



## Board of Directors

---

**MEETING DATE: FRIDAY, MARCH 21, 2025 • 9:00AM**



Increasing and accelerating investment  
into Connecticut's green economy.



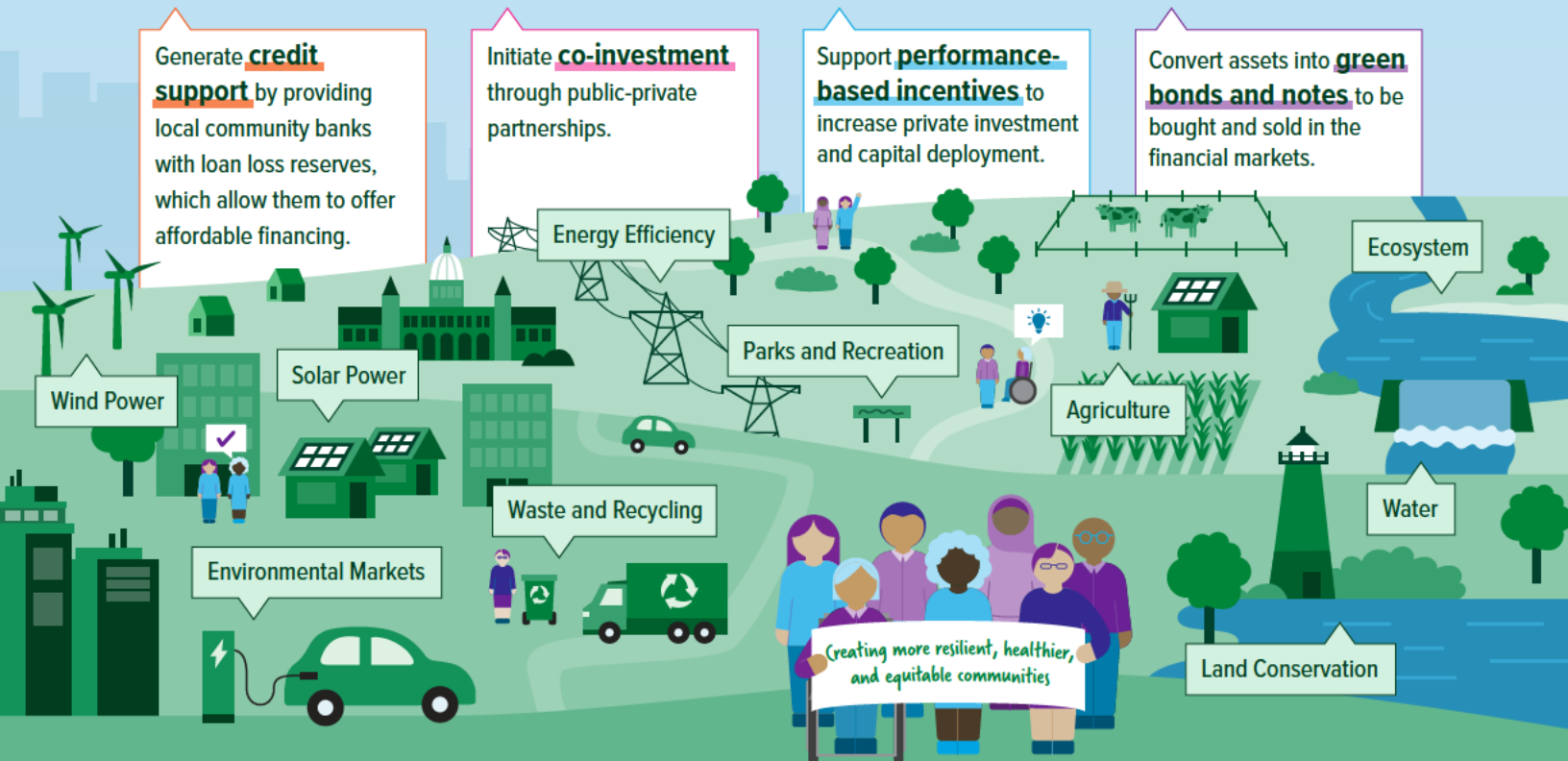
# The Green Bank Model

*A Planet Protected by the Love of Humanity*

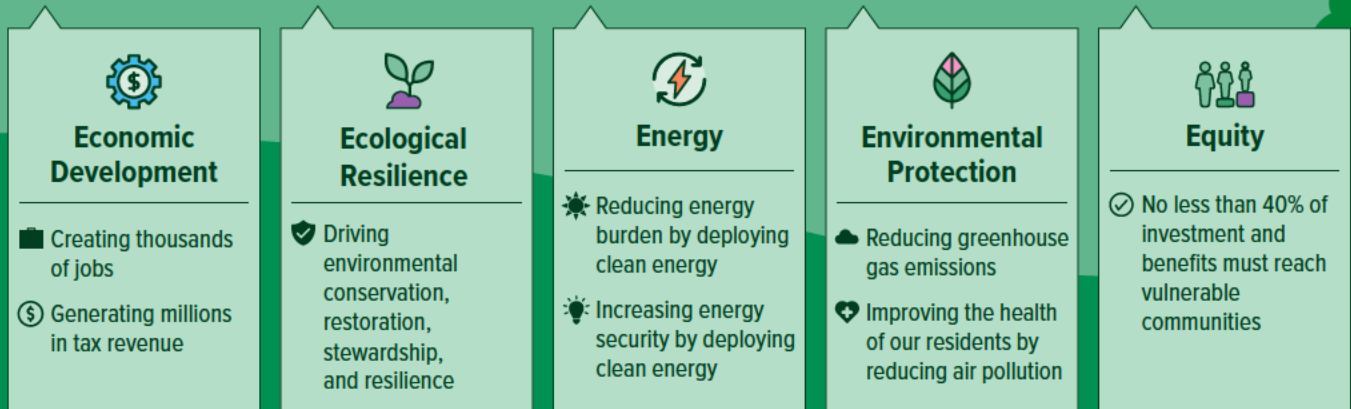
## 1 Attract Private Investment by Leveraging Public Funding



## 2 Apply Innovative Financial Tools to Deploy Investment Towards Our Mission



## 3 Deliver Benefits to Connecticut's Families, Businesses, and Communities



# Societal Impact Report

FY12  
FY24

Since the Connecticut Green Bank's inception through the bipartisan legislation in July 2011, we have mobilized more than **\$2.88 billion of investment** into the State's green economy. To do this, we used **\$409.4 million** in Green Bank dollars to attract \$2.47 billion in private investment, a leverage ratio of **\$7.00 for every \$1**. The impact of our deployment of renewable energy and energy efficiency to families, businesses, and our communities is shown in terms of economic development, environmental protection, equity, and energy (data from FY 2012 through FY 2024).\*

## ECONOMIC DEVELOPMENT

**JOBS** The Green Bank has supported the creation of more than **29,248** direct, indirect, and induced job-years.



### TAX REVENUES

The Green Bank's activities have helped generate an estimated **\$148.0 million** in state tax revenues.



**\$56.4 million**  
individual income tax

**\$58.0 million**  
corporate taxes

**\$32.0 million**  
sales taxes

**\$1.5 million**  
property taxes

## ENERGY

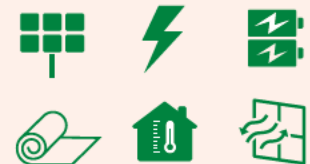
### ENERGY BURDEN

The Green Bank has reduced the energy costs on families, businesses, and our communities.



### DEPLOYMENT

The Green Bank has accelerated the growth of renewable energy to more than **707.2 MW** and lifetime savings of over **89.3 million MMBTUs** through energy efficiency projects.



## ENVIRONMENTAL PROTECTION

**POLLUTION** The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including **7.0 million pounds** of SOx and **8.7 million pounds** of NOx lifetime.



**11.4 MILLION**  
tons of CO<sub>2</sub> :  
**EQUALS**

**172 MILLION**  
tree seedlings  
grown for 10 years

OR

**2.3 MILLION**  
passenger vehicles  
driven for one year

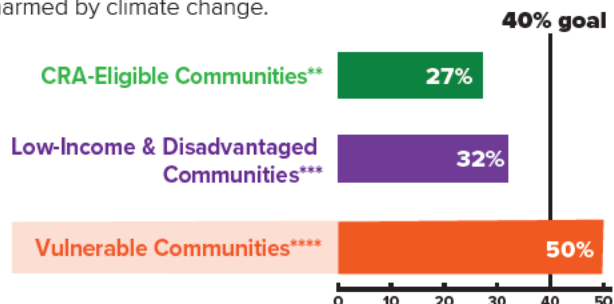
**PUBLIC HEALTH** The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.

**\$218.9 – \$494.9 million of lifetime public health value created**



## EQUITY

**INVESTING** in vulnerable communities, The Green Bank has set **goals** to reach **40% investment** in communities that may be disproportionately harmed by climate change.



\*\* Community Reinvestment Act (CRA) Eligible Communities – households at or below 80% of Area Median Income (AMI)

\*\*\* Low-Income and Disadvantaged Communities – those within federal Climate and Economic Justice Screening Tool and Environmental Justice Screening Tool

\*\*\*\* Vulnerable Communities – consistent with the definition of Public Act 20-05, including low- to moderate-income communities (i.e., less than 100% AMI), CRA-eligible communities, and environmental justice communities (e.g., including DECD distressed communities)



\* Includes projects, deployment, and investments approved, but not yet interconnected under Energy Storage Solutions.

Learn more by visiting [ctgreenbank.com/strategy-impact/societal-impact/](https://ctgreenbank.com/strategy-impact/societal-impact/)

Winner of the 2017 Harvard Kennedy School Ash Center Award for Innovation in American Government, the Connecticut Green Bank is the nation's first green bank.

www.ctgreenbank.com © 2024 CT Green Bank. All Rights Reserved  
Sources: Connecticut Green Bank Comprehensive Annual Financial Reports

# Board of Directors

Lonnie Reed

Board Chair



**E: [Lonnie.Reed@ctgreenbank.com](mailto:Lonnie.Reed@ctgreenbank.com)**

**P: 203-481-4474**

Lonnie Reed serves as the Chair of the Green Bank's Board of Directors. Ms. Reed brings significant experience in environmental policy leadership, job creation, and a deep understanding of the climate challenges facing Connecticut. Reed served in the Connecticut State House of Representatives for five terms, from 2009 to 2019, before choosing not to run for reelection. She also served on the Bi-State NY & CT Long Island Sound Committee and helped lead the successful battle to stop Broadwater, a floating liquefied natural gas plant with a 22-mile pipeline proposed for Long Island Sound. Ms. Reed was appointed as Chair in October 2019 by Governor Ned Lamont.

Joseph DeNicola

Chair of Deployment  
Committee



**E: [Joseph.Denicola@ct.gov](mailto:Joseph.Denicola@ct.gov)**

**P: 203-561-2279**

Joe DeNicola serves as the Deputy Commissioner of Energy at the Connecticut Department of Energy and Environmental Protection (DEEP), appointed in January 2024. As Deputy Commissioner, Joe leads DEEP's Energy Branch as Connecticut transitions to a zero-carbon electric grid by 2040 and economy-wide greenhouse gas (GHG) reductions of 80 percent below 2001 levels by 2050. He oversees development of Connecticut's Integrated Resources Plan and Comprehensive Energy Strategy, clean energy procurements, and policies and programs to achieve universal broadband access, energy affordability, energy efficiency, strategic electrification of the transportation and housing sectors, and efforts to reduce state agency emissions, waste, and water use.

Thomas M. Flynn

Chair of ACG Committee



**E: [Tom.Flynn@tomflynn.org](mailto:Tom.Flynn@tomflynn.org)**

**P: 203-209-0059**

Thomas M. Flynn is the Managing Member of Coral Drive Partners LLC, a financial and operations consulting firm serving the Media and Information Services industry. He serves as Chairman of the Board of Finance for the Town of Fairfield, CT and as a member of the Board of Directors of Beardsley Zoo. Mr. Flynn is a graduate of Syracuse University with dual degrees in Accounting from the Whitman School of Business and Broadcast Journalism from the Newhouse School of Communications. Senator John McKinney appointed Mr. Flynn to the Board in July 2012.

Dominick Grant

Board Member



**E: [Dominick@dirtpartners.com](mailto:Dominick@dirtpartners.com)**

**P: 518-225-4334**

Dominick joined Dirt Capital Partners in 2021 as Director of Investment and manages the company's investment evaluation, due diligence and related reporting. Dominick has worked extensively in land-based investing, including for seven years at BioCarbon Group, a global private-equity impact investment firm backed by institutional investors. In addition to serving on the Connecticut Green Bank's Board of Directors, Dominick serves on the Board for the CT Department of Agriculture Diversity Equity and Inclusion Working Group.



# Board of Directors

John Harrity

Chair of BOC Committee

**E: [iamjh@sbcglobal.net](mailto:iamjh@sbcglobal.net)**

**P: 860-459-5381**



John Harrity was the former President of the Connecticut State Council of Machinists – the electoral and legislative advocacy organization for more than 10,000 active and retired Machinists Union (IAM) members in Connecticut. The International Association of Machinists represents hourly workers at some of the state's largest industrial employers, including Pratt & Whitney, Hamilton Sundstrand, Electric Boat and Stanley Works, as well as a number of non-industrial worksites.

John is also the Chair of the [Connecticut Roundtable on Climate and Jobs](#).

---

Adrienne Farrar Houël

Board Member

**E: [houl@greenteambpt.com](mailto:houl@greenteambpt.com)**

**P: 203-212-3860**



Adrienne Farrar Houël is founder, President and CEO of Greater Bridgeport Community Enterprises, Inc. a nonprofit community development corporation that develops nonprofit sustainability enterprises to create jobs for disadvantaged area residents; researches trends in green business development; has trained and placed low and moderate- income residents in green jobs; and advocates for more green economy jobs in the Bridgeport area and throughout the State of Connecticut.

---

Allison Pincus

Board Member

**E: [Allison.Pincus@ct.gov](mailto:Allison.Pincus@ct.gov)**

**P: 914-815-0257**



Allison Pincus brings extensive legal and policy experience, with a focus on economic development and social justice. Currently, she serves as the Federal Programs Director for the Connecticut Department of Economic and Community Development (DECD). In this role, Allison leads a team that pursues federal funding related to economic development in Connecticut on behalf of DECD, with a focus on clean energy initiatives, and manages federal program implementation once funding has been awarded. Allison serves on the Green Bank board as designee for DECD Commissioner Dan O'Keefe, and was designated by the commissioner in 2024.

---

Matthew Ranelli

Board Member

**E: [mranelli@goodwin.com](mailto:mranelli@goodwin.com)**

**P: 860-251-5748**



Matthew Ranelli is a partner in the Environment, Energy and Land Use Group at Shipman & Goodwin LLP. Mr. Ranelli represents municipalities, developers, schools, and other end-users regarding on-site renewable energy projects, green building standards, energy conservation and efficiency projects, and managing energy options. Mr. Ranelli is a LEED Accredited Professional. Mr. Ranelli was previously appointed to the Connecticut Clean Energy Fund board in 2009.

# Board of Directors

## Erick Russell

Board Member



**E: [Kimberly.Mooers@ct.gov](mailto:Kimberly.Mooers@ct.gov)**

**P: 860-702-3288**

Erick Russell was sworn in as Connecticut's 84th State Treasurer on January 4, 2023. He is currently serving his first term. As treasurer, Russell administers Connecticut's pension funds holding over \$40 billion in assets, oversees the state's debt and cash management, collects and returns unclaimed property, and manages the Connecticut Higher Education Trust (CHET), a 529 plan that helps students and families save for higher education. Russell continues to advocate for people traditionally left out of the political process and denied economic opportunity.

---

## Brenda Watson

**E: [bwatson@northhartfordpartnership.org](mailto:bwatson@northhartfordpartnership.org)**

**P: 860-967-2751**

Chair of Joint Committee



Brenda Watson is the newly appointed Executive Director of The North Hartford Partnership, a nonprofit organization dedicated to advancing equitable social and economic development in the North Hartford Promise Zone. The North Hartford Partnership's mission is to collaborate with neighborhood residents in efforts to close health, housing and economic opportunity gaps across North Hartford. Watson was appointed to the Board in February 2020 by Speaker of the House Joe Aresimowicz (D-Berlin/Southington).

---

## Dr. Joanna Wozniak-Brown

Board Member

**E: [Joanna.Wozniak-Brown@ct.gov](mailto:Joanna.Wozniak-Brown@ct.gov)**

**P: 860-418-6252**



Dr. Joanna Wozniak-Brown has nearly two decades of experience in environmental management and planning in Connecticut. Currently, she serves as the Climate & Infrastructure Policy Development Coordinator at the Connecticut Office of Policy & Management. Prior to this role, she was the Assistant Director of Resilience Planning at UConn CIRCA. She earned her Ph.D. in Environmental Studies from Antioch University New England, an M.Sc. from Johns Hopkins University in Environmental Planning, and a B.A. from Drew University in Political Science and Environmental Studies. Dr. Wozniak-Brown has been certified by the American Institute of Certified Planners (AICP) since 2021.

# Meeting Schedules

## **Regular Board Meetings**

Friday, January 24th 2025

Friday, March 21st 2025

Friday, April 25th 2025

Friday, June 20th 2025

Friday, July 25th 2025

Friday, October 24th 2025

Friday, December 19th 2025

\*all meetings from 9am-11am

## **Audit, Compliance and Governance Committee**

Tuesday, January 14th 2025

Tuesday, May 13th 2025

Tuesday, October 7th 2025

\*all meetings from 8:30am-9:30am

## **Budget, Operations, & Compensation Committee**

Wednesday, January 15th 2025

Wednesday, May 7th 2025

Wednesday, June 4th 2025

Wednesday, June 11th 2025

\*all meetings from 2:00pm-3:30pm

## **Deployment Committee**

Wednesday, February 19th 2025

Wednesday, May 21st 2025

Wednesday, September 10th 2025

Wednesday, November 12th 2025

\*all meetings from 2:00pm-3:00pm

## **Joint Committee of the CT EE Board and the Connecticut Green Bank Board of Directors**

Wednesday, March 19th 2025

Thursday, June 18th 2025

Wednesday, September 24th 2025

Wednesday, December 17th 2025

\*all meetings from 1:30pm-3:30pm



March 14, 2025

Dear Connecticut Green Bank Board of Directors:

We have a **regular meeting** of the Board of Directors scheduled for **Friday, March 21, 2025, from 9:00-11:00 a.m.**

Please take note, for those of you that want to be at the meeting in-person, we will have space at our offices for you to join. Otherwise, this will be an online meeting.

For the agenda, we have the following:

- **Consent Agenda** – we have several items on the consent agenda, including:

- Meeting Minutes of January 24, January 29,<sup>1</sup> and February 19,<sup>2</sup> 2025
- C-PACE project (i.e., Danbury) extension request

In addition to items requiring resolution, there are also documents that you might be interested in perusing, including:

- **Under \$500,000 and No More in Aggregate than \$1,000,000 Staff Approved Transactions**
- Under \$100,000 and No More in Aggregate than \$500,000 Staff Approved Transaction Restructurings and Write-Offs
- Q2 FY25 Financial Report – Abridged and Comprehensive
- Clean Energy Tax Credit Fact Sheets – for Homeowners, Businesses, Non-Profits, and Tax Professionals, we produced these in partnership with DRS, DECD, and DEEP
- **Legislative Process** – an update mid-way through the 2025 legislative session of the Connecticut General Assembly
- **Investment Updates and Recommendations** – including the following transactions:
  - **Total Energies** – loan facility for state facilities
  - **Ellington – loan facility for SCEF solar project**
  - **C4C LIME Loan** – loan facility extension and possible modification
- **Incentive Programs Updates and Recommendations** – including:

---

<sup>1</sup> Special meeting

<sup>2</sup> Special meeting



- **Manchester**– Energy Storage Solutions project (Kinsley Group / Allied Printing Service)
- **Environmental Infrastructure Programs Updates and Recommendations** – a presentation on the recently released “Waste and Recycling Primer,” which is the final primer for environmental infrastructure.
- **Greenhouse Gas Reduction Fund Update and Recommendations** – a proposed Investment Policy for transactions related to the National Clean Investment Fund (“NCIF”) overseen by the Coalition for Green Capital. You will also see that we included a law review paper written by Brian Farnen that provides an overview of the federal requirements under the Greenhouse Gas Reduction Fund (“GGRF”).
- **Executive Session** – for matters related to strategy and negotiations with respect to pending claims or litigation.

Please note, those items **underlined, italicized, and highlighted** above, are materials coming by the close of business on Tuesday, March 18, 2025.

Have a great weekend ahead.

Appreciatively,

A handwritten signature in black ink, appearing to be 'Bryan Garcia', with a stylized flourish at the end.

Bryan Garcia  
President and CEO



## **AGENDA**

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

Friday, March 21, 2025  
9:00 a.m.– 11:00 a.m.

Dial (860) 924-7736  
Phone Conference ID: 275 805 920 440#  
[+1 860-924-7736,,690183514#](tel:+18609247736,690183514#)

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

1. Call to Order
2. Public Comments – 5 minutes
3. Consent Agenda – 5 minutes
4. Legislative Process – 15 minutes
5. Investment Programs Updates and Recommendations – 25 minutes
  - a. Total Energies – Loan Facility for State Facilities
  - b. Ellington – Loan Facility for SCEF Solar Project
  - c. C4C LIME Loan – Loan Facility Extension
6. Incentive Programs Updates and Recommendations – 10 minutes
  - a. ESS-001606 – Manchester – Kinsley Group / Allied Printing Services
7. Environmental Infrastructure Programs Updates and Recommendations – 15 minutes
  - a. Waste and Recycling Primer
8. Greenhouse Gas Reduction Fund – Update and Recommendations – 15 minutes
  - a. CGC Investment Policy

9. Executive Session – Strategy and Negotiations with Respect to Pending Claims or Litigation  
– 30 minutes

10. Adjourn

[Click here to join the meeting](#)

Meeting ID: 275 805 920 440

Passcode: Yj29ct

Dial In: [+1 860-924-7736,,690183514#](#)

Phone Conference ID: 275 805 920 440#

***Next Regular Meeting: Friday, April 25, 2025 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, March 21, 2025  
9:00 a.m.– 11:00 a.m.

Dial (860) 924-7736  
Phone Conference ID: 275 805 920 440#  
[+1 860-924-7736](tel:+18609247736), [690183514#](tel:+18609247736)

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

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 the regular meeting of January 24, 2025, and special meetings of January 29, 2025 and February 19, 2025

### **Resolution #2**

**WHEREAS**, pursuant to Conn. Gen. Stat. 16a-40g (the “Act”) the Connecticut Green Bank (“Green Bank”) is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy (“C-PACE”);

**WHEREAS**, pursuant to the C-PACE program, the Connecticut Green Bank Board of Directors (the “Board”) or the Connecticut Green Bank Deployment Committee (“DC”), as may be applicable, approved and authorized the President of the Green Bank to execute financing agreements for the C-PACE projects described in this Memo submitted on March 21, 2025 (the “Finance Agreements”);

**WHEREAS**, the Finance Agreements were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board or DC, as may be applicable, and executed no later than 120 days from the date of such Board or DC approval; and,



**WHEREAS**, due to delays in fulfilling pre-closing requirements the Green Bank will need more time to execute the Finance Agreements.

**NOW**, therefore be it:

**RESOLVED**, that the DC extends authorization of the Finance Agreements to no later than 120 days from March 21, 2025 and consistent in every other manner with the original Board or DC authorization for the Finance Agreement.

4. Legislative Process – 15 minutes

5. Investment Programs Updates and Recommendations – 25 minutes

a. Total Energies – Loan Facility for State Facilities

### **Resolution #3**

**WHEREAS**, on June 23, 2023 the Connecticut Green Bank (“Green Bank”) Board of Directors (the “Board”) approved the sale and assignment of pilot solar projects at state agencies (the “Projects”) to Total Energies or its subsidiary (the “PPA Owner”), following a competitive solicitation process (the “RFP”); and,

**WHEREAS**, Green Bank seeks to provide debt financing to the PPA Owner under terms consistent with those outlined in the RFP and with the memo dated March 14, 2025 (the “Debt Facility”).

**NOW**, therefore be it:

**RESOLVED**, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver the Debt Facility, and any associated legal instrument, with terms and conditions as are materially consistent with this Board Memorandum dated March 14, 2025; and,

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

b. Ellington – Loan Facility for SCEF Solar Project

### **Resolution #4**

**WHEREAS**, Community Power Group, LLC (“Community Power”) has requested financing in support of private capital from the Connecticut Green Bank (“Green Bank”) under the Capital Solutions Open RFP Program (“Capital Solutions”) to finance and construct a solar PV Shared Clean Energy Facility (“SCEF”) (the “Project”), in Ellington Connecticut;

**WHEREAS**, Green Bank has structured credit facilities whereby the Green Bank would provide construction and term debt financing for the Project; and,

**WHEREAS**, staff has considered the merits of the credit facilities and the ability of the Project and finance stakeholders to construct, operate and maintain the Project, support the obligations under the credit facilities throughout their respective terms and satisfying the requisite Capital Solutions criteria, and as set forth in the due diligence memorandum dated March 14, 2025 (the "Board Memo"), has recommended this support be in the form of funding not to exceed \$5,000,000 for the construction and long term financing for the Project, secured by all Project assets, contracts and revenues as described in the Board Memo.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (the "Board") hereby approves the applicants Capital Solutions proposal for the Green Bank to provide the credit facilities in an aggregate amount not to exceed \$5,000,000;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the credit facilities in an amount not to exceed \$5,000,000 in with terms and conditions consistent with the Board Memo, 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 the date of authorization by the Board; and,

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

c. C4C LIME Loan – Loan Facility Extension

#### **Resolution #5**

**WHEREAS**, the Connecticut Green Bank ("Green Bank") has an existing Master Facility to fund the Low Income Multifamily Efficiency ("LIME") loan Program with Capital for Change ("C4C"), approved at the October 25, 2019 meeting of the Green Bank Board of Directors (the "Board"),

**WHEREAS**, C4C has been successful in deploying LIME Program loans using the Master Facility; and

**WHEREAS**, in order to continue the successful deployment of capital into the LIME Program C4C has requested an extension of the availability period until March 31, 2026, approximately one year from the expiration of the availability period under the existing terms and conditions;

**WHEREAS**, Green Bank staff recommends the Board approve such extension of the availability period;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the extension of the availability period under the Master Facility until a date not to exceed March 31, 2026;

**RESOLVED**, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the extension of the availability period under the Master Facility for the LIME program on such terms and conditions as are materially consistent with the memorandum submitted to the Board on March 14, 2025; and,

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

6. Incentive Programs Updates and Recommendations – 10 minutes

a. ESS-001606 – Manchester – Kinsley Group / Allied Printing Services

**Resolution #6**

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

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

**WHEREAS**, in its December 9, 2002 meeting the Board approved updated Procedures to better align with the Program process.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors hereby approves the estimated upfront incentives sought by Kinsley Group for one non-residential project totaling a not-to-exceed amount of \$1,310,400 consistent with the approved Procedures; and,

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

7. Environmental Infrastructure Programs Updates and Recommendations – 15 minutes

a. Waste and Recycling Primer

8. Greenhouse Gas Reduction Fund – Update and Recommendations – 15 minutes

a. CGC Investment Policy

**Resolution #7**

**WHEREAS**, within the Inflation Reduction Act of 2022 (“IRA”) there is a \$27 billion Greenhouse Gas Reduction Fund (“GGRF”) inclusive of a \$14 billion National Clean Investment Fund (“NCIF”) modelled after the Connecticut Green Bank (“Green Bank”);

**WHEREAS**, the Coalition for Green Capital (“CGC”), a 501(c)3 nonprofit organization, applied for a grant through the GGRF NCIF on October 12, 2023, in the amount of \$10 billion, inclusive of eighteen (18) Subgrantees, including the Green Bank; and,

**WHEREAS**, on January 3, 2025, the Green Bank entered into an NCIF Subgrant Agreement with CGC totaling \$93.53 million, and on January 16, 2025, CGC transferred the total funding amount to the Green Bank’s account at Citibank in accordance with the Account Control Agreement the Green Bank executed with CGC and Citibank on January 14, 2025.

**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 submit the Green Bank’s NCIF Investment Policy to CGC for review and approval; and,

**RESOLVED**, that the Board hereby approves of the Green Bank adhering to its NCIF Investment Policy in all future disbursements of NCIF funds for Qualified Projects.

9. Executive Session – Strategy and Negotiations with Respect to Pending Claims or Litigation  
– 30 minutes

#### **Resolution #8**

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) is a recipient of a subgrant awarded by grantor Coalition for Green Capital (“CGC”) pursuant to a grant awarded to CGC by the Environmental Protection Agency (“EPA”) under EPA’s National Clean Investment Fund program;

**WHEREAS**, in connection with the subgrant award, this corporation entered into an Account Control Agreement (“ACA”) with Citibank, N.A. (“Citi”) and CGC, whereby Citi served as the provider of the bank accounts that would be used to hold this corporation’s subgrant funds;

**WHEREAS**, on or around February 18, 2025, Citi froze this corporation’s accounts containing the subgrant funds and refused to offer any explanation for its actions in response to this corporation’s requests to disburse funds;

**WHEREAS**, on March 11, 2025, EPA issued a “Notice of Termination” that purported to terminate the NCIF program without notice or process due to the recipients of grants and subgrants under the program;

**WHEREAS**, Citi’s refusal to unfreeze this corporation’s accounts constitute a breach of the terms of the ACA;

**WHEREAS**, EPA’s Notice of Termination threatens to illegally and unconstitutionally deprive the Green Bank of the subgrant award to which it is legally entitled; and



**WHEREAS**, while the Green Bank does not intend to take immediate action, it may need to pursue legal recourse to protect its rights and secure access to the subgrant funds to which it is legally entitled.

**NOW**, therefore be it:

**Resolved**, that the Green Bank Board of Directors authorizes the Green Bank to take action to restore its access to the subgrant award funds by retaining legal counsel and seeking intervenor status or initiating a lawsuit against Citi, EPA, and any party necessary to ensure its full recovery of funds.

10. Adjourn

[Click here to join the meeting](#)

Meeting ID: 275 805 920 440

Passcode: Yj29ct

Dial In: [+1 860-924-7736,,690183514#](#)

Phone Conference ID: 275 805 920 440#

***Next Regular Meeting: Friday, April 25, 2025 from 9:00-11:00 a.m.  
Colonel Albert Pope Room at the  
Connecticut Green Bank, 75 Charter Oak Avenue, Hartford***

- **In-Person Option** – if anyone wants to join future BOD or Committee meetings in person, we are inviting you to our offices in Hartford
- **Mute Microphone** – in order to prevent background noise that disturbs the meeting, if you aren't talking, please mute your microphone or phone.
- **Chat Box** – if you aren't being heard, please use the chat box to raise your hand and ask a question.
- **Recording Meeting** – we continue to record and post the board meetings.
- **State Your Name** – for those talking, please state your name for the record.

# Board of Directors Meeting

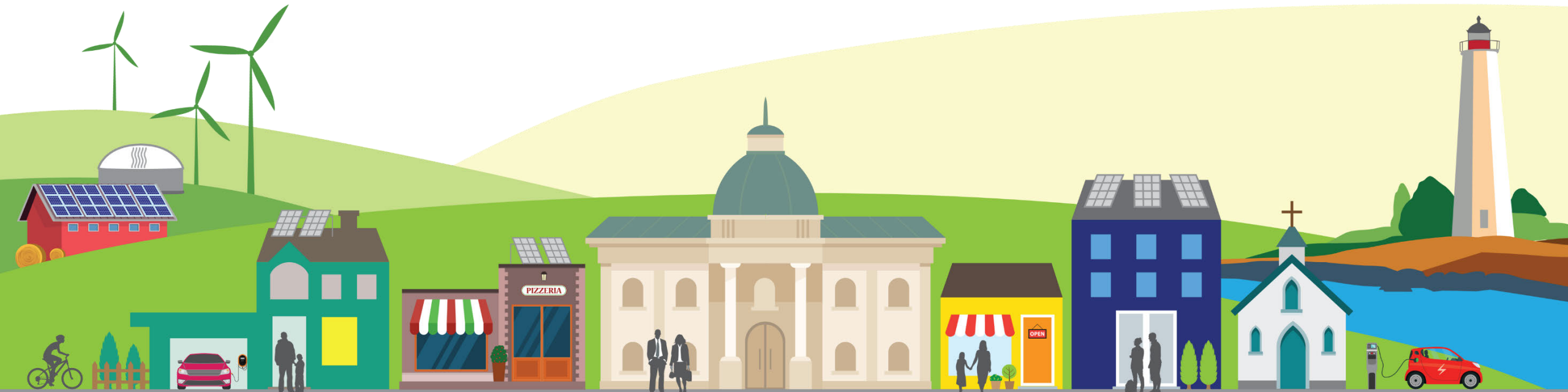
March 21, 2025



# Board of Directors



## Agenda Item #1 Call to Order





# Board of Directors



## Agenda Item #2 **Public Comments**



# Board of Directors



## Agenda Item #3 Consent Agenda



# Consent Agenda

## Resolutions #1 and #2



1. **Meeting Minutes** – approve meeting minutes of January 24, January 29, and February 19, 2025
2. **Transaction Extension** – approved C-PACE project extension for Danbury
  - **Under \$500,000 and No More in Aggregate than \$1,000,000** – staff approved transactions of over \$700,000 in total for three (3) C-PACE projects (i.e., Cheshire, Middletown, and Niantic)
  - **Under \$100,000 and No More in Aggregate than \$500,000** – staff approved restructurings or write-offs of \$0 and no transactions
  - **Q2 of FY25** – quarterly abridged and comprehensive financial report
  - **Fact Sheets** – DRS, DEEP, and DECD partnership on clean energy tax credits

# Board of Directors



## Agenda Item #4 Legislative Process Update



# Legal - 2025 Legislative Session Updates

Convened on January 8th and Adjourns on June 4th "Sine Die"



## The Session by the Numbers:

- 2,000+** Bills that were introduced this Legislative Session by individual legislators or by committees
- 321** Legislation currently being tracked by the Green Bank
- 9** Legislation that the Green Bank submitted Public Hearing Testimony into the record
- 1** Legislation that the Green Bank testified in person (Live).

*SB 1245 Governor's Resilience Bill – Bryan Garcia, Bert Hunter, Leigh Whelpton*

## Legislative Session – Phase 3:

Phase 1: Bill Introduction/Bill Screening

Phase 2: Public Hearing Process

Phase 3: Represents the conclusion of the Committee Process

E&T JF Deadline 3/20   Environment JF Deadline 3/31   File Copies - Negotiation Phase

## What's driving the discussion in 2025 in terms of Energy and the Environment:

- **High Electric Rates** – Politics with SB 647 - over – Policy with SB 4 "Public Benefits Charge"
- **PA 24-31** - PURA to study renewable energy tariffs and potential successor programs by January 15, 2026

# Legal - 2025 Legislative Session Updates

## "Clean Energy Legislation"



### **SB 647: AN ACT CONCERNING PROTECTIONS FOR CONSUMER ACCESS TO AFFORDABLE ELECTRICITY**

*Republican Caucus Bill with stated purpose: To reduce energy costs and increase energy supply*

- Sections 1-3 move programs funded by the "Public Benefits Charge" from Electric Bills to the State Budget
  - C&LM, ESS, EV.....Subjects programs to budget sweeps and line-item veto's.
- Section 4 eliminates the Clean Energy Fund after July 1, 2025. Green Bank Funding Elimination
  - Would cripple the green economy in terms of eliminating long term financial stability, jobs and taxes
  - Would devastate deployment into EJ communities negating health and economic development.

E&T Committee Leadership chose to not have bill added to agenda before JF Deadline. Republicans made motion to have this legislation added, but the motion failed. Bill is dead, but language is alive.

### **SB 4: AN ACT CONCERNING ENERGY AFFORDABILITY, ACCESS AND ACCOUNTABILITY**

*Democratic Caucus Bill with stated Purpose: To improve service and reduce costs for electricity ratepayers in the state*

- Sections 1-4 makes DEEP POC for Atomic Development. Permits Advanced Nuclear Reactor or Modular Reactor to be located at Millstone. DEEP to establish loan/grant program for advanced nuclear reactor & Offshore Wind readiness.
- Section 7: PURA to open Docket on Utility Scale Thermal Energy Network Program  
Green Bank to be apart of Working Group to develop program with DEEP, Gas/Electric Companies & Environmental Orgs.



# Legal - 2025 Legislative Session Updates

## "Clean Energy Legislation"



### HB 5004: AN ACT CONCERNING THE PROTECTION OF THE ENVIRONMENT AND THE DEVELOPMENT OF RENEWABLE ENERGY SOURCES AND ASSOCIATED JOB SECTORS (formerly the "GREEN MONSTER")

- Sections 4:** PURA to study future of Natural Gas here in CT by 1/1/26. Geothermal & Heat Pumps within scope.
- Section 7/8:** Revitalizes the CT Clean Economy Council. Green Bank has seat on Council.
- Section 13:** Nature Based Solutions. DEEP required to seek and receive review and input on integration plan from the Green Bank.
- Section 14:** PURA to develop solar canopy strategic plan by 1/15/26
- Section 16/17:** "Utility Scale renewable thermal energy network". Same as in SB 4. Green Bank on Work Group.
- Section 21:** DEEP to conduct study on renter utilization of state energy efficiency and clean energy programs. Study due to ENV and E&T by July 1, 2026.

# Legal - 2025 Legislative Session Updates

## "Environmental Infrastructure"



### SB 9: AN ACT CONCERNING THE ENVIRONMENT, CLIMATE AND SUSTAINABLE MUNICIPAL AND STATE PLANNING, AND THE USE OF NEONICOTINOIDS AND SECOND-GENERATION ANTICOAGULANT RODENTICIDES

*Governor Lamont Legislation on Climate Resilience*

Sea level is expected to rise by up to **20 inches by 2050**, and this legislation prepares Connecticut for the inevitable

**Sections 18-20:** Transfer of Development Rights (TDR). A well-structured TDR program will allow Connecticut to use private-sector capital and financial leverage to achieve public-sector resilience goals—moving development away from high-risk coastal zones while directing investment toward inland communities that can accommodate growth.

**Sections 24-33:** - legislation creates a purely optional infrastructure financing tool for municipalities, very similar to the current framework in statute - Tax Incremental Financing or "TIF" districts. Would allow homeowners and businesses to incorporate resiliency measures by leveraging bonds and repaying them with revenue from "increased savings" on insurance premiums.



## Agenda Item #5a

### **Investment Updates and Recommendations**

#### Total Energies – Loan Facility for State Facilities





# Overview

## SAP 1 – Solar at DOC facilities

- **Total Energies Partnership** – selected through a competitive RFP to install projects + long term ownership
- **Key Impact Metrics**
- 8.3MW DC
- 11,475 MWh Y1 expected
- ~\$12M in savings over 25-year term



Enfield



Osborn and Manson Youth





# Overview

## SAP 1 – Solar at DOC facilities



Cheshire campus: Manson Youth + Maloney Webster

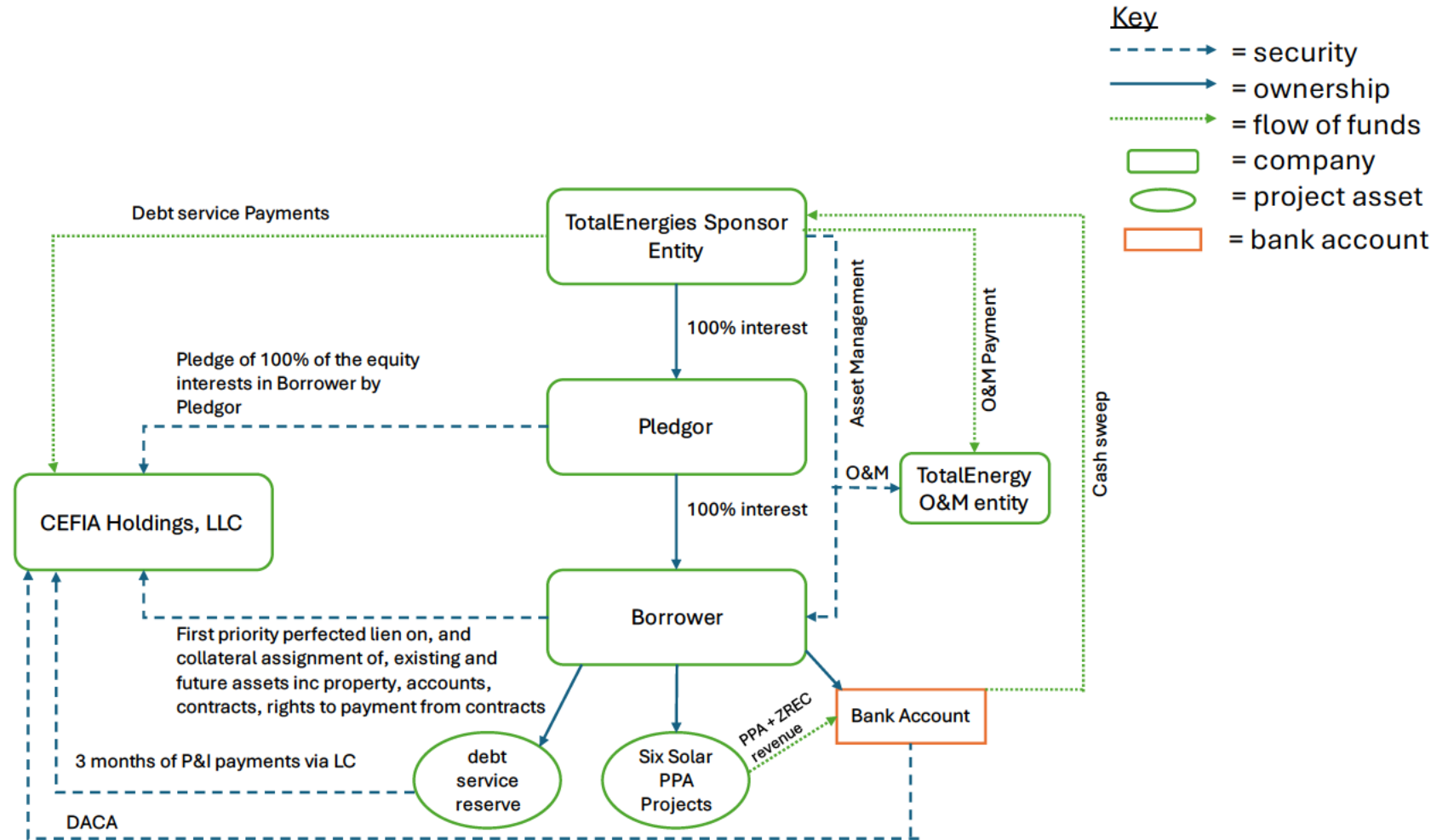


Osborn in Somers, CT

# Long Term Debt Summary

## Debt Highlights (consistent with PPA RFP)

- Front levered facility
- Up to \$12M Loan
- Sized based on 1.25X DSCR
- 20 year fully amortizing term
- 3.5% interest rate



# Resolution #3



**NOW**, therefore be it:

**RESOLVED**, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver the Debt Facility, and any associated legal instrument, with terms and conditions as are materially consistent with this Board Memorandum dated March 14, 2025; and,

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



## Agenda Item #5b

### **Investment Updates and Recommendations**

#### Ellington – Loan Facility for SCEF Solar Project



# Overview

## SCEF Project in Ellington



- **Key Project Metrics**

- 5.8MW DC - 8,671 MWh Y1 expected
  - Ground mount with single-axis trackers

- **SCEF Award**

- \$88.30/MWH

- Awarded in 2022 – Rates and Prices ↑

- Project moving forward with CGB Support

- **Subscriber Benefits**

- \$1 of CGB Investment = 50 cents to LMI Households and 17 cents to CT small businesses

- More than 500 LMI families expected to receive \$200/yr >

- **Developer - Community Power Group (CPG)**

- CPG has completed construction of more than 200MWs of solar facilities ranging in size from 100kw to 10MW.

- **EPC Contractor – CTEC Solar**

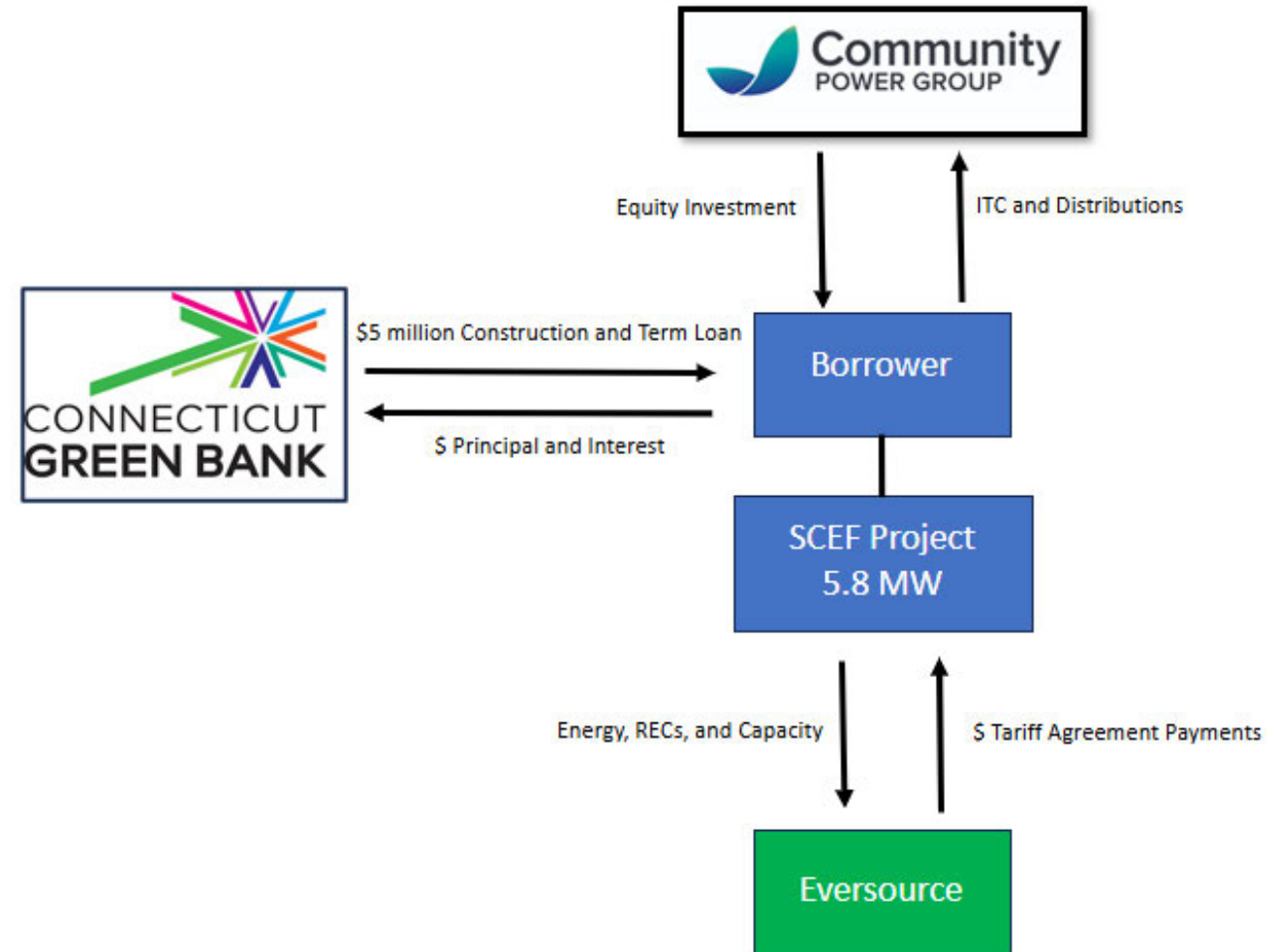
- Green Bank has developed 9 commercial solar projects with C-TEC, the latest was awarded through a competitive RFP for state solar projects and features a 2 MW ground-mounted system. In 2021, following a competitive process, C-TEC was appointed as the O&M service provider for the Green Bank's 20MW commercial solar portfolio (over 140 sites).

# Overview

## Debt Facilities



- **Construction Loan**
- Maximum 60% of Project costs
- Interest paid quarterly
- 3-month Debt Service Reserve
- **Term Loan**
- 1.35x DSCR, and 6-month Debt Service Reserve
- Fixed interest rate
- 18-year term, 2-year "tail"
- **ITC Monetization**
- Provided by the developer, CPG



# Prime Farmland

## Co-Uses and Department of Agriculture support



**“It is important to not only protect marginal farm lands, but to specifically protect prime farmland”**  
- *Green Bank Agriculture Primer*

Siting Council: Proceedings included support submitted by DEEP and DoAg.

- Apiaries for pollinator research
- Sheep pasture rotation and grazing
- Connecticut based vegetable grower that will utilize approximately 10,000 square feet of the property to grow crops.

*“...will not materially affect the status of project land as prime farmland”* - DoAg



# Resolution #4



**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (the "Board") hereby approves the applicants Capital Solutions proposal for the Green Bank to provide the credit facilities in an aggregate amount not to exceed \$5,000,000;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the credit facilities in an amount not to exceed \$5,000,000 in with terms and conditions consistent with the Board Memo, 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 the date of authorization by the Board; and,

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



## Agenda Item #5c **Investment Updates and Recommendations** C4C LIME Loan – Loan Facility Extension



# Capital For Change

## LIME Program Extension

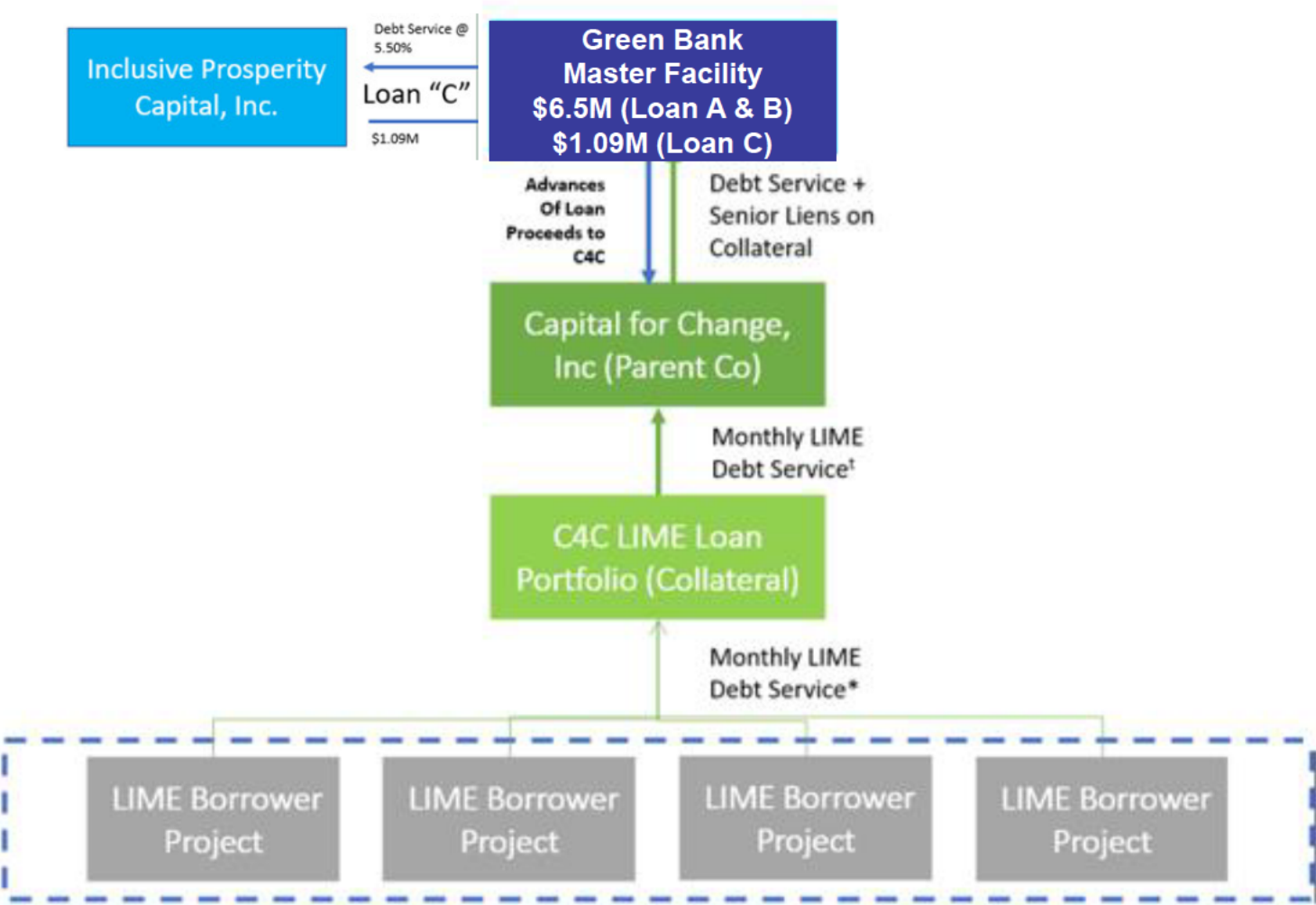


- Capital for Change (“C4C”) and Green Bank had a previous facility (“Original Facility”) dating back to 2015 and amended in 2016 that provided C4C with \$3.5M worth of capital.
- At the October 25, 2019 meeting of the Board, the Board approved \$3.0 M (total of \$6.5 M) of additional capital for LIME.
- C4C has a pipeline of transactions for the LIME facility, but the availability period expires in March 2025. Facility was extended for 1 year in March 2024.
- C4C has requested and Green Bank staff supports an extension of the availability period to March 31, 2026 with identical terms and conditions.
- C4C exploring making LIME available for new construction (staff would come back to the Board for any such modification)
- Loan has been fully performing
- Board Approval needed for the extension.



# Capital For Change

## LIME Program Extension



# Resolution #5



**NOW**, therefore be it:

**RESOLVED**, that the Board approves the extension of the availability period under the Master Facility until a date not to exceed March 31, 2026;

**RESOLVED**, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the extension of the availability period under the Master Facility for the LIME program on such terms and conditions as are materially consistent with the memorandum submitted to the Board on March 14, 2025; and,

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

# Board of Directors

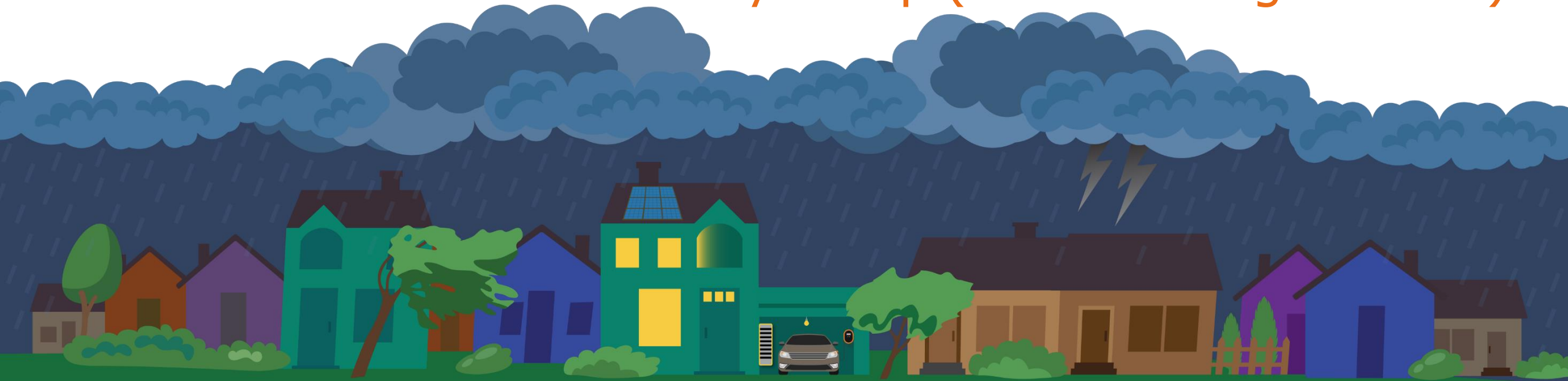
---

Agenda Item #6

## **Incentive Programs Updates and Recommendations**

Energy Storage Solutions

Kinsley Group (Allied Printing Services)



# Legislative and Regulatory Support



- PA. 21-53 established statewide goal of 1000 MW of battery storage by 2030
- Docket 17-12-03RE03 created a 9-year incentive program – Goal of 580 MW behind-the-meter storage for residential and non-residential end-use customers

Original Customer Class	Tranche 1 (2022 – 2024)	Tranche 2 (2025 – 2027)	Tranche 3 (2028 – 2030)	TOTAL
Residential	50 MW	100 MW	140 MW	290 MW
Commercial and Industrial	50 MW	100 MW	140 MW	290 MW
<b>Total</b>	<b>100 MW</b>	<b>200 MW</b>	<b>280 MW</b>	<b>580 MW</b>

Updated Customer Class	Tranche 1	Tranche 2	Tranche 3	Tranche 4	TOTAL
Residential	50 MW	50 MW	50 MW	0 MW	150 MW
Commercial and Industrial	50 MW	113.9 MW	126.1 MW	140 MW	430 MW
<b>Total</b>	<b>100 MW</b>	<b>163.9 MW</b>	<b>176.1 MW</b>	<b>100 MW</b>	<b>580 MW</b>

# ESS-01606 – Allied Printing Services

## Kinsley Group



**Business Operations** Commercial printer

**Annual Peak Demand** 3,288 kW (Large C&I)

**System Size** 3.98 MW / 14.4 MWh

**System Equipment** AESI TeraStor

**Installation Timeline** 2026-2027

**Total Installed Cost** \$6,596,700 (Estimated)

**Upfront Incentive** \$1,310,400

# Resolution #6



**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors hereby approves the estimated upfront incentives sought by Kinsley Group for one non-residential project totaling a not-to-exceed amount of \$1,310,400 consistent with the approved Procedures; and,

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



## Agenda Item #7 **Environmental Infrastructure Programs Updates** Waste and Recycling Primer





# PA 21-115 – Environmental Infrastructure

## Scope Expansion & Primer Process

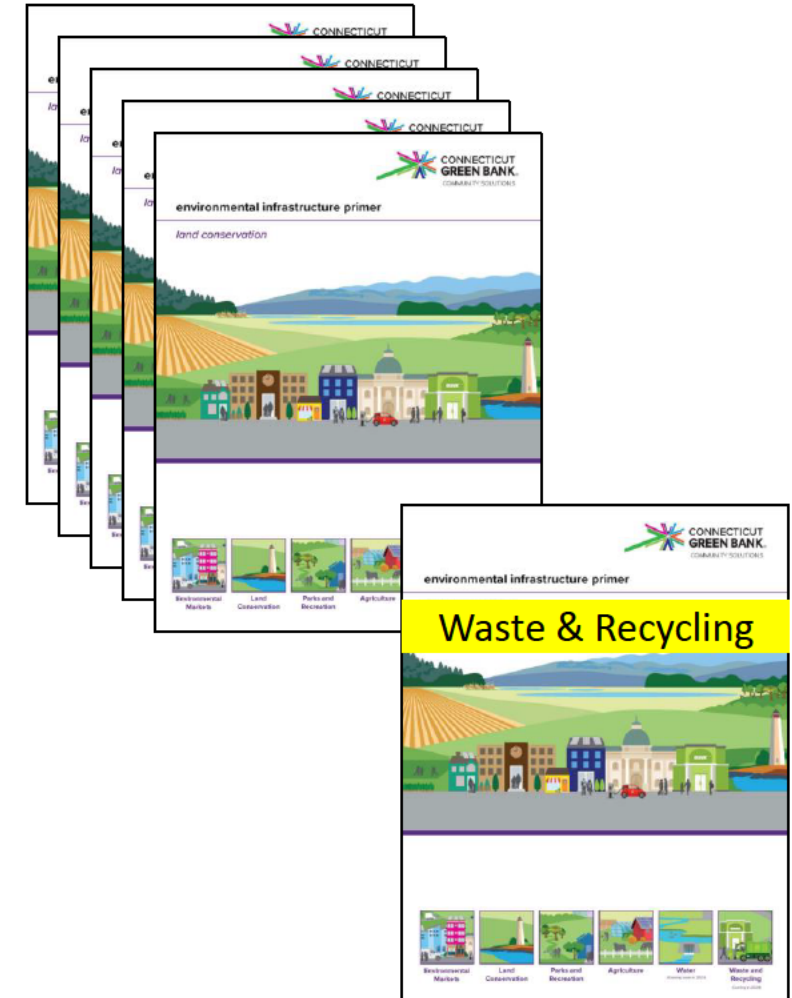
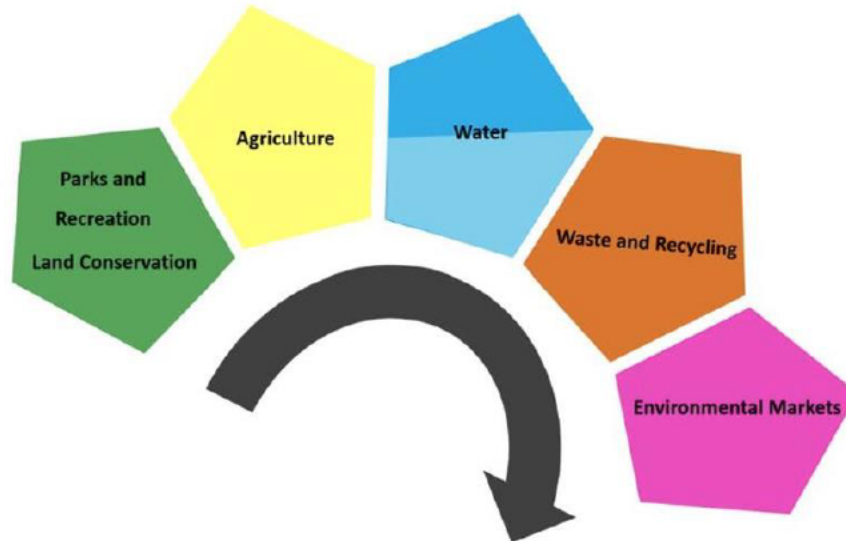


Structures, facilities, systems, services and improvement projects related to (A) water, (B) waste and recycling, (C) climate adaptation and resiliency, (D) agriculture, (E) land conservation, (F) parks and recreation, and (G) environmental markets.

Climate Adaptation  
& Resilience

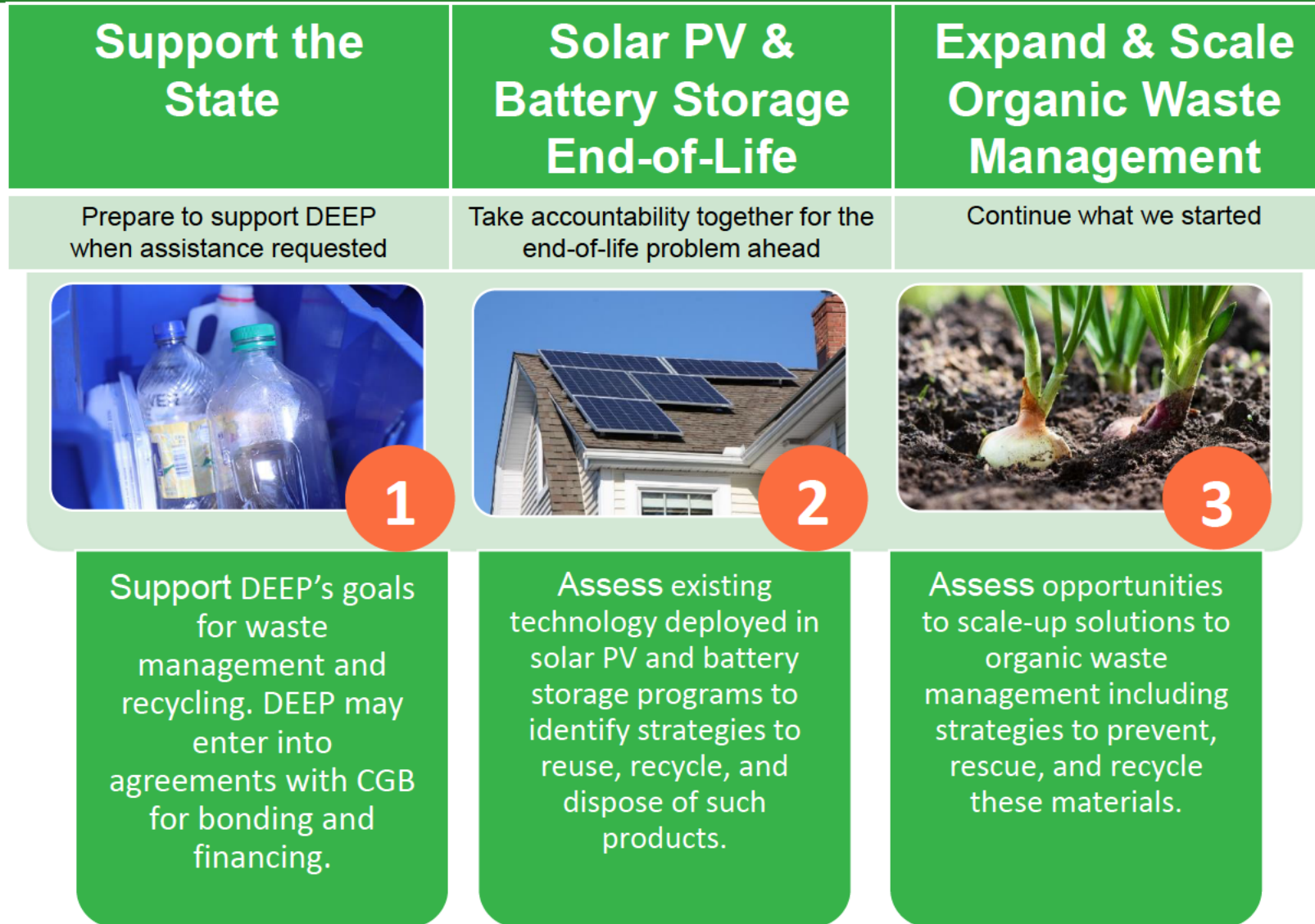
Justice, Equity,  
Diversity, & Inclusion

Greenhouse  
Gas Mitigation



# Waste & Recycling

## Three-Pronged Strategy



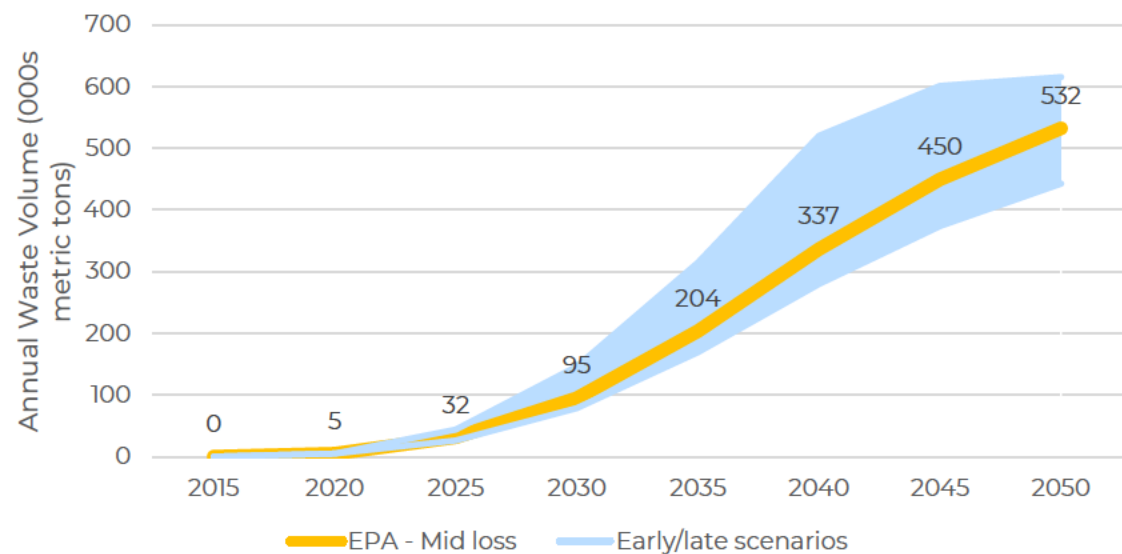
# Support the State

## Connecticut Policy Objectives & Goals



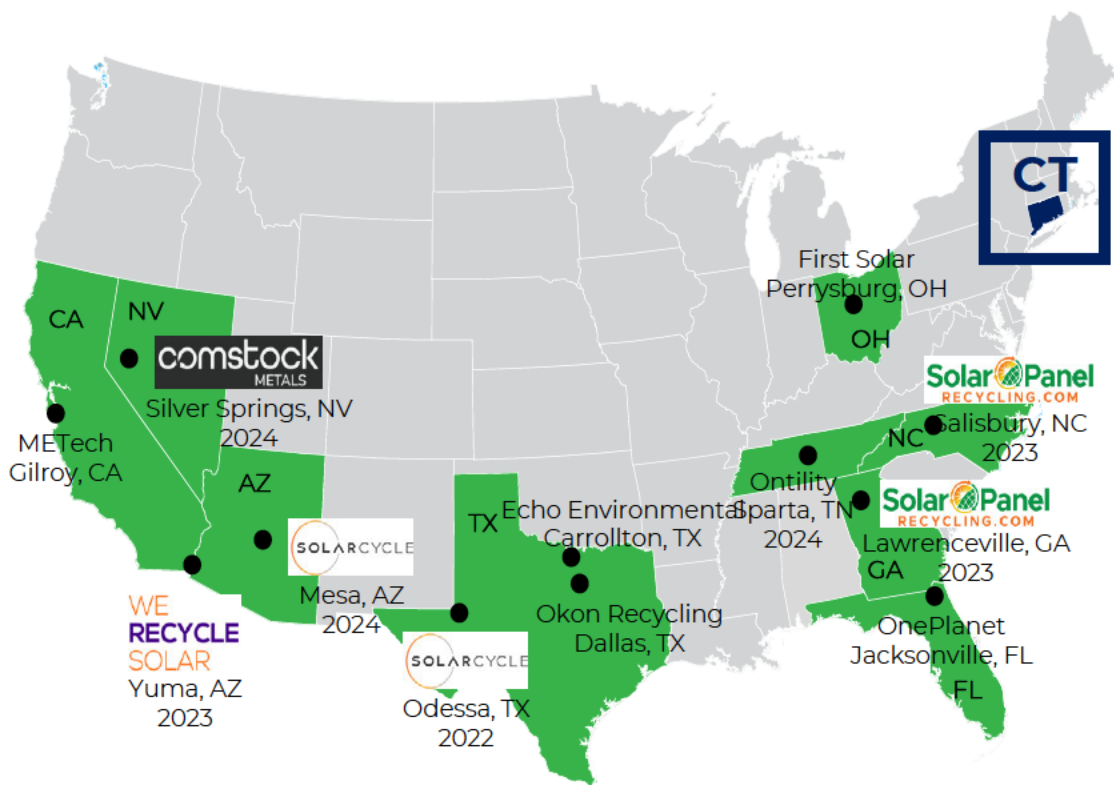
- **Policy Objectives:**
  - Improve municipal recycling programs, reduce waste, and increase participation
  - Develop and improve recycling and waste conversion technologies, and
  - Encourage organizations in EPR obligations.
  
- **Policy Goals** (relative to 2005 baseline):
  - Reduce MSW by 10%
  - Increase the recycling rate from 35% to 45%, and
  - Divert 300,000 tons of organic waste annually.
  
- **Overarching Goal** – Divert **60% MSW by 2024** (codified in Connecticut General Statute Section 22a-241a.17)

# Solar PV & Battery Storage End-of-Life Context on the Problem & Existing Capacity



Source: US EPA, 2023, “early/late” scenarios are Power Advisory rough estimates

- Key assumptions**
- “Mid loss” scenario – middle scenario (in between “regular scenario” (all goes to plan) and “early loss”)
  - 30 yr panel life, using Weibull distribution curve (normal bell curve)
  - 1 MW of solar panels = ~57 metric tons (1 metric ton = ~17.5 kW)



Existing recycling factories are generally in the southeast, southwest and Texas

# Solar PV & Battery Storage End-of-Life Next Steps



- **For Green Bank Owned Systems:**
  - Continue to investigate end-of-life solutions aligned to our mission & values
  - Investigate solutions to extend life (e.g. repairing systems)
- **For EI Scope Expansion:**
  - Scope out potential investments in this sector, whether in a local processing facility or in collection or aggregation
  - Take a field trip?
- **For the State of Connecticut:**
  - Support DEEP and/or legislature to identify whether/which policy solutions are required
  - Convene with other regional partners
  - Identify areas to modify programs deploying technology
  - Identify solutions for programs that have already deployed technology

# Expand & Scale Organic Waste Mgmt.

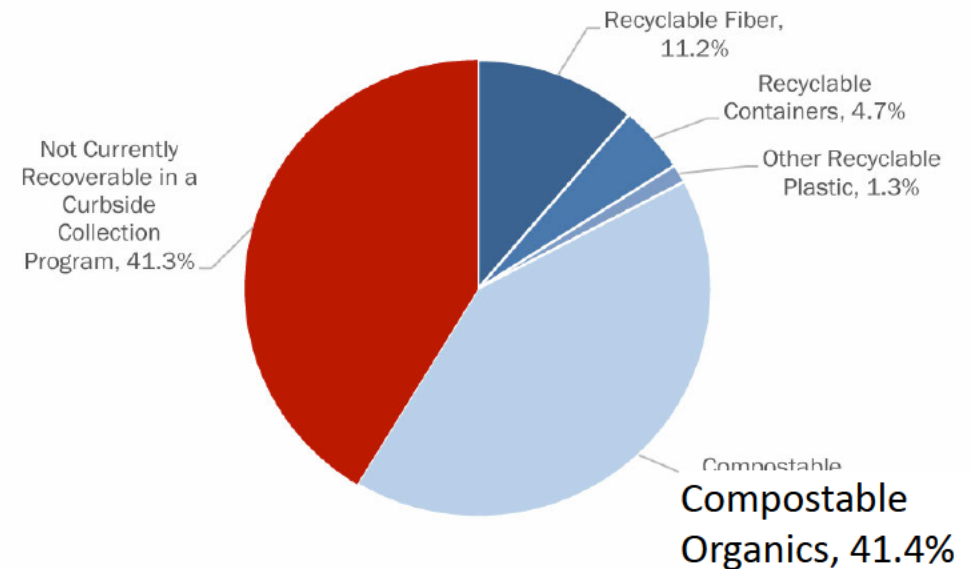
## Connecticut Waste Composition



- **Over 40% of CT municipal solid waste (MSW) is compostable, only 9.3% is currently diverted**
- **Breakdown of Connecticut's Compostable Waste Streams**
  - Food waste (22%), Yard trimmings, Compostable paper (11%), untreated wood

	Waste Stream	T/Year	%
1	Paper	499,367	23
2	Food Scraps*	482,073	22
3	Other Waste	298,323	14
4	Construction & Demolition	257,250	12
5	Plastic	255,088	12
6	Other Organics	239,956	11
7	Metal	75,662	4
8	Glass	54,044	2
Total		2,161,763	100

2021 est. CT Waste Streams



Recoverable materials in disposed MSW



# Expand & Scale Organic Waste Mgmt.

## Impact of Organic Waste



### ■ **GHG Impact**

- Food waste alone = 6% of total U.S. emissions, including 60% of methane from landfill
- Additional transportation emissions from shipping waste

### ■ **Water Impact**

- Wasted food accounts for 21% of U.S. freshwater use
- Leachate from landfill waste can contaminate groundwater supplies

### ■ **Food Insecurity & Equity**

- 1 in 10 CT residents face food insecurity
- Wasted, still edible food could address food insecurity + reduce disposal costs
- Lower-income and EJ communities disproportionately impacted by waste mgmt

Where CT MSW was Landfilled '18-'22

Landfill	St.	Total Tons MSW Accepted '18-'22	Est. Mi. Traveled
Keystone Sanitation LF	PA	538,366	228
BFI Carbon Limestone LF	OH	411,034	497
Tunnel Hill Landfill	OH	197,466	623
Sunny Farms Landfill	OH	190,042	652
Brunswick Landfill	VA	94,842	532
Empire Sanitary Landfill	PA	76,785	196
Apex Landfill	OH	70,434	530
Seneca Meadows Landfill	NY	27,220	293
WM Tullytown Landfill	PA	26,643	185
LaFarge Landfill	OH	25,842	509





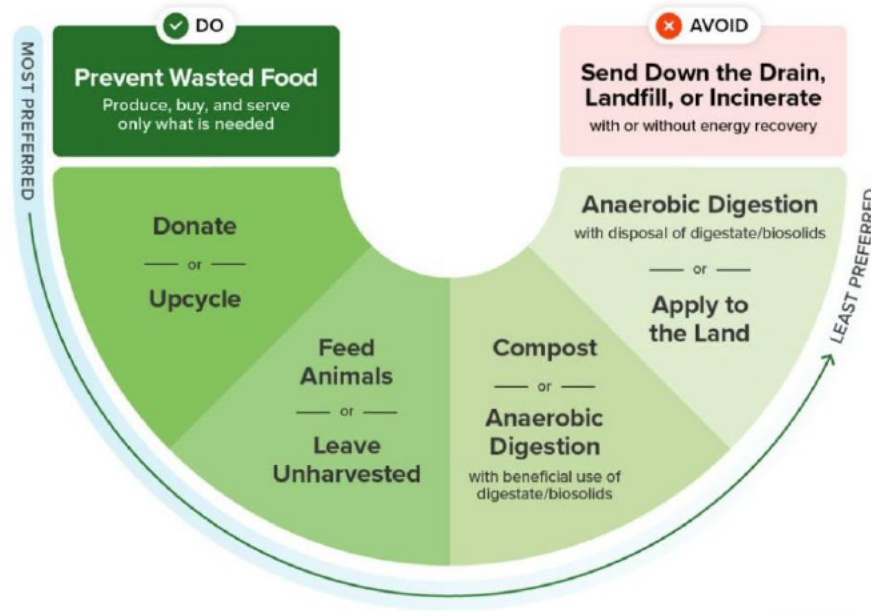
# Expand & Scale Organic Waste Mgmt.

## Target Solutions & Market Assessment



### Wasted Food Scale

How to reduce the environmental impacts of wasted food



PREVENTION

RESCUE

RECYCLING



Optimize the Harvest



Enhance Product Distribution



Refine Product Management



Maximize Product Utilization



Reshape Consumer Environments



Strengthen Food Rescue



Recycle Anything Remaining

### CT Organic Waste Market Dynamics

- Processing facilities not operating at capacity
- Processing mix of in-state and out-of-state organics
- Commercial organics law tightening with low compliance, no enforcement
- Facility locations drive market dynamics
- Improving diversion, hauling and tipping economics are a key part of the solution

### Barriers

- High transit costs, siting and permitting, limited grants and incentives, availability and quality of feedstock

From ReFed "Roadmap to 2030," through USDA, EPA, & FDA interagency agreement

# Expand & Scale Organic Waste Mgmt.

## Potential Investment Opportunities



Impact	Opportunity
Prevent	Technology and equipment adoption to reduce harvest losses (e.g. on-farm solar-powered frost fans or field cooling units)
	Food aggregation and distribution facilities for improved supply chain efficiencies
	Facility upgrades for improved produce management and reduced loss
	New commercial services to reduce food waste, save costs and improve supply chain efficiency
	Processing capacity expansion for upcycling defect produce into value-added products
Rescue	Working capital support for food rescue initiatives
Recycle	Pre-processing infrastructure (e.g. depackaging, homogenizing)
	Increased regional processing capacity (e.g. commercial aerobic composting, anaerobic digestion, etc.)
	Regional infrastructure to support organic waste processing capacity
	Increased capacity for organic waste management and compost (on-farm, at food-processing facilities, etc.)
	Expanding or improving organic waste hauling services
	Feedstock offtake agreements
	Support the development of onsite capacity to divert organic waste and generate products and energy for waste producers
	End product creation (e.g. finished compost, power, heat, or transportation fuels)
	Organic waste tracking and aggregation services

# Prior Investment – Quantum Organics

## Food Waste to Energy AD Project



<b>Market Segment</b>	<b>Project Finance</b> (Co-Investment)
<b>Project Summary</b>	Provided long-term subordinated debt (i.e., 15 years) at low interest rate (i.e., 2%) for 20% of the capital structure to finance the 1 <sup>st</sup> AD project of its kind in CT
<b>Support Needed</b>	<ul style="list-style-type: none"><li>▪ Links to food waste collection policy (PA 11-127)</li><li>▪ Attracted local lender as a senior debt provider (i.e., Peoples Bank) along with equity and tax equity</li></ul>
<b>CT Results</b>	\$10 MM project, 1 MW, diverts organic materials from waste stream while producing renewable energy





# Prior Investment: Ag-Grid Fort Hill Farms Farm Waste to Energy AD Project



<b>Market Segment</b>	<b>Project Finance</b> (Co-Investment)
<b>Project Summary</b>	Provided long-term subordinated debt to finance the 1 <sup>st</sup> AD farm waste project of its kind in CT at Fort Hill Farms in Thompson
<b>Support Needed</b>	<ul style="list-style-type: none"><li>▪ Links to food waste collection policy (PA 11-127)</li><li>▪ Attracted lender as a senior debt provider (i.e., Live Oak Bank) along with equity and tax equity</li></ul>
<b>CT Results</b>	\$4.8 MM project, 550 kW, reduce 25,000 tons of organic waste while producing renewable energy



## Agenda Item #8a **Greenhouse Gas Reduction Fund** Coalition for Green Capital Investment Policy





# NCIF Investment Policy



- CGC's Investment Policy for Subrecipients currently applies to Green Bank's NCIF project investments
- Green Bank's subaward agreement with CGC allows us to submit our own investment policy CGC's review and approval
- Green Bank's NCIF Investment Policy is modeled after CGC's but is tailored to our financing programs and investment activities
  - Puerto Rico and New Hampshire will need to develop their own policies or adhere to CGC's

# Resolution #7

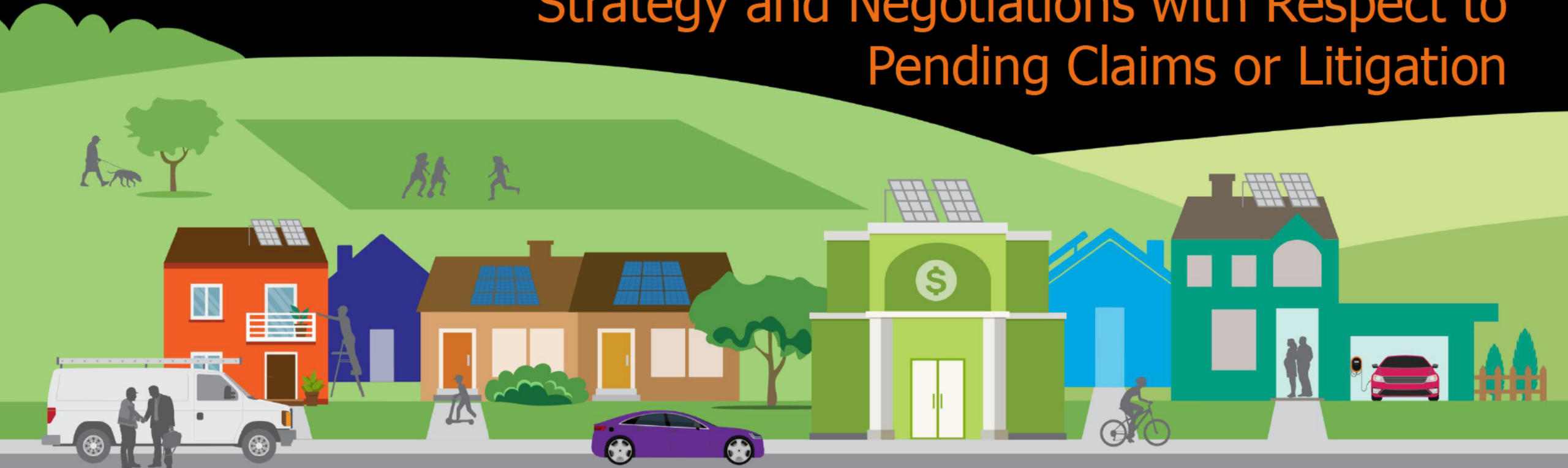


**NOW**, therefore be it:

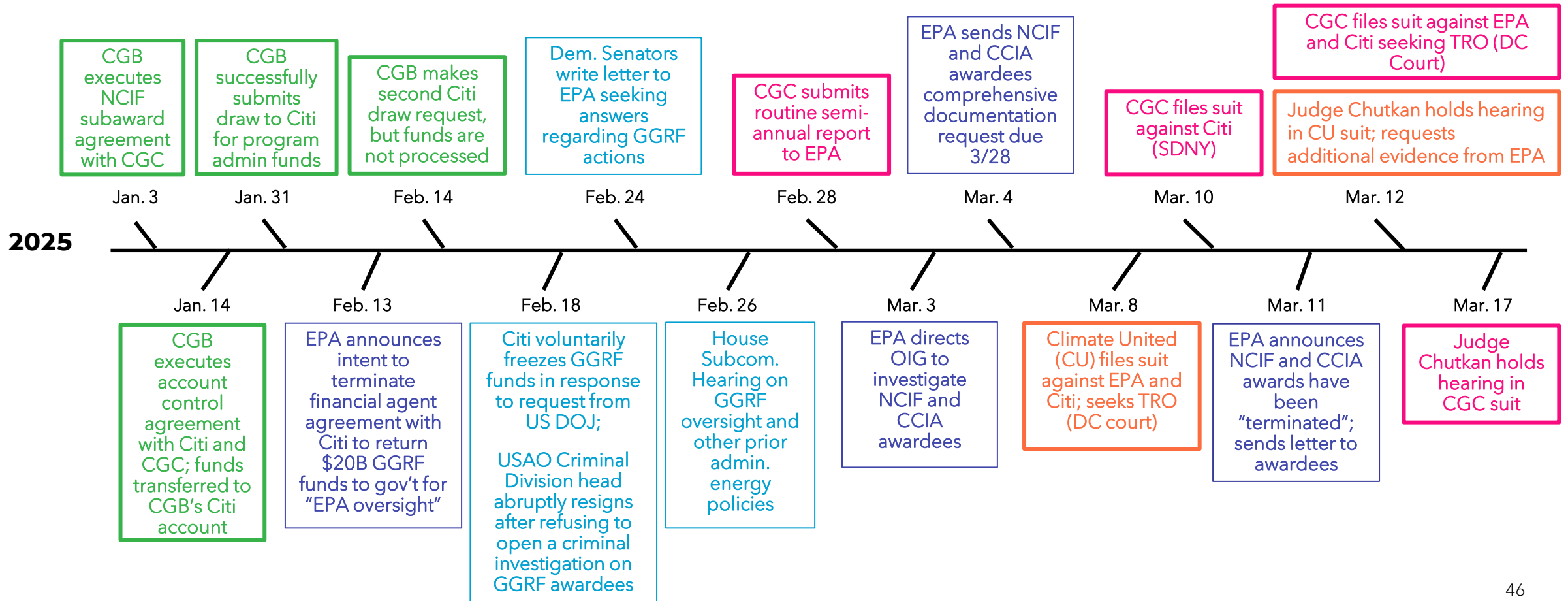
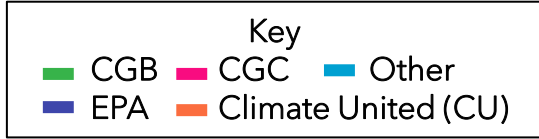
**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to submit the Green Bank's NCIF Investment Policy to CGC for review and approval; and,

**RESOLVED**, that the Board hereby approves of the Green Bank adhering to its NCIF Investment Policy in all future disbursements of NCIF funds for Qualified Projects.

## Agenda Item #9 **Executive Session** Strategy and Negotiations with Respect to Pending Claims or Litigation



# NCIF RECENT EVENTS TIMELINE



# UPDATE FROM DC COURTS

## Judge bars Trump's EPA from taking back \$20B in climate grants — for now

The ruling orders EPA and climate change groups to return to court to argue about the fate of the money.



Judge Tanya Chutkan's order is a setback for the Trump EPA's effort to claw back funding for the climate investments passed by Congress during the Biden administration. | Mark Schiefelbein/AP

- **Judge Tanya Chutkan** – ruled on 3/18 to temporarily block EPA from terminating \$20B under GGRF
  - Prevents EPA from reclaiming money that was deposited at Citibank for awardees (e.g., CGC, including CT Green Bank)
  - Decision does not allow the ability of awardees to draw from the funds, postponing that decision until further court proceedings
  - Parties jointly filed proposed schedule 3/19
  - Citi must file a status report by 3/24 demonstrating compliance
- **Plaintiff's (e.g., CGC) Motion** – for temporary restraining order is GRANTED in part and DENIED in part
- **Multi-State AG suit from CA, IL, ME and MN filed** against EPA and Citi 3/19
  - CT AG support?
- **House Dems coalition submitted letter to EPA** criticizing GGRF actions 3/19



# Board of Directors



## Agenda Item #10 Adjourn



Subject to Changes and Deletions



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

Friday, January 24, 2025  
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 January 24, 2025.

Board Members Present: Joseph DeNicola, Thomas Flynn, Dominick Grant, John Harrity, Kimberly Mooers, Lonnie Reed, Joanna Wozniak-Brown

Board Members Absent: Adrienne Farrar Houël, Allison Pincus, Matthew Ranelli, Brenda Watson

Staff Attending: Stephanie Attruia, David Beech, Priyank Bhakta, Joe Boccuzzi, Larry Campana, Shawne Cartelli, Louise Della Pesca, Catherine Duncan, Mackey Dykes, Brian Farnen, Bryan Garcia, Sara Harari, Bert Hunter, Stefanie Keohane, Matthew King, Stephanie Layman, Alysse Lembo-Buzzelli, Cheryl Lumpkin, Kevin Moss, Jane Murphy, Tyler Rubega, Ariel Schneider, Eric Shrago, Dan Smith, Fiona Stewart, Heather Stokes, Marianna Trief, Christina Tsitso, Leigh Whelpton

Others present: Amanda Nocera from the Office of the Treasurer

**1. Call to Order**

- Lonnie Reed called the meeting to order at 9:06 am.

**2. Public Comments**

- No public comments.

**3. Consent Agenda**

**a. Meeting Minutes of December 13, 2024**

**Resolution #1**

Motion to approve the meeting minutes of the Board of Directors for December 13, 2024.

## Subject to Changes and Deletions

### b. Employee Handbook Revisions

#### **Resolution #2**

**WHEREAS**, Budget, Operations, & Compensation Committee recommend the above noted revisions to the Green Bank Employee Handbook.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors hereby approves of the revisions to the Green Bank Employee Handbook presented on January 24, 2025.

**Upon a motion made by John Harry and seconded by Joseph DeNicola, the Board of Directors voted to approve the Consent Agenda which includes Resolutions 1 and 2. None opposed and Joanna Wozniak-Brown abstained. Motion approved.**

The Agenda items were then presented in the following order: 4b, 5a, 6c, 6a, 6b.

#### **4. Committee Updates and Recommendations**

##### **a. Audit, Compliance, and Governance Committee**

###### **i. Legislative and Regulatory Policy Process and Update**

- Brian Farnen summarized the statutory reporting and legislative update, in which the Green Bank is up to date on statutory reporting, the Green Bank did not initiate a legislative proposal this session, the session is a long session, and the Green Bank will predominantly be supporting Governor Lamont's legislation pertaining to Climate & Resilience. He reviewed some other items expected to be presented during the upcoming session.
  - John Harry asked if the Republican plan to put the Public Benefit Charge into the budget will impact the Green Bank and in what way. Brian Farnen responded if so it could affect the ability to plan in advance though he doesn't believe that proposal will become law. Bert Hunter commented that if it were to get to Appropriations then annually there would be Appropriations Risk, meaning that future revenues would not be able to be securitized or pledged due to that risk.

##### **b. Budget, Operations, and Compensation Committee**

###### **i. FY25 Targets and Budget – Proposed Revisions**

- Eric Shrago summarized the changes to the targets and budgets for FY 2025.
  - Thomas Flynn commented that he appreciates knowing the target changes are due to timing and not due to other issues, and stated he is comfortable with the change in the relationship to the subsidiaries. He noted his long-standing support for an incentive compensation plan as well and gave his support to the proposal.
  - John Harry commented that the Budget, Operations, and Compensation Committee approved of the changes as well.

#### **Resolution #3**

**WHEREAS**, pursuant to Section 5.2.2 of the Bylaws, the Connecticut Green Bank's

## Subject to Changes and Deletions

Budget, Operations, and Compensation Committee has reviewed and recommended to the Board of Directors to approve (1) the revised FY2025 Targets and Budget and (2) the direction to staff to create an incentive compensation plan that incentivizes staff to optimize the deployment of the Greenhouse Gas Reduction Fund award for the National Clean Investment Fund consistent with the aforementioned goals.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors of the Connecticut Green Bank approve: (1) the revised FY2025 Targets and Budget, and (2) the direction to staff to create an incentive compensation plan that incentivizes staff to optimize the deployment of the Greenhouse Gas Reduction Fund award for the National Clean Investment Fund consistent with the aforementioned goals.

**Upon a motion made by Dominick Grant and seconded by Thomas Flynn, the Board of Directors voted to approve Resolution 3. None opposed and Joanna Wozniak-Brown abstained. Motion approved.**

### **5. Greenhouse Gas Reduction Fund – Update and Recommendations** **a. National Clean Investment Fund – Puerto Rico and New Hampshire**

- Stefanie Keohane summarized an update to the draft agreements as part of the Green Bank's participation with the Puerto Rico Green Energy Trust and New Hampshire Community Loan Fund. There will be a Subgrant Agreement for technical assistance and the majority of the funding will come from a Loan and Security Agreement.

#### **Resolution #4**

**WHEREAS**, within the Inflation Reduction Act of 2022 ("IRA") there is a \$27 billion Greenhouse Gas Reduction Fund "GGRF" inclusive of a \$14 billion National Clean Investment Fund ("NCIF") modelled after the Green Bank;

**WHEREAS**, the Coalition for Green Capital ("CGC"), a 501(c)3 nonprofit organization, applied for a grant through the GGRF NCIF on October 12, 2023, in the amount of \$10 billion, and inclusive of eighteen (18) Subgrantees, including the Green Bank;

**WHEREAS**, the Green Bank's part of the CGC application included resources in support of financing projects in Connecticut, as well as additional resources that would be administered by the Green Bank on behalf of the New Hampshire Community Loan Fund and Puerto Rico Green Energy Trust ("the Participants") as outlined in memos to the Board of Directors of the Green Bank ("the Board") date June 14, 2024 and July 19, 2024;

**WHEREAS**, at the June 21, 2024, meeting of the Board, the Board approved of the Green Bank negotiating terms with the Participants with the intention to bring back such contract or term sheet back to the Board for approval as a Strategic Selection; and,

**WHEREAS**, on January 3, 2025, the Green Bank entered into an NCIF Subgrant Agreement with CGC totaling \$93.53 million, and on January 16, 2025, CGC transferred the total funding amount to the Green Bank's account at Citibank in accordance with the Account Control Agreement the Green Bank executed with CGC and Citibank on January 14, 2025.

## Subject to Changes and Deletions

**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 definitive documentation with the Participants as Financial Intermediary Subrecipients and Technical Assistance Subrecipients to CGC's winning GGRF NCIF award as outlined in this memo dated January 21, 2025 and materially consistent with the attached draft Loan and Security Agreement & Subgrant Agreement for Technical Assistance, and as he or she shall deem to be in the interests of the Green Bank;

**RESOLVED**, that the Board hereby approves of the Green Bank executing a contract with the Participants as a Financial Intermediary Subrecipients and Technical Assistance Subrecipients to CGC's winning GGRF NCIF award 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 contracts with the Participants; and,

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

**Upon a motion made by John Harrity and seconded by Dominick Grant, the Board of Directors voted to approve Resolution 4. None opposed and Joanna Wozniak-Brown abstained. Motion approved.**

### **b. National Clean Investment Fund – Zero Emissions Transportation**

- Bryan Garcia summarized the history of the National Clean Investment Fund establishment with the Coalition for Green Capital.
- Sara Harari summarized the updates to the plan to use a portion of the NCIF award to support the Connecticut Clean Air Act goal to transition school bus fleets to electric buses. There was a very robust participation in the RFP process, and there were 6 bids to support 217 buses and 254 chargers, leading to the DEEP grant request being oversubscribed. She presented the request to bring back recommendations to the Board on February 19, 2025, as there is an expectation of some projects to exceed what the Deployment Committee can approve.
  - John Harrity commented that in terms of environmental justice, when possible he suggests that organized labor be involved. Sara Harari stated she's heard anecdotally that the bus drivers are excited for the electric buses.
  - Joseph DeNicola added that from DEEP's perspective, the partnership with the Green Bank has been very strong.

## **6. Financing Programs Updates and Recommendations**

### **a. C-PACE Transaction – Plainville**

#### **Resolution #5**

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



## Subject to Changes and Deletions

the Connecticut Green Bank (Green Bank) has established a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

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

**WHEREAS**, the Green Bank seeks to provide a \$892,315 construction and term loan under the C-PACE program to Kalart Associates, LLC, the building owner of 20 Hultenius Street, Plainville, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan as more particularly described in the memorandum submitted to the Green Bank Board of Directors dated January 21, 2025 (the "Memo").

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the Memo, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by this resolution;

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

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

**Upon a motion made by John Harrity and seconded by Kimberly Mooers, the Board of Directors voted to approve Resolution 5. None opposed and Joanna Wozniak-Brown abstained. Motion approved.**

### **b. C-PACE Transaction – Bloomfield**

#### **Resolution #6**

**WHEREAS**, pursuant to Connecticut General Statute Section 16a-40g (the "Statute"), the Connecticut Green Bank ("Green Bank") has established a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy ("C-PACE");

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

**WHEREAS**, the Green Bank seeks to provide a \$667,722 construction and term loan under the C-PACE program to mk NORTH AMERICA, INC., the building owner of 105 Highland Park Drive, Bloomfield, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan as more particularly described in the memorandum submitted to the Green Bank

## Subject to Changes and Deletions

Board of Directors dated January 17, 2025 (the "Memo").

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the Memo, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by this resolution;

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

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

**Upon a motion made by Joseph DeNicola and seconded by John Harrity, the Board of Directors voted to approve Resolution 6. None opposed and Joanna Wozniak-Brown abstained. Motion approved.**

### c. SBEA Extension

- Mackey Dykes summarized the facility structure and extension request to continue the SBEA program, which would last 3 years to align with the Conservation & Load Management Plan.

### **Resolution #7**

**WHEREAS**, the purchase commitments under the CEFIA Holdings LLC (a Connecticut Green Bank subsidiary), Eversource Energy and Amalgamated Bank Small Business Energy Advantage (SBEA) financing facility, pursuant to that certain Third Amended and Restated Master Purchase and Servicing Agreement dated March 20, 2020 (as amended, the "MPA"), expired on December 31, 2024; and,

**WHEREAS**, the parties have agreed on terms in principle as set forth in a memorandum to the Connecticut Green Bank Board of Directors (the "Board") dated January 17, 2025 (the "MPA Memo") to renew and extend the MPA.

**NOW**, therefore be it:

**RESOLVED**, that the Board authorizes the Connecticut Green Bank to renew and extend the MPA to December 31, 2027 substantially in accordance with the terms of the existing MPA with modifications as set forth in the MPA Memo; and,

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

## Subject to Changes and Deletions

Upon a motion made by Kimberly Mooers and seconded by Joseph DeNicola, the Board of Directors voted to approve Resolution 7. None opposed and Joanna Wozniak-Brown abstained. Motion approved.

Quorum was lost and there was a suggestion for a Special Meeting next week to vote on Resolutions not able to be voted on today. The group decided to meet for a Special Meeting and for today would listen to the items that do not require a Resolution vote.

### 7. Investment Programs Updates and Recommendations a. Cargill Falls – Facility Modification (Restructuring)

#### Resolution #8

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

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

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

**WHEREAS**, Green Bank staff now seeks approval to defer C-PACE loan payments from HCFM (“Loan Deferral”) until July 1, 2025 as explained in the memorandum in respect of this matter submitted to the Board on January 21, 2025 (the “Board Memo”).

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan Deferral consistent with the Board Memo and the Green Bank’s Loan Loss Decision Process; and,

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

**This Resolution was not voted on due to lack of quorum.**

### b. PosiGen – Facility Modification (3<sup>rd</sup> Party Participant)

#### Resolution #9

## Subject to Changes and Deletions

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

**WHEREAS**, the Green Bank Board of Directors (the "Board") previously authorized approval for the impact investing firm ImpactAssets' participation in an Investment Tax Credit Bridge Loan with a participant contribution of \$2.875 million on June 7, 2023; and,

**WHEREAS**, staff has analyzed the current financial condition of PosiGen in relation to the proposed incremental 2nd lien upsize and related financing and has concluded that the additional exposure risk is reasonable and appropriate, and recommends the Board approve the addition of ImpactAssets as a participant with a capital contribution not to exceed \$6,000,000 as more fully explained in the memorandum to the Board dated January 21, 2025 (the "Board Memo").

**NOW**, therefore be it:

**RESOLVED**, that the Board authorizes the Green Bank to upsize the SLCF, adding ImpactAssets, or an alternative investor, as a participant to the 2nd lien facility for PosiGen, not to exceed an additional capital commitment of \$6,000,000, and to extend the availability period accordingly to allow for draws against this facility, as outlined in the Board Memo; 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 affect the above-mentioned legal instruments.

**This Resolution was not voted on due to lack of quorum.**

### **c. Sungage – Green Bank Capital Solutions (Solar + Storage and Smart-E Loan)**

#### **Resolution #10**

**WHEREAS**, the Connecticut Green Bank ("Green Bank") developed the Smart-E Loan program with financing agreements with various credit unions and community banks,

**WHEREAS**, the Smart-E Loan continues to be a tool for Connecticut homeowners to finance clean energy measures to reduce their energy burdens;

**WHEREAS**, the Sungage Financial has applied to the Capital Solutions Open Request for Proposals in order to enter the Smart-E Loan program as a solar and storage lender; and,

**WHEREAS**, Sungage and Green Bank have had a history of successful collaboration dating back to 2013 with the original solar loan.

**NOW**, therefore be it:

**RESOLVED**, that the Board approves a loan in an amount not to exceed \$10 million dollars from the Green Bank balance sheet in support of Smart-E Loans in partnership with Sungage generally consistent with this memorandum dated January 21, 2025 as a Capital

## Subject to Changes and Deletions

Solutions Project;

**RESOLVED**, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to affect the loan on such terms and conditions as are materially consistent with the Modification Memo; 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 affect the above-mentioned legal instruments.

**This Resolution was not voted on due to lack of quorum.**

### **d. Scale Microgrids – Green Bank Capital Solutions (Commercial – ESS Projects – KeyBank Facility)**

#### **Resolution #11**

**WHEREAS**, Microgrid Solutions LLC (“Scale”) has requested financing in support of private capital from the Connecticut Green Bank (“Green Bank”) to finance and construct a solar and battery energy storage portfolio (the “Portfolio”), including 8 battery energy storage projects in Connecticut;

**WHEREAS**, Scale and KeyBank have structured credit facilities whereby the Green Bank would participate on an equivalent security basis with other senior lenders; and,

**WHEREAS**, staff has considered the merits of the credit facilities and the ability of the project and finance stakeholders to construct, operate and maintain the Portfolio, support the obligations under the credit facilities throughout their respective terms, and as set forth in the due diligence memorandum dated January 21, 2025 (the “Board Memo”), has recommended this support be in the form of funding not to exceed \$10,000,000, secured by all project assets, contracts and revenues as described in the Board Memo.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (the “Board”) hereby approves the applicants Capital Solutions Proposal for Green Bank’s participation in the credit facilities in an amount not to exceed \$10,000,000;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to participate in the credit facilities in an amount not to exceed \$10,000,000 in with terms and conditions consistent with the Board Memo, 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 the date of authorization by the Board; and,

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

**This Resolution was not voted on due to lack of quorum.**



## Subject to Changes and Deletions

### **8. Incentive Programs Updates and Recommendations** **a. Energy Storage Solutions – CPower / Danbury Mission Technologies**

#### **Resolution #12**

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

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

**WHEREAS**, in its December 9, 2002 meeting the Board approved updated Procedures to better align with the Program process.

**NOW**, therefore be it:

**RESOLVED**, that the Deployment Committee hereby approves the estimated upfront incentives sought by CPower for one non-residential project individually under \$500,000, totaling a not-to-exceed amount of \$905,996 consistent with the approved Procedures; and,

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

**This Resolution was not voted on due to lack of quorum.**

### **9. Other Business**

#### **Resolution #13**

**WHEREAS**, the State of Connecticut has been awarded funding under the Energy Efficiency Revolving Loan Fund Capitalization Grant Program; and,

**WHEREAS**, the Connecticut Department of Energy and Environmental Protection has engaged the Connecticut Green Bank ("Green Bank") as a subgrantee to develop and implement a program to support the deployment of energy efficiency loans into the affordable multifamily housing sector;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank may enter into with and deliver to the State of Connecticut Department of Energy and Environmental Protection, any and all documents which it deems to be necessary or appropriate to enter into a contract for approximately \$1,269,190

## Subject to Changes and Deletions

titled Energy Efficiency Revolving Loan Fund Subgrant; and,

**RESOLVED**, that Bryan Garcia as President and CEO of the Connecticut Green Bank or other duly authorized Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to affect the above-mentioned legal instruments.

**This Resolution was not voted on due to lack of quorum.**

- Bryan Garcia briefly summarized the update to the Comprehensive Plan for FY23 – FY25.
- John Harrity asked how many Board Members are currently in position and Bryan Garcia stated that 11 of 12 positions are filled.

### 10. Adjourn

Upon a motion made by Kimberly Mooers and seconded by Joseph DeNicola, the Board of Directors meeting adjourned at 9:46 am.

Commented [BF1]: If the plan is to not get these regularly signed, let's delete this moving forward



**BOARD OF DIRECTORS OF THE  
CONNECTICUT GREEN BANK**  
Special Meeting Minutes

Wednesday, January 29, 2025  
9:00 a.m. – 10:00 a.m.

A special meeting of the Board of Directors of the **Connecticut Green Bank** (the “Green Bank”) was held on January 29, 2025.

Board Members Present: Joseph DeNicola, Adrienne Farrar Houël, Thomas Flynn, Dominick Grant, John Harrity, Kimberly Mooers, Matthew Ranelli, Lonnie Reed, Brenda Watson

Board Members Absent: Allison Pincus, Joanna Wozniak-Brown

Staff Attending: Stephanie Attruia, David Beech, Priyank Bhakta, Larry Campana, Sergio Carrillo, Catherine Duncan, Mackey Dykes, Brian Farnen, Bryan Garcia, Sara Harari, Bert Hunter, Stefanie Keohane, Matthew King, Edward Kranich, Cheryl Lumpkin, Jane Murphy, Tyler Rubega, Ariel Schneider, Eric Shrago, Dan Smith, Marianna Trief

Others present: None

**1. Call to Order**

- Lonnie Reed called the meeting to order at 9:02 am.

**2. Investment Programs Updates and Recommendations**  
**a. Cargill Falls – Facility Modification (Restructuring)**

- Marianna Trief summarized the recent history of the Cargill Falls project, including that the 2025 budget has completed and that stakeholder negotiations are ongoing. Due to that, the team is asking for an additional deferral until July 1, 2025 for time to resolve the negotiations.
  - Thomas Flynn asked if this is the first time Cargill Falls has asked for a deferral. Marianna Trief responded no, the project has been deferred for about 2 years due to a large lead issue which has been remediated but caused issues, though most have stabilized. Thomas Flynn asked how this project is presented on the balance sheet. Marianna Trief responded the principal outstanding is about \$10.8 million which includes the deferrals, but the Green Bank is the first lean on the property and further explained the financial position. The group discussed the project and its financial status further.

**Resolution #1**

**WHEREAS**, pursuant to Conn. Gen. Stat. 16a-40g, the Connecticut Green Bank (“Green

## Subject to Changes and Deletions

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

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

**WHEREAS**, Green Bank staff now seeks approval to defer C-PACE loan payments from HCFM (“Loan Deferral”) until July 1, 2025 as explained in the memorandum in respect of this matter submitted to the Board on January 21, 2025 (the “Board Memo”).

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan Deferral consistent with the Board Memo and the Green Bank’s Loan Loss Decision Process; and,

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

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

### **b. PosiGen – Facility Modification (3<sup>rd</sup> Party Participant)**

- Larry Campana summarized the history of PosiGen and the reason for the modification request which is due to steady growth in Connecticut.
  - Thomas Flynn asked if the Green Bank’s funds are restricted for use in Connecticut. Bert Hunter responded that the Green Bank’s funds are percentage of a pool of assets that is well represented, meaning there are more Connecticut assets as a percentage of the pool than our funding into the pool represents.
  - Thomas Flynn asked if there are any concerns about concentration of risk with one entity. Bert Hunter responded there is not as the Green Bank has considerable experience with residential loan portfolios, there are substantial systems generating the cash flows behind this, and the portfolio is well diversified. Thomas Flynn and Bert Hunter further discussed the concentration of risk, though Bert was confident with this project’s security. Thomas Flynn expressed wanting to discuss with the management of the Green Bank the possibility of implementing a cap of funds to invest within one portfolio on a percentage basis.

### **Resolution #2**

## Subject to Changes and Deletions

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

**WHEREAS**, the Green Bank Board of Directors (the "Board") previously authorized approval for the impact investing firm ImpactAssets' participation in an Investment Tax Credit Bridge Loan with a participant contribution of \$2.875 million on June 7, 2023; and,

**WHEREAS**, staff has analyzed the current financial condition of PosiGen in relation to the proposed incremental 2nd lien upside and related financing and has concluded that the additional exposure risk is reasonable and appropriate, and recommends the Board approve the addition of ImpactAssets as a participant with a capital contribution not to exceed \$6,000,000 as more fully explained in the memorandum to the Board dated January 21, 2025 (the "Board Memo").

**NOW**, therefore be it:

**RESOLVED**, that the Board authorizes the Green Bank to upsize the SLCF, adding ImpactAssets, or an alternative investor, as a participant to the 2nd lien facility for PosiGen, not to exceed an additional capital commitment of \$6,000,000, and to extend the availability period accordingly to allow for draws against this facility, as outlined in the Board Memo; 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 affect the above-mentioned legal instruments.

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

### **c. Sungage – Green Bank Capital Solutions (Solar + Storage and Smart-E Loan)**

- Bert Hunter summarized that the diversity of measures that Smart-E covers has caused some strain on the program, particularly due to the fact that Capital for Change has paused their participation. He summarized the history of discussions with Sungage and their proposed funding options. Larry Campana summarized the history and success of Sungage's business and proposal to fulfill the role within the Smart-E program. Bert Hunter clarified that the advances within the Resolution are to the pool of loans, much like the PosiGen structure, and that it will be advanced over time.

- Joseph DeNicola asked if the pool of loans is for Connecticut only or is diversified geographically. Bert Hunter responded the pool is for Connecticut only.

### **Resolution #3**

**WHEREAS**, the Connecticut Green Bank ("Green Bank") developed the Smart-E Loan program with financing agreements with various credit unions and community banks,

**WHEREAS**, the Smart-E Loan continues to be a tool for Connecticut homeowners to



## Subject to Changes and Deletions

finance clean energy measures to reduce their energy burdens;

**WHEREAS**, the Sungage Financial has applied to the Capital Solutions Open Request for Proposals in order to enter the Smart-E Loan program as a solar and storage lender; and,

**WHEREAS**, Sungage and Green Bank have had a history of successful collaboration dating back to 2013 with the original solar loan.

**NOW**, therefore be it:

**RESOLVED**, that the Board approves a loan in an amount not to exceed \$10 million dollars from the Green Bank balance sheet in support of Smart-E Loans in partnership with Sungage generally consistent with this memorandum dated January 21, 2025 as a Capital Solutions Project;

**RESOLVED**, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to affect the loan on such terms and conditions as are materially consistent with the Modification Memo; 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 affect the above-mentioned legal instruments.

**Upon a motion made by Joseph DeNicola and seconded by Thomas Flynn, the Board of Directors voted to approve Resolution 3. None opposed or abstained. Motion approved unanimously.**

### **d. Scale Microgrids – Green Bank Capital Solutions (Commerical – ESS Projects – KeyBank Facility)**

- David Beech summarized the history with Scale Microgrids and the new proposal to participate in one of their credit facilities. He reviewed the details of the portfolio, the structure of the credit facility, and the key points about risks and mitigants.
  - John Harry asked if all the activity indicated things are going well or issues within the market. David Beech responded that he believes it is indicative of a strong portfolio, and that Scale Migrogrids has significant plans to make sure they are starting construction and safe harboring the projects.
  - Adrienne Farrar-Houël asked if this is related to the New Power project. David Beech stated that Scale Microgrids is the owner of that project and they are doing construction, but the connection stops there.
  - Matthew Ranelli asked about the construction loans, if there is confirmation of the projects being safe harbored before some or all of the loan is disbursed. David Beech responded yes that will happen as there is a 10% minimum equity requirement which applies to every project.

### **Resolution #4**

**WHEREAS**, Microgrid Solutions LLC (“Scale”) has requested financing in support of private capital from the Connecticut Green Bank (“Green Bank”) to finance and construct a solar

## Subject to Changes and Deletions

and battery energy storage portfolio (the "Portfolio"), including 8 battery energy storage projects in Connecticut;

**WHEREAS**, Scale and KeyBanc have structured credit facilities whereby the Green Bank would participate on an equivalent security basis with other senior lenders; and,

**WHEREAS**, staff has considered the merits of the credit facilities and the ability of the project and finance stakeholders to construct, operate and maintain the Portfolio, support the obligations under the credit facilities throughout their respective terms, and as set forth in the due diligence memorandum dated January 21, 2025 (the "Board Memo"), has recommended this support be in the form of funding not to exceed \$10,000,000, secured by all project assets, contracts and revenues as described in the Board Memo.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (the "Board") hereby approves the applicants Capital Solutions Proposal for Green Bank's participation in the credit facilities in an amount not to exceed \$10,000,000;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to participate in the credit facilities in an amount not to exceed \$10,000,000 in with terms and conditions consistent with the Board Memo, 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 the date of authorization by the Board; and,

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

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

### **e. USDOE and DEEP – Energy Efficiency Revolving Loan Fund**

- Sara Harari summarized the history of the DEEP Subgrant and proposal to enter into a contract with DEEP to receive the funds. The team is still investigating the method that the funds will be applied to but are considering initiating an interest rate buydown on the LIME loan programs, using the loans to fund energy efficiency improvements required by the tenant sharing revenue rules of affordable multifamily solar projects, and possibly buydowns of the Green Bank's rate of return for Affordable Multifamily Solar and Storage leases. The Board's approval will be required before applying the funds to any project.

### **Resolution #5**

**WHEREAS**, the State of Connecticut has been awarded funding under the Energy Efficiency Revolving Loan Fund Capitalization Grant Program; and,

**WHEREAS**, the Connecticut Department of Energy and Environmental Protection has engaged the Connecticut Green Bank ("Green Bank") as a subgrantee to develop and implement a program to support the deployment of energy efficiency loans into the affordable

## Subject to Changes and Deletions

multifamily housing sector;

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank may enter into with and deliver to the State of Connecticut Department of Energy and Environmental Protection, any and all documents which it deems to be necessary or appropriate to enter into a contract for approximately \$1,269,190 titled Energy Efficiency Revolving Loan Fund Subgrant; and,

**RESOLVED**, that Bryan Garcia as President and CEO of the Connecticut Green Bank or other duly authorized Green Bank officers are authorized and empowered to do all other acts and execute and deliver all other documents and instruments as they shall deem necessary and desirable to affect the above-mentioned legal instruments.

**Upon a motion made by Dominick Grant and seconded by Matthew Ranelli, the Board of Directors voted to approve Resolution 5. None opposed or abstained. Motion approved unanimously.**

### **f. USDA – Rural Energy Savings Program**

This item was deferred to the next Deployment Committee meeting.

### **Resolution #6**

**WHEREAS**, consistent with its Comprehensive Plans, the Connecticut Green Bank (“Green Bank”) has been seeking opportunities to access low-cost and long-term federal funding from the United States Department of Agriculture (“USDA”) to support its mission;

**WHEREAS**, on April 2, 2020, the Rural Utilities Service (“RUS”) of the USDA issued within the Federal Register (Vol. 85, No. 64), an “Announcement of Funding Availability, Loan Application Procedures, and Deadlines for the Rural Energy Savings Program (“RESP”);

**WHEREAS**, on April 29, 2020, the American Green Bank Consortium, a membership organization for green banks, informed the Green Bank of the RESP, and provided technical assistance resources to the Green Bank through the Environmental and Energy Study Institute;

**WHEREAS**, on May 14, 2020, the Green Bank filed a Letter of Intent (“LOI”) with the RUS for a RESP Loan, including an overview of the organization, proposed program descriptions consistent with its Comprehensive Plan, evaluation, measurement, and verification framework, balance sheet, eligible Connecticut towns, and performance measures and indicators; and

**WHEREAS**, on July 1, 2020 the USDA notified the Green Bank that it had received and reviewed its LOI, and invited it to proceed with a full application for a \$10 million RESP Loan; and

**WHEREAS**, on July 24, 2020 the Green Bank Board of Directors (the “Board”) approved a resolution to empower staff to approve and submit to USDA application documents as needed in pursuit of a RESP Loan USDA; and

## Subject to Changes and Deletions

**WHEREAS**, on September 11, 2020 the Connecticut Green Bank submitted to USDA ahead of USDA's September 28, 2020 deadline a full RESP Loan application package.

**WHEREAS**, in September 2024, the Connecticut Green Bank entered into a commitment with the USDA for the RESP Loan;

**WHEREAS**, staff is in the process of closing the RESP Loan and the RESP Loan requires a letter of credit to support the borrowing by the Green Bank;

**WHEREAS**, Webster Bank is willing to provide a letter of credit in the amount of \$500,000 collateralized by cash of the Green Bank to facilitate the Green Bank closing the RESP Loan with the USDA;

**NOW**, therefore be it:

**RESOLVED**, that the Board of the Green Bank, pursuant to the information provided by the Staff in a memo dated January 22, 2025, has determined that it is in the best interests of Green Bank to close the RESP Loan and to obtain a letter of credit from Webster Bank in the amount of \$500,000 collateralized by cash of the Green Bank to facilitate the Green Bank closing the RESP Loan with the USDA; 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 affect the above-mentioned legal instruments.

**This item was not voted on.**

### **3. Incentive Programs Updates and Recommendations**

#### **a. Energy Storage Solutions – CPower / Danbury Mission Technologies**

This item was presented after item 2e.

- Edward Kranich summarized the proposal for a 4.98 MW, 9.96 MWh Tesla Megapack 2XL system for nearly \$4 million and an upfront incentive of \$905,996.
  - John Harritty asked what a Tesla Megapack is. Edward Kranich responded it is a container about the size of a shipping container which is full of batteries and inverters, designed to be a battery storage system on a concrete pad.

### **Resolution #7**

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

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



## Subject to Changes and Deletions

**WHEREAS**, in its December 9, 2002 meeting the Board approved updated Procedures to better align with the Program process.

**NOW**, therefore be it:

**RESOLVED**, that the Deployment Committee hereby approves the estimated upfront incentives sought by CPower for one non-residential project individually under \$500,000, totaling a not-to-exceed amount of \$905,996 consistent with the approved Procedures; and,

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

Upon a motion made by Joseph DeNicola and seconded by Thomas Flynn, the Board of Directors voted to approve Resolution 7. None opposed or abstained. Motion approved unanimously.

#### 4. Adjourn

Lonnie Reed adjourned the Board of Directors meeting at 10:01 am.





**BOARD OF DIRECTORS OF THE  
CONNECTICUT GREEN BANK**  
Special Meeting Minutes

Wednesday, February 19, 2025  
2:00 p.m. – 3:00 p.m.

A special meeting of the Board of Directors of the **Connecticut Green Bank** (the “Green Bank”) was held on February 19, 2025.

Board Members Present: Adrienne Farrar Houël, Dominick Grant, John Harrity, Kimberly Mooers, Allison Pincus, Matthew Ranelli, Lonnie Reed,

Board Members Absent: Joseph DeNicola, Thomas Flynn, Brenda Watson, Joanna Wozniak-Brown

Staff Attending: Priyank Bhakta, Larry Campana, Sergio Carrillo, Shawne Cartelli, Mackey Dykes, Austin Dziki, Brian Farnen, Bryan Garcia, Sara Harari, Bert Hunter, Stefanie Keohane, Cheryl Lumpkin, Kevin Moss, Jane Murphy, Tyler Rubega, Ariel Schneider, Eric Shrago, Dan Smith, Heather Stokes, Christina Tsitso

Others present: None

**1. Call to Order**

- Lonnie Reed called the meeting to order at 2:03 pm.

**2. Public Comments**

- No public comments.

**3. Investment Programs Updates and Recommendations**  
**a. USDA – Rural Energy Savings Program**

- Bert Hunter summarized the history of the program and requirements, including the letter of credit requirement, which the Green Bank is in the process of obtaining from Webster Bank once the underwriting process is done. The letter of credit being requested to close the transaction is for \$500,000 and since it is to be put in place before the completion of underwriting by Webster Bank, needs to be 100% cash collateralized. A larger, non-cash collateralized letter of credit would be obtained from Webster Bank in the future, though that would take more time to receive.

**Resolution #1**

**WHEREAS**, consistent with its Comprehensive Plans, the Connecticut Green Bank (“Green Bank”) has been seeking opportunities to access low-cost and long-term federal funding from the United States Department of Agriculture (“USDA”) to support its mission;

**WHEREAS**, on April 2, 2020, the Rural Utilities Service (“RUS”) of the USDA issued within the Federal Register (Vol. 85, No. 64), an “Announcement of Funding Availability, Loan Application Procedures, and Deadlines for the Rural Energy Savings Program (“RESP”);

**WHEREAS**, on April 29, 2020, the American Green Bank Consortium, a membership organization for green banks, informed the Green Bank of the RESP, and provided technical assistance resources to the Green Bank through the Environmental and Energy Study Institute;

**WHEREAS**, on May 14, 2020, the Green Bank filed a Letter of Intent (“LOI”) with the RUS for a RESP Loan, including an overview of the organization, proposed program descriptions consistent with its Comprehensive Plan, evaluation, measurement, and verification framework, balance sheet, eligible Connecticut towns, and performance measures and indicators; and

**WHEREAS**, on July 1, 2020 the USDA notified the Green Bank that it had received and reviewed its LOI, and invited it to proceed with a full application for a \$10 million RESP Loan; and

**WHEREAS**, on July 24, 2020 the Green Bank Board of Directors (the “Board”) approved a resolution to empower staff to approve and submit to USDA application documents as needed in pursuit of a RESP Loan USDA; and

**WHEREAS**, on September 11, 2020 the Connecticut Green Bank submitted to USDA ahead of USDA’s September 28, 2020 deadline a full RESP Loan application package.

**WHEREAS**, in September 2024, the Connecticut Green Bank entered into a commitment with the USDA for the RESP Loan;

**WHEREAS**, staff are in the process of closing the RESP Loan and the RESP Loan requires a letter of credit to support the borrowing by the Green Bank; and,

**WHEREAS**, Webster Bank is willing to provide a letter of credit in the amount of \$500,000 collateralized by cash of the Green Bank to facilitate the Green Bank closing the RESP Loan with the USDA.

**NOW**, therefore be it:

**RESOLVED**, that the Board of the Green Bank, pursuant to the information provided by the Staff in a memorandum dated February 14, 2025, has determined that it is in the best interests of Green Bank to close the RESP Loan and to obtain a letter of credit from Webster Bank in the amount of \$500,000 collateralized by cash of the Green Bank to facilitate the Green Bank closing the RESP Loan with the USDA; and,

## Subject to Changes and Deletions

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

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

- Bryan Garcia reviewed the context of the recent federal changes and Executive Orders which affect the Green Bank and the National Clean Investment Fund.

#### **4. Greenhouse Gas Reduction Fund – Update and Recommendations**

##### **a. National Clean Investment Fund**

##### **i. Green Homes – Linked Deposits for Smart-E Lenders**

- Bert Hunter summarized the NCIF Implementation Plan, context of the 2023 pilot linked-deposits program with Mutual Security Credit Union to fund a portion of Smart-E loans, and the proposal to include the linked-deposits program for Smart-E lenders under the Implementation Plan, in full transparency as they are considered “financial instruments.” Up to \$10 million of the NCIF funds would be used in this way over approximately 5 years, aiming to sunset June 30, 2030.

- Lonnie Reed commented that it is important to be prepared for the worst but try to continue with business and the programs that are in place. Bryan Garcia added that an account at Citi has been established in the name of the Connecticut Green Bank at \$93.5 million, which had been accessed previously but is believed to be frozen now. The funds are in support of the workplan of the Connecticut Green Bank, and approved by the Coalition for Green Capital.

### **Resolution #2**

**WHEREAS**, within the Inflation Reduction Act of 2022 (“IRA”) there is a \$27 billion Greenhouse Gas Reduction Fund (“GGRF”) inclusive of a \$14 billion National Clean Investment Fund (“NCIF”) modelled after the Connecticut Green Bank (“Green Bank”);

**WHEREAS**, the Coalition for Green Capital (“CGC”), a 501(c)3 nonprofit organization, applied for a grant through the GGRF NCIF on October 12, 2023 in the amount of \$10 billion, and inclusive of eighteen (18) Subgrantees, including the Green Bank;

**WHEREAS**, the EPA officially notified CGC of its winning application on April 4, 2024 in the amount of \$5 billion and CGC subsequently submitted to the EPA a revised workplan and budget and awarded to the Green Bank (the “Green Bank Award”) a portion of the CGC award;

**WHEREAS**, the EPA and CGC entered into a grant agreement on August 8, 2024 under the NCIF of the GGRF;

**WHEREAS**, on January 3, 2025, the Green Bank signed and executed the Green Bank Award in the amount of \$93.53 million, a portion of which was to serve the purposes of financing clean energy deployment in single-family homes in collaboration with our local community banks and credit unions through Green Homes within our plan submitted to CGC; and,

## Subject to Changes and Deletions

**WHEREAS**, the Green Bank seeks approval to use a portion of the Green Bank Award to make linked deposits to eligible Smart-E lenders in support of Green Homes within the implementation plan submitted to CGC and as more fully explained in a memorandum to the Board of Directors dated February 14, 2025 (the "NCIF Linked Deposits Memo").

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver contracts with eligible Smart-E lenders for a linked deposits program, with such aggregate amount of upfront deposits using NCIF funds being limited to \$10,000,000 as outlined in the NCIF Linked Deposits Memo as he or she shall deem to be in the interests of the Green Bank; and,

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

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

### ii. Green School Buses – Project Portfolio

- Sara Harari reviewed an update to the progress of the Green School Buses section of the Implementation Plan. Kevin Moss summarized the policy and market background for the program as well as data to contextualize why the Green Bank is targeting this sector of the market. He summarized the next steps for the program, including confirming project-specific financing needs, due diligence, and developing the term sheets.

- Kevin Moss summarized the future plans and role of the Green Bank for the 2030 Electric School Bus pathway.

**Upon a motion made by John Harrity and seconded by Adrienne Farrar Houël, the Board of Directors voted to enter Executive Session at 2:47 pm. None opposed or abstained. Motion approved unanimously.**

**The Board of Directors returned from Executive Session at 3:07 pm.**

### **Resolution #3**

**WHEREAS**, within the Inflation Reduction Act of 2022 ("IRA") there is a \$27 billion Greenhouse Gas Reduction Fund ("GGRF") inclusive of a \$14 billion National Clean Investment Fund ("NCIF") modelled after the Connecticut Green Bank ("Green Bank");

**WHEREAS**, the Coalition for Green Capital ("CGC"), a 501(c)3 nonprofit organization, applied for a grant through the GGRF NCIF on October 12, 2023 in the amount of \$10 billion, and inclusive of eighteen (18) Subgrantees, including the Green Bank;

**WHEREAS**, the EPA officially notified CGC of its winning application on April 4, 2024 in



## Subject to Changes and Deletions

the amount of \$5 billion and CGC subsequently submitted to the EPA a revised workplan and budget and awarded to the Green Bank (the "Green Bank Award") a portion of the CGC award;

**WHEREAS**, the EPA and CGC entered into a grant agreement on August 8, 2024 under the NCIF of the GGRF;

**WHEREAS**, Connecticut Public Act 22-55 directs school districts including at least one "environmental justice community" shall have zero-emissions buses by January 1, 2030, which; and, the Green Bank has issued a Request for Proposals for Electric School Bus Deployment ("ESB RFP") on December 6, 2024;

**WHEREAS**, at the December 13, 2024, meeting of the Green Bank Board of Directors, it was resolved for staff to review responses to ESB RFP for electric school bus and associated upgrades and structure agreements to present to the Board for approval; and,

**WHEREAS**, on January 3, 2025, the Green Bank signed and executed the Green Bank Award in the amount of \$93.53 million, a portion of which was to serve the purposes of financing Green School Buses within our plan submitted to CGC.

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank is authorized to enter into agreement(s), including, but not limited to: letters of commitment and/or term sheets for the benefit of applicants identified through the ESB RFP that ultimately qualify for Green Bank financing, the formation of one or more Special Purpose Entities or direct investment, with or for the benefit of these applicants to obligate NCIF capital in support of investment in deployment of electric school buses, including associated upgrades consistent with this memorandum to the Board dated February 14, 2025;

**RESOLVED**, that the Green Bank staff is directed to deploy up to \$16M in NCIF funds, which aligns with the expected estimate of required capital;

**RESOLVED**, that the Green Bank staff is directed to present to the Green Bank Board of Directors at a future meeting a request for final approval of financing amounts for applicants identified through the ESB RFP that ultimately qualify for Green Bank financing to be deployed, as compared to estimates presented with this memorandum to the Board dated February 14, 2025; and,

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

**Upon a motion made by John Harrity and seconded by Dominick Grant, the Board of Directors voted to approve Resolution 3. None opposed or abstained. Motion approved unanimously.**

5. **Executive Session – Trade Secrets and Commercial Information Given in Confidence (this relates to the matters noted in Item #4 ... following which the resolutions under Resolutions #3 were voted on by the Board).**



**6. Adjourn**

**Upon a motion made by Matthew Ranelli and seconded by John Harrity, the Board of Directors voted to adjourn the Board of Directors meeting at 3:10 pm.**

DRAFT



# Memo

**To:** Connecticut Green Bank Deployment Committee

**From:** Alysse A. Lembo-Buzzelli, Director, Financing Programs; Catherine Duncan, Director, Financing Programs; Mackey Dykes, Executive Vice President, Financing Programs;

**CC:** Bryan Garcia, President & CEO; Alex Kovtunenکو, Deputy General Counsel, Financing Programs; Brian Farnen, General Counsel and CLO

**Date:** March 13, 2025

**Re:** Extending timeline for closing certain C-PACE transactions

---

## Summary

The Connecticut Green Bank Board of Directors (the "Board") or the Connecticut Green Bank Deployment Committee ("DC"), as may be applicable, has previously approved and authorized C-PACE financing for the following property:

Project Address	Approved	Expired	Project Amount
65 Sandpit Road, Danbury, CT 06810	10/25/2024	2/22/2025	\$1,220,280

The financing agreement(s) listed above (the "Financing Agreements") were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board/DC and made no later than one hundred twenty (120) days from the date of Board/DC approval.

Due to delays in fulfilling pre-closing requirements, including collecting governance documents, the C-PACE program staff requests more time from the Board or DC, as may be applicable, to close and execute the Financing Agreements. The staff requests an additional 120 days from the date of this meeting to execute the Financing Agreements for the transaction(s) listed above.

## Resolutions

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

**WHEREAS**, pursuant to the C-PACE program, the Connecticut Green Bank Board of Directors (the “Board”) or the Connecticut Green Bank Deployment Committee (“DC”), as may be applicable, approved and authorized the President of the Green Bank to execute financing agreements for the C-PACE projects described in this Memo submitted on March 21, 2025 (the “Finance Agreements”);

**WHEREAS**, the Finance Agreements were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board or DC, as may be applicable, and executed no later than 120 days from the date of such Board or DC approval; and,

**WHEREAS**, due to delays in fulfilling pre-closing requirements the Green Bank will need more time to execute the Finance Agreements.

**NOW**, therefore be it:

**RESOLVED**, that the DC extends authorization of the Finance Agreements to no later than 120 days from March 21, 2025 and consistent in every other manner with the original Board or DC authorization for the Finance Agreement.

Submitted by: Bryan Garcia, President & CEO; Alex Kovtunenکو, Deputy General Counsel, Financing Programs; Brian Farnen, General Counsel and CLO



# Memo

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

**From:** Sergio Carrillo (Managing Director of Incentive Programs), Mackey Dykes (EVP of Incentive Programs and Officer), Bryan Garcia (President and CEO), and Bert Hunter (EVP and CIO)

**CC:** Brian Farnen (General Counsel and CLO), Jane Murphy (EVP of Finance and Administration), and Eric Shrago (VP of Operations)

**Date:** March 18, 2025

**Re:** Approval of Financing Programs and Energy Storage Solutions Projects Funding Requests below \$500,000 and No More in Aggregate than \$1,000,000 – Update

---

At the October 20, 2017 Board of Directors (BOD) meeting of the Connecticut Green Bank (“Green Bank”) it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve funding requests less than \$500,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Comprehensive Plan, approved within Green Bank’s fiscal budget and in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting.

The Green Bank BOD further revised the approval process to create separate aggregate amounts for the Financing and Energy Storage Solutions (“ESS”) programs as described in the memorandum to the Board dated January 19, 2024.

This memo provides an update on Financing Programs and ESS project funding requests below \$500,000 that were evaluated and approved. During this period, 3 projects were evaluated and approved for funding in an aggregate amount of approximately \$703,249 for Financing Programs. And, during this period, no projects were evaluated and approved for funding for ESS.

If members of the board or committee would be interested in the internal documentation of the review and approval process Green Bank staff and officers go through, then please request it.

---

## Summary

Property Information		
Property Address	5 King Arthur Dr, Niantic, CT 06357	
Municipality	Niantic	
Property Owner	Shyam-Ram, LLC	
Type of Building	Hospitality	
Building Size (sf)	29,415sf / 73 Rooms	
Year of Build / Most Recent Renovation	2001 / 2013	
Environmental Screening Report	[REDACTED]	
Project Information		
Proposed Project Description	83.42 kW DC rooftop solar + roof replacement	
Energy Contractor	[REDACTED]	
Objective Function	25.98 <u>kBTU</u> / ratepayer dollar at risk	
Projected Energy Savings ( <u>mmBTU</u> )	Per Year	301.75
	Over EUL	6,035
Estimated Cost Savings (incl. ZRECs/Tariff and tax benefits)	Per Year	\$24,297
	Over EUL	\$485,944
Financial Metrics		
Proposed C-PACE Assessment	\$292,520	
Term Duration ( <i>years</i> )	20	
Term Rate	5.25% annually	
Construction Rate	5.00% annually	
Annual C-PACE Assessment	\$23,799	
Average DSCR	[REDACTED]	
Savings-to-Investment Ratio	[REDACTED]	
Lien-to-Value ( <u>LiTV</u> )	[REDACTED]	
Loan-to-Value ( <u>LTV</u> )	[REDACTED]	
Appraisal Value <sup>1</sup>	[REDACTED]	
Mortgage Lender Consent	[REDACTED]	



## Summary

Property Information	
Property Address	363 Main Street Middletown, CT 06457
Municipality	Middletown
Property Owner	363 Main Street Middletown LLC
Type of Building	Mixed-Use
Building Size (sf)	22,137 sq. ft
Year of Build / Most Recent Renovation	1915
Environmental Screening Report	
Project Information	
Proposed Project Description	51 kw Solar PV system
Energy Contractor	
Financial Metrics	
Proposed C-PACE Assessment	\$162,602
Term Duration (years)	5 years
Term Rate	4.50% annually
Construction Rate	5.00% annually
Annual C-PACE Assessment	\$36,679
Average DSCR	
Savings-to-Investment Ratio	
Lien-to-Value (LiTV)	
Loan-to-Value (LTV)	
Appraised Value <sup>1</sup>	
Mortgage Lender Consent	

## Summary

Property Information	
Property Address	1322 Waterbury Road Cheshire, CT 06410
Municipality	Cheshire
Property Owner	J&A Enterprises, LLC
Type of Building	Specialty
Building Size (sf)	10,584
Year of Build / Most Recent Renovation	2019
Environmental Screening Report (EDR)	
Project Information	
Proposed Project Description	Four <a href="#">level-2</a> EV Chargers
Energy Contractor	
Financial Metrics	
Proposed C-PACE Assessment	\$248,127
Term Duration (years)	10
Term Rate	4.75% annually
Construction Rate	5.00% annually
Annual C-PACE Assessment	\$30,542
Average DSCR	
Savings-to-Investment Ratio	
Lien-to-Value ( <i><u>LiTV</u></i> )	
Loan-to-Value ( <i><u>LTV</u></i> )	
Appraisal Value <sup>1</sup>	
Mortgage Lender Consent	
Co-Borrower	



# Memo

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

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

**CC:** Sergio Carrillo (Managing Director of Incentive Programs), Mackey Dykes (EVP of Incentive Programs and Officer), Brian Farnen (General Counsel and CLO), Sara Harari (Director of Innovation), Bert Hunter (EVP and CIO), Jane Murphy (EVP of Finance and Administration), Eric Shrago (VP of Operations), and Leigh Whelpton (Director of Environmental Infrastructure)

**Date:** March 14, 2025

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

---

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

During this period, no projects were evaluated and approved for payment restructure/write-off. The last memo indicating a payment restructure/write-off was October 18, 2024.

---

---

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



# Memo

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

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

**Cc:** Jane Murphy (EVP of Finance and Administration), Eric Shrago (VP of Operations), Tyler Rubega (Senior Accountant), and Dan Smith (Director of Accounting and Financial Reporting)

**Date:** February 13, 2025

**Re:** Q2 of FY25 Financial Package (Abridged)

---

## Overview

Following on the recommendation of the Chair<sup>1</sup> of and discussions with the Audit, Compliance, and Governance Committee ("ACG Committee")<sup>2</sup> and Board of Directors,<sup>3</sup> we are continuing to provide an abridged quarterly financial package for the Connecticut Green Bank ("Green Bank") for the purposes of helping members of the board communicate four key messages consistent with its Comprehensive Plan – (1) making an impact,<sup>4</sup> (2) mobilizing private investment,<sup>5</sup> (3) achieving sustainability,<sup>6</sup> and (4) monitoring state budget allocation. Each of these areas is elaborated on further below with an explanation of what transpired at a "high level" within that area in the second quarter of FY25.

---

## Making an Impact – Board Member Dashboards

Given a primary goal of the Green Bank is to continuously deliver benefits to our communities, and need to communicate that impact to our stakeholders, we have created dashboards for each member of the board that shows the organization's impact to your community or is most relevant to your appointer. For example, with Governor Lamont's interest in the State of Connecticut, we have provided a link to the impact metrics the Green Bank has made for Connecticut:

***"The Green Bank has enabled \$2,927,064,176 of investment in clean energy in CT helping 72,452 families and businesses reduce the burden of energy costs while creating 29,399 job years in our communities and avoiding 11,595,429 tons of CO2 emissions causing global climate change."***<sup>7</sup>

---

<sup>1</sup> Tom Flynn

<sup>2</sup> May 17, 2022 ACG Committee meeting – [click here](#)

<sup>3</sup> June 24, 2022 BOD meeting – [click here](#)

<sup>4</sup> Goal 2 – 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.

<sup>5</sup> Goal 1 – to leverage limited public resources to scale-up and mobilize private capital investment in the green economy of Connecticut.

<sup>6</sup> Goal 3 – to pursue investment strategies that advance market transformation in green investing while supporting the organization's pursuit of financial sustainability.

<sup>7</sup> February 9, 2025

Given our goal to ensure that “no less than 40 percent of investment and benefits are directed to vulnerable communities by 2025,” you will see that we also include those breakdowns.

---

### **Mobilizing Private Investment – Balance Sheet**

Given a primary goal of the Green Bank is to invest public funds wisely to mobilize multiples of private capital investment, the strength of the balance sheet (e.g., total assets, net position) is important to attracting private capital investment partners.

There is an increase in total assets from \$310.7 million to \$311.5 million (i.e., increase of \$0.8 million) in FY25 from Q1 to Q2 of FY25. The total liabilities decreased from \$131.5 million to \$127.6 million (i.e., decrease of \$3.9 million). Through Q2 of FY25, public revenues were invested in 1,401 loans closed totaling \$12.8 million.

---

### **Achieving Sustainability – Organizational P&L**

Given a primary goal of the Green Bank is to pursue organizational sustainability, the realization of revenues (i.e., specifically earned revenues) and management of operating expenses (i.e., specifically personnel-related operating expenses) is important.

The key observation from FY25 is that earned revenues through Q2 (i.e., \$22.7 million) were ahead of budget (i.e., by \$7.3 million). In addition to that important sustainability milestone, earned revenues continue to exceed personnel related operating expenses (i.e., \$7.7 million), as well as total operating expenses (i.e., \$20.2 million). These are continuing trends as the Green Bank makes steady progress towards organizational sustainability as planned in FY18.<sup>8</sup>

---

### **Monitoring State Budget Allocation**

And lastly, to track the impact of the long-term structural budget deficit issues with respect to pension and healthcare liabilities, the Green Bank tracks the State of Connecticut Comptroller Employer SERS Rate (i.e., 47.5%) to a hypothetical market rate (i.e., 35.0%) to discern the amount the Green Bank overpays for such benefits causing increased pressure on organizational sustainability.

The key observation from Q2 of FY25 is that the Green Bank paid the State of Connecticut over \$1.2 million more than it would have paid in a competitive environment for pension and healthcare benefits for its employees. This additional payment slows down progress of the Green Bank towards organizational sustainability.

---

### **Conclusion**

For those interested in further details beyond the “Abridged” version of the Q2 of FY25 financial package, see the “Comprehensive” version attached.

---

<sup>8</sup> December 15, 2017 BOD meeting – [click here](#)





# **Connecticut Green Bank**

December 2024 Quarterly Financial Package  
(Abridged)

Connecticut Green Bank  
**December 2024 Financial Package**  
Table of Contents

<b><u>Connecticut Green Bank:</u></b>	<b>Page</b>
1. Impact in Your Community - Making an Impact.....	1
2. Mobilizing Private Investment - Balance Sheet.....	2-3
3. Achieving Sustainability - Organizational P&L.....	4-5
4. Monitoring State Budget Allocation.....	6


# Connecticut Green Bank

## Making an Impact

### Board Member Dashboard

So that you can best articulate our ongoing impact to the Green Bank's stakeholders, we have created the below linked dashboards that show the organization's impact to your community or is most relevant to your appointer.

<https://www.ctgreenbank.com/boardimpact/>



**Welcome to the Connecticut Green Bank KPI  
(Key Performance Indicator)**  
This dashboard shows our impact in various geographical areas.



#### Click to Navigate to a Page

Home
State of CT
Council of Governments (COG)
DECD – State of CT
DEEP – State of CT
OPM – State of CT
Treasurer – State of CT
Adrienne Farrar Houel - Bridgeport
Brenda Watson - Bloomfield
Brenda Watson - House District 1
Dominick Grant - Middlefield
John Harrity - East Hartland
Lonnie Reed - Branford
Matt Ranelli - New Haven
Matt Ranelli - Senate District 11
Tom Flynn - Fairfield
Tom Flynn - Senate District 21

When you access the site, you will see the different dashboards on the righthand side. Please click on the one you wish to view. The dashboards default to our performance and impact since inception but you may filter them by calendar or fiscal year in the top right. The top has a summary statement of the performance and impact for that geographic area. The bottom tables are further cross sections of this performance for vulnerable communities, Community Reinvestment Act Eligible Projects, and projects in Distressed Communities.

Please forward me your feedback and suggestions at [eric.shrago@ctgreenbank.com](mailto:eric.shrago@ctgreenbank.com).

# Connecticut Green Bank

## Mobilizing Private Investment

### Balance Sheet

		As of 12/31/2024	As of 6/30/2024	vs 6/30/24 \$ Change
<b>Assets</b>				
Current Assets				
Cash and Cash Equivalents (1)	{a}	41,857,904	26,065,154	15,792,750
Other Current Assets	{b}	11,147,577	36,528,036	(25,380,459)
<b>Total Current Assets</b>		<b>53,005,481</b>	<b>62,593,190</b>	<b>(9,587,709)</b>
Noncurrent Assets				
Restricted Assets (1)	{c}	27,799,778	27,782,421	17,357
Program Loans/Notes Receivable and Other Investments	{d}	162,906,193	145,408,081	17,498,112
Capital Assets, net	{e}	67,791,277	69,517,800	(1,726,523)
<b>Total Noncurrent Assets</b>		<b>258,497,248</b>	<b>242,708,302</b>	<b>15,788,946</b>
<b>Total Assets</b>		<b>311,502,729</b>	<b>305,301,492</b>	<b>6,201,237</b>
<b>Liabilities</b>				
Current Liabilities	{f}	21,185,871	20,848,839	337,032
Noncurrent Liabilities				
Asset Retirement Obligation		4,416,304	4,345,686	70,618
Long-term debt				
Notes Payable		7,519,270	7,273,800	245,470
Bonds Payable-SHREC ABS 1	{g}	15,474,255	16,472,663	(998,408)
Bonds Payable-CREBs	{h}	7,131,635	7,849,299	(717,664)
Bonds Payable-Green Liberty Bonds	{i}	28,761,000	31,553,000	(2,792,000)
Lease Liability, less current maturities	{j}	1,853,851	1,853,851	0
Long-term debt		60,740,011	65,002,613	(4,262,602)
Pension & OPEB Liabilities	{k}	41,228,205	41,228,205	0
<b>Total Noncurrent Liabilities</b>		<b>106,384,520</b>	<b>110,576,504</b>	<b>(4,191,984)</b>
<b>Total Liabilities</b>		<b>127,570,391</b>	<b>131,425,343</b>	<b>(3,854,952)</b>
<b>Deferred Inflows of Resources</b>	{l}	<b>7,862,374</b>	<b>7,782,569</b>	<b>79,805</b>
<b>Total Net Position</b>		<b>176,069,964</b>	<b>166,093,579</b>	<b>9,976,385</b>

(1) The \$41.9M unrestricted balance at 12/31/2024 was mostly due to the issuance of two series of Special Capital Reserve Fund (SCRF) backed Green Liberty Bonds in FY21. The purpose of these issuances was to refinance expenditures of the Green Bank related to its Residential Solar Incentive Program (RSIP) per CGS 16-245ff. As of 12/31/24, unfunded and committed Solar PV incentives related to the RSIP program totaled approximately \$17.1M, to be paid to third parties over the next five fiscal years using the proceeds from these two bond issuances. Additionally, \$4.8M of RGGI funds are committed to Class 1 Renewable projects under the Regional Greenhouse Gas Initiative and not yet spent as of 12/31/24.

	Actual	Adj for RSIP/RGGI Commitment s	Total
Cash - Unrestricted	\$ 41,857,904	\$ (21,900,000)	\$ 19,957,904
Cash - Restricted	27,799,778	21,900,000	49,699,778
<b>Total Cash</b>	<b>\$ 69,657,682</b>	<b>\$ -</b>	<b>\$ 69,657,682</b>

\* Additionally, Pursuant to CGS 16-245n(h), the State cannot impair the Green Bank's rights or obligations contained in contracts it has with third parties unless the State otherwise makes the third party whole pursuant to the Green Bank's unique non-impairment clause. As such, please contact the Green Bank before any material funding reductions or sweeps to ensure this non-impairment clause is not triggered. This could impact the Green Bank's or the State's credit and bond rating, if applicable.

## Appendix

- {a} Cash and Cash Equivalents includes all unrestricted cash accounts for the CT Green Bank and all entities included financial reporting purposes.
- {b} Other Current Assets are made up of Accounts Receivable, Utility Remittance Receivable, Interest Receivable, Other Receivables and Prepaid Expenses
- {c} Restricted Assets includes all restricted cash accounts such as loan loss reserves, Special Capital Reserve Funds (SCRFS) related to the bonds outstanding and other contractually restricted cash accounts
- {d} Program Loans/Notes Receivable and Other Investments include the principal balances of all outstanding Program Loans, SBEA Notes, Solar Lease 1 Notes, Bonds, as well as REC receivables, some additional smaller investments made.
- {e} Capital Assets, net represent the cost of all capital assets that are owned by all CGB entities, including Solar PV systems, furniture and equipment, leasehold improvements and computer hardware.
- {f} Current Liabilities includes accounts payable and accrued expenses (including accrued incentives), accrued interest, current portions of long-term debt, deferred revenue and custodial liabilities
- {g} SHREC ABS 1 Bonds Payable represent the outstanding principal remaining on \$38.6M in bonds issued in March 2019. These bonds were collateralized by revenue from sales of SHRECs for two tranches of approx. 14,000 residential Solar PV systems to two CT utilities. These mature in 2033.
- {h} Bonds Payable- CREBs are two separate Clean Energy Renewable Energy bonds issued in February 2017 for just under \$3.0M(Meriden Hydro project) and December 2017 for \$9.1M (CSCUs project). These mature in 2038.
- {i} Green Liberty bonds represent the outstanding principal remaining on the \$16.8M Series 2020 and \$24.8M Series 2021 Green Liberty Bonds, collateralized by revenues from sales of SHRECs related to Tranche 3(Series 2020) and Tranche 4 (Series 2021). These mature in 2037.
- {j} Lease liability represents the amount owed on the two leases of office space (Hartford & Stamford). The amount is determined per GASB 87, which included a present value of payments expected to be made during the lease term at the onset of the lease (both of which include 10.5 year terms beginning in Fiscal year 2021).
- {k} Pension and OPEB Liabilities represent the actuarially determined Pension and OPEB liabilities allocated to the CT Green Bank out of the SERS retirement plans. This number is uncontrollable by the Green Bank, with the amount to be booked provided by the actuarial valuation on an annual basis.
- {l} Deferred inflows of resources are a governmental accounting function which represents an acquisition of net position that applies to future periods and will not be recognized until that time. Amounts included here are functions of the Pension and OPEB actuarial valuations and are updated on an annual basis.



# Connecticut Green Bank Achieving Sustainability Organizational P&L

Consolidated 7/1/2024 Through 12/31/2024						
		Actual	Budget	Variance	Prior Year Actual	Variance
<b>Total Revenues</b>						
Public Revenues	{a}	13,847,673	13,779,414	68,259	17,347,803	(3,500,130)
Earned Revenues (**)	{b}	22,731,730	15,392,576	7,339,154	17,421,665	5,310,065
<b>Total Revenues</b>		<b>36,579,403</b>	<b>29,171,990</b>	<b>7,407,413</b>	<b>34,769,468</b>	<b>1,809,935</b>
<b>Total Operating Expenses</b>						
Personnel Related Operating Expenses	{c}	7,675,206	9,658,941	(1,983,735)	6,427,285	1,247,921
Non-Personnel Related Operating Expenses (**)	{d}	12,509,914	8,939,787	3,570,127	8,261,374	4,248,540
<b>Total Operating Expenses</b>		<b>20,185,120</b>	<b>18,598,728</b>	<b>1,586,392</b>	<b>14,688,659</b>	<b>5,496,461</b>
<b>Margin (\$) - All Revenues</b>		<b>16,394,283</b>	<b>10,573,262</b>		<b>20,080,809</b>	
<b>Margin (%) - All Revenues</b>		<b>44.8%</b>	<b>36.2%</b>		<b>57.8%</b>	
<b>Margin (\$) - Pre Public Revenues</b>						
<b>Margin (%) - Pre Public Revenues</b>		<b>7.0%</b>	<b>-11.0%</b>		<b>7.9%</b>	
<b>Total Non-Operating Expenses</b>						
Program Incentives and Grants	{e}	4,531,309	4,285,806	245,503	3,644,451	886,858
Non-Operating Expenses	{f}	2,075,338	2,483,631	(408,293)	2,420,747	(345,409)
<b>Total Non-Operating Expenses</b>		<b>6,606,647</b>	<b>6,769,437</b>	<b>(162,790)</b>	<b>6,065,198</b>	<b>541,449</b>
<b>Total Expenses</b>		<b>26,791,767</b>	<b>25,368,165</b>	<b>1,423,602</b>	<b>20,753,857</b>	<b>6,037,910</b>
<b>Net Margin (\$) - All Revenues (*)</b>		<b>9,787,636</b>	<b>3,803,825</b>	<b>5,983,811</b>	<b>14,015,611</b>	<b>(4,227,975)</b>
<b>Net Margin (%) - All Revenues</b>		<b>26.8%</b>	<b>13.0%</b>		<b>40.3%</b>	

\* Net Margin represents the Operating Results of the Green Bank before impact of State Pension and OPEB allocation of costs based on the annual actuarial valuation performed of the benefit plans. As such, the benefit/expense related to these actuarial determined amounts are not included in this presentation. See Detailed Quarterly and Annual ACFR for more details on these amounts.

\*\* The prior year Earned revenues and non-personnel related operating expenses both include \$1.9M in Energy System Sales that occurred in the prior period, where the revenues and cost of sales net to zero. These items both have a budget of \$0. The current year actuals include similar items in the same period of the fiscal year amounting to \$5.5M with no budgeted amounts. See Detailed Quarterly report for more details on these amounts.

## Appendix

- {a} Public Revenues include system benefit charges from electric ratepayers and RGGI allowance proceeds.
- {b} Earned Revenues include interest income, REC sales, PPA income and other revenues earned by the Primary Government.
- {c} Personnel Related Operating Expenses include Salaries, benefits and payroll taxes.
- {d} Non-Personnel Related Operating Expenses include all other operating expenses not related to personnel, including O&M, tech support costs, IPC human capital, marketing, consulting, rent, insurance, IT and other office expenses.
- {e} Program Incentives and Grants are included in Non-Operating Expenses, and relate mostly to PBI & Battery Storage incentives paid out.
- {f} Non-Operating Expenses include Interest expense (mostly on bonds), loan loss reserve expense, and Interest Rate Buydowns using ARRA funds.

**Connecticut Green Bank  
Monitoring State Benefit Allocation  
December 31, 2024**

	FYTD 12/31/24 Actual	FYE 6/30/24 Actual	FYE 6/30/23 Actual	FYE 6/30/22 Actual	FYE 6/30/21 Actual	FYE 6/30/20 Actual
<b>Compensation:</b>	\$ 4,553,530	\$ 7,655,056	\$ 5,902,859	\$ 4,813,293	\$ 4,476,214	\$ 3,931,596
<b>Employee Benefits:</b>						
State Retirement Plan Contributions	\$ 2,228,033	\$ 4,547,141	\$ 3,995,132	\$ 3,317,054	\$ 2,903,780	\$ 2,411,864
Medical Dental Rx Premiums	578,456	970,135	791,620	610,627	625,480	553,908
<b>Total Employee Benefits</b>	<b>2,806,489</b>	<b>5,517,276</b>	<b>4,786,752</b>	<b>3,927,681</b>	<b>3,529,260</b>	<b>2,965,772</b>
<b>Total Compensation and Benefits</b>	<b>\$ 7,360,020</b>	<b>\$ 13,172,331</b>	<b>\$ 10,689,611</b>	<b>\$ 8,740,974</b>	<b>\$ 8,005,474</b>	<b>\$ 6,897,368</b>
* Retirement Plan Contributions as a % of Salary	48.93%	59.40%	67.68%	68.91%	64.87%	61.35%
Medical Dental Rx Premiums as a % of Salary	12.70%	12.67%	13.41%	12.69%	13.97%	14.09%
Total Benefits and Taxes as a % of Salary	61.63%	72.07%	81.09%	81.60%	78.84%	75.43%
** State of CT Comptroller Employer SERS Rate	47.48%	59.57%	67.40%	65.90%	64.14%	59.99%
* Retirement Plan Contributions include Pension & OPEB, included Employer contributions to the Tier IV Defined Contribution for associated employees in that plan. ** State of CT Comptroller Employer SERS Rate provided via the annual "Fringe Benefit Recover Rate" memo issued 7/1 of each year by the State Comptroller.						
Total Benefits Cost @ Hypothetical Benefits Rate	<b>35%</b> 1,593,736	2,679,270	2,066,001	1,684,653	1,566,675	1,376,059
<b>Actual Total Compensation and Benefits</b>	7,360,020	13,172,331	10,689,611	8,740,974	8,005,474	6,897,368
<b>Less Total Compensation and Benefits @ Hypothetical Rate</b>	(6,147,266)	(10,334,325)	(7,968,860)	(6,497,946)	(6,042,889)	(5,307,655)
Incremental HR cost due to State Benefits Charge	1,212,754	2,838,006	2,720,751	2,243,028	1,962,585	1,589,713



# **Connecticut Green Bank**

December 2024 Quarterly Financial Package  
(Comprehensive)

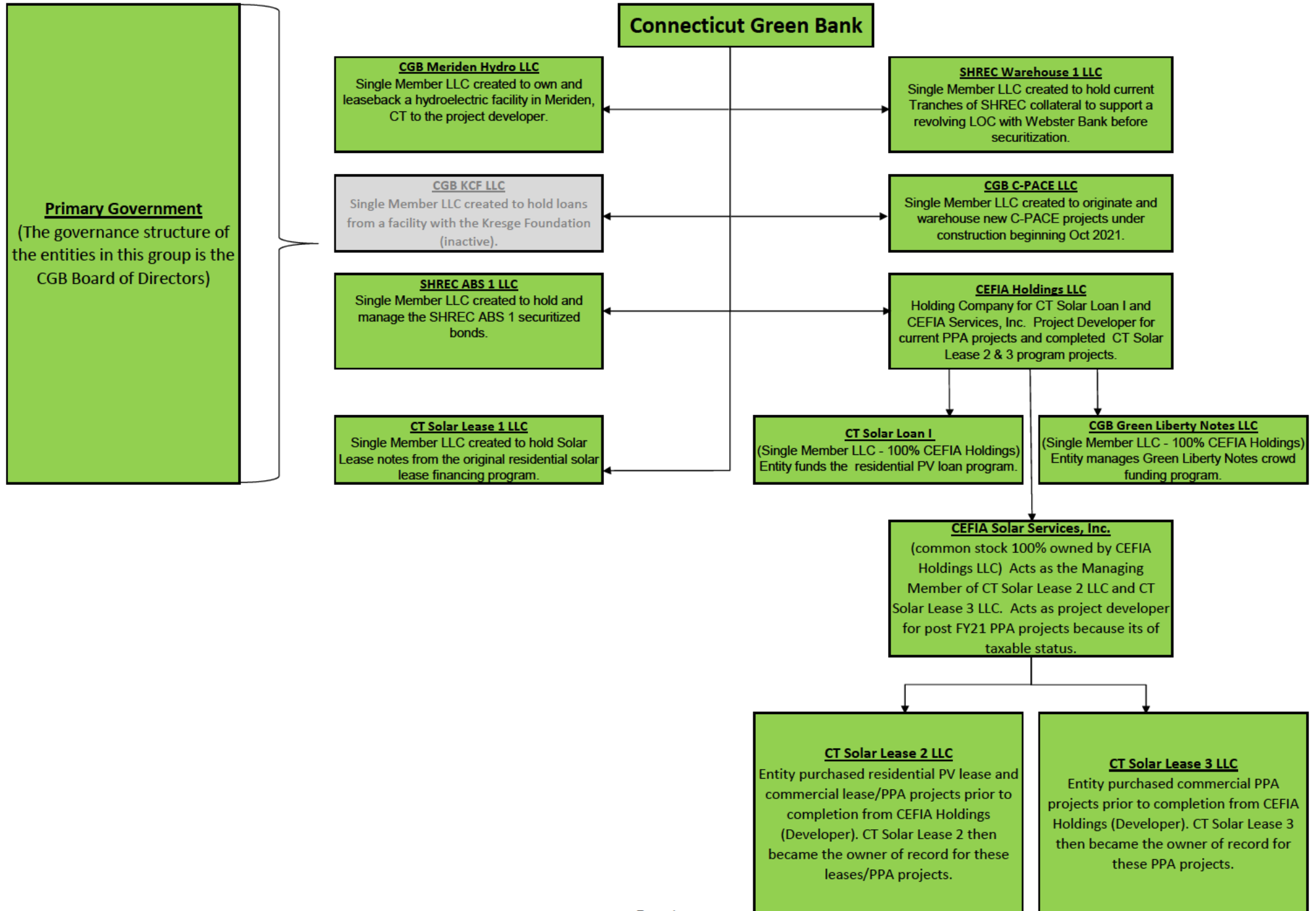
Connecticut Green Bank  
**December 2024 Financial Package**  
Table of Contents

<b><u>Connecticut Green Bank:</u></b>	<b>Page</b>
1. Entity Roadmap.....	1
1a. Executive Summary.....	2
2. CGB Balance Sheet.....	3
3. CGB Statement of Revenues and Expenditures.....	4
4. CGB Budget to Actual Report (By Financing, Incentive, and Environmental Infrastructure Programs).....	5
5. CGB Analysis of Compensation and Benefits.....	6
5a. CGB Historical Analysis of Compensation and Benefits.....	7
6. CGB Summary of Unfunded Commitments.....	8
7. CGB Summary of Loan Guarantees.....	9
8. CGB Program Loans, Notes and Loan Loss Reserve Analysis.....	10
<b><u>Consolidated Financial Statements:</u></b>	
9. Consolidated Balance Sheet.....	11
10. Consolidated Statement of Revenues and Expenditures.....	12
11. Consolidated Statement of Cash Flows.....	13



# The Connecticut Green Bank and its Component Units (as of 12/31/2024)

See the Annual Comprehensive Financial Report of the Connecticut Green Bank for more details.



**Connecticut Green Bank**  
**Executive Summary**  
December 2024

**Overview**

This financial package contains financial information for the Connecticut Green Bank (CGB) for Fiscal Year ending June 30, 2025 through December 31, 2024 with comparisons to June 30, 2024 for balance sheet, comparisons to the same period ended December 31, 2023 for the statement of revenue and expenditures, and versus Budget for the Statement of Revenue and Expenditures. Schedules of compensation and benefits, unfunded commitments, loan guarantees, and program loans, notes and loan loss reserves are also presented. See Consolidated Balance Sheet, Consolidated Statement of Revenues and Expenditures and Consolidated Statement of Cash Flows for more details on the entities that make up the totals for purposes of this Reporting.

**Balance Sheet - Primary Government**

- ✓ CGB's current assets decreased by \$9.6M compared to June 2024, which is mostly a function of timing of reporting current portions of loans/notes receivable (done for ACFR purposes annually at fiscal year end). Taking out the \$19.2M decrease in current assets relating to this, the remaining current assets increased by about \$9.6M. The largest contributing factors to this were the increase in cash and cash equivalents of \$15.8M slightly offset by a decrease in other receivables of \$4.9M.
- ✓ Noncurrent assets increased \$15.8M compared to June 30, 2024, due in part to the aforementioned reclassification of \$19.2M done for fiscal year end, as well as the approx. \$13.8M of payments received on program loans outstanding in the quarter outpacing the approx. \$12.8M of disbursements made on new and existing program loans.
- ✓ As of December 31, 2024, 93.2% of accounts receivable is aged 30 days or lower, and 5.2% of accounts receivable aged 60+ days - showing no significant collectability issues on accounts receivable. Utility Remittance receivables are all aged under 30 days, and Other Receivables represent disbursements made for development of projects and don't have specific aging/invoice due dates at any given time.
- ✓ Liabilities have decreased \$3.9M compared to June 30, 2024, mostly attributable to an approx. \$6.0M decrease in long term debt due to payments made during the year, offset by a \$1.8M increase in accrued expenses for the period ended December 31, 2024.
- ✓ Net Position has increased \$10.0M from the prior year due to the period's income as seen on Statement of Revenues and Expenditures below.

**Statement of Revenues and Expenditures vs. Prior Year**

Change in Net Position for FY25 was approximately \$10.0M of Income.

- ✓ Excluding a \$3.5M increase in both Operating Revenue and Expenses due to offsetting Energy System Sales and Cost of Goods Sold for Energy System Sales, Operating Revenues decreased \$2.0M from the same period of the prior year and Operating expenses increased \$2.8M from the same period of the prior year, resulting in Operating income decreasing \$4.8M from the same period of the prior year. The revenue decrease is mostly due to a \$3.6M decrease in RGGI revenues due to the ratepayer relief threshold being met due to historic demand in Q3 of 2024 limiting CGB's proceeds for the same auction year over year. This was slightly offset by an additional \$1.1M of other income and \$1.0M in additional Interest Income from Promissory Notes compared to the period ended December 30, 2023.
- ✓ Operating Expenses had an overall increase of \$6.3M. This is mostly due to the aforementioned \$3.5M increase in Cost of Goods Sold-Energy Systems for the period. Additionally, there was an increase in program administration expenses of \$1.7M (mostly due to increased headcount) and a \$0.9M increase in grant and incentive payments (due to increased ESS incentives), compared to the same period from the prior year.
- ✓ Nonoperating Revenues (Expenses) showed a decrease in expenses of \$0.6M compared to the same period of the prior year. This decrease is mostly due to the increase in interest income on short term deposits, which had a \$0.2M increase in revenue, as well as a \$0.1M decrease in interest expense on long term debt and a \$0.2M decrease in Loss on fair value of investments for the same period year over year.

**Statement of Revenues and Expenditures vs. Budget**

Fiscal Year Net Revenues Over Expenses of \$10.0M was \$6.2M better than budget.

- ✓ Revenues were \$7.2M higher than budget due mostly to \$5.5M in Sales of Energy Systems compared to a budget of zero. Additionally, Interest income was \$0.7M, other income was \$0.5M and capitalized interest was \$0.3M above budget, respectively.
- ✓ Operating Expenses were \$1.3M higher than budget for the period. The biggest contributing factor to this was the Cost of Sales - Energy Systems that had expenses of \$5.5M, with no budgeted amounts for the year. Three offsetting items to that variance were compensation and benefits variances of approx. \$2.0M lower than budgeted, \$0.7M less of program development & administration than budgeted and \$0.5M lower consulting and professional fees than budgeted. See breakout of budget to actual for financing programs, incentive programs and environmental infrastructure programs for more details.
- ✓ Program incentives and grants were consistent with the budgeted amounts, being approx. \$0.2M higher than budget of \$4.3M.
- ✓ Non-operating expenses were approximately \$0.5M below budget, mostly due to a loan loss reserve recovery in the amount of \$0.4M.

**Unfunded Commitments**

CGB has a total of \$61.3M in unfunded commitments at December 31, 2024, a decrease of \$2.3M from \$63.6M of unfunded commitments as of June 30, 2024. The decrease is mostly due to the amount of investment made so far in the fiscal year (\$12.8M in investments - see CGB program loans, notes and loan loss reserve analysis page for more details) and incentives paid in the first two quarters of the fiscal year net of a few newly approved loans yet to disburse.

# Connecticut Green Bank Balance Sheet

	12/31/2024	06/30/2024	\$ Change
<b>Assets</b>			
Current Assets			
Cash and Cash Equivalents	41,857,904	26,065,154	15,792,750
Accounts Receivable	1,350,403	1,816,604	(466,201)
Utility Remittance Receivable	2,069,860	1,983,528	86,332
Interest Receivable	2,243,028	2,102,879	140,149
Other Receivables	2,829,697	7,763,671	(4,933,974)
Prepaid Expenses and Other Assets	1,346,559	2,319,852	(973,293)
Current Portion of Solar Lease Notes	0	753,842	(753,842)
Current Portion of SBEA Promissory Notes	0	1,559,260	(1,559,260)
Current Portion of Program Loans, Net of Reserves	0	16,919,794	(16,919,794)
Current Portion of Lease Receivable	1,050,019	1,050,019	0
Current Portion of Prepaid Warranty Management	258,011	258,587	(576)
<b>Total Current Assets</b>	<b>53,005,481</b>	<b>62,593,190</b>	<b>(9,587,709)</b>
Noncurrent Assets			
Restricted Assets	27,799,778	27,782,420	17,358
Investments	1,113,685	1,113,685	0
Program Loans, net of reserves	139,593,318	124,199,151	15,394,167
Solar Lease I Promissory Notes, net of reserves	745,899	428,120	317,779
Renewable Energy Certificates	31,042	31,042	0
SBEA Promissory Notes, net of reserves	5,061,382	3,030,663	2,030,719
Lease Receivable, less current portion	13,719,779	13,719,778	1
Prepaid Warranty Management, less current portion	2,538,839	2,673,454	(134,615)
Fair Value - Interest Rate Swap	102,249	212,188	(109,939)
Capital Assets, net	67,791,277	69,517,800	(1,726,523)
<b>Total Noncurrent Assets</b>	<b>258,497,248</b>	<b>242,708,301</b>	<b>15,788,947</b>
<b>Total Assets</b>	<b>311,502,729</b>	<b>305,301,491</b>	<b>6,201,238</b>
<b>Deferred Outflows of Resources</b>			
Deferred Amount for Pensions	7,216,342	7,216,342	0
Deferred Amount for OPEB	11,631,046	11,631,046	0
Deferred Amount for Asset Retirement Obligations	1,787,189	1,866,994	(79,805)
<b>Total Deferred Outflows of Resources</b>	<b>\$ 20,634,577</b>	<b>\$ 20,714,382</b>	<b>\$ (79,805)</b>
<b>Liabilities</b>			
Current Liabilities			
Accounts Payable	570,349	877,981	(307,632)
Accrued Payroll and Related Liabilities	1,469,244	1,469,245	(1)
Accrued Expenses	11,618,914	9,847,924	1,770,990
Notes Payable- Green Liberty Notes	1,050,000	1,400,000	(350,000)
Current Maturities of Long-Term Debt	6,504,483	6,452,484	51,999
Custodial Liability	647,219	748,583	(101,364)
Deferred Revenue	279,915	52,622	227,293
<b>Total Current Liabilities</b>	<b>22,140,124</b>	<b>20,848,839</b>	<b>1,291,285</b>
Noncurrent Liabilities			
Asset Retirement Obligation	4,416,304	4,345,686	70,618
Notes Payable	6,565,017	7,273,800	(708,783)
Bonds Payable-SHREC ABS 1	15,474,255	16,472,663	(998,408)
Bonds Payable-CREBs	7,131,635	7,849,300	(717,665)
Bonds Payable-Green Liberty Bonds	28,761,000	31,553,000	(2,792,000)
Lease Liability, less current maturities	1,853,851	1,853,850	1
Pension Liability	17,457,556	17,457,556	0
OPEB Liability	23,770,649	23,770,649	0
<b>Total Noncurrent Liabilities</b>	<b>105,430,267</b>	<b>110,576,504</b>	<b>(5,146,237)</b>
<b>Total Liabilities</b>	<b>127,570,391</b>	<b>131,425,343</b>	<b>(3,854,952)</b>
<b>Deferred Inflows of Resources</b>			
Deferred Pension Inflow Liability	4,152,515	4,152,515	0
Deferred OPEB Inflow Liability	10,606,728	10,606,728	0
Deferred Lease Inflow Liability	13,737,708	13,737,708	0
<b>Total Deferred Inflows of Resources</b>	<b>28,496,951</b>	<b>28,496,951</b>	<b>0</b>
<b>Net Position</b>			
Net Investment in Capital Assets	67,791,277	69,517,800	(1,726,523)
Restricted-Energy Programs	27,799,778	27,782,421	17,357
Unrestricted Net Position	80,478,909	68,793,358	11,685,551
<b>Total Net Position</b>	<b>176,069,964</b>	<b>166,093,579</b>	<b>9,976,385</b>

# Connecticut Green Bank

## Statement of Revenues and Expenditures

	Fiscal YTD Dec 31 2024	Fiscal YTD Dec 31 2023	\$ Change
<b>Change in Net Position</b>			
Operating Income (Loss)			
Operating Revenues			
Utility Remittances	12,821,004	12,722,877	98,127
Interest Income-Promissory Notes	5,026,222	4,047,643	978,580
RGGI Auction Proceeds	1,026,670	4,624,926	(3,598,257)
Energy System Sales	5,502,889	1,959,040	3,543,850
REC Sales	7,250,573	7,837,956	(587,384)
Lease Income	730,421	724,814	5,607
Other Income	3,177,294	2,077,387	1,099,907
Total Operating Revenues	35,535,073	33,994,643	1,540,430
Operating Expenses			
Cost of Goods Sold-Energy Systems	5,502,889	1,959,039	3,543,850
Provision for Loan Losses	473,150	646,002	(172,852)
Grants and Incentive Payments	4,531,309	3,657,452	873,857
Program Administration Expenses	11,315,147	9,606,801	1,708,345
General and Administrative Expenses	3,306,181	2,927,323	378,859
Total Operating Expenses	25,128,676	18,796,617	6,332,059
Operating Income (Loss)	10,406,397	15,198,026	(4,791,629)
Nonoperating Revenue (Expenses)			
Interest Income-Short Term Cash Deposits	920,381	674,134	246,247
Interest Expense-ST Debt	(35,419)	(25,748)	(9,671)
Interest Expense-LT Debt	(1,081,956)	(1,191,984)	110,028
Debt Issuance Costs	(2,500)	(5,000)	2,500
Distributions to Member	0	(22,801)	22,802
Unrealized Gain (Loss) on Interest Rate Swap	(109,939)	(134,175)	24,235
Net change in fair value of investments	(120,579)	(331,320)	210,741
Total Nonoperating Revenue (Expenses)	(430,012)	(1,036,894)	606,882
<b>Change in Net Position</b>	<b>9,976,385</b>	<b>14,161,132</b>	<b>(4,184,747)</b>

# CT Green Bank Budget to Actual Financial Analysis December 2024

	CGB Total 07/01/2024 Through 12/31/2024			Incentive Programs 07/01/2024 Through 12/31/2024			Financing Programs 07/01/2024 Through 12/31/2024			Environmental Infrastructure 07/01/2024 Through 12/31/2024		
	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance	Actual	Budget	Variance
<b>Revenue</b>												
Operating Income												
Utility Customer Assessments	12,821,004	12,752,744	68,260	0	0	0	12,821,004	12,752,744	68,260	0	0	0
RGGI Auction Proceeds-Renewables	1,026,669	1,026,670	(1)	0	0	0	1,026,669	1,026,670	(1)	0	0	0
CPACE Closing Fees	92,805	60,000	32,805	0	0	0	92,805	60,000	32,805	0	0	0
REC Sales	6,507,660	6,452,025	55,635	6,507,660	6,452,025	55,635	0	0	0	0	0	0
Sales Energy Systems	5,502,889	0	5,502,889	0	0	0	5,502,889	0	5,502,889	0	0	0
Grant Income-Federal Programs	2,686	20,000	(17,314)	0	0	0	1,998	20,000	(18,002)	688	0	688
Grant Income-Private Foundations	153,347	60,000	93,347	0	0	0	103,348	60,000	43,348	49,999	0	49,999
PPA Income	968,058	902,774	65,284	0	0	0	968,058	902,774	65,284	0	0	0
LREC/ZREC Income	742,912	835,464	(92,552)	0	0	0	742,912	835,464	(92,552)	0	0	0
Rental Income	730,421	711,807	18,614	0	0	0	730,421	711,807	18,614	0	0	0
<b>Total Operating Income</b>	<b>28,548,451</b>	<b>22,821,484</b>	<b>5,726,967</b>	<b>6,507,660</b>	<b>6,452,025</b>	<b>55,635</b>	<b>21,990,104</b>	<b>16,369,459</b>	<b>5,620,645</b>	<b>50,687</b>	<b>0</b>	<b>50,687</b>
Interest Income	5,552,525	4,885,989	666,537	412,577	16,050	396,527	5,139,948	4,869,939	270,009	0	0	0
Interest Income, Capitalized	373,815	45,000	328,814	0	0	0	373,815	45,000	328,815	0	0	0
Other Income	1,960,399	1,419,517	540,883	1,147,270	1,147,270	0	813,129	272,247	540,883	0	0	0
<b>Total Revenue</b>	<b>\$ 36,435,190</b>	<b>\$ 29,171,990</b>	<b>\$ 7,263,201</b>	<b>\$ 8,067,507</b>	<b>\$ 7,615,345</b>	<b>\$ 452,162</b>	<b>\$ 28,316,996</b>	<b>\$ 21,556,645</b>	<b>\$ 6,760,352</b>	<b>\$ 50,687</b>	<b>\$ 0</b>	<b>\$ 50,687</b>
<b>Operating Expenses</b>												
Compensation and Benefits	7,675,206	9,658,941	(1,983,736)	1,572,923	1,825,242	(252,319)	5,429,428	7,021,497	(1,592,069)	672,855	812,202	(139,347)
Program Development & Administration	2,007,301	2,671,200	(663,897)	789,163	1,193,762	(404,599)	1,218,139	1,352,438	(134,299)	0	125,000	(125,000)
Cost of Sales Energy Systems	5,502,890	0	5,502,889	0	0	0	5,502,889	0	5,502,889	0	0	0
Lease Origination Services	918	2,500	(1,582)	0	0	0	918	2,500	(1,582)	0	0	0
Marketing Expense	556,084	802,195	(246,111)	81,378	106,500	(25,122)	474,187	695,695	(221,508)	519	0	519
E M & V	114,151	292,500	(178,349)	65,015	125,000	(59,985)	49,137	167,500	(118,363)	0	0	0
Research and Development	122,218	280,000	(157,782)	0	0	0	96,845	250,000	(153,155)	25,372	30,000	(4,628)
Consulting and Professional Fees	746,957	1,253,750	(506,793)	164,597	262,500	(97,903)	577,359	983,750	(406,390)	5,000	7,500	(2,500)
Rent and Location Related Expenses	1,950,337	2,172,494	(222,157)	55,598	62,182	(6,584)	1,871,211	2,082,977	(211,767)	23,530	27,336	(3,806)
Office, Computer & Other Expenses	1,106,394	1,335,855	(229,460)	253,518	256,615	(3,097)	806,221	1,017,590	(211,369)	46,655	61,649	(14,994)
Warranty Management	135,189	129,293	5,896	0	0	0	135,189	129,293	5,896	0	0	0
<b>Total Operating Expenses</b>	<b>19,917,645</b>	<b>18,598,728</b>	<b>1,318,918</b>	<b>2,982,192</b>	<b>3,831,801</b>	<b>(849,609)</b>	<b>16,161,523</b>	<b>13,703,240</b>	<b>2,458,283</b>	<b>773,931</b>	<b>1,063,687</b>	<b>(289,756)</b>
<b>Program Incentives and Grants</b>	<b>\$ 4,531,309</b>	<b>\$ 4,285,806</b>	<b>\$ 245,502</b>	<b>\$ 4,179,613</b>	<b>\$ 4,045,806</b>	<b>\$ 133,806</b>	<b>\$ 301,697</b>	<b>\$ 240,000</b>	<b>\$ 61,697</b>	<b>\$ 49,999</b>	<b>\$ 0</b>	<b>\$ 49,999</b>
<b>Operating Income/(Loss)</b>	<b>\$ 11,986,237</b>	<b>\$ 6,287,455</b>	<b>\$ 5,698,781</b>	<b>\$ 905,703</b>	<b>\$ (262,262)</b>	<b>\$ 1,167,965</b>	<b>\$ 11,853,776</b>	<b>\$ 7,613,405</b>	<b>\$ 4,240,372</b>	<b>\$ (773,243)</b>	<b>\$ (1,063,687)</b>	<b>\$ 290,444</b>
<b>Non-Operating Expenses</b>	<b>\$ 2,009,851</b>	<b>\$ 2,483,630</b>	<b>\$ (473,779)</b>	<b>\$ 856,232</b>	<b>\$ 1,088,198</b>	<b>\$ (231,966)</b>	<b>\$ 1,153,620</b>	<b>\$ 1,395,432</b>	<b>\$ (241,813)</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Net Revenues Over (Under) Expenses</b>	<b>\$ 9,976,385</b>	<b>\$ 3,803,825</b>	<b>\$ 6,172,560</b>	<b>\$ 49,471</b>	<b>\$ (1,350,460)</b>	<b>\$ 1,399,931</b>	<b>\$ 10,700,157</b>	<b>\$ 6,217,972</b>	<b>\$ 4,482,184</b>	<b>\$ (773,243)</b>	<b>\$ (1,063,687)</b>	<b>\$ 290,444</b>

# Connecticut Green Bank

## December 2024 Financial Package

### Analysis of Compensation and Benefits

	FY 2025 YTD		Budget	Budget	Budget	FY 2024 YTD	Prior Year
	Actual		Budget		Variance	Actual	Variance
<b>Compensation:</b>							
Full Time Employees	\$ 4,451,025	\$	5,068,473		\$ (617,448)	\$ 3,487,395	\$ 963,630
Interns	93,974		120,960		\$ (26,987)	46,289	47,685
Temporary Employees	-		-		\$ -	-	-
Overtime	8,532		-		\$ 8,532	15,859	(7,327)
<b>Total Compensation</b>	<b>\$ 4,553,530</b>	<b>\$</b>	<b>5,189,433</b>		<b>\$ (635,903)</b>	<b>\$ 3,549,543</b>	<b>\$ 1,003,987</b>
<b>Employee Benefits:</b>							
State Retirement Plan Contributions	\$ 2,228,033					\$ 2,168,784	\$ 59,249
Medical Dental Rx Premiums	578,456					459,232	119,224
Payroll and Unemployment Taxes	292,168					228,323	63,844
Life, Disability & WC Premiums	23,019					21,403	1,616
<b>Total Employee Benefits</b>	<b>3,121,676</b>		<b>4,469,510</b>		<b>(1,347,834)</b>	<b>2,877,742</b>	<b>243,934</b>
<b>Total Compensation and Benefits</b>	<b>\$ 7,675,206</b>	<b>\$</b>	<b>9,658,943</b>		<b>\$ (1,983,737)</b>	<b>\$ 6,427,285</b>	<b>\$ 1,247,921</b>
<b>Benefits and Taxes as a % of Salary</b>	68.56%		86.13%			81.07%	

#### Actual vs. Budget

Total Employee compensation and benefit costs were \$2.0M under budget. Full time employee costs are \$617k under budget mostly due to \$530k of budgeted open positions and \$80k due to timing of employee leaves compared to budget. Benefits and Taxes are approx. \$1.3M less than budget due mostly to the favorable employee compensation variance due to open positions previously noted as well as an approx 17% rate variance compared to budget. This is due to the SERS recovery rate determined by the state of CT decreasing from 59.57% in FY24 to 47.48% in FY25 (note: CGB does not help to determine this actual rate). Additionally, this led to actual benefits and taxes being significantly lower than budget (68.56% actual vs a budgeted 86.13% of total compensation for the period to date as an estimated 64.50% SERS rate was used for budget purposes based on the 64.30% average of the prior three fiscal years).

#### Actual vs. Prior Year

Compensation costs increased \$1.0M and benefit costs increased \$244k, respectively over the same period of the prior year. This is mostly due to an increase in total employees (62 in December 2024 compared to 53 in December 2023). Actual benefit percentages decreased from 81.07% in the prior period, to 68.56% in the current period mostly due to the aforementioned decrease in SERS recovery rate from the prior year. Additionally, actual contributions to the State employee retirement plan decreased from 62.2% to 50.1% of full time employee compensation, year over year.



**Connecticut Green Bank  
December 2024 Financial Package  
Historical Analysis of Compensation and Benefits**

	FYTD 12/31/24 Actual	FYE 6/30/24 Actual	FYE 6/30/23 Actual	FYE 6/30/22 Actual	FYE 6/30/21 Actual	FYE 6/30/20 Actual
<b>Compensation:</b>						
Full Time Employees	\$ 4,553,530	\$ 7,655,056	\$ 5,902,859	\$ 4,813,293	\$ 4,476,214	\$ 3,929,354
Temporary Employees	-	-	-	-	-	2,242
<b>Total Compensation</b>	<b>\$ 4,553,530</b>	<b>\$ 7,655,056</b>	<b>\$ 5,902,859</b>	<b>\$ 4,813,293</b>	<b>\$ 4,476,214</b>	<b>\$ 3,931,596</b>
<b>Employee Benefits:</b>						
State Retirement Plan Contributions	\$ 2,228,033	\$ 4,547,141	\$ 3,995,132	\$ 3,317,054	\$ 2,903,780	\$ 2,411,864
Medical Dental Rx Premiums	578,456	970,135	791,620	610,627	625,480	553,908
Payroll and Unemployment Taxes	292,168	523,545	417,828	353,405	305,032	269,295
Life, Disability & WC Premiums	23,019	40,884	35,115	28,223	23,840	27,567
<b>Total Employee Benefits</b>	<b>3,121,676</b>	<b>6,081,705</b>	<b>5,239,695</b>	<b>4,309,308</b>	<b>3,858,132</b>	<b>3,262,634</b>
<b>Total Compensation and Benefits</b>	<b>\$ 7,675,206</b>	<b>\$ 13,736,761</b>	<b>\$ 11,142,554</b>	<b>\$ 9,122,602</b>	<b>\$ 8,334,346</b>	<b>\$ 7,194,230</b>
<b>Medical Dental Rx Premiums as a % of Salary</b>	12.70%	12.67%	13.41%	12.69%	13.97%	14.09%
<b>* Retirement Plan Contributions as a % of Salary</b>	48.93%	59.40%	67.68%	68.91%	64.87%	61.35%
<b>Total Benefits and Taxes as a % of Salary</b>	68.56%	79.45%	88.77%	89.53%	86.19%	82.98%
<b>** State of CT Comptroller Employer SERS Rate</b>	47.48%	59.57%	67.40%	65.90%	64.14%	59.99%
<p>* Retirement Plan Contributions include Pension &amp; OPEB, included Employer contributions to the Tier IV Defined Contribution for employees in that plan.</p> <p>** State of CT Comptroller Employer SERS Rate provided via the annual "Fringe Benefit Recover Rate" memo issued 7/1 of each year by the State Comptroller.</p>						
Total Benefits Cost @ Hypothetical Benefits Rate	<b>35%</b> 1,593,736	2,679,270	2,066,001	1,684,653	1,566,675	1,376,059
<b>Actual Total Compensation and Benefits</b>	7,675,206	13,736,761	11,142,554	9,122,602	8,334,346	7,194,230
<b>Less Total Compensation and Benefits @ Hypothetical Rate</b>	(6,147,266)	(10,334,325)	(7,968,860)	(6,497,946)	(6,042,889)	(5,307,655)
Incremental HR cost due to State Benefits Charge	1,527,940	3,402,435	3,173,694	2,624,656	2,291,457	1,886,575

**Analysis:**

As noted above, the cost of benefits per employee has been in excess of 79% of salary for every year since FYE 6/30/20, with retirement plan contributions making up 49-69% of the total cost of salary in each of these years. In the current year, the SERS rate decreased to 47.48%, the first year it's been below 59% in the analysis, leading to total benefits around 68% (lower than the 79% and higher of the past 5 fiscal years). It is noted that the medical/dental/Rx costs have remained fairly consistent over the period presented above (approx. 12-14%). The main driver of the benefits rate is the State of CT Comptroller Employer SERS rate that is a tool the state uses to allocate expenses accross all SERS employees. The allocation is done only based on salary of the employees, regardless of the demographic information or tier level of the benefit plans that each employee is eligible for. The Green Bank has a fairly young staff, with 18 Tier III and 36 Tier IV employees of the total 62 full-time employees of the Green Bank at 12/31/24 (where Tier III and Tier IV are lower cost pension arrangements than Tier IIa and Tier II where the Green Bank only has 8 employees). This rate is a cost of doing business to the Green Bank as a quasi-public agency of the state, and management of the Green Bank has no control to manage this rate provided to us. Due to the demographics of our staff, we also believe the rate charged to the Green Bank based on its broad allocation to not be representative of the Tier of employees, where the Green Bank would likely pay a lower rate than what is being charged if employee demographic information as it relates to what Tier SERS plan they are enrolled in was used in the allocation. As further noted above, if we were to apply a standard 35% benefits rate to our salaries over the time period presented, we would save approx. **\$2 - 3M per year**.

**Connecticut Green Bank**  
**Summary of Unfunded Commitments**  
**As of December 31, 2024**  
(In thousands)

	EPBB	PBI	CPACE	Non CPACE	All Projects		
	Balance	Balance	Loans	Loans	Balance	Balance	Increase /
	12/31/2024	12/31/2024	Balance	Balance	12/31/2024	6/30/2024	(Decrease)
Solar - SHREC Eligible	636	5,428	0	0	6,064	9,850	(3,786)
Solar - Not SHREC Eligible	250	55	0	0	305	96	209
CPACE	0	0	7,486	0	7,486	9,630	(2,144)
Multifamily/LMI Solar PV & EE	0	0	0	3,510	3,510	5,883	(2,373)
SBEA	0	0	0	14,227	14,227	14,557	(330)
Solar PPAs/IPC	0	0	0	19,807	19,807	23,599	(3,792)
Fuel Cells	0	0	0	9,900	9,900	0	9,900
Total Unfunded Commitments	\$ 886	\$ 5,483	\$ 7,486	\$ 47,444	\$ 61,299	\$ 63,615	\$ (2,316)

**Connecticut Green Bank  
Summary of Loan Guarantees  
As of December 31, 2024**

<b>Guarantor</b>	<b>Issuer</b>	<b>Beneficiary</b>	<b>Relationship of guarantor to Issuer</b>	<b>Type of obligation guaranteed</b>	<b>Maximum amount of guaranty</b>	<b>Obligations guaranteed as of 12/31/2024</b>	<b>Obligations guaranteed as of 6/30/2024</b>
CT Green Bank	Owners of multifamily dwellings in Connecticut	Housing Development Fund	Issuers participate in program administered by CGB and the Housing Development Fund to install energy upgrades in multifamily dwellings	Commercial and consumer loan products with various terms	\$ 5,000,000	\$ 2,839,171	\$ 2,892,171
CEFIA Holdings LLC	CEFIA Solar Services Inc.	CHFA	Holdings is the sole shareholder of Services and an affiliate of CGB	Promissory Note for funds received from CHFA upon their issuance of Qualified Energy Conservation Bonds (QECBs) for State Sponsored Housing Projects (SSHP)	1,895,807	1,129,584	1,176,979
CT Green Bank	Canton Hydro, LLC	Provident Bank	Issuer is the developer of hydropower project in Connecticut approved by the CGB Board of Directors.	Unfunded guaranty not to exceed \$500,000.	500,000	-	500,000
					<b>\$ 7,395,807</b>	<b>\$ 3,968,755</b>	<b>\$ 4,569,150</b>

**Connecticut Green Bank**  
**Program Loans, Notes and Loan Loss Reserve Analysis**  
As of December 31, 2024

Legal Entity	Loan Program	Project	Loan Portfolio Balance 7/1/2024	FY24 YTD Investments	FY24 YTD Repayments	Loan Portfolio Balance As of December 31, 2024	Loan Loss Reserve Balance 7/1/2024	FY24 YTD Increase / Decrease to Reserve	Loan Loss Reserve Balance As of December 31, 2024	Reserve as a % of Portfolio Balance	Loan Portfolio Carrying Value As of December 31, 2024
CGB	CPACE Program	Various	\$ 45,412,640	\$ -	\$ (1,635,706)	\$ 43,776,934	(4,541,269)	\$ (483,650)	\$ (5,024,919)	11.5%	\$ 38,752,015
CGB	Fuel Cell Projects	FCE Corp-Master Refinance Facility	8,943,111	-	(471,626)	8,471,485	(894,311)		(894,311)	10.6%	7,577,173
		FCE Corp-Promissory Note	8,000,000	-	-	8,000,000	(800,000)		(800,000)	10.0%	7,200,000
		FCE Corp- Derby Senior Loan	2,740,518	-	(126,415)	2,614,103	(274,052)		(274,052)	10.5%	2,340,051
		FCE Corp- Derby Junior Loan	3,500,000	-	-	3,500,000	(350,000)		(350,000)	10.0%	3,150,000
CGB	CHP Pilot	Bridgeport MicroGrid	358,651		(11,580)	347,071	(17,933)		(17,933)	5.2%	329,139
CGB	Anaerobic Digester	Quantum Biopower	987,605		(66,580)	921,025	(49,380)		(49,380)	5.4%	871,645
		Fort Hill Ag-Grid LLC	549,116		(30,083)	519,033	(27,456)		(27,456)	5.3%	491,577
CGB	Other Loans	Nu Power Thermal	427,000		(427,000)	-	(427,000)	427,000	-	0.0%	-
		Terrace Heights Condos	6,363		(6,363)	-	(636)		(636)	0.0%	(636)
CGB	Multifamily / Affordable Housing / Credit Challenged / LMI	Capital for Change	3,262,085		(106,537)	3,155,548	(326,209)		(326,209)	10.3%	2,829,339
		CEEFCo	15,000,000		(1,000,000)	14,000,000	(1,500,000)		(1,500,000)	10.7%	12,500,000
		Posigen	28,229,195	2,372,509	(7,379,840)	23,221,864	(2,822,920)		(2,822,920)	12.2%	20,398,945
CGB	Energy Efficiency Financing	RENEW Energy Efficiency Bridgeport	45,160		(17,525)	27,634	(4,516)		(4,516)	16.3%	23,118
CGB	Wind Financing	Wind Colebrook	1,230,922		(68,425)	1,162,496	(123,092)		(123,092)	10.6%	1,039,404
CGB	Hydro Projects	Canton Hydro	679,920		(12,882)	667,038	(33,996)		(33,996)	5.1%	633,042
CGB	Sunwealth Note	Sunwealth	739,894		(28,552)	711,342	(36,995)		(36,995)	5.2%	674,347
CGB	IPC Note Receivable	IPC	1,000,000		(150,000)	850,000	-		-	0.0%	850,000
CGB	Budderfly	Budderfly	4,249,032		(460,556)	3,788,476	(424,903)		(424,903)	11.2%	3,363,573
CGB	Budgeted LLR Adj (to be adjusted at fiscal year end)	Various	-		-	-	-	(416,500)	(416,500)	0.0%	(416,500)
CEFIA Holdings	Sunwealth Note	Sunwealth	629,357		(33,453)	595,904	(31,468)		(31,468)	5.3%	564,436
CEFIA Holdings	Skyview Notes	Skyview	7,022,729		(260,802)	6,761,927	(351,136)		(351,136)	5.2%	6,410,790
		Skyview Bantam	-	69,760		69,760	-		-	0.0%	69,760
CEFIA Holdings	SBEA Loans	SBEA	215	39		254	-		-	0.0%	254
CEFIA Holdings	Inclusive Solar Manager	IPC	4,532,255		(139,249)	4,393,006	(90,645)		(90,645)	2.1%	4,302,361
	Inclusive Solar CT	IPC	-	1,173,255		1,173,255	-		-	0.0%	1,173,255
		IPC-Tax Equity Bridge Loan	-	526,957		526,957	-		-	0.0%	526,957
CT Solar Loan 1	Solar Loans	CT Solar Loan 1	445,455		(82,589)	362,865	(22,273)		(22,273)	6.1%	340,593
CT Solar Lease 1	Solar Lease Notes	CT Solar Lease 1	1,313,291		(436,063)	877,228	(131,329)		(131,329)	15.0%	745,899
CGB CPACE	CPACE Program	Various	16,677,000	7,408,807	(87,998)	23,997,810	(398,879)		(398,879)	1.7%	23,598,931
CGB Green Liberty Notes	SBEA Loans	SBEA	5,243,218	1,252,364	(722,408)	5,773,174	-		-	0.0%	5,773,174
<b>Total:</b>			<b>\$ 161,224,733</b>	<b>\$ 12,803,691</b>	<b>\$ (13,762,236)</b>	<b>\$ 160,266,189</b>	<b>\$ (13,680,397)</b>	<b>\$ (473,150)</b>	<b>\$ (14,153,547)</b>	<b>8.8%</b>	<b>\$ 146,112,641</b>
<b>CGB:</b>											
<b>CPACE Loans</b>			<b>\$ 45,412,640</b>	<b>\$ -</b>	<b>\$ (1,635,706)</b>	<b>\$ 43,776,934</b>	<b>\$ (4,541,269)</b>	<b>\$ (483,650)</b>	<b>\$ (5,024,919)</b>	<b>11.5%</b>	<b>\$ 38,752,015</b>
<b>Posigen</b>			<b>\$ 28,229,195</b>	<b>\$ 2,372,509</b>	<b>\$ (7,379,840)</b>	<b>\$ 23,221,864</b>	<b>\$ (2,822,920)</b>	<b>\$ -</b>	<b>\$ (2,822,920)</b>	<b>12.2%</b>	<b>\$ 20,398,945</b>
<b>Sunwealth</b>			<b>\$ 739,894</b>	<b>\$ -</b>	<b>\$ (28,552)</b>	<b>\$ 711,342</b>	<b>\$ (36,995)</b>	<b>\$ -</b>	<b>\$ (36,995)</b>	<b>5.2%</b>	<b>\$ 674,347</b>
<b>Program Loans</b>			<b>\$ 50,979,483</b>	<b>\$ -</b>	<b>\$ (2,955,574)</b>	<b>\$ 48,023,909</b>	<b>\$ (5,253,484)</b>	<b>\$ 10,500</b>	<b>\$ (5,242,984)</b>	<b>10.9%</b>	<b>\$ 42,780,925</b>
<b>Total CGB:</b>			<b>\$ 125,361,213</b>	<b>\$ 2,372,509</b>	<b>\$ (11,999,672)</b>	<b>\$ 115,734,050</b>	<b>\$ (12,654,667)</b>	<b>\$ (473,150)</b>	<b>\$ (13,127,817)</b>	<b>11.3%</b>	<b>\$ 102,606,232</b>
<b>CEFIA Holdings</b>			<b>\$ 12,184,556</b>	<b>\$ 69,799</b>	<b>\$ (433,504)</b>	<b>\$ 11,820,850</b>	<b>\$ (473,249)</b>	<b>\$ -</b>	<b>\$ (473,249)</b>	<b>4.0%</b>	<b>\$ 11,347,601</b>
<b>CT Solar Loan 1</b>			<b>\$ 445,455</b>	<b>\$ -</b>	<b>\$ (82,589)</b>	<b>\$ 362,865</b>	<b>\$ (22,273)</b>	<b>\$ -</b>	<b>\$ (22,273)</b>	<b>6.1%</b>	<b>\$ 340,593</b>
<b>CT Solar Lease 1</b>			<b>\$ 1,313,291</b>	<b>\$ -</b>	<b>\$ (436,063)</b>	<b>\$ 877,228</b>	<b>\$ (131,329)</b>	<b>\$ -</b>	<b>\$ (131,329)</b>	<b>15.0%</b>	<b>\$ 745,899</b>
<b>CGB CPACE</b>			<b>\$ 16,677,000</b>	<b>\$ 7,408,807</b>	<b>\$ (87,998)</b>	<b>\$ 23,997,810</b>	<b>\$ (398,879)</b>	<b>\$ -</b>	<b>\$ (398,879)</b>	<b>1.7%</b>	<b>\$ 23,598,931</b>
<b>CGB Green Liberty Notes</b>			<b>\$ 5,243,218</b>	<b>\$ 1,252,364</b>	<b>\$ (722,408)</b>	<b>\$ 5,773,174</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ 5,773,174</b>
											<b>\$ 144,412,430</b>

**Connecticut Green Bank  
Consolidated Balance Sheet  
As of December 31, 2024**

	Connecticut Green Bank As of 12/31/2024	CGB Meriden Hydro LLC As of 12/31/2024	SHREC ABS 1 LLC As of 12/31/2024	SHREC Warehouse 1 LLC As of 12/31/2024	CT Solar Lease 1 LLC As of 12/31/2024	CGB C-PACE LLC As of 12/31/2024	CT Solar Loan 1 LLC As of 12/31/2024	CEFIA Holdings LLC As of 12/31/2024	CGB Green Liberty Notes LLC As of 12/31/2024	CT Solar Lease 2 LLC As of 12/31/2024	CT Solar Lease 3 LLC As of 12/31/2024	CEFIA Solar Services Inc. As of 12/31/2024	Eliminations As of 12/31/2024	Consolidated As of 12/31/2024	Consolidated As of 6/30/2024	Consolidated As of 6/30/2024	Variance	
Assets																		
Current Assets																		
Cash and Cash Equivalents	33,908,739	41,227	2,399,411	17,877	-	903,198	143,189	1,035,478	2,572,458	485,041	241,447	109,839	-	41,857,904	26,065,154	15,792,750		
Accounts Receivable	1,228,985	-	-	-	-	-	-	2,634	-	71,489	8,923	38,372	-	1,350,403	1,816,604	(466,201)		
Current Portion of Program Loans, Net of Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,919,794	(16,919,794)		
Utility Remittance Receivable	2,069,860	-	-	-	-	-	-	-	-	-	-	-	-	2,069,860	1,983,528	86,332		
Current Portion of Solar Lease Notes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	753,842	(753,842)		
Current Portion of SBEA Promissory Notes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,559,260	(1,559,260)		
Current Portion of Lease Receivable	-	-	-	-	-	-	-	-	-	1,047,311	-	2,708	-	1,050,019	1,050,019	-		
Interest Receivable	2,070,254	-	-	-	-	165,415	2,067	-	-	5,291	-	-	-	2,243,028	2,102,879	140,149		
Other Receivables	26,824	-	-	-	78,232	-	-	1,280,262	-	724,627	306,372	413,379	-	2,829,697	7,763,672	(4,933,975)		
Prepaid Expenses and Other Assets	65,526	13,757	16,667	-	-	-	-	927,162	-	177,610	4,677	141,160	-	1,346,559	2,319,852	(973,293)		
Current Portion of Prepaid Warranty Management	-	-	-	-	-	-	-	-	-	258,011	-	-	-	258,011	258,586	(575)		
Total Current Assets	39,370,188	54,983	2,416,078	17,877	78,232	1,068,614	145,256	3,245,537	2,572,458	2,769,380	561,419	705,458	-	53,005,481	62,593,190	(9,587,708)		
Noncurrent Assets																		
Restricted Assets																		
Cash and Cash Equivalents	18,139,968	-	716,354	6,310,885	-	-	-	738,052	-	1,502,451	-	392,067	-	27,799,778	27,782,421	17,357		
Investments	1,113,685	-	-	-	-	-	-	-	-	-	-	-	-	1,113,685	1,113,685	-		
Program Loans, net of reserves	102,606,237	-	-	-	-	23,598,931	340,593	13,047,558	-	-	-	-	-	139,593,318	124,199,150	15,394,168		
Solar Lease 1 Promissory Notes, net of reserves	-	-	-	-	745,899	-	-	-	-	-	-	-	-	-	745,899	428,120	317,779	
Renewable Energy Certificates	31,042	-	-	-	-	-	-	-	-	-	-	-	-	-	31,042	-		
SBEA Promissory Notes, net of reserves	-	-	-	-	-	-	-	254	5,061,128	-	-	-	-	-	5,061,382	3,030,663	2,030,719	
Lease Receivable, less current portion	-	-	-	-	-	-	-	-	-	13,658,846	-	60,932	-	13,719,779	13,719,779	-		
Due From Component Units	82,287,935	-	30,565,204	7,578,455	-	-	-	5,583,096	-	-	-	7,160,674	(133,175,365)	-	-	-		
Investment in Component Units	100,100	-	-	-	-	-	-	100	-	-	-	27,578,253	(27,678,453)	-	-	-		
Prepaid Warranty Management, less current portion	-	-	-	-	-	-	-	-	-	2,538,839	-	-	-	2,538,839	2,673,454	(134,614)		
Fair Value - Interest Rate Swap	-	-	-	-	-	-	-	-	-	102,249	-	-	-	102,249	212,188	(109,939)		
Capital Assets, net	10,516,708	3,433,559	-	-	-	-	-	810,854	-	43,679,258	8,796,617	365,532	188,749	67,791,277	69,517,800	(1,726,523)		
Total Noncurrent Assets	214,795,675	3,433,559	31,281,559	13,889,340	745,899	23,598,931	340,593	20,179,915	5,061,128	61,481,644	8,796,617	35,557,459	(160,665,068)	258,497,248	242,708,301	15,788,946		
Total Assets	254,165,863	3,488,542	33,697,637	13,907,217	824,131	24,667,544	485,848	23,425,452	7,633,586	64,251,024	9,358,036	36,262,917	(160,665,068)	311,502,729	305,301,491	6,201,238		
Deferred Outflows of Resources																		
Deferred Amount for Pensions	7,216,342	-	-	-	-	-	-	-	-	-	-	-	-	7,216,342	7,216,342	-		
Deferred Amount for OPEB	11,631,046	-	-	-	-	-	-	-	-	-	-	-	-	11,631,046	11,631,046	-		
Deferred Amount for Asset Retirement Obligations	-	-	-	-	-	-	-	-	-	1,444,478	342,711	-	-	1,787,189	1,866,994	(79,805)		
Total Deferred Outflows of Resources	18,847,388	-	-	-	-	-	-	-	-	1,444,478	342,711	-	-	20,634,577	20,714,382	(79,805)		
Liabilities																		
Current Liabilities																		
Accounts Payable	455,331	-	-	2,153	-	-	1,135	0	-	132	-	111,599	-	570,349	877,981	(307,633)		
Accrued payroll and related liabilities	1,469,244	-	-	-	-	-	-	-	-	-	-	-	-	1,469,244	1,469,244	-		
Accrued Expenses	11,368,251	-	39,893	-	-	-	-	119,255	35,965	40,078	-	15,471	-	11,618,914	9,847,925	1,770,989		
Notes Payable-Green Liberty Notes	-	-	-	-	-	-	-	-	1,050,000	-	-	-	-	1,050,000	1,400,000	(350,000)		
Current Maturities of Long-Term Debt	3,744,230	-	1,806,000	-	-	-	-	-	-	859,463	-	94,791	-	6,504,483	6,452,484	51,999		
Custodial Liability	-	-	-	-	-	-	-	640,837	-	-	-	6,383	-	647,219	748,583	(101,364)		
Deferred Revenue	304,274	-	-	-	-	-	-	-	-	(24,358)	-	-	-	279,915	52,622	227,294		
Total Current Liabilities	17,341,330	-	1,845,893	2,153	-	-	1,135	760,092	1,085,965	875,314	-	228,243	-	22,140,125	20,848,839	1,291,285		
Noncurrent Liabilities																		
Due to Component Units	38,143,659	6,209,180	-	-	652,641	23,246,000	100,000	7,315,000	6,262,678	16,211,352	2,448	35,032,406	(133,175,365)	-	-	-		
Asset Retirement Obligation	-	-	-	-	-	-	-	-	-	3,747,049	669,254	-	-	4,416,303	4,345,686	70,617		
Long-term debt	37,746,486	-	15,474,254	-	-	-	-	-	-	5,530,225	-	1,034,793	-	59,785,758	65,002,613	(5,216,855)		
Pension Liability	17,457,556	-	-	-	-	-	-	-	-	-	-	-	-	17,457,556	17,457,556	-		
OPEB Liability	23,770,649	-	-	-	-	-	-	-	-	-	-	-	-	23,770,649	23,770,649	-		
Total Noncurrent Liabilities	117,118,350	6,209,180	15,474,254	-	652,641	23,246,000	100,000	7,315,000	6,262,678	25,488,626	671,702	36,067,199	(133,175,365)	105,430,266	110,576,504	(5,146,238)		
Total Liabilities	134,459,680	6,209,180	17,320,147	2,153	652,641	23,246,000	101,135	8,075,092	7,348,644	26,363,940	671,702	36,295,442	(133,175,365)	127,570,391	131,425,343	(3,854,952)		
Deferred Inflows of Resources																		
Deferred Pension Inflow Liability	4,152,515	-	-	-	-	-	-	-	-	-	-	-	-	4,152,515	4,152,515	-		
Deferred OPEB Inflow Liability	10,606,728	-	-	-	-	-	-	-	-	-	-	-	-	10,606,728	10,606,728	-		
Deferred Lease Inflow Liability	-	-	-	-	-	-	-	-	-	13,675,772	-	61,937	-	13,737,708	13,737,708	-		
Total Deferred Inflows of Resources	14,759,243	-	-	-	-	-	-	-	-	13,675,772	-	61,937	-	28,496,951	28,496,951	-		
Net Position																		
Net Investment in Capital Assets	10,516,708	3,433,559	-	-	-	-	-	810,854	-	43,679,258	8,796,617	365,532	188,749	67,791,277	69,517,800	(1,726,523)		
Restricted-Energy Programs	18,139,968	-	716,354	6,310,885	-	-	-	738,052	-	1,502,451	-	392,067	-	27,799,778	27,782,421	17,357		
Unrestricted Net Position	95,137,652	(6,154,196)	15,661,135	7,594,179	171,490	1,421,544	384,713	13,801,453	284,942	(19,525,918)	232,428	(852,062)	(27,678,453)	80,478,909	68,793,359	11,685,550		
Total Net Position	123,794,328	(2,720,638)	16,377,490	13,905,064	171,490	1,421,544	384,713	15,350,360	284,942	25,655,791	9,029,045	(94,462)	(27,489,704)	176,069,964	166,093,579	9,976,385		

**Connecticut Green Bank**  
**Consolidated Statement of Revenues and Expenditures**  
**For the Period July 1, 2024 to December 31, 2024**

	Connecticut Green Bank	CGB Meriden	SHREC ABS 1	SHREC	CT Solar Lease 1	CGB C-PACE	CT Solar Loan I LLC	CEFIA Holdings LLC	CGB Green Liberty	CT Solar Lease 2	CT Solar Lease 3	CEFIA Solar	Eliminations	Consolidated	Consolidated	Consolidated
	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD	Fiscal YTD
	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2024	12/31/2023
																Variance
<b>Operating Income (Loss)</b>																
Operating Revenues																
Utility Remittances	12,821,004	-	-	-	-	-	-	-	-	-	-	-	-	12,821,004	12,722,877	98,127
Interest Income-Promissory Notes	4,040,858	-	-	-	30,982	521,225	13,347	311,807	108,003	-	-	-	-	5,026,222	4,047,643	978,580
RGGI Auction Proceeds	1,026,669	-	-	-	-	-	-	-	-	-	-	-	-	1,026,669	4,624,926	(3,598,257)
Energy System Sales	-	-	-	-	-	-	-	5,502,890	-	-	-	-	-	5,502,890	1,959,040	3,543,850
REC Sales	2,479,400	-	2,544,533	1,664,501	-	-	-	6,465	-	323,794	223,986	7,894	-	7,250,572	7,837,956	(587,384)
Lease Income	-	-	-	-	-	-	-	-	-	728,129	-	2,292	-	730,421	724,814	5,607
Other Income	1,844,554	-	-	-	-	63,070	117	489,740	-	447,116	189,683	221,741	(78,725)	3,177,294	2,077,387	1,099,907
Total Operating Revenues	22,212,485	-	2,544,533	1,664,501	30,982	584,296	13,464	6,310,901	108,003	1,499,039	413,669	231,926	(78,725)	35,535,073	33,994,643	1,540,430
Operating Expenses																
Cost of Goods Sold-Energy Systems	-	-	-	-	-	-	-	5,502,890	-	-	-	-	-	5,502,890	1,959,040	3,543,850
Provision for Loan Losses	473,150	-	-	-	-	-	-	-	-	-	-	-	-	473,150	646,002	(172,852)
Grants and Incentive Payments	4,531,309	-	-	-	-	-	-	-	-	-	-	-	-	4,531,309	3,657,452	873,857
Program Administration Expenses	8,437,304	240,263	26,000	87,847	27,707	-	6,928	61,164	6,250	1,675,795	265,998	668,640	(188,749)	11,315,147	9,606,801	1,708,345
General and Administrative Expenses	3,095,715	-	-	1,247	-	431	2,138	(947)	12,174	213,337	42,422	18,389	(78,725)	3,306,181	2,927,322	378,859
Total Operating Expenses	16,537,478	240,263	26,000	89,094	27,707	431	9,066	5,563,106	18,424	1,889,131	308,421	687,029	(267,474)	25,128,676	18,796,617	6,332,059
Operating Income (Loss)	5,675,007	(240,263)	2,518,533	1,575,407	3,275	583,865	4,397	747,795	89,579	(390,093)	105,248	(455,102)	188,749	10,406,397	15,198,026	(4,791,629)
<b>Nonoperating Revenue (Expenses)</b>																
Interest Income-Short Term Cash Deposits	721,882	-	36,562	93,870	-	-	-	922	65,927	482	126	610	-	920,381	674,134	246,247
Interest Income-Component Units	37,693	-	-	-	-	-	-	-	-	-	-	27,794	(65,487)	-	-	-
Interest Expense-Component Units	-	-	-	-	-	-	-	-	-	(65,487)	-	-	65,487	-	-	-
Interest Expense-ST Debt	-	-	-	-	-	-	-	-	(35,419)	-	-	-	-	(35,419)	(25,748)	(9,671)
Interest Expense-LT Debt	(419,631)	-	(472,813)	-	-	-	-	-	-	(175,144)	-	(14,367)	-	(1,081,955)	(1,191,984)	110,029
Debt Issuance Costs	-	-	-	-	-	-	-	-	(2,500)	-	-	-	-	(2,500)	(5,000)	2,500
Distributions to Member	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(22,801)	22,801
Unrealized Gain (Loss) on Investments	-	-	-	-	-	-	-	-	-	(120,579)	-	-	-	(120,579)	(331,320)	210,741
Total Nonoperating Revenue (Expenses)	339,944	-	(436,251)	93,870	-	-	-	922	28,008	(470,668)	126	14,038	-	(430,012)	(1,036,895)	606,883
<b>Change in Net Position</b>	<b>6,014,951</b>	<b>(240,263)</b>	<b>2,082,282</b>	<b>1,669,277</b>	<b>3,275</b>	<b>583,865</b>	<b>4,397</b>	<b>748,717</b>	<b>117,587</b>	<b>(860,761)</b>	<b>105,374</b>	<b>(441,065)</b>	<b>188,749</b>	<b>9,976,385</b>	<b>14,161,132</b>	<b>(4,184,747)</b>



**Connecticut Green Bank**  
**Consolidated Statement of Cash Flows**  
**For the Period July 1, 2024 to December 31, 2024**

	Connecticut Green Bank	GGB Meriden Hydro LLC	SHREC ABS 1 LLC Warehouse 1 LLC	SHREC CT Solar Lease 1 LLC	GGB C-PACE LLC	CT Solar Loan I LLC	CEFIA Holdings LLC	GGB Green Liberty Notes LLC	CT Solar Lease 2 LLC	CT Solar Lease 3 LLC	CEFIA Solar Services Inc.	Eliminations	Consolidated
	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024	Fiscal YTD 12/31/2024
<b>Operating Activities</b>													
Change in Net Position	6,014,951	(240,263)	2,082,282	1,669,277	3,275	583,865	4,397	748,717	117,587	(860,761)	105,374	(441,065)	9,787,636
Adjustments to reconcile change in net position to net cash provided by (used in) operating activities													
Depreciation	271,218	76,020	-	-	-	-	-	13,821	-	1,278,294	224,786	7,623	1,871,762
Accretion	-	-	-	-	-	-	-	-	-	59,916	10,701	-	70,617
Provision for Loan Losses	473,150	-	-	-	-	-	-	-	-	-	-	-	473,150
Loss on Fixed Asset Disposals/Solar Lease Buyouts	-	-	-	-	-	-	-	-	-	120,579	-	-	120,579
Gain (Loss) on FV of Interest Rate Swap	-	-	-	-	-	-	-	-	-	109,939	-	-	109,939
Changes in operating assets and liabilities:													
Accounts Receivable	409,666	-	-	-	-	1,294	-	7,477	-	27,359	19,740	665	466,201
Utility Remittance Receivable	(86,332)	-	-	-	-	-	-	-	-	-	-	-	(86,332)
Interest Receivables	(87,312)	-	-	-	-	(56,208)	356	-	-	3,015	-	-	(140,149)
Other Receivables	116,967	-	-	-	-	-	956	-	-	66,775	4,610	4,433,878	4,933,975
Due from Component Units	1,992,047	-	-	(1,794,000)	-	-	-	5,217,047	-	-	-	72,206	5,487,300
Prepaid Expenses and Other Assets	90,889	24,001	25,000	-	-	-	-	10,476	-	262,018	28,063	668,034	1,108,482
Accounts Payable and Accrued Expenses	1,807,933	-	463	208	-	-	42	(3,528)	(1,071)	(72,255)	(16,568)	(251,866)	1,463,357
Due to Component Units	1,794,000	150,000	-	-	(439,339)	5,811,000	(313,729)	(6,104,642)	-	(534,513)	2,448	(5,852,526)	(5,487,300)
Custodial Liability	(40,000)	-	-	-	-	-	-	(61,364)	-	-	-	-	(101,364)
Deferred Revenue	251,652	-	-	-	-	-	-	-	-	(24,358)	-	-	227,294
<b>Net cash provided by (used in) operating activities</b>	<b>13,008,829</b>	<b>9,758</b>	<b>2,107,745</b>	<b>(124,515)</b>	<b>(436,063)</b>	<b>6,339,951</b>	<b>(307,977)</b>	<b>(61,104)</b>	<b>316,411</b>	<b>436,008</b>	<b>379,155</b>	<b>(1,363,050)</b>	<b>20,305,147</b>
<b>Investing Activities</b>													
Purchase of Capital Assets	(10,712)	-	-	-	-	-	-	-	-	-	-	-	(10,712)
Proceeds from sale of Capital Assets/Solar Lease Buyouts	-	-	-	-	-	-	-	-	-	13,448	-	-	13,448
Program Loan Disbursements	(2,372,509)	-	-	-	-	(7,408,807)	-	(1,769,972)	(1,193,818)	-	-	-	(12,745,106)
Return of Principal on Program Loans	11,999,672	-	-	-	436,063	87,998	82,590	433,456	722,408	-	-	-	13,762,187
<b>Net cash provided by (used in) investing activities</b>	<b>9,616,451</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>436,063</b>	<b>(7,320,809)</b>	<b>82,590</b>	<b>(1,336,516)</b>	<b>(471,410)</b>	<b>13,448</b>	<b>-</b>	<b>-</b>	<b>1,019,816</b>
<b>Financing Activities</b>													
Proceeds from Green Liberty Notes	-	-	-	-	-	-	-	350,000	-	-	-	-	350,000
Repayments of Debt	(3,517,663)	-	(938,409)	-	-	-	-	(700,000)	(661,388)	-	(47,395)	-	(5,864,856)
Distributions to Member	-	-	-	-	-	-	-	-	-	(950,000)	950,000	-	-
<b>Net cash provided by (used in) financing activities</b>	<b>(3,517,663)</b>	<b>-</b>	<b>(938,409)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(350,000)</b>	<b>(661,388)</b>	<b>(950,000)</b>	<b>902,605</b>	<b>-</b>	<b>(5,514,856)</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>19,107,617</b>	<b>9,758</b>	<b>1,169,336</b>	<b>(124,515)</b>	<b>-</b>	<b>(980,858)</b>	<b>(225,387)</b>	<b>(1,397,620)</b>	<b>(504,999)</b>	<b>(211,932)</b>	<b>(570,845)</b>	<b>(460,446)</b>	<b>15,810,107</b>
<b>Cash and Cash Equivalents, Beginning of Period</b>													
Unrestricted	14,906,338	31,468	1,219,975	56,009	-	1,884,057	368,576	2,440,919	3,077,457	697,168	812,292	570,894	26,065,154
Restricted	18,034,752	-	726,455	6,397,268	-	-	-	730,232	-	1,502,256	-	391,458	27,782,421
<b>Cash and Cash Equivalents, Beginning of Period</b>	<b>32,941,090</b>	<b>31,468</b>	<b>1,946,430</b>	<b>6,453,277</b>	<b>-</b>	<b>1,884,057</b>	<b>368,576</b>	<b>3,171,150</b>	<b>3,077,457</b>	<b>2,199,424</b>	<b>812,292</b>	<b>962,352</b>	<b>53,847,574</b>
<b>Cash and Cash Equivalents, End of Period</b>													
Unrestricted	33,908,739	41,227	2,399,411	17,877	-	903,198	143,189	1,035,478	2,572,458	485,041	241,447	109,839	41,857,904
Restricted	18,139,968	-	716,354	6,310,885	-	-	-	738,052	-	1,502,451	-	392,067	27,799,778
<b>Cash and Cash Equivalents, End of Period</b>	<b>52,048,707</b>	<b>41,227</b>	<b>3,115,766</b>	<b>6,328,762</b>	<b>-</b>	<b>903,198</b>	<b>143,189</b>	<b>1,773,530</b>	<b>2,572,458</b>	<b>1,987,492</b>	<b>241,447</b>	<b>501,906</b>	<b>69,657,682</b>

# Save Money While Saving Energy

## Unlock Tax Credits with the Inflation Reduction Act (IRA)

The IRA offers big savings to help you upgrade your home with clean energy and energy-efficient technologies. Whether you're just starting to think about going green or completed a project in 2024, there's something here for everyone!



### How Can You Benefit?

You can get up to 30% back on costs for these upgrades:

- **Solar Panels** to lower your electricity bills.
- **Heat Pumps** for efficient heating and cooling.
- **Electric Vehicles (EV) and EV Chargers** for your home.
- **Battery Storage Systems** to store energy for later use.
- **Efficient Windows, Doors, and Insulation** to keep your home comfortable year-round.
- **Energy-Efficient Appliances** like stoves, washers, and dryers.

### How Does It Work?

- **Choose Your Upgrade:** Whether it's solar panels or an efficient heat pump, pick what's right for your home.
- **Install the Technology:** Work with a qualified installer or contractor.
- **Claim Your Credit:** Get money back when you file your taxes next year!

#### Quick Tip:

Save your receipts and get a copy of your contractor's certification—it's easy to file for the tax credit when you're ready!

### Not Sure Where to Start?

State incentives for clean energy technologies are also available. Visit [EnergizeCT.com](https://energizect.com) to learn more about state incentives!

If you get stuck, you can contact [IRATaxCredits@ct.gov](mailto:IRATaxCredits@ct.gov) with questions or visit the new Connecticut Tax Credit Resource Hub at <https://preview.ct.gov.com/ctbilt/home/overview> to learn more.

*Federal tax credits are subject to change. Please consult a tax professional for guidance.*



# Boost Your Bottom Line with Clean Energy Tax Credits

## Save Money and Go Green with the Inflation Reduction Act (IRA)

The IRA offers significant tax credits for businesses investing in energy-efficient technologies and renewable energy. Whether you're looking to reduce operating costs or enhance your sustainability goals, now is the perfect time to upgrade.

### What Can Your Business Save On?

Claim between 30-50% in tax credits for:

- **Solar Panels and Renewable Energy Systems:** Reduce energy costs with clean, sustainable power.
- **Energy Efficiency Improvements:** Upgrade HVAC systems, lighting, insulation, and more.
- **Battery Energy Storage Systems:** Store power and increase resilience during outages.
- **Electric Vehicle (EV) Chargers:** Install charging stations for your fleet or customers.
- **Fleet Electrification:** Transition company vehicles to electric or hybrid models.
- **Green Building Upgrades:** Incorporate energy-efficient materials and designs in new or existing structures.



### Bonus Credits for Your Business

Your project could qualify for bonus incentives if it's located in an energy community, creates good-paying jobs, or uses domestic materials. Ask us how to maximize your savings!

### How to get started

1. Identify Opportunities: Evaluate which upgrades or technologies suit your business needs.
2. Install and Certify: Work with licensed contractors to implement your project.
3. Claim the Credit: Get money back on your federal taxes when you file!

### Connect With Us

We're here to help you understand these incentives and make the most of them. Reach out to us at [IRATaxCredits@ct.gov](mailto:IRATaxCredits@ct.gov) with any questions or visit the new Connecticut Tax Credit Resource Hub at <https://preview.ct.egov.com/ctbilt/home/overview> to learn more.

*Federal tax credits are subject to change. Please consult a tax professional for guidance.*



# Unlock Federal Funding for Your Community's Green Projects:

## IRA Tax Incentives Are Here for Municipalities, Nonprofits, and Other Tax Exempt Organizations

The Inflation Reduction Act (IRA) provides opportunities to reduce energy costs, improve infrastructure, and lead the way in sustainability. Even if your town or organization doesn't pay federal taxes, the **Direct Pay** provision ensures you can still benefit from these tax incentives.



### What is Direct Pay?

Direct Pay allows tax-exempt entities, like municipalities, nonprofits, and other 501(c)(3) organizations (e.g., school districts, religious organizations, and public universities and hospitals) to receive the value of certain IRA tax credits as a cash payment from the federal government. This means your community can invest in clean energy and energy efficiency projects and receive significant financial support, even without a tax liability.

### Getting Started is Easy!

1. If applying for low-income community bonus, apply at the beginning of the year.
2. The project must have been placed in service after the start of the 2023 tax year. Confirm that the project meets the eligibility criteria under the applicable tax credit and any additional requirements.
3. Collect the necessary tax documents, registration details, and banking information to ensure smooth filing.
4. Submit pre-filing registration with the IRS at least 120 days before the tax return due date. Receive your registration number to upload your documents with the IRS.
5. Using your pre-filing registration number, file your tax return and receive direct pay reimbursement



For a more comprehensive explanation of the steps above, please visit our new Connecticut Tax Credit Resource Hub.

### Connect with Us

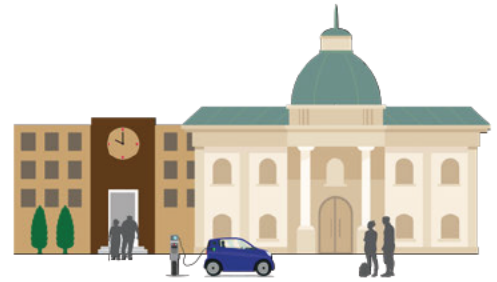
We're here to help. Contact [IRATaxCredits@ct.gov](mailto:IRATaxCredits@ct.gov) to learn how your municipality or organization can take advantage of IRA tax credits and direct pay or visit the new Connecticut Tax Credit Resource Hub at <https://preview.ct.egov.com/ctbilt/home/overview> to learn more.

*Federal tax credits are subject to change. Please consult a tax professional for guidance.*



## How Can Your Municipality or Organization Benefit?

The non-exhaustive table below highlights tax credits that are eligible for Direct Pay and that may be most useful for municipalities and nonprofit entities. For a complete list of tax credits for which Direct Pay can be used, please see Publication 5817-G (6-2023).



Tax Credit	Available for 2023-2032 Tax Years	Credit Amount
<b>Production Tax Credit for Electricity from Renewables (§45, pre-2025)</b>	For production of electricity from eligible renewable sources, including wind, biomass, geothermal, solar, small irrigation, landfill and trash, hydropower, marine and hydrokinetic energy.	For 2022: 0.55 cents/kilowatt (kW); (½ rate for electricity produced from open loop biomass, landfill gas, and trash); 2.75 cents/kW if Prevailing Wage and Apprenticeship (PWA) rules are met.
<b>Investment Tax Credit for Energy Property (§48, pre-2025)</b>	For investment in renewable energy projects including fuel cell, solar, geothermal, small wind, energy storage, biogas, microgrid controllers, and combined heat and power properties.	6% of qualified investment (basis); 30% if Prevailing Wage and Apprenticeship (PWA) rules are met.
<b>Low-Income Communities Bonus Credit (§48(e), 48(h))</b>	Additional investment tax credit for small-scale solar and wind (§ 48(e)) or clean electricity (§48E(h)) facilities (<5MW net output) on Indian land, federally subsidized housing, in low-income communities, and benefit low-income households. Allocated through an application process.	10 or 20 percentage point increase on base investment tax credit.
<b>Credit for Qualified Commercial Clean Vehicles (§45W)</b>	For purchasers of commercial clean vehicles. Qualifying vehicles include passenger vehicles, buses, ambulances, and certain other vehicles for use on public streets, roads, and highways.	Up to \$40,000 (max \$7,500 for vehicles <14,000 lbs).
<b>Alternative Fuel Vehicle Refueling Property Credit (§ 30C)</b>	For alternative fuel vehicle refueling and charging property (i.e., charging stations), located in low-income and non-urban areas. Qualified fuels include electricity, ethanol, natural gas, hydrogen, and biodiesel.	6% of basis for businesses and can increase to 30% if Prevailing Wage and Apprenticeship (PWA) rules are met.

### Connect with Us

We're here to help. Contact [IRATaxCredits@ct.gov](mailto:IRATaxCredits@ct.gov) to learn how your municipality can take advantage of IRA tax credits and direct pay or visit the new Connecticut Tax Credit Resource Hub to learn more.

*Federal tax credits are subject to change. Please consult a tax professional for guidance.*





# Your Clients Are Asking – Do You Have the Answers About IRA Tax Credits?

## Guide Your Clients to Big Savings with the Inflation Reduction Act (IRA)

The IRA offers unprecedented opportunities for tax professionals to support their clients in maximizing federal clean energy tax credits. From homeowners to businesses, understanding these incentives is key to helping your clients save money and meet their sustainability goals.



### At a Glance: Eligible Technologies and Credits.

Use this quick reference to guide your clients.

Technology	Base Credit for Residential Customers
Solar Panels	30%
Heat Pumps	30% up to \$2,000
Electric Vehicles (EVs)	Up to \$7,500 (new) or \$4,000 (used)
EV Chargers	30% up to \$1,000
Energy Storage (Batteries)	30%

## How You Can Help Your Clients

### Residential Clients:

- Homeowners can save thousands on upgrades like solar panels, heat pumps, and energy-efficient windows.
- Ensure proper documentation to maximize their credit.

### Commercial Clients:

- Businesses can offset project costs for solar, EV chargers, and more—up to **50%** with bonus incentives.
- Highlight transferable credits and strategies for effective tax planning.

### Tax-Exempt Clients:

- Explain the **Direct Pay** option for municipalities, nonprofits, and schools, allowing them to claim cash payments even without a tax liability.

### FAQ: Be Ready to Answer These Questions

#### How do I claim the credit?

Clients must file IRS Form 5695 (residential) or Form 3468 (commercial). Clients should keep all receipts and certifications.

#### What's the difference between Direct Pay and Transferable Credits?

Direct Pay benefits tax-exempt entities, while transferable credits allow businesses to sell their credits.

#### Can bonus credits apply to my project?

Yes! Projects in energy communities or meeting domestic content requirements can qualify for extra savings.

*Federal tax credits are subject to change. Please consult the IRS website for information.*

Let's Work Together. Contact [IRATaxCredits@ct.gov](mailto:IRATaxCredits@ct.gov) to learn more or visit the new Connecticut Tax Credit Resource Hub at <https://preview.ct.egov.com/ctbilt/home/overview>





# Memo

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

**From:** Mariana Trief, Director, Clean Energy Investments; Louise Della Pesca, Consultant, Clean Energy Investments, and Bert Hunter, EVP & CIO

**CC:** Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Mackey Dykes, EVP Financing Programs; Jane Murphy, EVP Finance and Administration

**Date:** March 14, 2025

**Re:** Debt to Total Energies

## Introduction

The purpose of this memorandum is to request approval from the Board of Directors (the “Board”) for the Connecticut Green Bank (“Green Bank”), including any of its wholly-owned subsidiaries, to enter into a term debt facility of up to \$12 million with Solar Star State of CT Solar 1, LLC an entity owned by TotalEnergies Distributed Generation USA, LLC (“TotalEnergies”) to provide long term financing (“Term Debt”) for solar photovoltaic (“PV”) projects providing electricity under power purchase agreement (“PPA”) at and for facilities owned and operated by the Department of Correction of the State of Connecticut (the “Projects”) within Connecticut. The proposed term debt facility would fall under the Green Bank Commercial Solar Program most recently approved by the Board at a meeting held December 15, 2023.

## Background

In October 2019 the Green Bank issued a Request for Proposals (“RFP”) for Engineering, Procurement, and Construction (“EPC”) services for the Projects. The awardee of the EPC RFP was Sunpower, which has since been acquired by TotalEnergies. The Green Bank owned and oversaw the development of the Projects, with the intention of selling them to a third party prior to completion. Following an RFP process (the “PPA Financing RFP”), in May 2023 Green Bank accepted TotalEnergies’ proposal to acquire the Projects. The RFP for the ownership of the Projects contemplated the Green Bank’s provision of Term Debt to finance the Projects.

At its meeting held June 16, 2023, the Board approved the sale and assignment of the partially developed Projects by the Green Bank to TotalEnergies, or a subsidiary thereof. Further, related to these transactions, the Board approved the provision of Term Debt to

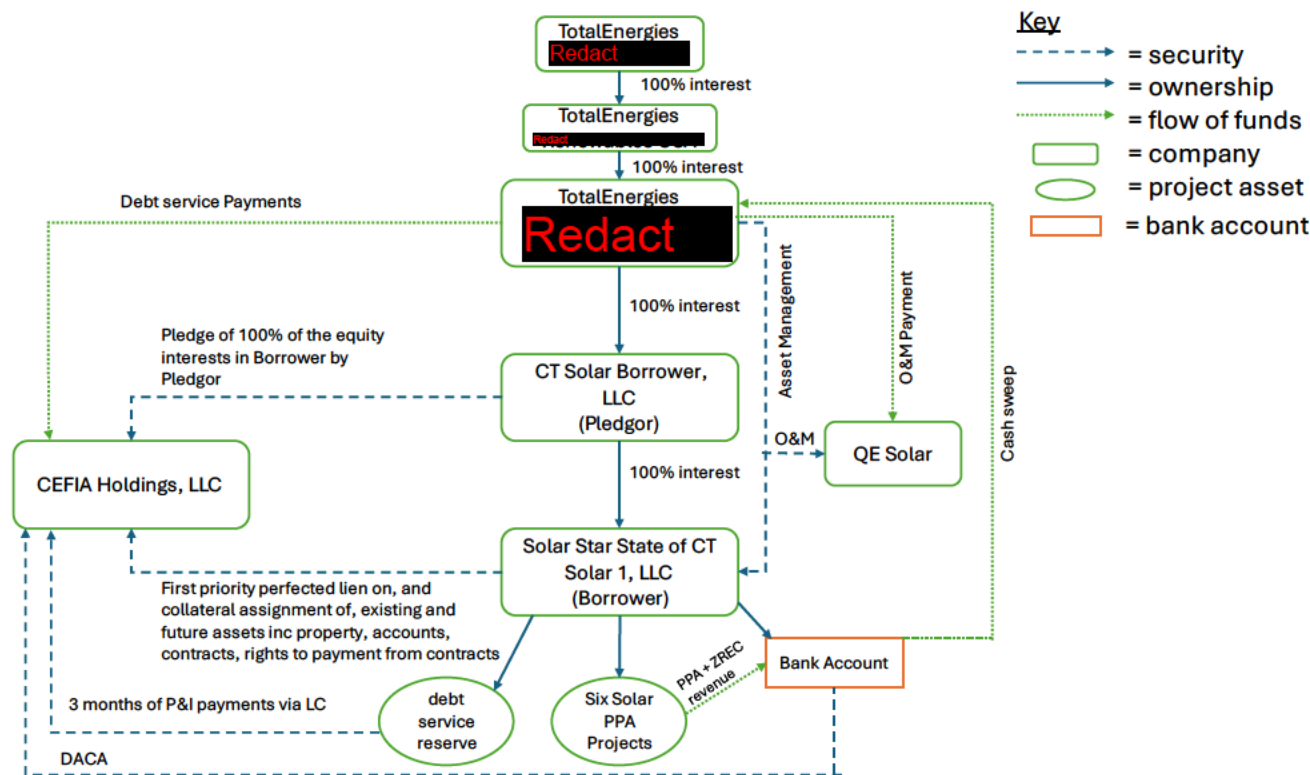
TotalEnergies in an amount not to exceed \$12 million. In the period since the Board meeting on June 16, 2023, the sale of the Projects was completed (October, 2024) and TotalEnergies continued to develop and construct the Projects toward the point of commercial operations. All seven Projects have now achieved commercial operations and represent 8.3MWdc capacity, expected to generate 11,475 MWh of clean energy in the first year of operations.

Since the Board approved the Term Debt facility, the Green Bank and TotalEnergies worked to finalize the structure of the transaction, which differs to that which was presented to the Board in June 2023. The facility that was originally presented to the Board contemplated multiple tax equity monetization scenarios, including an Investment Tax Credit (“ITC”) transfer and a tax equity partnership. However, it was not anticipated the ITC would actually be directly monetized by the parent company by claiming the tax credits on its federal income tax returns. The structure now being proposed for the Board’s approval reflects this updated approach.

New Debt Facility

The proposed Term Debt facility (“Debt Facility”) would follow a typical “front levered” (also known as project levered) structure for commercial solar debt financing, which the Green Bank has used for prior financing arrangements (e.g., for Skyview). Figure 1 depicts the intended transaction structure.

Figure 1. Transaction Structure (as contemplated)



The proposed term sheet for the transaction with the detailed terms of the Debt Facility can be found at Appendix A. While there may be some minor modifications to the term sheet, we expect it to be materially the same as presented in Appendix A.

The high-level terms of the Debt Facility are as follows, consistent with the debt terms made available to all bidders during the PPA financing RFP:

- Facility Size: Up to \$12 million, with the final amount determined based on the lower amount of either a 1.25x Debt Service Coverage Ratio (“DSCR”) using P50 estimates or 60% of total project costs.
- Interest Rate: 3.50% per annum<sup>1</sup>.
- Term: 20 years.
- Payment Structure: Fully amortizing over the term, sculpted to maintain a DSCR of 1.25x, with quarterly principal and interest payments.
- Security Package: Consistent with Green Bank’s standard conditions for commercial solar program borrowers, including:
  - A first-priority interest and lien on Borrower’s existing and future assets.
  - The right, title, and interest in all project assets, equipment, accounts, contract rights, and rights to payment.
  - 100% pledge of equity interests in Borrower by Pledgor.
- Minimum DSCR Requirement: 1.10x, tested annually.
- Prepayment Fee: 3.00% of loan advances prepaid within three years of initial advance; 2.00% of loan advances prepaid between three and four years of initial advance, and; 1.00% of loan advances prepaid between four and five years of initial advance.
- Revenue Handling & Payment Structure: All project revenues will be directed to an account controlled by the Borrower, subject to a Deposit Account Control Agreement (“DACA”). The Borrower will sweep all cash at the Borrower level to an account held at a higher-level entity, which will then be responsible for paying project invoices and servicing debt payments to Green Bank. This structure allows TotalEnergies to use its automated payment system to handle all payments associated with the projects. In the event of timing misalignments in project revenue, the Parent entity may advance payments on behalf of the Borrower, recorded as payables to an affiliate. Green Bank will receive quarterly reporting on any payables due to the affiliate, along with details on any payments exceeding Redact in comparison to the project model.

In the event of an Event of Default, any Operations & Maintenance (“O&M”) payments due to the affiliate will remain outstanding, consistent with treatment of O&M payments owed to third parties. However, any payments due to the affiliate related to debt service obligations will not be payable under an EOD scenario.

---

<sup>1</sup> Reasons for the lower interest rate compared to other debt facilities: i) the counterparty risk is minimal, as the state serves as the offtaker; (ii) at the time the original PPA financing RFP was issued, U.S. Treasury rates were significantly lower than today. While interest rate could have been adjusted for the rise in rates, the original rate was maintained to ensure the state benefits from a low PPA rate, despite higher-than-expected costs (particularly in labor, equipment, and changes in stormwater regulations) and delays affecting the portfolio.

## Ratepayer Payback

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

Based on the assumption that the full \$12 million Debt Facility commitment could be used to finance 8.3MW of Solar Projects, the forecasted kWh over the projects' lifetime is approximately 216,086,226 kWh of energy. The kWh / \$ ratepayer funders at risk is forecast to be 18.

## Capital Extended

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

The Debt Facility will not exceed \$12 million in outstanding principal as of the end of the availability period.

## Recommendation

The development of the first solar projects on properties owned by state agencies has been a lengthy process. It has involved negotiating Power Purchase Agreements (PPAs) with the state and the Office of the Attorney General, securing ZRECs, issuing an RFP to select a solar installer, navigating the permitting process, and ultimately selling the projects to a TotalEnergies-owned entity chosen through a competitive process to be the long-term owner. Aligning with the Green Bank Commercial Solar Program and with the Projects having achieved commercial operations, Staff is in the process of structuring debt financing with TotalEnergies. The state agencies will purchase solar energy under the PPA at a fixed rate of \$0.075/kWh for 25 years, resulting in average annual savings of \$600,058.24 and total savings exceeding \$12 million over the term of the agreement. Staff recommends that the Board approve the Debt Facility on terms, and using a structure, materially consistent with information presented in this memorandum.

## Resolutions

**WHEREAS**, on June 23, 2023 the Connecticut Green Bank (“Green Bank”) Board of Directors (the “Board”) approved the sale and assignment of pilot solar projects at state agencies (the “Projects”) to Total Energies or its subsidiary (the “PPA Owner”), following a competitive solicitation process (the “RFP”); and,

**WHEREAS**, Green Bank seeks to provide debt financing to the PPA Owner under terms consistent with those outlined in the RFP and with the memo dated March 14, 2025 (the “Debt Facility”).

**NOW**, therefore be it:

**RESOLVED**, that the President of Green Bank; and any other duly authorized officer of Green Bank, is authorized to execute and deliver the Debt Facility, and any associated legal instrument, with terms and conditions as are materially consistent with this Board Memorandum dated March 14, 2025; and,

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

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Mariana Trief, Director, Clean Energy Investments; Louise Della Pesca, Consultant, Clean Energy Investments;

## Appendix A: Term Sheet

**Indicative Summary of Terms and Conditions**  
**TotalEnergies Distributed Generation USA, LLC**  
**Senior Secured Loan Facility – Solar PV Systems – Up to \$12,000,000**

March [7], 2025

*For Discussion Purposes Only – Confidential – This is Not a Commitment*

*The following is a non-binding term sheet (“Term Sheet”) of a proposed loan transaction. Except as set forth below, this Term Sheet is intended solely as a basis for further discussions and is not intended to be, and does not constitute, a legally binding obligation of any party. A legally binding obligation will be established only pursuant to mutually acceptable definitive written agreements executed by the parties, and only after satisfactory completion of due diligence, legal review, governance approval and other conditions to be set forth in such definitive written agreements. In the event of any inconsistency between this Term Sheet and such definitive written agreements, the written agreements will govern. This Term Sheet does not constitute either an offer to (i) sell securities, (ii) purchase securities, or (iii) provide a loan or any other type of financing.*

**Borrower:** Project Company (defined below)

**Pledgor:** CT Solar Borrower Member, LLC, a Delaware limited liability company and direct owner of 100% of the equity interests of Borrower

**Sponsor:** TotalEnergies Redact A, LLC<sup>2</sup>, a Delaware limited liability company and the indirect owner of one hundred percent of the membership interests in Pledgor and Borrower,

**Project Company:** Solar Star State of CT Solar 1, LLC, a Delaware limited liability company and owned directly and 100% by Pledgor

**Lender:** Connecticut Green Bank or a subsidiary thereof such as CEFIA Holdings, LLC

**Project Assets:** Six solar project assets and associated Power Purchase Agreements (“PPAs”) with offtakes in the expected aggregate capacity of 8,319.2 kWdc, including but not limited to the Project Company and Assigned Assets

**Assigned Assets:** The Project Assets and Assets (as defined in the Asset Purchase Agreement (“APA”) between CEFIA Holdings LLC, a Connecticut limited liability company, and Project Company, a Delaware limited liability company, dated as of September 28, 2023, as amended by that certain First Amendment to the Asset Purchase Agreement, dated as of March 26, 2024, pursuant to which the Assets were transferred to the Project Company on October 31, 2024.)

**Use of Proceeds:** Loan Facility will be used for the financing of a portion of the Sponsor’s indirect equity contribution in the company, including additional transaction costs on the loan transaction

**Debt Sizing:**

Subject to debt service coverage ratio (“DSCR”) and advance restrictions on a per project basis, calculated at date of advance.

- Each advance will be sized at the time of each advance based on a DSCR of 1.25x using P50 estimates for energy production as a basis for forecast revenue.
- Each advance will not exceed 60% of the total project costs at commercial operation, of the Assigned Assets.

---

<sup>2</sup> NTD: Subject to financial and commercial diligence.



- DSCR shall be defined as four quarter rolling EBITDA divided by four quarter rolling debt service.

**Loan Facility:** Not to exceed \$12,000,000 (the "Commitment") available under multiple advances within a 24-month period. The Commitment shall be available in a single advance per project after the project has achieved commercial operations, for which the term will be 20 years from the date of the latest advance (the "Maturity Date"). Repaid funds may not be reborrowed.

**Amortization:** Fully amortizing over the term, sculpted subject to DSCR of 1.25x. Quarterly principal and interest payments over the term. On the Maturity Date, the Borrower will repay all the then-outstanding principal balance, all accrued and unpaid interest and any and all amounts due under the loan.

**Security:** All obligations to Lender will be secured by

1. First priority perfected security interest in and lien on and collateral assignment of all of Borrower's assets, including (a) Borrower's right, title and interest in all accounts (including the debt service reserve account), which all such accounts shall be subject to a DACA, and contract rights and (b) Borrower's then existing and future assets, including Project Company's right, title and interest in all real and personal property, accounts, if any, contract rights, rights to payment of a monetary obligation or other consideration to receive payments by virtue of being counterparty to power purchase agreements and zero emissions renewable energy credit contracts. Project Company shall ensure that any and all revenue or other payments made pursuant to the offtake agreements and any other project contract shall be directly paid to and deposited to a controlled account subject to a DACA;
2. Pledge of 100% of the equity interests in Borrower by Pledgor;
3. Security, credit support, and all other loan terms subject to finalization in definitive documentation.

Collateral to be further defined in the definitive documentation for the Loan Facility.

**Interest Rate:** 3.50% fixed on an actual/360 day basis (the "Interest Rate").

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

1. Project has been placed in service and achieved commercial operations;
2. Satisfactory completion of business, financial, and legal due diligence;
3. Approval of the loan contemplated herein by the Lender's Board of Directors or committee thereof, Sponsor;
4. Obtaining any consents or approvals necessary from third parties, such as Borrower's, Pledgor's and Sponsor's governing bodies, to consummate the loan contemplated herein, including the approval from all necessary governmental authorities of the Lender;
5. No significant material litigation by any person (private or governmental) shall be pending or threatened with respect any of Borrower, Pledgor or Sponsor;
6. Absence of material adverse change in the financial condition, operations or business prospects of Borrower, Pledgor, the Project Assets, and Sponsor;
7. Receipt of UCC, tax, bankruptcy, fixture and judgment lien search results in respect of Borrower and Pledgor;
8. UCC filing consistent with the Collateral/Security requirements of the Lender;
9. Satisfactory evidence of insurance coverage for the projects consistent with any project contract or applicable program requirements, placed using a nationally-recognized insurance broker;

10. Asset Management will be performed by Sponsor or an affiliate thereof, or a counterparty with equivalent technical and financial capability, or as otherwise approved by the Lender, not to be unreasonably withheld;
11. Operations and Maintenance Agreement will be performed by QE Solar, or a counterparty with equivalent technical and financial capability, or as otherwise approved by the Lender, not to be unreasonably withheld;
12. Usual and customary representations in respect of Borrower and the Assigned Assets.

**Financial Covenants:**

1. The Borrower must maintain an annual **Redact** x, tested quarterly for the prior rolling 12 months, in order to make distributions. At each advance, Lender reserves the right to adjust the requirement or advance amount to account for final P90 production figures; provided that the annual DSCR required to make distributions shall not exceed **Redact**.
2. Borrower to maintain a debt service reserve equal to **Redact** months of principal and interest payments. Borrower may replace or satisfy the debt service reserve with an equivalent standby letter of credit.
3. More to be negotiated based on final structure

**Prepayment Fee:** 3.00% of loan advances prepaid within 3 years of initial advance; 2.00% of loan advances prepaid more than 3 years but within 4 years of initial advance; 1.00% of loan advances prepaid more than 4 years but within 5 years of initial advance.

**Reporting Covenants:** To be defined within loan documentation, but should expect: annual unaudited balance sheet and income statement without footnotes for **Redact** quarterly report on outstanding Affiliate Liabilities (defined below); and annual audited financial statements for TotalEnergies **Redact** 3 annual payment performance history of Project Assets; annual operational performance reports of Project Assets including but not limited to actual vs expected production (kWh) for solar PV projects.

**Account Control Documents:** Passive Deposit Account Control Agreement ("DACA") shall be executed in respect of Borrower's bank account, in form and substance satisfactory to Lender in its sole discretion and subject to any reasonable comments from the deposit bank. Borrower shall not have any account that is not subject to a DACA and no payments received in respect of any project or Assigned Asset shall be made to any account other than an account subject to a DACA. Lender remedies pursued under a DACA and any withdrawals by Borrower or its affiliates from any Borrower bank account shall be in accordance with terms and conditions set forth in the transaction documents.

**Other Terms and Conditions:** To be defined within loan documentation, including but not limited to: representations, warranties and covenants, events of default, cross default, default interest rate and late charges, remedies, indemnities, operating performance and operations and maintenance provisions, distributions of cash flow, deposit accounts control matters, liability, property casualty and business interruption insurance, annual financial statements (described above); payment performance history of customers of Project Assets; operational performance reports of Project Assets, no modification of any Assigned Assets or material project contracts without prior consent of the Lender (subject to limited exceptions as may be agreed in loan documentation).

**Expiration:** This Term Sheet expires on March 15, 2025.

**Enabling Statute and State Contracting:** Lender is subject to the requirements outlined in Sections 16-245n of the Connecticut General Statutes and Borrowers will be responsible for complying with applicable state contracting requirements.

**Limitation of Debt / Permitted Indebtedness:** Borrower may not assume or incur any debt, unless otherwise consented to by Lender. Borrower will, however, be permitted to incur and assume new liabilities (a) from an affiliate or (b) directly from providers of operating costs, in each case, that are

either (i) advances for project payments such as operations and maintenance (“O&M”) costs and expenses that would ordinarily be take priority over Lender debt service payments in the project cash flow waterfall, provided that in all cases, such costs and expenses shall be consistent with the approved budget and any cost above \$50,000 shall require Lender’s prior written consent (this clause (b)(i) “Affiliate O&M Liabilities”), or (ii) advances for actual debt service paid to Lender (collectively, clauses (a) and (b), the “Affiliate Liabilities”).

In the event of an event of default other than due to Borrower or any of its affiliates bankruptcy, gross negligence or willful misconduct, and Lender exercises its remedies to assume control of the Borrower and its assets, including its bank account pursuant to the DACA, Borrower liabilities to Sponsor or Sponsor’s affiliate associated with respect to Affiliate O&M Liabilities will remain obligations of the Borrower to be repaid to the Sponsor or Sponsor’s affiliate.

In the event of an event of default, and Lender exercises its remedies to assume control of the Borrower and its assets, including its bank account pursuant to the DACA, Borrower’s liabilities to Sponsor or any Sponsor affiliate associated with advances or payments provided by Sponsor or Sponsor’s affiliate for any debt service payments to Lender shall be forgiven.

Sponsor’s and Sponsor affiliates’ bank accounts will not be subject to DACA; for the avoidance of doubt, any amounts withdrawn or distributed from any Borrower account in violation of any transaction document shall be immediately returned or replenished.

Borrower will provide quarterly notification of the level of affiliate liabilities outstanding.

#### **Governing Law and Forum:** Connecticut

**ITCs:** Borrower shall not, and Sponsor or any of Sponsor’s affiliates shall not, monetize the ITCs generated from Project Assets through a tax equity partnership or similar structure with a third-party tax equity investor. Borrower or a direct or indirect owner of Borrower shall claim the ITCs generated from Project Assets directly or through Borrower’s affiliate. As such, Lender shall not be required to agree to any forbearance or similar restrictions in exercising its remedies during any applicable recapture period. This debt is intended to be treated as qualified commercial financing under IRC 49 for federal income tax purpose and is not intended to be convertible debt for federal income tax purposes.

**Documentation:** Lender and its counsel shall provide initial drafts of the definitive loan documents.

**Binding Effect: The above terms are non-binding and subject to final legal documentation and previously listed Conditions to Close provided however that the above provisions setting forth the Interest Rate and the Commitment shall be binding and included in the final legal documentation and,**

**the following terms will be binding, regardless of whether the proposed transaction closes or not:**

**Expenses:** The Sponsor or Borrower will pay all out of pocket and third party reasonable legal (including all costs associated with all UCC filings and searches), due diligence, background checks and other expenses incurred by the Lender in connection with the proposed transaction (whether or not the transaction closes), including third-party diligence. Lender will use commercial best efforts to minimize transaction expenses and notify the Sponsor as it incurs any costs exceeding Redact. Sponsor and Borrower shall not be obligated to pay Lender’s outside counsel legal expenses in excess of Redact. Lender shall begin to accrue reimbursable Expenses upon execution of this Term Sheet. In the event the financing is not consummated, Sponsor shall still be obliged to reimburse Lender for all such Expenses upon demand from Lender; provided, however, that if the financing is not consummated due to Lender’s decision not to pursue the financing, which was otherwise consistent with this Term Sheet, then Sponsor shall not be obliged to reimburse Lender for such Expenses. For the avoidance of doubt,

the exercise of Lender's discretion shall not be deemed a decision not to pursue the financing for which Sponsor's obligation to pay for Expenses is relieved. This section shall survive any expiration of termination of the Term Sheet.

**Accepted and Agreed as of the date of the Term Sheet:**

**TOTALENERGIES DISTRIBUTED GENERATION USA, LLC**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**CEFIA HOLDINGS LLC**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_



75 Charter Oak Avenue, Hartford, Connecticut 06106

T: 860.563.0015

[www.ctgreenbank.com](http://www.ctgreenbank.com)

## **Community Power Group, LLC – Solar Shared Clean Energy Facility**

### **A Debt Financing Capital Solutions RFP Response**

**March 17, 2025**



**Document Purpose:** This document contains background information and due diligence on a proposed credit facility for a shared clean energy facility solar project developed and owned by Community Power Group, LLC. 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

# Capital Solutions Financing Memo

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

**From:** David Beech, Senior Manager, Investments; Louise Della Pesca, Consultant;

**Cc:** Bryan Garcia, President & CEO; Brian Farnen, General Counsel & CLO; Eric Shrago, VP Operations; Jane Murphy, EVP of Finance and Administration

**Date:** March 17, 2025

**Re:** Community Power Group, LLC – Solar Shared Clean Energy Facility

---

## Capital Solutions Request

The purpose of this memorandum is to request Connecticut Green Bank (“Green Bank”) Board of Directors (the “Board”) approval for a construction and term loan facility (separately the “Construction Loan” and “Term Loan”, together the “Credit Facilities”) to Community Power Group, LLC with respect to a 5.8MW DC solar PV Shared Clean Energy Facility (“SCEF”) project (the “Project”) in Ellington, CT.

## Summary

Community Power Group, LLC (“CPG”) is a developer of distributed generation and utility scale solar. They have constructed more than 200MWs of solar facilities ranging in size from 100kw to 10MW and currently have a pipeline of 800MWs in varying stages of development. They have six full-time employees and are headquartered in Washington DC. CPG selected CTEC Solar as the EPC contractor for the Project (Green Bank has a long and extensive relationship with CTEC, explained below). CPG is seeking financing to support the construction and long-term financing of the Project, which received a tariff agreement in year three of the SCEF Program.

## Project Background – Highlights

### Project Summary

The Project is located on 30 acres of agricultural land in Ellington and has achieved significant development milestones. Those milestones include a Siting Council Declaratory Ruling Petition Approval, a signed and paid for Interconnection Agreement with Eversource, Connecticut State Historic Preservation Office approval, a wetlands delineation, a DEEP species review<sup>1</sup>, stormwater management design and calculations, and real estate review. CPG has also purchased, and received, the solar modules for the Project. The Project is a ground mount solar PV system that will use single axis trackers to shift the panels over the course of each day to follow the sun and improve electricity production.

CPG applied for and received a SCEF tariff for the Project at a price of \$88.30/MWh in the year 3 Eversource SCEF program auction. That pricing reflected the economic conditions present at the time of submission. As a result of increased inflation, the cost of the facility has increased meaningfully. Another developer that received a year 3 tariff has decided to cancel their award and resubmit their project after the required waiting period in

---

<sup>1</sup> Connecticut’s Department of Energy and Environmental Protection (“DEEP”)’s Natural Diversity Data Base (NDDDB) reviews hundreds of projects each year to determine their impact on state-listed species.



the hope of receiving an award at an increased price. Instead of pursuing that route, CPG is moving forward with the Project with the support of the Green Bank.

As part of Connecticut's Shared Clean Energy Facility program, the Project will sell electricity to Connecticut Light and Power ("CL&P"), a subsidiary of Eversource Energy ("Eversource"). For every kilowatt hour of electricity sold, Eversource will provide a \$0.025/kwh credit to subscriber accounts. In compliance with Connecticut statute, 20% of these credits must be subscribed by Low-Income customers (defined as 60% or less of area median income ("AMI")) with an additional 40% subscribed by one (or multiple) of: (i) low and moderate income customers, (ii) customers who serve as landlords to affordable housing facilities, and (iii) customers who qualify as low-income service organizations. Lastly, 20% of credits must be subscribed by small business customers, with the remaining 20% available for voluntary enrollment by eligible customers. Projected payments to subscribers in the first year are expected to be \$216,780 with total projected payments to subscribers totaling \$4,135,708 over the course of the tariff. These subscriber benefits align with the Green Bank's goal to ensure that no less than 40% of the investment and benefits of our incentive and financing programs will reach our state's vulnerable communities.

### **Project – Prime Farmland**

The Project is located on prime farmland in Ellington. Based on the USDA Natural Resources Conservation Service ("NRCS") criteria, "prime" farmland is land with soils that have the best combination of physical and chemical characteristics for producing crops. According to the Green Bank's Agriculture Primer, which was released in October of 2022 in alignment with Public Act 21-115, staff found that "It is important to not only protect marginal farm lands, but to specifically protect prime farmland because maintaining and continuously improving soil quality is vital for delivering the full benefits agriculture industry can provide across the state" and stated that "the Green Bank should consider never providing capital to finance solar PV projects on prime farmland unless dual-use solar". Therefore, along with the Green Bank's commitment to vulnerable communities, staff also considered the potential impacts to prime farmland when evaluating the Project's alignment with Green Bank goals.

During the diligence process, staff reviewed Siting Council proceedings which included testimony submitted by DEEP and the Connecticut Department of Agriculture ("DoAg"). Both agencies supported the development of the Project. DoAg provided a letter with three practices that CPG agreed to implement at the site. Those practices include the establishment of apiaries on site to conduct pollinator research, a sheep pasture rotation and grazing plan, and a Connecticut based vegetable grower that will utilize approximately 10,000 square feet of the property to grow crops. These practices were sufficient for DoAg to conclude that the Project "will not materially affect the status of project land as prime farmland" as long as the practices are maintained for the life of the Project. That letter is included here as Exhibit B. As an ongoing incentive, the Green Bank will cause the loan documentation to reflect a requirement to maintain the co-uses outlined in the DoAg letter, or similar co-uses that do not affect the status of the project land as prime farmland. With these mitigating factors, staff believes the Project is aligned with the Agriculture Primer and the Green Bank's comprehensive plan. Staff also finds that the DEEP and DoAg written support to Siting Council is compliant with Public Act 12-218, "An Act Concerning the Installation of Certain Solar Facilities on Productive Farmlands, Incentives for the Use of Anaerobic Digesters by Agricultural Customer Hosts, Applications Concerning the Use of Kelp in Certain Biofuels and the Permitting of Waste Conversion Facilities."

### Project – Construction Schedule

The Project is expected to begin construction in the second quarter of calendar 2025, with a commercial operation date near the end of this year. The chart below shows the proposed project schedule:

Milestone	Duration	Expected Date
Receipt of SCEF Award	Complete	
Siting Council Declaratory Ruling Approval	Complete	
Execution of Eversource Interconnection Agreement	Complete	
Design Development Civil Plans	30 days	
Design Development Electrical Plans	30 days	
Order Racking and Equipment	2 days	
Submit to DEEP for Stormwater Review	60 days	
Development and Management Plan Submission to Siting Council	60 days	
Submit for Building Permit	30 days	
Siting Council Approval	1 day	
Building Permit Approval	1 day	
Notice to Proceed - Construction	1 day	
Civil Site Work Completed	30 days	
Racking Completed	65 days	
Long-Lead Equipment Delivery	1 day	
Mechanical Completion	1 day	
Substantial Completion	1 day	
Commissioning	15 days	
Final COD	1 day	

### Project – Sources and Uses

During construction the Construction Loan will fund no more than 60% of project costs. CPG must provide equity funding equal to at least 10% of the Project costs, in addition to an investment equal to the expected investment tax credit value. Both equity investments will be fully disbursed prior to Green Bank construction loan draws. Below is a sources and uses table.

--

## Project – Tax Credit Monetization

CPG has chosen to monetize the federal investment tax credit (“ITC”) using their own prior and expected tax liability, instead of using a tax equity investor. This provides significant advantages in the form of increased economic returns and a reduction in transaction costs. As part of the due-diligence process, staff reviewed the past two years of available CPG tax returns and compared the income tax paid to the expected tax credit value of the Project. The results are below.



The Inflation Reduction Act authorized taxpayers to “carryback” the ITC 3 years to reduce taxes owed and qualify for an additional refund. Staff reviewed an income statement for CPG that covered January through November of 2024 which showed that their 2024 tax liability would likely to be similar to 2023. However, staff takes comfort knowing that without any income tax liability in 2024 or 2025, CPG could monetize the ITC by carrying back the value to 2022 and 2023.

## Project Investment/Risk Profile

From Sponsor Equity, and the Lender’s perspective, the Project carries key attributes that make it an attractive asset. Below are key investment attributes, though an extensive list of risks and mitigants to the Green Bank’s position are discussed further in the sections below:

- Construction & Technology Risk: CPG has significant experience developing community solar projects like the Project. Staff spoke with the contractor and references provided by CPG who shared their prior work was professional and their projects were well built and performing in line with expectations. Additionally, the Green Bank has significant experience working with CTEC solar, the EPC contractor, and will have the opportunity to review the EPC agreement prior to loan advances. All construction loan distributions will occur after contract milestones in that agreement have been reached.
- Development & Siting Risk: CPG has site control for the Project and has received a Siting Council Declaratory Ruling Petition Approval, though they are working to return to the siting council for updated approval after Eversource requested the proposed location of a transmission box be moved.
- Credit/Repayment Risk: The sole SCEF Tariff offtaker is CL&P, a subsidiary of Eversource. Both CL&P and Eversource have an investment grade credit rating. (CL&P is rated A- and Eversource rated BBB by Fitch)

## Construction Loan

### Summary Terms and Conditions

The Construction Loan for the Project will be repaid when it is converted to the Term Loan or the maturity date. The maturity date is the sooner of 30 days after the Project achieves commercial operations or 18 months from the first advance. The interest rate will be [REDACTED] and the loan will be sized up to 60% of project costs. Interest payments will be due quarterly, with any unpaid principal and interest due at maturity.

Construction Loan advances will be limited to disbursements outlined in the EPC agreement that is approved by the Green Bank. At the time of the first advance a debt service reserve equal to 3-months of Construction Loan interest payments on all outstanding debt will be established and that reserve will be updated at all additional advances. A closing fee equal to [REDACTED] of the advance amount will be charged to the borrower at each advance. The Construction Loan also includes a [REDACTED] availability fee payable quarterly on the loan facility that is unused to compensate the Green Bank for the capital that must be reserved for future advances and to encourage timely construction.

## **Term Loan – Green Bank**

### **Summary Terms and Conditions**

The Term Loan facility will be up to \$5 million, with the exact size subject to the criteria outlined below. The Term Loan will carry an interest rate of [REDACTED] and have an 18-year term to provide a two-year “tail” of SCEF tariff revenue after maturity as additional protection against production risk.

The annual debt service payments are sized based on a DSCR of 1.35x applied to modeled cashflows from the Project. The Term Loan will be sized to the value that would allow the debt service payments to fully amortize the loan by the end of the term, so long as the Term Loan does not exceed 60% of project costs.

At the time of Term Loan conversion, the borrower must establish and maintain a debt service reserve equal to 6 months of principal and interest payments. Throughout the term, the Borrower must maintain an annual DSCR of at least [REDACTED], tested quarterly on a trailing 12-month basis, in order to make distributions to the parent entity.

## **Project & Financing Stakeholders**

### **Community Power Group, LLC**

CPG (and its predecessor, EPG Solar) has been developing solar projects since 2010. CPG is a privately held limited liability company that focuses exclusively on greenfield and brownfield solar development. CPG is 51% women-owned and 66% staffed by women and is focused on developing sustainable solar energy projects. CPG has six full time seasoned employees that includes two licensed engineers, three project managers and a president. CPG prioritizes relationships with landowners, consultants, and long-term project owners. The two main market sectors that CPG focuses on are distributed generation (including community solar and behind the meter/on-site solar) and utility scale solar. CPG’s portfolio spans across the United States, including Maryland, Virginia, Delaware, Connecticut, New York, Massachusetts, Pennsylvania, Illinois, and Colorado.

### **CTEC Solar**

CTEC was founded in Bloomfield, CT in 2011 and is one of the most experienced solar providers in the Northeast. They have built over 100 MW of rooftop and ground-mount commercial, industrial, and utility scale solar projects. CTEC performs solar development, construction, and operation of over 150 existing solar projects. CTEC employs 30 individuals across their two offices and they also built the first project in the DEEP Community Solar Pilot Program and one of the first Virtual Net Metering projects in the state of CT.

Green Bank itself has developed 9 commercial solar PPA projects with C-TEC acting as engineering, procurement and construction contractor. The first of these projects began development in 2014, which means the Green

Bank and C-TEC have been working together for over a decade. The latest PPA project that Green Bank is collaborating on with CTEC was awarded through a competitive RFP for state solar projects and features a 2 MW ground-mounted system. In 2021, the Green Bank's relationship with C-TEC expanded to include operations and maintenance (O&M) services: following a competitive tender process, C-TEC was appointed as the O&M service provider for the Green Bank's 20MW commercial solar portfolio (over 140 sites). C-TEC was re-appointed in 2024 (the O&M contract is put out to tender every 3 years, per Green Bank procurement process).

## **Project Risks and Mitigants**

The Green Bank faces risks by means of the Project's construction and operation and the Green Bank's position in the financing structure as a lender. Green Bank staff believes they have identified and mitigated those risks as explained below.

### **General Risks & Mitigants:**

For each specific type of risk outlined below in subsequent sections, there are specific structures, concepts, and mitigants that staff has designed to minimize Green Bank exposure to certain downside scenarios. There are, however, several overarching mitigants that will be put in place due to the overall concept of risk, and in effect, can be applied to almost all of the defined Projects' risks. Those overarching mitigants are identified below:

1. The Term Loan will be secured by (i) First priority perfected security interest in and lien on and collateral assignment of all of Borrower's assets, including (a) Borrower's right, title and interest in all accounts (including the debt service reserve account), which all such accounts shall be subject to a DACA and (b) Borrower's then existing and future assets, including its right, title and interest in all real and personal property, accounts, if any, contract rights, rights to payment of a monetary obligation or other consideration to receive payments by virtue of being counterparty to the Tariff Agreement. Borrower shall ensure at all times that any and all revenue or other payments made pursuant to the Tariff Agreement and any other revenue contract shall be directly paid to and deposited to an account controlled and owned by Borrower; (ii) Collateral assignment of all ancillary contracts usual and customary for the size and scope of the project being undertaken (such as utility interconnection agreements, site lease, easement or license agreements, contracts with subcontractors, etc.), permits, warranties, licenses, insurance policies and proceeds related to any of the foregoing, and general intangibles. (iii) Pledge of 100% of the equity interests in Borrower by Sponsor; (iv) Security, credit support, and all other loan terms subject to finalization in definitive documentation.
2. See "Capital Flow Diagram – Term Financing" later in the memo for a description of these relationships.
3. A Debt Service Reserve ("DSR") equal to 6 months of debt service will be established and funded as a condition precedent to the conversion of the Construction Loan to the Term Loan. Additionally, a DSR equal to 3-months of Construction Loan interest payments on all outstanding debt will be established at the time of the first Construction Loan advance and updated at all additional advances.

### **Technology Risk**

The Project will be constructed with tier-1 equipment that feature standard warranties. Green Bank has recent experience with the module manufacturer and monitoring system.

### **Production Risk**

The Project does face production risk, though this risk has been mitigated in a couple of ways. First, staff will use

and internal production estimate for the Project, which aligns with our experience owning and operating commercial solar in Connecticut for more than a decade, to size the Term Loan and assess risk. Second, the DSCR applied to cashflows (1.35x) offers a cushion in the downside scenario where production is lower-than-expected.

**Price Risk**

The tariff price (\$88.30/MWh) is fixed for 20 years.

**Credit Risk**

Project cashflows come from an investment grade utility, a structure that is familiar to the Green Bank and offers minimal credit risk.

**Proforma Projection Model for Debt Service**

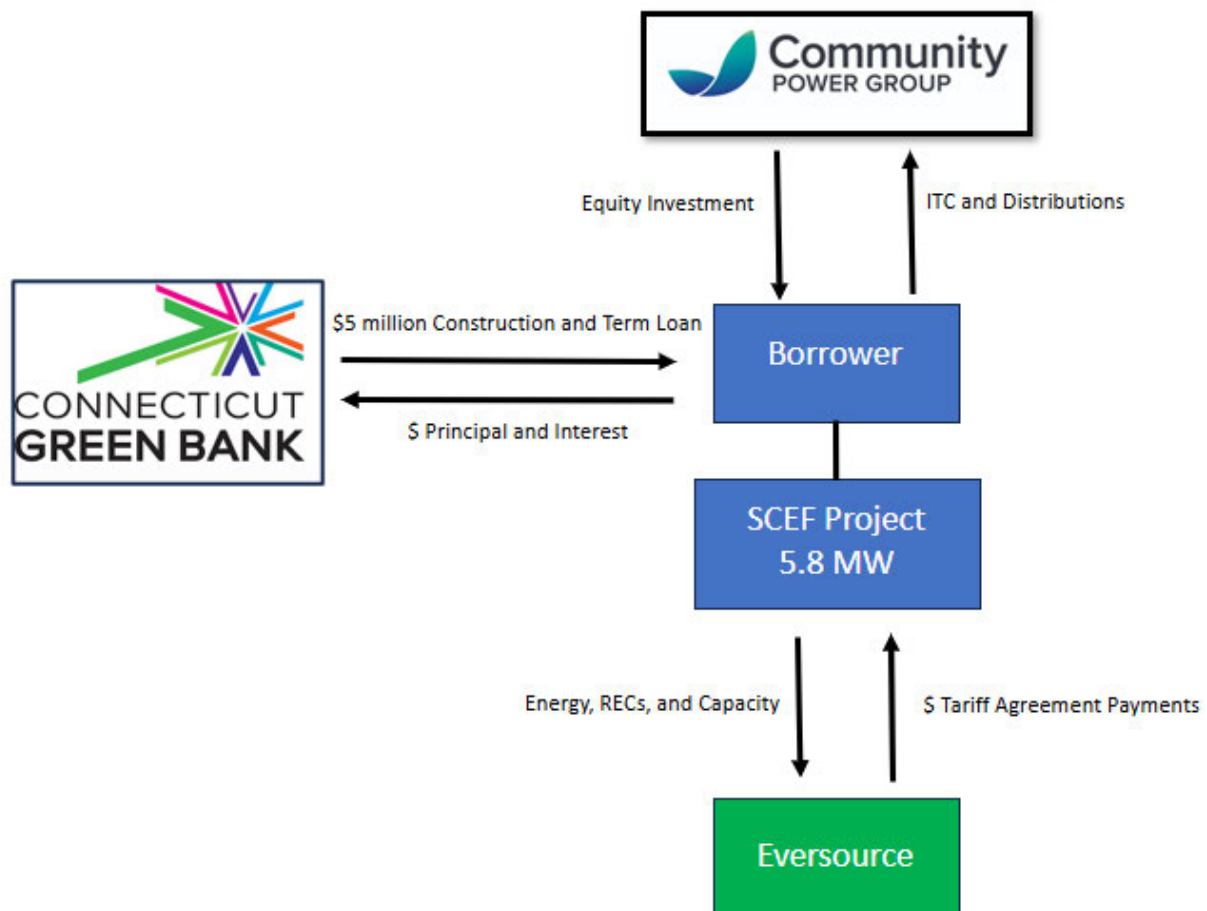
Staff has reviewed a projected financial model for the Project. Based on this proforma, and the structure of the SCEF Tariff Agreement, staff is confident that the Project will be able to meet the debt service requirements of the term loan.



## Capital Flow Diagram and Tables

### Capital Flow Diagram – Term Financing

Below, an organizational chart is included to demonstrate the structure of the facility.



## Evaluation

Capital Solutions RFP Proposals are evaluated using the matrix in the image below. A more detailed explanation of the evaluation for this project is included below:

Criteria	Rating	Explanation	Score
1 Meeting Green Bank Goals – how well does this project align with the Green Bank’s goals?	High	The Shared Clean Energy Facility program aligns with the Green Bank’s goal to strengthen Connecticut’s vulnerable communities by making the benefits of the green economy inclusive and accessible to all.	3
2 Green Bank Essentiality – to what extent is participation by the Green Bank essential to the success of the project?	High	The Project is facing serious headwinds in the form of project costs that have risen significantly in the years since the Project’s SCEF tariff was awarded. Green Bank participation is thereby essential to the timely completion of this project.	3
3 Project Feasibility – How feasible is the project to achieve its stated goals?	High	Community Power has significant experience developing similar projects, and, the Project has achieved important development milestones.	3
4 Project Replicability – Could a similar project be replicated in Connecticut or elsewhere, or is this a unique opportunity?	High	Yes, the SCEF program provides a 20-year fixed electricity price with an investment grade offtaker, making the program attractive for lenders, developers, and asset owners.	3
5 Relevant Experience – Does the proposer offer relevant and sufficient experience for the type of project being proposed?	Medium	Yes, CPG has completed construction of more than 200MWs of solar facilities ranging in size from 100kw to 10MW. This is however, their first time as the long-term owner of a project.	2
6 References	High	Staff spoke with references provided by CPG who reported that their work was professional and their projects were well built and performing in line with expectations.	3
7 Pending Litigation	High	No pending litigation was reported in the RFP response.	3
8 Management and character review	High	No character concerns were identified after reviewing management.	3
Bonus Points	Rating	Explanation	Score
1 Project benefits LMI or underserved communities	N/A		1
2 Project benefits communities with environmentally hazardous areas, such as	N/A		0
<b>TOTAL SCORE</b>	<b>Pass</b>		<b>24/24</b>

### A. Meeting Green Bank Goals

Based on Project diligence provided by Community Power, staff is confident that the Project will support the Green Banks goals. Per the Green Bank’s Comprehensive Plan, the organization has 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.
  - The Shared Clean Energy Facility program provides \$0.025/kwh credits to subscribers, 80% of whom must be low- and moderate-income households and organizations that support them, or small businesses.

As outlined in greater detail above, DoAg has concluded that the project will not materially affect the status of project land as prime farmland based on co-uses of the property that CPG agreed to, a conclusion that also aligns with the Green Bank’s Agriculture Primer.

### B. Green Bank Essentiality – to what extent is participation by the Green Bank essential to the success of the Project?

- Green Bank staff sees its participation as essential to the completion of the Project which received a SCEF tariff award almost 3 years ago. Despite inflationary pressures, Community Power is comfortable moving ahead with the current pricing thanks the credit facilities crafted by the Green Bank and presented to the Board in this memo. If it weren't for the Green Bank, it is likely that the project would be cancelled, and the developer would have to reapply in a subsequent SCEF RFP.

The Construction Loan will:

- Enable the Project to commence further construction and achieve commercial operations in alignment with the Project schedule pending no unforeseen delays.

The Term Loan will:

- Complete the Project's capital stack along with sponsor equity contributions, creating a long-term efficient financing structure for the Project.

C. Project Feasibility – How feasible is the Project to achieve its stated goals?

- Community Power has a successful track record developing projects of a similar size and scope and has selected a contractor with significant experience building and maintaining solar pv systems in Connecticut.

D. Project Replicability – Could a similar project be replicated in Connecticut or elsewhere, or is this a unique opportunity?

- Yes, the SCEF program provides a 20-year fixed electricity price with an investment grade offtaker, making the program attractive for lenders, developers, and asset owners. Other community energy programs exist across the country.

E. Project timetable – total development and construction timeline.

Green Bank expects to complete documentation of the Credit Facilities within the 2nd quarter of 2025. Funds are expected to be deployed immediately for construction purposes identified in the term sheet attached as **Exhibit A**. The Project is expected to be operational by the end of 2025.

F. Relevant Experience – Does the proposer offer relevant and sufficient experience for the type of project being proposed?

Yes, CPG has completed construction of more than 200MWs of solar facilities ranging in size from 100kw to 10MW and currently has a pipeline of 800MWs in varying stages of development. However, this is their first time acting as the long-term owner of a project. Green Bank staff made slight adjustments to the interest rate and DSCR to account for that lack of ownership experience.

G. References

Green Bank staff has had positive experiences working with CTEC solar on separate work previously approved by the board. Staff have also spoken with CPGs references who reported that CPG was a thorough and professional organization with a track record of well-built projects that are performing in line with expectations.

H. Pending Litigation

In their RFP submission, CPG stated “Community Power Group LLC has not been a party in any litigation and does not have any pending judgements”. Green Bank staff did not complete an independent legal review as of the writing of this memo.

I. Community Power management and character review

No character concerns were identified after reviewing management.

## Conclusion

This proposal offers a unique opportunity for the Green Bank to support the construction and long-term financing of a Project that will support low- and moderate-income Connecticut households. With experienced partners managing construction and operations, along with proven technology and executed offtake and interconnection agreements, the Project is well situated to achieve its goals and support repayment of the Credit Facilities. Approval is recommended.

## Strategic Plan

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

Yes, the Credit Facilities support the Project which aligns with the Green Bank’s goal to strengthen Connecticut’s communities, especially vulnerable communities, by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses.

## Ratepayer Payback

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

The Project is expected to produce 165 GWh over its effective useful life. Compared with the maximum \$5,000,000 of ratepayer funds at risk, the Project is expected to yield up to 33 kWh per \$1 of ratepayer funds over its effective useful life.

## Terms and Conditions

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

The Term Loan will carry a fixed interest rate of [REDACTED]. The Construction Loan will carry a fixed interest rate of [REDACTED].

## Capital Expended

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

\$5,000,000

## Risk

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

\$5,000,000

## Financial Statements

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

The loans would result in a \$5,000,000 reduction of cash and a \$5,000,000 increase in promissory notes (Statutory & Infrastructure program).

## Target Market

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

Electric utility and SCEF subscribers.

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

Lender via the Capital Solutions Open RFP Program.

## Program Partners

Community Power Group, LLC and CTEC Solar

## Risks and Mitigation Strategies

Lending risks and mitigation strategies have been addressed in the **Project Risks and Mitigants** section of this Memo.

## Staff Recommendation

The Green Bank has reviewed CPG's experience, prior work, and references, and has significant experience financing solar PV projects along with private capital in the form of sponsor equity. In relation to the Project, the Green Bank has reviewed the proposed system design, equipment, and forecasted electricity production. Every project finance transaction entails various risks. Furthermore, staff takes comfort in the EPC being CTEC, an enterprise well-known to the Green Bank and with which the Green Bank has ongoing contractual relations for operation and maintenance service for the Green Bank's commercial portfolio as explained in the memorandum. Green Bank staff believes it has identified and mitigated those risks as explained in this memorandum. Staff recommends Board approval of the Credit Facilities on the basis that Project risks have been reasonably mitigated, are well-balanced and contained, and that the strategic importance of the Project, to both the state and Green Bank, also support the investment.

## Resolutions

**WHEREAS**, Community Power Group, LLC ("Community Power") has requested financing in support of private capital from the Connecticut Green Bank ("Green Bank") under the Capital Solutions Open RFP Program ("Capital Solutions") to finance and construct a solar PV Shared Clean Energy Facility ("SCEF") (the "Project"), in Ellington Connecticut;

**WHEREAS**, Green Bank has structured credit facilities whereby the Green Bank would provide construction and term debt financing for the Project;

**WHEREAS**, staff has considered the merits of the credit facilities and the ability of the Project and finance stakeholders to construct, operate and maintain the Project, support the obligations under the credit facilities throughout their respective terms and satisfying the requisite Capital Solutions criteria, and as set forth in the due diligence memorandum dated March 14, 2025 (the “Board Memo”), has recommended this support be in the form of funding not to exceed \$5,000,000 for the construction and long term financing for the Project, secured by all Project assets, contracts and revenues as described in the Board Memo; and,

**NOW**, therefore be it:

**RESOLVED**, that the Green Bank Board of Directors (the “Board”) hereby approves the applicants Capital Solutions proposal for the Green Bank to provide the credit facilities in an aggregate amount not to exceed \$5,000,000;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to provide the credit facilities in an amount not to exceed \$5,000,000 in with terms and conditions consistent with the Board Memo, 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 the date of authorization by the Board; and,

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

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; David Beech, Senior Manager; Louise Della Pesca, Consultant.









# Memo

**To:** Connecticut Green Bank ("Green Bank") Board of Directors (the "Board")

**From:** Bert Hunter, EVP & Chief Investment Officer & Mackey Dykes, EVP Financing Programs

**CC:** Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Jane Murphy, EVP of Admin and Finance

**Date:** March 18, 2025

**Re:** Modification of Capital Commitment for the LIME Program with Capital for Change Bank

---

## Background & Summary of Request for Approval

At the October 25, 2019 meeting of the Connecticut Green Bank ("Green Bank") Board of Directors ("Board"), the Board approved a capital commitment to the LIME Program<sup>1</sup> with Capital for Change ("C4C"), the largest "full-service" community development financial institution ("CDFI") in Connecticut. (See attached memorandum to the Board dated October 21, 2019 (**Appendix C**) which explains in detail the LIME program and the capital commitment extended at that time).

While the LIME program is still successfully underwriting energy efficiency loans for qualifying multifamily properties, the availability period under the facility expires at the end of March 2025. During the meeting of the Board held March 15, 2024, the Board extended the availability period to March 31, 2025.

C4C has requested an additional extension of our capital commitment. C4C staff explained that C4C currently has several eligible projects that could use the funding from the LIME facility, some on an immediate basis. C4C staff memorialized this request in a submission to the Green Bank dated March 13, 2025, attached to this memorandum as **Appendix A**). Included with C4C's request is a suggestion that at some point in the future, C4C might request a modification of the LIME facility to include funding for new construction. However, at this time, C4C has not yet fully formed the program parameters and how this expanded use might fit with the goals of the Green Bank supplied funds. Accordingly, the request today is a simple extension of the existing facility on the existing terms for a period of one additional year.

Given the success of the facility and the C4C request – which Green Bank staff supports – to extend the availability period to March 31, 2026 with identical terms and conditions. Accordingly,

---

<sup>1</sup> Originally, the LIME stood for "Low Income Multifamily Efficiency" but has recently been rebranded as "Loans Improving Multifamily Efficiency".

given the stable and sound financial position of C4C (summary financial statements attached to this memorandum as **Appendix B**), C4C's consistent debt servicing record with respect to this facility, and the programmatic alignment between C4C and Green Bank on the merits of the program, staff recommends an extension of the existing availability period to March 31, 2026. C4C will reimburse the Green Bank for any out of pocket legal expenses associated with this extension (which are expected to be minimal).

## Resolutions

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) has an existing Master Facility to fund the Low Income Multifamily Efficiency (“LIME”) loan Program with Capital for Change (“C4C”), approved at the October 25, 2019 meeting of the Green Bank Board of Directors (the “Board”),

**WHEREAS**, C4C has been successful in deploying LIME Program loans using the Master Facility; and

**WHEREAS**, in order to continue the successful deployment of capital into the LIME Program C4C has requested an extension of the availability period until March 31, 2026, approximately one year from the expiration of the availability period under the existing terms and conditions;

**WHEREAS**, Green Bank staff recommends the Board approve such extension of the availability period;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the extension of the availability period under the Master Facility until a date not to exceed March 31, 2026;

**RESOLVED**, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the extension of the availability period under the Master Facility for the LIME program on such terms and conditions as are materially consistent with the memorandum submitted to the Board on March 14, 2025; and,

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



**TO:** Bert Hunter, EVP and Chief Investment Officer, CGB  
Mackey Dykes, EVP Financing Programs, DGB  
**FROM:** Diane Smith, President and CEO, C4C  
Carla Weil, Dir. Commercial Lending and Impact, C4C  
**DATE:** March 13, 2025  
**RE:** Request for one-year renewal of the LIME funding commitment

---

### **Summary**

The current extension of the funding commitment of \$7.59 million (of which \$5,333,923 is available per our calculation) from the Connecticut Green Bank (CGB) to Capital for Change (C4C) designated for LIME funding is maturing on March 31, 2025. C4C is requesting a one-year renewal of the commitment to fund three new loans already in the C4C portfolio as well as a number of potential projects currently in the pipeline.

### **Background**

Over the past year C4C has increased outreach and lending for the LIME product, and the portfolio of loans, both closed and in the pipeline has begun to grow. With the addition to the department of a Senior Underwriter we have increased internal capacity for processing loans. We have also increased our focus on extending a climate lending lens to all of our multifamily work. We are in the second round of application for CCIA funding with OFN. Our application requested \$10 million in capital and \$1 million in TA funding to support a dedicated Climate Lending staff person to work with both the commercial department and our consumer lending, as well as funding to support energy assessments for all multifamily properties underwritten in the commercial department. Political delays in the availability of these funds notwithstanding, we plan to continue the focus on incorporating energy efficiency considerations into all of our lending. Hiring of the Climate Lending staff person is delayed until funding is available but we plan to raise grant funds to assist in support of the Stephen Turner assessments for all of our multifamily properties.

### **Pipeline**

Currently we have three closed loans for a total of \$443,000 for which we are preparing a requisition for prior to March 31, 2025. These projects, in Bloomfield, New London and East Hartford comprise about 300 units and benefit from upgrades to boilers, water heaters and windows and sealing resulting in savings of \$32K, \$16K and \$3,750 per unit respectively.



### **Pipeline – continued**

C4C's pipeline includes a variety of potential LIME projects. Currently C4C is reviewing a portfolio of existing properties from a social service agency that provides transitional housing in multiple sites and cities (Hartford, Bloomfield). Stephen Turner reviews are being requested for upgrades that will provide heat pumps and associated work in three existing properties for a total of about \$750K. Further solar and geothermal installations are possible at one of these sites. Approvals and closings of these loans are expected in late Q2 or early Q3 of this calendar year.

C4C has also made construction/permanent loans to a portfolio of properties in Hartford which were recently acquired by a new owner who has obtained project-based Section 8 subsidies for the units. Two additional CDFI lenders are financing additional properties in the portfolio. As part of C4C's underwriting process for the units, Stephen Turner reports were funded by C4C for use in underwriting LIME retrofit loans subsequent to occupancy. While the full scope of modifications is not currently in hand, C4C expects commitments of at least \$ 1 million in LIME lending associated with this portfolio over the next 12 months.

C4C has also begun outreach to other nonprofit providers of supportive housing to ascertain the potential need for energy efficiency upgrades over the coming year. We plan to continue this outreach as well as an analysis of properties already in C4C's portfolio for LIME lending. C4C's marketing activities in the coming year will increasingly focus on green lending opportunities.

### **Future opportunities**

C4C is also currently underwriting and funding a number of affordable homeownership projects in multiple cities (Cornwall, Salisbury, Bridgeport, Guilford, Seymour). While these are not currently eligible uses for LIME funding we would be interested in exploring an expanded potential use of CGB funds to support targeting Net Zero construction into these homeownership projects, as well as into other multifamily gut renovation and construction projects funded by C4C in the future.

## Capital for Change

### Summary Financial Statements

**CAPITAL FOR CHANGE, INC. AND AFFILIATES**

Combined Statements of Financial Position  
March 31, 2024 and 2023

<b>Assets</b>	<b>2024</b>	<b>2023</b>
<b>Current Assets:</b>		
Cash and cash equivalents	\$ 3,428,046	\$ 2,721,951
Grants and government contracts receivable	341,865	610,000
Accounts receivable	1,713,978	1,120,029
Interest receivable	546,471	454,870
Current portion of loans receivable, net of allowance for credit losses of \$665,768 as of March 31, 2024	11,848,977	8,126,831
Other current assets	315,444	86,671
<b>Total current assets</b>	<b>18,194,781</b>	<b>13,120,352</b>
<b>Other Assets:</b>		
Restricted cash	16,180,018	14,273,182
Investments	1,007,541	1,294,294
Loans receivable, net of current portion and allowance for credit losses of \$4,666,436 and \$4,489,257 as of March 31, 2024 and 2023, respectively	82,377,322	76,652,926
<b>Total other assets</b>	<b>99,564,881</b>	<b>92,220,402</b>
<b>Property and Equipment</b>		
Land	241,686	241,686
Building and improvements	3,227,214	3,227,214
Furniture and equipment	1,762,842	1,666,037
	5,231,742	5,134,937
Less - accumulated depreciation	1,871,286	1,657,866
<b>Net property and equipment</b>	<b>3,360,456</b>	<b>3,477,071</b>
<b>Total assets</b>	<b>\$ 121,120,118</b>	<b>\$ 108,817,825</b>
<b>Liabilities and Net Assets</b>		
<b>Current Liabilities:</b>		
Current portion of notes payable	\$ 8,486,430	\$ 3,893,076
Current portion of equity equivalent notes payable	800,000	1,300,000
Accounts payable and accrued expenses	445,934	549,830
Accrued interest payable	136,527	90,305
<b>Total current liabilities</b>	<b>9,868,891</b>	<b>5,833,211</b>
<b>Long-Term Liabilities:</b>		
Conditional advances	5,507,167	5,007,167
Loan escrows liability	2,655,451	2,960,276
Funds held for others	543,421	994,703
Deferred interest and other revenue	1,785,935	1,721,491
Notes payable, net	59,986,822	52,638,353
Credit loss liability - unfunded commitments	541,522	-
Equity equivalent notes payable, net	5,400,000	4,850,000
<b>Total long-term liabilities</b>	<b>76,420,318</b>	<b>68,171,990</b>
<b>Total liabilities</b>	<b>86,289,209</b>	<b>74,005,201</b>
<b>Net Assets:</b>		
Without donor restrictions:		
Operating	12,090,210	11,181,032
Property and equipment	2,004,938	2,068,652
Board designated	1,012,266	1,030,804
<b>Total without donor restrictions</b>	<b>15,107,414</b>	<b>14,280,488</b>
With donor restrictions	19,723,495	20,532,136
<b>Total net assets</b>	<b>34,830,909</b>	<b>34,812,624</b>
<b>Total liabilities and net assets</b>	<b>\$ 121,120,118</b>	<b>\$ 108,817,825</b>

**CAPITAL FOR CHANGE, INC. AND AFFILIATES**

Combined Statements of Activities Without Donor Restrictions  
For the Years Ended March 31, 2024 and 2023

	<u>2024</u>	<u>2023</u>
<b>Revenues:</b>		
Earned revenue:		
Financial revenue:		
Interest on loans	\$ 4,713,683	\$ 4,013,333
Investment return	188,583	(45,000)
Less - provision for credit losses - unfunded loans	(151,347)	-
Less - (provision for) recovery of credit losses - funded loans	(160,976)	358,306
Less - write-off of loans receivable	(1,249,075)	(1,556,129)
Less - interest expense	(2,639,549)	(2,265,657)
Net financial revenue	701,319	504,853
Loan servicing fees	1,680,538	1,487,484
Loan origination and other fees	1,315,615	1,254,752
Total earned revenue	3,697,472	3,247,089
Public support:		
Government grants and contracts	855,547	925,897
Other grants and contributions	99,317	38,911
Net assets released from purpose restrictions	2,605,509	2,083,435
Total public support	3,560,373	3,048,243
Total revenues	7,257,845	6,295,332
<b>Expenses:</b>		
Program services	5,352,442	5,131,425
General and administrative	533,013	627,262
Fundraising	155,289	223,342
Total expenses	6,040,744	5,982,029
Changes in net assets without donor restrictions	<u>\$ 1,217,101</u>	<u>\$ 313,303</u>

**CAPITAL FOR CHANGE, INC. AND AFFILIATES**

Combined Statements of Changes in Net Assets  
For the Years Ended March 31, 2024 and 2023

	<b>Without Donor Restrictions</b>	<b>With Donor Restrictions</b>	<b>Total</b>
<b>Net Assets, March 31, 2022</b>	<u>\$ 13,967,185</u>	<u>\$ 19,681,818</u>	<u>\$ 33,649,003</u>
Changes in net assets without donor restrictions	<u>313,303</u>	<u>-</u>	<u>313,303</u>
Changes in net assets with donor restrictions:			
Grants and contributions	-	2,933,753	2,933,753
Net assets released from restrictions	<u>-</u>	<u>(2,083,435)</u>	<u>(2,083,435)</u>
Total changes in net assets with donor restrictions	<u>-</u>	<u>850,318</u>	<u>850,318</u>
Changes in net assets	<u>313,303</u>	<u>850,318</u>	<u>1,163,621</u>
<b>Net Assets, March 31, 2023</b>	<u>14,280,488</u>	<u>20,532,136</u>	<u>34,812,624</u>
Cumulative adjustment from adoption of new credit loss standard	<u>(390,175)</u>	<u>(681,971)</u>	<u>(1,072,146)</u>
Changes in net assets without donor restrictions	<u>1,217,101</u>	<u>-</u>	<u>1,217,101</u>
Changes in net assets with donor restrictions:			
Grants and contributions	-	2,478,839	2,478,839
Net assets released from restrictions	<u>-</u>	<u>(2,605,509)</u>	<u>(2,605,509)</u>
Total changes in net assets with donor restrictions	<u>-</u>	<u>(126,670)</u>	<u>(126,670)</u>
Changes in net assets	<u>1,217,101</u>	<u>(126,670)</u>	<u>1,090,431</u>
<b>Net Assets, March 31, 2024</b>	<u><u>\$ 15,107,414</u></u>	<u><u>\$ 19,723,495</u></u>	<u><u>\$ 34,830,909</u></u>



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



# Memo

**To:** Connecticut Green Bank (“Green Bank”) Board of Directors (the “Board”)  
**From:** Bert Hunter, EVP & Chief Investment Officer  
**CC:** Bryan Garcia, President and CEO; Brian Farnen, General Counsel and CLO; Jane Murphy, VP of Admin and Finance  
**Date:** October 21<sup>st</sup>, 2019  
**Re:** Modification of Capital Commitment for the LIME Program with Capital for Change

---

## Background & Summary of Request for Approval

Capital for Change is the largest “full-service” CDFI in Connecticut, the result of a 2016 merger of three long-running CDFIs – the Community Capital Fund, the Greater New Haven Community Loan Fund, and the Connecticut Housing Investment Fund (or CHIF). This merger created an entity with long-standing relationships in several of Connecticut’s urban areas – particularly Bridgeport and New Haven – and with a large portfolio of operating loans. Prior to the merger, C4C (then, still the Connecticut Housing Investment Fund) began issuing LIME loans<sup>2</sup> as the result of a 2013 oil-fired boiler replacement project for an affordable housing development. The general purpose of the LIME Program is to finance renewable energy and energy efficiency measures installed on multifamily affordable housing through C4C’s partnership with Green Bank. The project was extremely successful, yielding \$75,000 in first year energy savings after a \$250,000 loan, and planting the seed for C4C to launch the LIME program.

Green Bank partnered with C4C soon after the launch of the LIME program. In April 2014, in coordination with seed capital funding from the Opportunity Finance Network, the Green Bank Board approved \$1,000,000 in additional loan funding and \$300,000 in loan loss reserve credit enhancement for LIME loans. In June 2016, the Board reauthorized the Program under amended

---

<sup>2</sup> Originally, the LIME stood for “Low Income Multifamily Efficiency” but has recently been rebranded as “Loans Improving Multifamily Efficiency”.

guidelines and authorized the Green Bank's provision of \$1,000,000 in capital financing<sup>3</sup> and \$625,000 of repurposed ARRA-SEP funds for a loan loss reserve to support an initial capital pool of \$3,000,000<sup>4</sup>. In February 2017, the Green Bank Board approved a further deployment of an additional \$2.5M from Green Bank balance sheet capital to C4C to finance additional properties in the LIME pipeline. Approximately \$3.3 million of the \$3.5M Green Bank facility is outstanding. All of C4C's funded LIME loans are fully performing.

Due to C4C's growth relative to legacy financing facilities across multiple financing products and programs, C4C and the Green Bank have worked together to structure new financing facilities better equipped to scale alongside C4C's projected origination pipeline. In the current quarter alone, Green Bank worked with Amalgamated Bank to arrange term sheets for a \$27 million credit facility for its CEEFCo subsidiary (to which Green Bank has already advanced a \$1.5 million bridge loan for C4C and in which Green Bank will participate in a subordinated role) for C4C's single-family residential energy loan financing programs, which includes the Smart-E Loan. This loan is expected to close in November.

Similarly, the C4C LIME pipeline has been outgrowing its funding sources, resulting in a liquidity constraint as C4C seeks to execute on its pipeline. C4C is seeking to raise additional capital from Bank of America and the Opportunity Finance Network for the LIME Program and Green Bank staff received FY 2020 budget approval from the Board for an additional investment of \$2M at the same 3% original interest rate on the existing \$3.5 million facility for the LIME portfolio. In addition, due to the success of the LIME Program and adequate Green Bank resources, staff is proposing an additional \$1 million above the \$2 million budget for the LIME Program (sourced from budgeted \$7.5 MM of new product development funds), but this incremental \$1 million would be at a rate of 5% in line with our benchmark. Altogether, upon approval, Green Bank's capital commitment to the LIME Program with C4C will rise from \$3.5 million to \$6.5 million. Furthermore, given the unexpended loan resources available to Inclusive Prosperity Capital ("IPC"), Green Bank and IPC proposed to C4C a "Master LIME Funding Facility" (the "Master Facility") which would be structured as a loan facility secured by each loan advanced to a LIME Program borrower. Altogether, with IPC's \$1.2 million proposed participation in the Master Facility, C4C would have available to it \$4.2 million in additional capital funds for LIME. Moreover, OFN and Bank of America are making progress on committing to additional facilities for the LIME Program given its success.

Based on communications between Green Bank and IPC, IPC will (in advance of the Master Facility) document, close, and advance an initial capital deployment (equal to its \$1.2 million participation in the "Master Facility") that would then be rolled up (together with any collateral IPC would have with its initial capital deployment) into the larger Green Bank Master Facility on a pari passu basis.

---

<sup>3</sup> This allocation was budgeted from the \$5,000,000 multifamily sector allocation approved by the Board of Directors for Fiscal Year 2014. This \$1,000,000 would remain on Green Bank's books but be available to C4C as C4C approved and closed on loans with qualified borrowers, in accordance with approved underwriting standards under the LIME Loan program.

<sup>4</sup> Additional funding sources included: \$1,000,000 intercompany loan from the CT Energy Efficiency Finance Company ("CEEFCo") at 1.00%; \$1,000,000 from the Opportunity Finance Network ("OFN") at 3.00%.



## LIME Program Success to Date

The Program has been successful in its target market – financing mid-cycle improvements for properties serving low and moderate income households. To date, the Program has closed 29 loans and deployed \$10.1 million in capital toward project costs of \$13.5 million (less \$1.2 million in utility incentives) improving nearly 2,000 housing units.

# LIME Program Highlights

<b>Program Start Date:</b>	December 5, 2013	<b>Utility Incentive Leverage Ratio (Loans):</b>	9:1
<b>Number of Loans Closed:</b>	29	<b>Utility Incentive Leverage Ratio (Total):</b>	12:1
<b>Smallest Loan Amount:</b>	\$25,000	<b>Total Units Improved:</b>	1,973
<b>Largest Loan Amount:</b>	\$2,600,000	<b>Average Project Cost per Unit:</b>	\$6,833
<b>Average Loan Amount:</b>	\$348,042	<b>Average Utility Incentive per Unit:</b>	\$586
<b>Total Originations:</b>	\$10,093,223	<b>Total Projected NOI Increase:</b>	\$1,245,941
<b>Total Cost of Funded Projects:</b>	\$13,481,528		
<b>Total Utility Incentives:</b>	\$1,155,197		

### Eligible Upgrades

- Heating and cooling systems
- Hot water systems
- Building envelope
- Lighting
- Appliances
- Water efficiency
- Alternative energy systems (solar PV, fuel cells, etc.)
- Conversion from oil or electric to gas
- Qualified health and safety measures

### Program Hallmarks

- Loan terms dictated by savings projections
- Incorporation of utility and O/M savings
- Conservative, verifiable projections
  - Heavy reliance on utility rebate contracts
  - Independent third-party audit/review process
- Big cushion for shortfalls in performance
  - 1.30X minimum DSCR for EE savings
  - 1.10X minimum for solar PV
- Term length based on useful life of measures to be installed
- Mandatory utility cost monitoring/verification, with lender portal to data
- 25% allowance for health/safety measures
- Most loans require no equity contribution from borrower
- Included costs:
  - Lender legal fees
  - Origination fee @ 2.00%
  - M/V contract - \$5.80 per unit per year
  - Third-party audit/review fees
  - Take-out of existing pre-development financing
- Security: 1% second mortgages; 73% guarantees; 25% income assignments; 1% UCC-1 (unsecured)

## Transaction Summary & Requested Approval

The Facility would be advanced in one or more draws, with an initial draw expected to occur concurrently with the close of the transaction. As the Facility would be held on C4C's balance sheet and collateralized by project-level loans, closing will be conditioned upon satisfactory due diligence of 1) the financial strength and obligations of the parent entity, Capital for Change, Inc., 2) the ability of Green Bank to adequately structure the Master Facility and take security against underlying loans in the manner proposed herein and, for the avoidance of doubt, in a manner that facilitates repayment from the secured collateral even during a C4C default and/or bankruptcy event, and 3) the performance of both LIME loans used as collateral (i.e. repayment performance) and the underlying renewable energy/energy efficiency projects themselves (i.e. technical performance).

The Facility would be fully amortizing across the repayment term, aligning the repayment term with the blended cash flow profile of the underlying LIME loans. The repayment term of the Facility would have a 3 year availability period and would be repayable via the underlying LIME loan collateral pool, up to 20 years from the final draw during the availability period.

Note that while C4C's maximum term for the LIME loan program is 20 years following the availability period, Green Bank would provide C4C with the ability to replace a delinquent loan with another eligible LIME loan, and, depending on the age of the replacement loan, would restrict the overall term of the Facility to the 20 years from the final draw during the 3 year availability period.

Capital would be advanced at the lesser of 90% of total outstanding principal of the collateral pool or such lesser amount to conform the principal amount that would result in a debt service coverage ratio from the cash flows from the collaterally assigned LIME loans of 1.25x.

The Green Bank loans in the Master Facility would carry an interest rate of:

**Green Bank A Loan** \$5,500,000: 3%

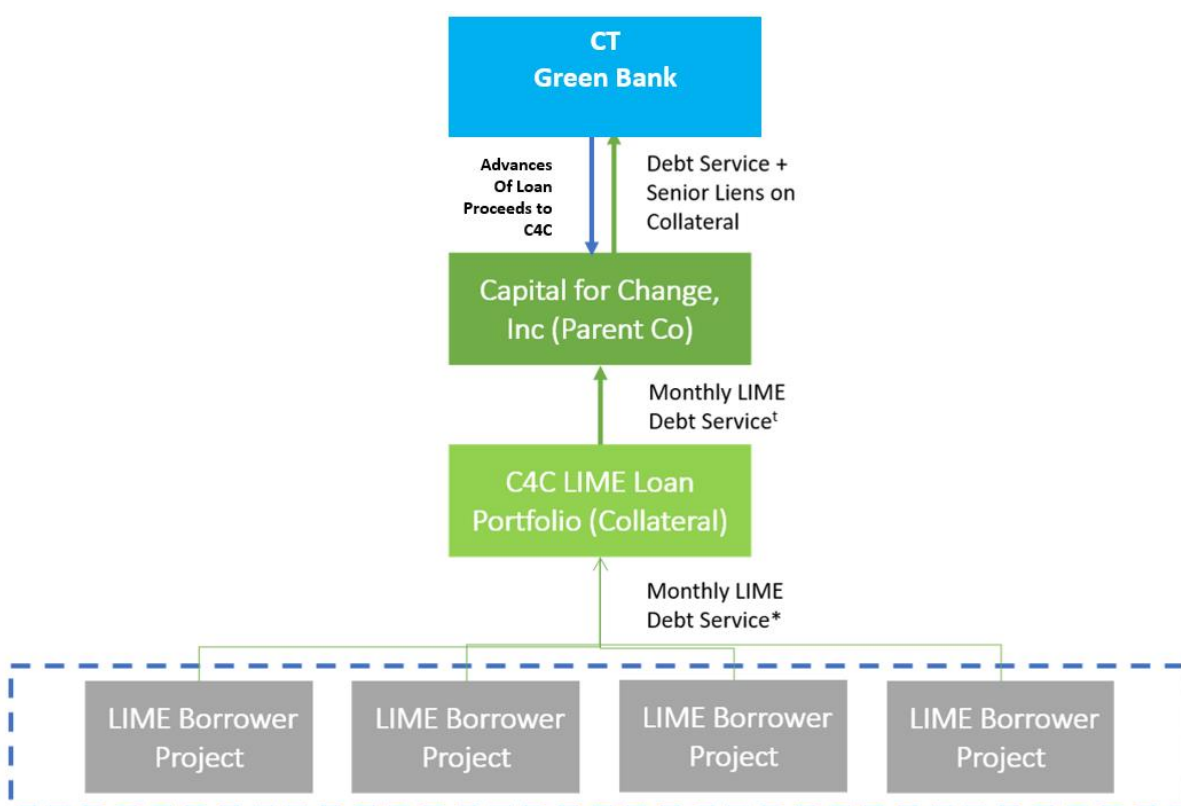
**Green Bank B Loan** \$1,000,000: 5%

Term Sheet agreed between C4C, IPC and Green Bank is attached (see Exhibit A).

## Capital Flow Diagrams

The following diagram illustrates the flow of capital and responsibilities of and between Green Bank, C4C, and the underlying collateral. The LIME loan contracts will be collaterally assigned to Green Bank at transaction close. Other than collateral assignment of the LIME loan documents, project borrowers will be unaffected.

The structure illustrates the Facility for which Green Bank is requesting approval: a direct balance sheet loan of \$6.5 million (an increase from the existing \$3.0 million facility) from Green Bank to C4C.



## Green Bank Risk Exposure and Mitigants

The C4C LIME loan Facility faces off-taker risk and C4C balance sheet risk.

The off-taker risk manifests simply as the possibility that C4C's LIME loan borrowers default under their respective loans. This risk is inherent in any project financing, however, and, as such, is mitigated in a number of ways. First, C4C has underwritten its LIME Loans in a manner co-

developed with Green Bank and consistent with Green Bank's approach to underwriting renewable energy and energy efficiency projects. Metrics include customer leverage ratio, liquidity analysis, and energy savings coverage ratio. Additionally, Green Bank would structure the proposed facility with a mandatory prepayment or loan replacement in the event of delinquency.

As Green Bank would be investing directly onto C4C's balance sheet, Green Bank is mindful of both the sponsor risks associated with the facility and the structuring risks associated with adequately collateralizing and protecting a corporate credit facility relative to other potential creditors. Green Bank's cashflows would be protected relative to other creditors and in the event of a C4C bankruptcy by:

- 1) perfected, first priority liens on all of the loans used as collateral under the facility,
- 2) collateral assignment all applicable asset cash flows and contracts, and
- 3) collateral assignment of any step-in rights and guarantees associated with equipment.

## C4C Financial Condition

C4C is in good financial health. Represented below is the parent-level company which is the entity to which the Green Bank loan would be made. Unrestricted cash decreased from 2017 to 2018 due to advances to CEEFCo (where Smart-E and other utility loan program advances are made) and about \$1 million in building and equipment acquisition related to new office space. Restricted cash declined and liabilities increased tracing to loan growth. The proposed \$6.5 million loan would represent approximately 12.6% of loans C4C at the parent level would have available from third parties.<sup>5</sup>

### Capital for Change, Inc. and Affiliated Organizations Consolidated Statement of Financial Position March 31, 2019

<u>Assets</u>	<u>3/31/2017</u>	<u>3/31/2018</u>	<u>3/31/2019</u>
Current assets			
Cash	\$4,566,382	\$1,244,026	\$1,235,106
Restricted cash	11,151,667	7,536,837	6,545,928
Accounts receivable, net	822,759	2,389,403	1,235,135
Interest receivable	182,363	222,195	390,234
Prepaid expenses	85,914	176,340	122,259
Property and equipment, net	333,885	1,305,207	2,286,575
Investments	296,713	334,029	352,485
<b>Loans receivable</b>	<b>53,780,427</b>	<b>69,611,610</b>	<b>81,091,556</b>
Loan loss reserves	(3,779,033)	(3,489,093)	(5,570,180)
Loans receivable - agency assets	2,642,704	6,834,387	18,326,441
Other assets	426,280	27,446	27,447
<b>Total assets</b>	<b>\$70,510,061</b>	<b>\$86,192,387</b>	<b>\$106,042,986</b>
 <u>Liabilities and Net Assets</u>			
Accounts payable and accrued expenses	\$777,589	\$556,355	\$402,994
Accounts payable construction			295,788
Accrued interest payable	52,585	83,590	68,660
Escrows	3,501,949	4,206,817	3,726,115
Refundable advances	4,268,843	4,432,343	4,475,343
Deferred revenue		1,244,161	1,718,373
<b>Notes payable</b>	<b>24,704,495</b>	<b>33,929,027</b>	<b>42,975,606</b>
<b>Notes payable - EQ2</b>	<b>4,700,000</b>	<b>4,950,000</b>	<b>5,625,000</b>
Agency liabilities	3,127,046	7,903,213	18,827,120
<b>Total liabilities</b>	<b>\$41,132,507</b>	<b>\$57,305,506</b>	<b>\$78,114,999</b>
Net assets			
Without donor restrictions	7,940,355	9,245,686	9,511,768
With donor restrictions	21,437,199	19,641,195	18,416,219
<b>Total net assets</b>	<b>29,377,554</b>	<b>28,886,881</b>	<b>27,927,987</b>
<b>Total liabilities and net assets</b>	<b>\$70,510,061</b>	<b>\$86,192,387</b>	<b>\$106,042,986</b>

<sup>5</sup> 12.6% = \$6.5m / (\$48.6m + \$3.0m) ... Green Bank's existing \$3.5m facility is included in the \$41.1m amount. Total outstanding loans to C4C at 3/31/19: \$41.1M; total undrawn availability: \$11.9M

**Capital for Change, Inc. and Affiliated Organizations**  
**Consolidated Statement of Activities and Changes in Net Assets**  
**Year Ended March 31, 2019**

	FYE 3/31/17	FYE 3/31/18	FYE 3/31/19
Revenue and support			
Loan interest activity	\$2,067,361	\$2,751,900	\$3,548,160
Loan servicing revenue	1,037,739	1,412,180	1,550,782
Loan fees	156,809	144,818	430,936
Grants and contributions	3,848,994	1,042,663	1,605,045
Other income	263,600	333,719	1,116,603
Total revenue and support	\$7,374,503	\$5,685,280	\$8,251,526
Expenses			
Program (incl G&A & Fundraising)	\$5,290,790	\$6,175,953	\$9,210,420
Changes in net assets	2,083,713	(490,673)	(958,894)
Net assets, beginning	27,293,841	29,377,554	28,886,881
Net assets, end	\$29,377,554	\$28,886,881	\$27,927,987

### Stable Financial Performance Trends

Year Ended	3/31/2017	3/31/2018	3/31/2019
Operating Revenue	\$ 3,419,224	\$ 4,467,189	\$ 5,906,534
Expense Ratio (Exp/Tot Assets)	8.7%	7.9%	9.6%
Net Interest Margin	2.59%	2.92%	2.77%

- For three years, increasing Operating Revenue (Total Revenue net of Grants and Contributions)
- Expense ratio under 10%
- Net interest margin consistently stable

Year Ended	3/31/2017	3/31/2018	3/31/2019
Credit Losses	\$ 144,519	\$ 788,518	\$ 365,515
Average Outstanding Loans	\$ 52,757,796	\$ 61,696,019	\$ 75,176,391
Loss Rate	0.27%	1.28%	0.49%

- For three years, credit losses and loss rates remaining low as average loan balances increase
- Low Leverage ratio relative to other CDFIs of similar size
- All metrics are consolidated Capital for Change, Inc.

## Request

Green Bank staff requests:

Deployment of up to \$6.5M from Green Bank balance sheet capital to C4C on a secured basis to finance LIME Program loan growth. This represents an increase of \$3.0 million in addition to existing authority of \$3.5 million. Given the success of the LIME Program, consistent LIME Loan performance, and solid health of Green Bank's program partner – Capital for Change, the largest CDFI in the state, approval is recommended.

## Green Bank Financial Statements

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

Upon advancing loans to C4C, Green Bank would have a reduction in cash and cash equivalents on the asset side of the Green Bank's balance sheet and a concomitant increase in short-term loans.



## Resolutions

**WHEREAS**, the Connecticut Green Bank (“Green Bank”) has an existing Low Income Multifamily Efficiency (“LIME”) loan Program with Capital for Change (“C4C”);

**WHEREAS**, C4C has been successful in deploying more than \$10 million in LIME Program loans, for 29 projects representing 1,973 housing units improved by the program;

**WHEREAS**, in order to continue the successful deployment of capital into the LIME Program C4C needs additional funding which it is sourcing from Green Bank and other capital sources; and,

**WHEREAS**, Green Bank staff recommends an increase in the LIME funding facility (the “LIME Loan Facility”) to \$6.5 million from the existing \$3.0 million substantially conforming to the terms and conditions explained in staff’s memorandum to the Green Bank Board of Directors (the “Board”) dated October 21, 2019, and inclusive of the term sheet for the proposed facility attached to said memorandum as Exhibit A.

**NOW**, therefore be it:

**RESOLVED**, that the Board approves the LIME Loan Facility to C4C in an amount of up to \$6.5 million in capital from the Green Bank balance sheet in support of the LIME Program;

**RESOLVED**, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the LIME Loan Facility on such terms and conditions as are materially consistent with the memorandum submitted to the Board on October 21, 2019; and,

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

Submitted by: Bryan Garcia, President and CEO and Bert Hunter, EVP and CIO

## **Preliminary Summary of Non-Binding Terms and Conditions**

### **Capital for Change LIME Loan Master Credit Facility**

*October [ ], 2019*

This Preliminary Summary of Non-Binding Terms and Conditions ("Term Sheet") is intended for discussion purposes only and does not constitute a legally binding obligation of any party, nor does it represent or constitute any commitment to underwrite, arrange, place, or provide any financing, or to otherwise extend credit, make loans, make investments, or enter into negotiations of any kind with respect to any of the information herein.

This Term Sheet does not include descriptions of all of the terms, conditions, and other provisions that would be contained in any definitive documentation derived from the information herein, which is subject to governance approvals, satisfactory completion of due diligence, financial modeling, review of documentation, and other such terms and conditions as CONNECTICUT GREEN BANK ("CGB") may determine in its sole discretion. In the event of any discrepancy between this Term Sheet and any such mutually executed and legally binding definitive documentation that is contemplated herein by the parties, the definitive documentation will govern.

No agreement, oral or otherwise, that may be understood or implied by any party during negotiations shall be binding unless such agreement is explicit in writing in mutually executed and legally binding definitive documentation. Additionally, changes may be made to the preliminary terms and conditions summarized herein based on negotiation, advice of advisors and/or legal counsel, due diligence, internal approval requirements, or any other consideration deemed necessary, prudent, or desirable.

This Term Sheet is delivered on the understanding that it is confidential, and any of the terms of substance hereunder shall not be disclosed, directly or indirectly, to any other person except to your directors, officers, employees, agents, and advisors who are directly involved in the consideration of this matter unless prior written consent has been given by CGB. The transaction contemplated by this Term Sheet is subject to all necessary CGB approvals, including, but not limited to, its Board of Directors or relevant committees thereof.

Lender	CONNECTICUT GREEN BANK ("CGB"), or a wholly owned subsidiary thereof and jointly participating lenders including, but not necessarily limited to, Inclusive Prosperity Capital, Inc. ("IPC"). an independent third party partner of CGB.
Borrower and Ultimate Parent	Capital for Change, Inc.
Facility Type	Multiple draw credit facility, with a senior secured promissory note drawn during the Availability Period that fully amortizes according to the blended repayment profile of the underlying loans
Facility Amount	<p>Up to \$7,700,000 comprised of:</p> <p><b>CGB A Loan</b> \$5,500,000  <b>CBG B Loan</b> \$1,000,000  <b>IPC Loan</b> \$1,200,000</p> <p>Note: (1) CGB's existing \$1.0m LIME funding and \$2.5m LIME funding to be combined into the CGB A Loan  (2) IPC's existing \$1.2m LIME funding to be combined into the IPC Loan under this Facility</p>
Closing Date	The date upon which definitive documentation is mutually executed and legally binding by and between Lender and Borrower, expected to occur on or before November 30, 2019
Facility Use of Proceeds	To support the continued capitalization of LIME loans in Connecticut as originated by Borrower
Lender Collateral / Security	<p>At all times the Lender will be secured by:</p> <p>(A) Perfected first-priority security interests in existing Eligible LIME Loans as identified/originated by Borrower and approved by Lender's Underwriting Guidelines (the facility shall be senior to all debt and equity interests in said Eligible LIME Loans);  (B) (B)Collateral Assignment of all Eligible LIME Loan cash flows and contracts;</p>

	<p>(C) Collateral assignment of UCC-1 filings on equipment financed by Eligible LIME Loans</p> <p>As for (A) and (B), Lender will be satisfied with security in a subset of existing LIME Loans so as to remain within the Advance Rate constraints explained below.</p>
Facility Availability Period	Three (3) years
Advance Rate	<p><b>For the IPC Portion:</b> the minimum of (A.) 70% of total loan value ("LTV"), defined as the total principal outstanding at the time of Advance and (B.) a senior secured promissory note amount that would result in a minimum annual Debt Service Coverage Ratio ("DSCR") of 1.25x given the Repayment Profile and cash flows from the assigned LIME loans, and subject to acceptable borrowing request memos, loan documentation, and loan/portfolio borrowing financial models, the forms of which shall be attached to the definitive documentation.</p> <p><b>For the CGB Portion:</b> the minimum of (A.) 90% of total loan value ("LTV"), defined as the total principal outstanding at the time of Advance and (B.) a senior secured promissory note amount that would result in a minimum annual Debt Service Coverage Ratio ("DSCR") of 1.25x given the Repayment Profile and cash flows from the assigned LIME loans, and subject to acceptable borrowing request memos, loan documentation, and loan/portfolio borrowing financial models, the forms of which shall be attached to the definitive documentation.</p>
Eligible LIME Loans	<p>The LIME Loans set forth in a schedule attached to the definitive documentation and in compliance with Underwriting Guidelines.</p> <p>Eligible LIME Loans will be owned by the Borrower and will have customer contracts with fixed payment terms and which are secured by second mortgages, collateral assignments of income, or guarantees for the full loan amount. Contracts and all other income and guarantees associated with and/or collaterally assigned to C4C as part of</p>

	<p>the Eligible LIME Loans will be assigned to Lender prior to advance of funds.</p> <p>Eligible LIME Loans will also have been used to finance projects with insurance and warranty coverage in amounts and coverages acceptable to Lender in its sole discretion and with Borrower named as additional insured / loss payee, as appropriate</p>
Advance Milestone	The Advance will be made upon Lender receiving, for each Eligible LIME Loan, a Borrowing Packet consisting of 1) underwriting package developed by Borrower, inclusive of any relevant loan approval memorandums, pro forma models, and customer contracts and information, 2) proof the project is in repayment and is current, as deemed adequate by Lender, 3) a production report showing the renewable energy and/or energy efficiency measures are performing as expected, within reason, and 4) all technology performance related documents including any warranties, insurance, and O&M agreements.
Repayment Term	In accordance with the remaining life of the underlying collateral, not to exceed 20 years.
Repayment Profile	Monthly payments of principal and interest in a sculpted payment structure and in amounts sufficient to fully amortize the promissory note over the Repayment Term.
Interest Rate:	<p><b>CGB A Loan</b> Fixed at 3.00% P.A. for the Repayment Term.</p> <p><b>CBG B Loan</b> Fixed at 5.0% P.A. for the Repayment Term.</p> <p><b>IPC Loan</b> Fixed at 5.50% P.A. for the Repayment Term.</p>
Calculation of Interest and Fees	All calculations of interest and fees shall be made on the basis of actual number of days elapsed in a 360-day year.
Closing Fee:	<p><b>CGB A Loan</b> None</p> <p><b>CBG B Loan</b> None</p> <p><b>IPC Loan</b> 2.0% of the IPC Loan Amount.</p>
Good Faith Deposit	\$10,000 to be deposited with Lender upon acceptance and execution of this Term Sheet

	<p>and to be used toward any third-party expenses associated with the facility.</p> <p>The Good Faith Deposit, net of any third-party expenses incurred by Lender, will either be returned to Borrower at the Closing Date, applied towards any fees associated with the facility (at the Borrower's election), or returned to the Borrower if Lender withdraws from the contemplated facility before the Closing Date.</p> <p>If the Borrower withdraws from the contemplated facility before the Closing Date, the Good Faith Deposit shall be deemed to have been paid to and fully earned by Lender.</p>
Lender Third Party Fees	<p>Borrower shall reimburse Lender for all incurred out-of-pocket and third-party fees and expenses associated with the facility ("Reimbursable Expenses"), inclusive of closing and, and including (but not limited to) legal fees, filing fees, and searches. In the event Borrower withdraws from the contemplated facility before the Closing Date, Borrower will still be responsible for Reimbursable Expenses.</p>
Mandatory Prepayment	<ul style="list-style-type: none"> <li>• Sale or disposition of any Eligible LIME Loan by any means, including customer refinancing of LIME Loan or sale of underlying property so long as no other Eligible LIME Loan has taken its place in the portfolio within the earlier of a) 60 days from such sale or disposition or b) the end of the Availability Period, provided further that 100% of the proceeds from any such sale or disposition of any Eligible LIME Loan shall remain in cash deposits or other highly liquid short term investments and not used for any other purpose whatsoever pending redeployment in such other Eligible LIME Loan.</li> <li>• If an Eligible LIME Loan is delayed in making payments owed to Borrower under any relevant customer contract for 60 days past the relevant payment date, any Facility Amount associated with that project must be repaid so long as no other</li> </ul>



	<p>Eligible LIME Loan has taken its place in the portfolio</p> <ul style="list-style-type: none"> <li>• Usual and customary, including change in ownership of the Borrower and other Borrower capital events.</li> </ul>
Deposit Account	<p>Borrower shall establish a primary operating account for Eligible LIME Loan cash flows with adequate account control provisions/ agreements, acceptable to Lender in its sole discretion. Any fees incurred by Borrower's in establishing the account and reasonably expected to be incurred for maintaining the account will be deducted from the Closing Fee.</p>
Priority of Payments / Waterfall	<p>Subject to the Borrower and any requirements imposed by Lender to include payment priority provisions in the Borrower's Operating Agreement, funds in the Deposit Account shall be applied in the following order:</p> <ul style="list-style-type: none"> <li>i. Accrued but unpaid fees to the Lender;</li> <li>ii. Undrawn Commitment Fees;</li> <li>iii. Accrued but unpaid interest to the Lender;</li> <li>iv. Principal payments to the Lender;</li> <li>v. Deposits into the DSRA to the extent needed to replenish previously drawn funds.</li> </ul>
Servicer/Servicing	<p>Borrower will have in place customer payment servicing processes acceptable to Lender in its sole discretion.</p>
Default Provisions	<p>Usual and customary, including</p> <ul style="list-style-type: none"> <li>• Repayment default</li> <li>• Failure to pay/cure Mandatory pre-payment</li> <li>• Bankruptcy</li> <li>• Ineligible Disbursement</li> </ul>
Default Interest Rate	<p>The Interest Rate plus 300 bps, and in all cases subject to compliance with applicable laws and regulations.</p>
Conditions Precedent to Closing	<ul style="list-style-type: none"> <li>• Definitive documentation</li> </ul>

	<ul style="list-style-type: none"> <li>• Collateral and Security Documentation</li> <li>• Fees and Expenses</li> <li>• No Borrower EOD</li> </ul>
Conditions Precedent to Draw	<ul style="list-style-type: none"> <li>• Delivery of a Draw Request</li> <li>• Borrower Certification of an Eligible LIME Loan</li> <li>• Borrower Certification of No Defaults</li> <li>• Form of Draw Request Certificate to be attached to definitive documentation</li> </ul>
Financial Covenants	<ul style="list-style-type: none"> <li>• No liens or any other security interests in Eligible LIME loans senior to the CGB credit facility</li> <li>• Maintain required collateral, resulting in mandatory prepayment upon sale or disposition without replacement of Eligible Projects</li> </ul>
Financial Statements	2 years financials (third party certified public accountant prepared financials or tax returns) for Borrower
Legal Requirements	Usual and customary
Monitoring Requirements	<ul style="list-style-type: none"> <li>• DSCR reporting</li> <li>• Aging reporting</li> <li>• LMI allocation reporting</li> <li>• Customer Invoices</li> <li>• Expense Documentation</li> <li>• Renewable Energy / Energy Efficiency performance Reporting</li> </ul>
Other Covenants, Representations, and Warranties	Usual and customary
Indemnities	Borrower will indemnify and hold harmless the Lender and its affiliates, partners, directors, officers, employees, agents, and advisors from and against all incurred losses, claims, damages, liabilities, and expenses arising from this Term Sheet, the facility anticipated herein, any definitive documentation that arises from this Term Sheet, and any actual or perceived impact to the Ultimate Parent's, and affiliated entities' and investors, business operations.
Eligible Project Underwriting Guidelines	Consistent with Capital for Change Lending Policy as of October 2018
Assignment	Lender may assign all or a portion of the Facility Amount, under the terms and

	conditions set forth herein and as finalized in the definitive documentation, to one or more assignees.
Governing Law	Connecticut.
Expiration	This Term Sheet shall expire if not duly executed by November 1, 2019.

ACCEPTED AND AGREED:

CAPITAL FOR CHANGE, INC.

Date:

By: \_\_\_\_\_

Name:

Title:

CONNECTICUT GREEN BANK

Date:

By: \_\_\_\_\_

Name:

Title:

INCLUSIVE PROSPERITY CAPITAL, INC.

Date:

By: \_\_\_\_\_

Name:

Title:

# Memo

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

**From:** Ed Kranich (ESS Program Manager), Sergio Carrillo (Managing Director of Incentive Programs), Bryan Garcia (President and CEO)

**Cc:** Mackey Dykes, Brian Farnen, Bert Hunter, Jane Murphy, and Eric Shrago

**Date:** March 14, 2025

**Re:** Energy Storage Solutions Program – Upfront Incentive Approval Request for Kinsley Group

---

The Energy Storage Solutions (ESS) Program was established by the Public Utilities Regulatory Authority (PURA) in Docket No. 17-12-03RE03, PURA Investigation into Distribution System Planning of the Electric Distribution Companies – Electric Storage. In its Final Decision<sup>1</sup> in this docket, issued July 28, 2021, PURA appointed The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource), The United Illuminating Company (UI), and the Connecticut Green Bank (Green Bank) as co-administrators of the Program.<sup>2</sup>

The Green Bank's responsibilities include customer enrollment, administration of the upfront incentive, marketing and promotion, and data aggregation and publication to support evaluation, measurement, and verification, among others.

## A. Upfront Incentive Approval Process

In its June 24, 2022 Board meeting, the Green Bank Board approved a process for the approval of upfront incentives for projects participating in the ESS Program by which projects with estimated upfront incentives greater than \$500,000 would follow a process similar to the one used by the C-PACE program.

Within the existing Board of Directors (Board) and Deployment Committee regular meeting schedule, the Green Bank staff will seek Board or Deployment Committee approval of these upfront incentives via consent agenda, and only after the upfront incentives are approved, Green Bank staff will issue Reservation of Funds (ROF) letters.

The Board approved that Green Bank staff shall obtain Board or Deployment Committee approval of estimated upfront incentive payments via consent agenda utilizing the Tear Sheet process described in the Memorandum to the Board dated June 24, 2022. Only after securing

---

<sup>1</sup> <https://tinyurl.com/2p8v4cwa>

<sup>2</sup> It should also be noted that with the passage of Public Act 21-53 "An Act Concerning Energy Storage," that PURA shall solicit input from DEEP, OCC, EDC's, and the Green Bank in developing energy storage system programs, and may select DEEP, EDC's, Green Bank, a third party, or any combination thereof to implement one or more programs for electric storage resources as directed by PURA.

Board or Deployment Committee approval, will Green Bank Staff issue ROF letters to project developers and/or owners.

After projects are fully operational, Green Bank staff will notify the Board of their intent to issue Confirmation of Funds (COF) letters, highlighting any differences between the Board- or Deployment Committee-approved incentive and the final incentive amount, and the reason for the difference.

## **B. About Kinsley Group**

Founded in 1964, Kinsley Group is an energy solutions provider for customers throughout the Northeast. Kinsley has been a distributor of KOHLER Power Systems generators for 50 years and has recently added battery storage to their list of services.

Kinsley Group joined Energy Storage Solutions in February 2025. The proposed project with Allied Printing Services is their first in the Program.

## **C. About Allied Printing Services Inc.**

Allied Printing Services offers an array of printing services for customers in nearly every sector. The family-owned-and-operated business has maintained their presence in Manchester since 1949, growing from a 150 square foot shop into a 30-acre campus. Allied Printing Services also boasts Connecticut's largest behind-the-meter solar array and is furthering their commitment to the environment by installing—and owning—a 3.98 MW TeraStor battery storage system to reduce their peak demand and their impact on the grid.

## **D. Request for Approval of New Upfront Incentives Under \$500,000**

Table 1 below shows the single non-residential project seeking estimated upfront incentives for a total amount of \$1,310,400 and total capacity of 3.98 MW.

<b>Project Number</b>	ESS-01606
<b>Utility</b>	Eversource
<b>Contractor</b>	Kinsley Group, Inc.
<b>System Owner</b>	Customer
<b>Customer Class</b>	Large C&I
<b>Annual Peak Demand</b>	3,288 kW
<b>Host Customer</b>	Allied Printing Services, Inc.
<b>Host Customer Address</b>	1046R Tolland Tpke
<b>Host Customer City</b>	Manchester
<b>System Pairing</b>	Paired with existing on-site generation
<b>System Energy Capacity</b>	14,400 kWh
<b>System Power</b>	3,980 kW
<b>Total Battery Cost</b>	\$6,596,700
<b>Upfront Incentive</b>	\$1,310,400
<b>Program Dispatch</b>	Active and Passive

*Table 1. Estimated Upfront Incentives Above \$500,000*

The attached Tear Sheet provides these and other details pertaining to the single new project seeking estimated upfront incentives in the ESS Program.

---



## **Resolutions**

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

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

**WHEREAS**, in its December 9, 2002 meeting the Board approved updated Procedures to better align with the Program process.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors hereby approves the estimated upfront incentives sought by Kinsley Group for one non-residential project totaling a not-to-exceed amount of \$1,310,400 consistent with the approved Procedures; and,

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

## Energy Storage Solution Program Upfront Incentive Application

<b>Project Description</b>	Installation of a 3.99 MW / 14.4 MWh battery storage system to reduce electric bills and provide backup power to the facility during power outages.
----------------------------	---

### Customer / Site Information

<b>Customer Name</b>	Allied Printing Services, Inc.
<b>Address</b>	1046R Tolland Tpke, Manchester, CT 06042
<b>Business Purpose</b>	Commercial printing facility
<b>Incentive Application No.</b>	ESS-01606
<b>Incentive Application Date</b>	3/3/2025
<b>Customer Peak Demand (kW)</b>	3,228 kW across 3 meters
<b>Customer Class (S / M / L)</b>	Large
<b>Project Developer / Installer</b>	Kinsley Group, Inc.

### Program Eligibility

<b>Critical Facility</b>	No
<b>Small Business</b>	No
<b>Onsite Fossil Fuel Generator</b>	No
<b>Grid Edge Customer</b>	No
<b>Participation in FCM Allowed</b>	No
<b>Participation in FCM Declared</b>	No

### Battery Energy Storage System (BESS) Characteristics

<b>System Configuration</b>	Paired with solar PV
<b>Expected Program Participation</b>	Passive + Active Dispatch
<b>BESS Make / Model</b>	AESI TeraStor 7200 + AESI GT450
<b>BESS Power Rating (kW)</b>	3,998 kW across 3 inverters
<b>BESS Energy Capacity (kWh)</b>	14,400 kWh across 2 battery banks
<b>BESS Technology Approval Status</b>	Approved
<b>Power Rating to Peak Demand Ratio</b>	1.24
<b>Interconnection Application Filed</b>	Yes (12/26/24)
<b>Interconnection Study Required</b>	Yes
<b>Estimated Project Cost</b>	\$6,596,700

### Benefit / Cost Ratios

<b>RIM – Ratepayer Impact Measure</b>	3.74
<b>PCT – Participant Cost Test</b>	1.22
<b>PACT – Program Administrator Cost Test</b>	4.66
<b>SCT – Societal Cost Test</b>	3.91
<b>TRC – Total Resource Cost Test</b>	3.91
<b>CTET – Connecticut Efficiency Test</b>	4.65

### Upfront Incentive Information

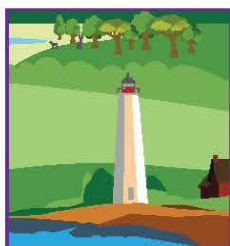
<b>Incentive Application Status</b>	<ul style="list-style-type: none"> <li>▪ <b>Application Submitted</b></li> <li>▪ Approved Reservation of Funds Letter (ROF)</li> <li>▪ Approved Confirmation of Funds Letter (COF)</li> </ul>
<b>Incentive Calculation Method</b>	Tiered Incentive – Tranche 3 – Step 1
<b>Estimated Upfront Incentive</b>	\$1,310,400.00

## environmental infrastructure primer

### *waste and recycling*



**Environmental  
Markets**



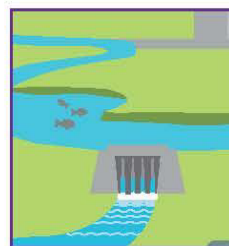
**Land  
Conservation**



**Parks and  
Recreation**



**Agriculture**



**Water**



**Waste and  
Recycling**



CONNECTICUT  
**GREEN BANK**®

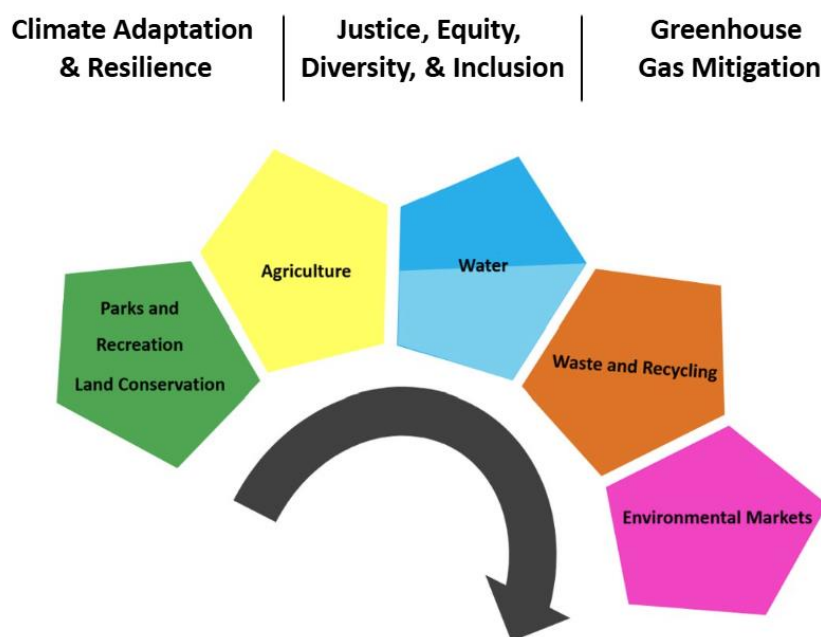
**Waste and Recycling**  
**Environmental Infrastructure Primer**

## Contents

Introduction .....	4
Overview.....	4
Introduction to Waste and Recycling in Connecticut.....	6
The Importance of Supporting State Policy.....	7
The Importance of End-of-Life Planning for Solar PV & Batteries.....	7
The Importance of Food and Organic Waste Reduction .....	7
Connecticut Green Bank Strategy Outlook .....	8
Support the State .....	9
Solar PV & Battery Storage End-of-Life.....	9
Overview .....	9
Key Public Policies .....	10
Market Potential.....	12
Targets.....	19
Funding and Financing Programs .....	19
Other Programs .....	19
Stakeholder Outreach: End-of-life Working Group .....	20
Findings.....	22
Opportunities .....	23
Expand & Scale Organic Waste Management .....	24
Overview .....	24
Key Public Policies .....	24
Market Potential.....	28
Targets.....	29
Funding and Financing Programs .....	32
Other Programs .....	36
Stakeholder Outreach.....	37
Findings.....	38
Opportunities .....	43
References .....	45
Definitions.....	46
Appendix A: Societal Impact Report .....	48
Appendix B: Anaerobic Digestion Pilot Program Case Studies .....	49

# Introduction

In October of 2021, the Connecticut Green Bank (“Green Bank”) developed a plan to engage stakeholders to understand the various components of “environmental infrastructure” – see Figure 1. With its mission to “confront climate change by increasing and accelerating investment into Connecticut’s green economy to create more resilient, healthier, and equitable communities” within each component of “environmental infrastructure,” the cross-cutting issues of reducing greenhouse gas emissions (“GHG”), increasing climate adaptation and resilience, and enabling investment in vulnerable communities was explored.



**Figure 1. Sectors of Environmental Infrastructure Per Public Act 21-115**

This primer reflects the observations, findings, and initial recommendations from conversations with stakeholders and research conducted on waste and recycling.

## Overview

On July 6, 2021, Governor Ned Lamont signed Public Act 21-115 “An Act Concerning Climate Change Adaptation” (“the Act”) into law. The bipartisan-supported public policy was among the sixty-one (61) recommendations made by the Governor’s Council on Climate Change (“GC3”), which included a recommendation to expand the scope of the Green Bank beyond “clean energy” to include “environmental infrastructure” (i.e., Recommendation #57).

Since its founding over a decade ago, the Green Bank has focused its efforts on using a limited amount of public resources to mobilize multiples of private investment in Connecticut to increase and accelerate the deployment of “clean energy” to deliver social and environmental impact – see Appendix A.

Given its mission, the Green Bank helps the State of Connecticut achieve its ambitious public policy objectives (e.g., GHG emission reductions targets, renewable portfolio standards). In



so doing, by 2025, no less than 40 percent of investment and benefits from its programs are to be directed to vulnerable communities.<sup>1</sup>

The Act expands the scope of the Green Bank beyond “clean energy” to include “environmental infrastructure,” and includes the following key provisions:

- **Definition** – “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;
- **Comprehensive Plan** – requirement for the Green Bank to develop a Comprehensive Plan<sup>2</sup> prior to implementing any programs or initiatives related to “environmental infrastructure
- **Reporting** – inclusion of the Banks Committee and the Environment Committee, alongside the Energy and Technology Committee and Commerce Committee in terms of reporting; and
- **Bonding** – the ability to issue up to 25-year bonds for “clean energy” and 50-year bonds for “environmental infrastructure” (i.e., no more than the useful life of the projects), supported by the Special Capital Reserve Fund (“SCRF”), for up to 25 years to improve the credit rating of the bonds issued.

This document summarizes the findings from the research and outreach efforts conducted by the Green Bank<sup>3</sup> on “waste and recycling” from mid-June through mid-December of 2024. It includes a section on supporting state policy and deeper explorations into end-of-life planning for solar PV and batteries and food and organic waste management, each with the following sections: (A) overview, (B) key public policies, (C) market potential, (D) targets, (E) funding and financing programs, (F) other programs, (G) stakeholder outreach, (H) findings, (I) opportunities, (J) references, and (K) definitions.

---

<sup>1</sup> “Vulnerable communities” means populations that may be disproportionately impacted by the effects of climate change, including, but not limited to, low and moderate income communities, environmental justice communities pursuant to section 22a-20a, communities eligible for community reinvestment pursuant to section 36a-30 and the Community Reinvestment Act of 1977, 12 USC 2901 et seq., as amended from time to time, populations with increased risk and limited means to adapt to the effects of climate change, or as further defined by DEEP in consultation with community representatives.

<sup>2</sup> Connecticut Green Bank. *Comprehensive Plan Fiscal Years 2023-2025*. 2025. Available here: [https://www.ctgreenbank.com/wp-content/uploads/2024/07/Comprehensive-Plan\\_FY-2025\\_071924.pdf](https://www.ctgreenbank.com/wp-content/uploads/2024/07/Comprehensive-Plan_FY-2025_071924.pdf).

<sup>3</sup> This primer was developed by Leigh Whelpton (Director of Environmental Infrastructure Programs), Bryan Garcia (President and CEO), Bert Hunter (Executive Vice President and Chief Investment Officer), Sara Harari (Associate Director of Innovation & Senior Advisor to the President and CEO), Austin Dziki (Senior Manager, Environmental Infrastructure Programs), Ashley Stewart (Manager of Engagement, Environmental Infrastructure Programs), Janice Cheng (Associate, Environmental Infrastructure Programs), and James Desantos (Associate Director of Legislative & Regulatory Affairs).

# Introduction to Waste and Recycling in Connecticut

Connecticut faces significant challenges in managing its waste and recycling streams stemming from limited in-state processing capacity and persistent barriers to achieving diversion targets. As waste streams grow more complex, the state grapples with balancing environmental sustainability, economic feasibility, and operational capacity. Addressing these issues requires innovative strategies to reduce waste generation, expand recycling and composting infrastructure, address environmental justice concerns, and enhance local capacity to create a more resilient, sustainable, and equitable materials management system.

Connecticut's Comprehensive Materials Management Strategy ("CMMS") (CGS 22a-241a)<sup>4</sup> provides the overarching policy framework and targets related to Municipal Solid Waste ("MSW"). Municipalities design programs following the framework of the state's waste hierarchy (see Figure 9) to achieve the stated targets. CMMS emerged from Connecticut's Solid Waste Management Plan, first passed in 1987.<sup>5</sup> The primary goal of CMMS is to divert 60% of MSW from the 2005 baseline, a target codified in Connecticut statute.

According to a 2022 Solid Waste Disposal and Diversion report by Connecticut's Department of Energy and Environmental Protection ("DEEP"), the state generated 3.49 million tons of MSW in 2022, with 1.55 million tons (44%) disposed at in-state Resource Recovery Facilities ("RRFs"), 640,000 tons (18%) shipped out of state for disposal, and 1.3 million tons (37%) diverted via recycling, composting, or anaerobic digestion.<sup>6</sup> Of the total waste diverted, approximately 75% went to recycling and 25% went to compost or anaerobic digestion. This diversion rate has remained relatively consistent between 2012 and 2022, hovering between 30% and 40%. These figures fall short of the CMMS target 60% diversion rate by 2024, the "Connecticut Solid Waste Management Plan,"<sup>7</sup> and emphasize the need for increased investment in Connecticut's waste management capacity.

The closure of the Materials Innovation and Resource Recovery ("MIRA") facility in July of 2022<sup>8</sup> has intensified these challenges, straining the system's ability to handle MSW locally while increasing dependence on out-of-state disposal options that carry higher costs and

---

<sup>4</sup> Connecticut General Statutes § 22a-241a (2023), [https://www.cga.ct.gov/2021/pub/chap\\_446d.htm#sec\\_22a-241a](https://www.cga.ct.gov/2021/pub/chap_446d.htm#sec_22a-241a).

<sup>5</sup> The Solid Waste Management Plan was amended in 1991 and 2006. In 2014, after the passage of Public-Act No. 14-94 (through an amendment that replaced Section 22a-241a of Chapter 446d), the DEEP Commissioner was required to draft a new Solid Waste Management Strategy, leading to the creation of CMMS.

<sup>6</sup> Connecticut Department of Energy and Environmental Protection (DEEP), *2022 Solid Waste Disposal & Diversion Report* (Hartford, CT: Connecticut DEEP, 2024), 3, [https://portal.ct.gov/-/media/deep/reduce\\_reuse\\_recycle/data/diversion\\_report\\_2024\\_3.pdf?rev=70afa4a7e67a4fa182f704eb4a8fe67e&hash=4186C1ADCCA5D3170E537DB52597DA0F](https://portal.ct.gov/-/media/deep/reduce_reuse_recycle/data/diversion_report_2024_3.pdf?rev=70afa4a7e67a4fa182f704eb4a8fe67e&hash=4186C1ADCCA5D3170E537DB52597DA0F).

<sup>7</sup> Connecticut Department of Energy and Environmental Protection (DEEP), *Comprehensive Materials Management Strategy (CMMS)* (Hartford, CT: Connecticut DEEP, 2016), 7, [https://portal.ct.gov/-/media/deep/waste\\_management\\_and\\_disposal/solid\\_waste\\_management\\_plan/cmmsfinaladoptedcomprehensivematerialsmanagementstrategy.pdf?rev=19c414dbac054fa78dab6f5d70699bfb&hash=75F1D8DE80FA40AE32807E6BF7EE090C](https://portal.ct.gov/-/media/deep/waste_management_and_disposal/solid_waste_management_plan/cmmsfinaladoptedcomprehensivematerialsmanagementstrategy.pdf?rev=19c414dbac054fa78dab6f5d70699bfb&hash=75F1D8DE80FA40AE32807E6BF7EE090C).

<sup>8</sup> MIRA's closure represents an additional 720,000 tons of annual MSW processing capacity that Connecticut will need to replace.

environmental impacts. The MIRA closure reduced Connecticut's waste processing capacity by approximately one-third and has led to increased disposal at landfills in Pennsylvania, Ohio, and other states, increasing the associated GHG emissions of MSW disposal from transportation. The MIRA dissolution has exacerbated the state's disposal capacity deficit and highlights the challenges and complexity of Connecticut achieving its target diversion rate.

## **The Importance of Supporting State Policy**

Connecticut's regulatory landscape is crucial to achieving the state's diversion goals, especially given heightened constraints to disposal capacity and its impact on GHG emissions, environmental quality concerns, and equity considerations. Properly enforced state policy unlocks private capital and animates markets by encouraging innovative waste technologies, robust recycling/composting infrastructure, and implementation of food diversion programs at the municipal and regional levels. The Green Bank is thus committed to supporting any and all state policy conducive to delivering the 60% diversion goal, as well as other initiatives that remedy the self-sufficiency deficit around financing and regulatory constraints. Waste stream circularity and organic materials infrastructure are still nascent, hence stringent legislation will be the driving mechanism in propelling innovative development forward and holding stakeholders liable to obligations mandated by statute.

## **The Importance of End-of-Life Planning for Solar PV & Batteries**

End-of-life ("EOL") planning for solar photovoltaic ("PV") systems and batteries is an essential component of Connecticut's transition to a clean energy future. As the state accelerates the deployment of renewable energy technologies to meet its ambitious energy policy goals—such as achieving the 40% Class I Renewable Portfolio Standard by 2030 and the 100% zero-carbon electricity by 2040—managing the eventual disposal and recycling of these systems has become a priority. For example, the Green Bank supported the deployment of 380 MW of solar PV systems for residential end-use customers through its administration of the Residential Solar Investment Program ("RSIP"), which has transformed the market for residential solar PV in Connecticut.

While solar and storage systems currently represent a small fraction of the overall waste stream today, their volumes are projected to grow significantly as installations mature. Without robust EOL strategies, the environmental and economic benefits of solar and storage technologies risk being undermined by waste management challenges.

## **The Importance of Food and Organic Waste Reduction**

The Green Bank is a leading investor in Connecticut's organic waste infrastructure through prior investments in Quantum Biopower in Southington (i.e., food waste to energy project) and Fort Hill Farms with Ag-Grid in Thompson (i.e., farm waste to energy). Reducing and recapturing food and organic waste is a critical strategy for addressing GHG emissions and combating food insecurity, particularly in vulnerable communities. Wasted food accounts for approximately 6% of U.S. GHG emissions due to the energy-intensive processes of production, transportation, and disposal and approximately 21% of U.S. freshwater use.<sup>9</sup>

---

<sup>9</sup> ReFED, *New Estimates on Food Waste in the United States: 2020-2021, Trends, and COVID-19 Impact* (New York: ReFED, 2023), <https://refed.org/articles/refed-s-new-estimates-on-food-waste-in-the-united-states-2020-2021-trends-and-covid-19-impact/>

This waste contributes to climate change and resource scarcity while also exacerbating inequities in access to nutritious food, as millions of Americans face food insecurity despite the surplus of edible food being discarded. Often, vulnerable communities disproportionately bear the brunt of these challenges, enduring both higher exposure to environmental hazards and limited access to affordable, healthy food. Prioritizing food and organic waste reduction can mitigate GHG emissions (e.g. avoided methane emissions from organic decomposition in landfills) and contribute to a more sustainable and equitable food system by recapturing prevented food waste and making it available to food insecure communities.

## Connecticut Green Bank Strategy Outlook

The Green Bank is focusing its initial strategy development on areas where there is alignment with organizational capacity, experience, and expertise. The following primer sub-sections breakdown the Green Bank's strategic approach to waste and recycling, as summarized in Table 1.

**Table 1. Green Bank Waste & Recycling Strategy Outlook**

<b>Support the State</b>	<b>Solar PV &amp; Battery Storage End-of-Life</b>	<b>Expand &amp; Scale Organic Waste Management</b>
Support DEEP's goals for waste management and recycling. <sup>10</sup>	Assess existing technology deployed in solar PV and battery storage programs – both those administered by the Green Bank and by other entities – to identify strategies to reuse, recycle, and dispose of these products.	Assess opportunities to scale-up solutions to organic waste management including strategies to prevent, rescue, and recycle these materials.

The Green Bank strategy to "Support the State" is informed by a recognition that the policy and programmatic landscape is dynamic and that the Green Bank will be supportive and adaptive to future DEEP considerations on waste and recycling. This is further influenced by DEEP's ability to enter into agreements with the Green Bank that are supportive of bonding and financing for recycling and waste management projects.

The initial outlook on "Solar PV & Battery Storage End-of-Life" is informed by the Green Bank's implementation of CGS 16-245ff (i.e., Residential Solar Investment Program) which deployed nearly 380 MW of solar PV for over 45,000 households.

Through its implementation of Section 103 of Public Act 11-80, the Green Bank is a leading financier of Connecticut's first food waste and farm waste (i.e., components of "organic waste") to energy projects, Quantum Biopower and Fort Hill Farms, which utilized anaerobic digestion and combined heat and power to reduce methane and produce renewable natural

---

<sup>10</sup> Per Public Act 23-170

gas for onsite clean energy.<sup>11</sup> These transactions help inform the strategy outlook to “Expand & Scale Organic Waste Management.”

This focused approach to the broad and complex issue of waste and recycling will best position the Green Bank to align with and support DEEP’s strategies to address the state’s waste and recycling crisis,<sup>12</sup> noting the evolving policy environment and as the state faces the impacts of the closure and dissolution of the MIRA facility<sup>13</sup> with a constrained ability to build additional facilities in state.

## Support the State

In addition to the sections below on solar PV and battery EOL and organic waste management, Public Act 23-170 “An Act Establishing the Management of Solid Waste and Establishing the MIRA Dissolution Authority” includes several important provisions for the Green Bank to support the state (i.e., DEEP) with its “waste and recycling” efforts, including:

1. **State-Wide Solid Waste Management Plan** – per Section 17, DEEP is to submit revisions of the CMMS to the joint standing committee of the Connecticut General Assembly having cognizance of matters relating to the environment (i.e., Environment Committee) for approval prior to the implementation of such revisions.<sup>14</sup>
2. **Agreements between DEEP and Green Bank** – per Section 21, DEEP may enter into agreements with the Green Bank to effectuate the issuance of environmental infrastructure bonds to support such solid waste facilities, supported by a SCRF that was adjusted from \$250MM up to \$500MM.<sup>15</sup>

As the CMMS is revised and approved, DEEP may seek assistance from the Green Bank to assist it in raising capital to finance solid waste facilities for the betterment of the state.

## Solar PV & Battery Storage End-of-Life

### Overview

The rapid growth of solar PV and battery storage technologies in Connecticut and beyond presents both opportunities and challenges. While these technologies are crucial for

---

<sup>11</sup> As part of its Anaerobic Digestion Pilot program, the Connecticut Green Bank provided novel capital investment in two anaerobic digestion projects, Quantum Biopower and Fort Hill Farms, a partnership with AgGrid. See Appendix B for more information.

<sup>12</sup> Connecticut Department of Energy and Environmental Protection (DEEP), *Comprehensive Materials Management Strategy (CMMS) Amendment* (Hartford, CT: Connecticut DEEP, 2023), [https://portal.ct.gov/-/media/deep/waste\\_management\\_and\\_disposal/solid\\_waste\\_management\\_plan/january2023/cmms-amendment-2023-draft.pdf](https://portal.ct.gov/-/media/deep/waste_management_and_disposal/solid_waste_management_plan/january2023/cmms-amendment-2023-draft.pdf)

<sup>13</sup> Public Act 23-170 created the MIRA Dissolution Authority effective July 1, 2023. It replaces the Materials Innovation and Recycling Authority (MIRA) and was established in response to the closure of MIRA’s Resource Recovery Facility in Hartford.

<sup>14</sup> Connecticut General Assembly, *Public Act No. 23-170: An Act Concerning the Management of Solid Waste and Establishing the MIRA Dissolution Authority*, § 17 (2023), <https://www.cga.ct.gov/2023/act/Pa/pdf/2023PA-00170-R00HB-06664-PA.PDF>.

<sup>15</sup> Conn. Gen. Assembly, *Public Act No. 23-170*, § 21.

achieving our renewable energy goals, they have finite lifespans and will eventually need to be managed at their EOL. While large volumes of equipment will only reach EOL some years from now, it is important to begin thinking about this subject so that the policies and infrastructure needed to manage the waste stream at EOL are in place when the time comes. This section aims to provide a comprehensive overview of the current state of waste and recycling for solar panels and batteries in Connecticut, outline key policies, assess market potential, and highlight opportunities for intervention by the Green Bank.

## Key Public Policies

In 2023 the Public Utilities Regulatory Authority ("PURA") tasked the Green Bank with facilitating a public process to create a framework for guiding the management of solar panels and stationary battery energy storage systems at the end of their useful lives. This stakeholder process concluded in 2024, the takeaways are discussed more extensively in Section E ("EOL Working Group"). The following are key public policies that advance our ability to collectively manage the EOL impacts of solar PV and storage equipment in Connecticut, including, but not limited to:

### **Federal Policies**

- **Resource Conservation and Recovery Act ("RCRA")** – a federal law enacted in 1976 that governs the disposal of solid and hazardous waste. Its primary goals are to protect human health and the environment from the potential hazards of waste disposal, conserve energy and natural resources, reduce the amount of waste generated, and ensure that waste is managed in an environmentally responsible manner.

Under RCRA, the Environmental Protection Agency ("EPA") has the authority to control hazardous waste from its creation to its final disposal, often referred to as "cradle-to-grave" management. This includes the generation, transportation, treatment, storage, and disposal of hazardous waste.

RCRA is divided into several components, key among which are:

- Subtitle C: Governs hazardous waste management, establishing a framework for managing hazardous waste from its point of origin to its ultimate disposal. It requires stringent tracking and management practices to prevent environmental contamination.
- Subtitle D: Focuses on non-hazardous solid waste, including the management of municipal and industrial waste in landfills and other disposal facilities. It sets standards for the design, operation, and closure of these facilities to minimize environmental impact.

In the context of solar panels and batteries, RCRA plays a crucial role in determining whether these materials are classified as hazardous waste when they reach the end of their life. For example, the Toxicity Characteristic Leaching Procedure ("TCLP") test, a key component of RCRA, is used to determine if the leachate from waste materials exceeds regulatory levels for specific toxic substances. If it does, the waste must be managed as



hazardous under Subtitle C, which imposes stricter disposal and recycling requirements.

Additionally, the **Universal Waste Classification** is made under authority of RCRA. Universal Waste is a category of hazardous waste materials that are widely produced by households and many different types of businesses. The EPA established the Universal Waste Rule to streamline the collection and recycling of these common hazardous wastes, making it easier for businesses and households to comply with hazardous waste regulations.

The Universal Waste Rule was created to encourage the proper disposal and recycling of these materials by reducing the regulatory burden on generators of universal waste. It provides more flexible storage, transportation, and collection requirements compared to other hazardous wastes under RCRA Subtitle C. This flexibility aims to promote recycling and proper disposal, preventing the release of hazardous substances into the environment. Currently, batteries, pesticides, mercury-containing equipment, lamps, and aerosol cans can be classified as universal waste if they are hazardous. In response to a petition from the electric power industry, the EPA is currently consulting on adding hazardous waste solar panels to the universal waste regulations, with the final rule expected in December 2026.

States have the option to adopt the federal Universal Waste Rule or develop their own state-specific regulations. Some states have added additional types of waste to their own lists of universal waste. For example, California has classified certain types of electronic waste, including some solar panels, as universal waste, simplifying their disposal process.

- **Infrastructure Investment and Jobs Act ("IIJA")** – also known as the Bipartisan Infrastructure Law, this act provides significant funding opportunities to support the development of recycling infrastructure. For example, the Department of Energy ("DOE") is channeling resources into research and development of advanced recycling technologies for solar panels and batteries. Connecticut stands to benefit from these federal programs, which can help offset the costs of implementing new recycling facilities and programs.
- **Inflation Reduction Act ("IRA")** – enhances or creates numerous tax incentives for clean energy and manufacturing, including for clean energy production, clean vehicles, etc. – many of which are expected to increase rates of production and deployment of solar PV and battery storage equipment. Greater deployment of this equipment will eventually mean greater volumes of waste as equipment reaches EOL.

### **State Policies**

- **Comprehensive Materials Management Strategy ("CMMS") (CGS 22a-241a)** - EOL management of solar PV panels and battery storage systems align with CMMS objectives to reduce disposal and increase recycling of complex waste streams.

- **E-Waste Recycling (P.A. 07-189)**– Connecticut has had an electronic waste (“e-waste”) recycling policy since 2007, which covers residential televisions, monitors, printers and computers under an extended producer responsibility (“EPR”) model (see Section E for more information on EPR). Under the provisions of this law, manufacturers of such devices must register with the DEEP and pay approved recyclers to collect, transport and process these devices from municipalities. In turn, municipalities collect the specified devices from residents through transfer stations or other collection events. Recyclers sort the computers and monitors by manufacturer and submit a bill to the responsible manufacturer for the cost of transporting and recycling devices with the manufacturer's brand name on them. Television manufacturers pay a percentage of the total cost of recycling televisions equivalent to their market share.

In addition to the EPR policy itself, since 2011 Connecticut has banned the disposal of devices covered under the e-waste law at any Connecticut solid waste facility; rather, they must be recycled. Note that there are currently no landfills in Connecticut accepting MSW.

For additional Connecticut policies concerning general MSW, see Policy under Expand & Scale Organic Waste Management section below.

## Market Potential

Connecticut's deployment of solar and storage technologies has grown rapidly, with projections indicating continued expansion. Understanding the market potential for deployment of these technologies – and hence, for their eventual end-of-life and subsequent entry into the waste/recycling stream – is crucial for developing a sustainable waste management strategy.

### Market Sizing

Connecticut has deployed solar and storage technologies through a variety of programs:

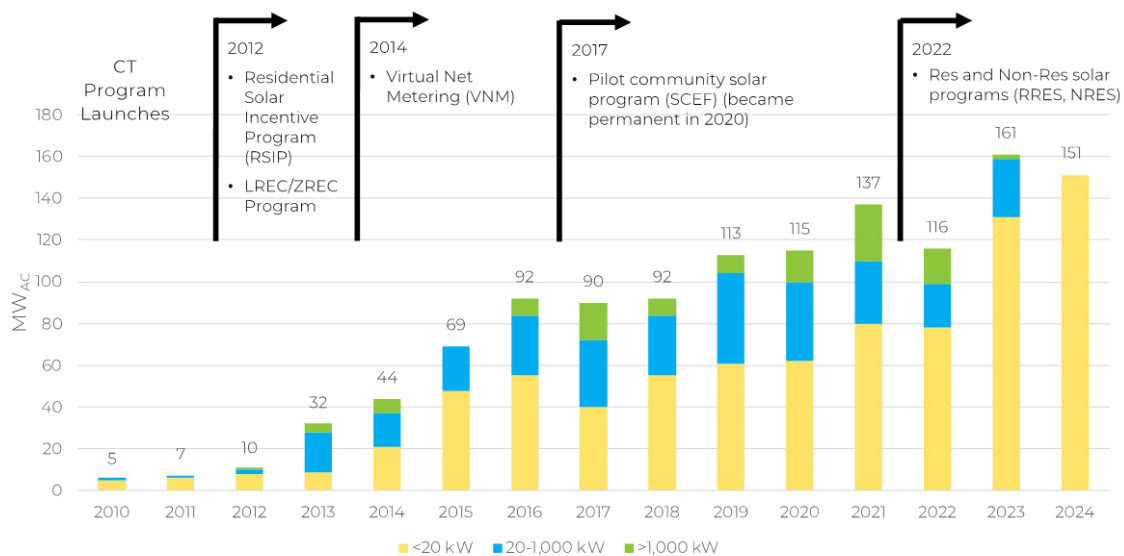
**Table 2 - State-Administered Solar Programs**

Program	1 <sup>st</sup> Yr of Program	Program Size	MW <sub>AC</sub> deployed as of early 2023 <sup>1</sup>	Approximate # of Panels <sup>2</sup>
Pre-SHREC RECs	2011	47 MW <sub>AC</sub> in total	47	190,000
Residential Solar Investment Program (RSIP)	2011	330 MW <sub>AC</sub> in total	330	1,430,000
Residential Renewable Energy Solutions (RRES) Program	2022	Target of 50-60 MW <sub>AC</sub> /year	161	634,000
Low Emission / Zero Emission Renewable Energy Credit Program (LREC/ZREC)	2012	349 MW <sub>AC</sub> of solar thus far	349	1,376,000
Virtual Net Metering Program (VNM)	2014	77 MW <sub>AC</sub> of solar thus far	77	305,000

Shared Community Energy Facilities (SCEF) Program	Pilot 2017 Permanent 2020	Max procurement of 25 MW <sub>AC</sub> /year	3	12,000
Non-Residential Renewable Energy Solutions (NRES) Program	2022	6 year program x 60 MW <sub>AC</sub> /year	2	6,000
		<b>Total</b>	<b>922</b>	<b>3,763,000</b>

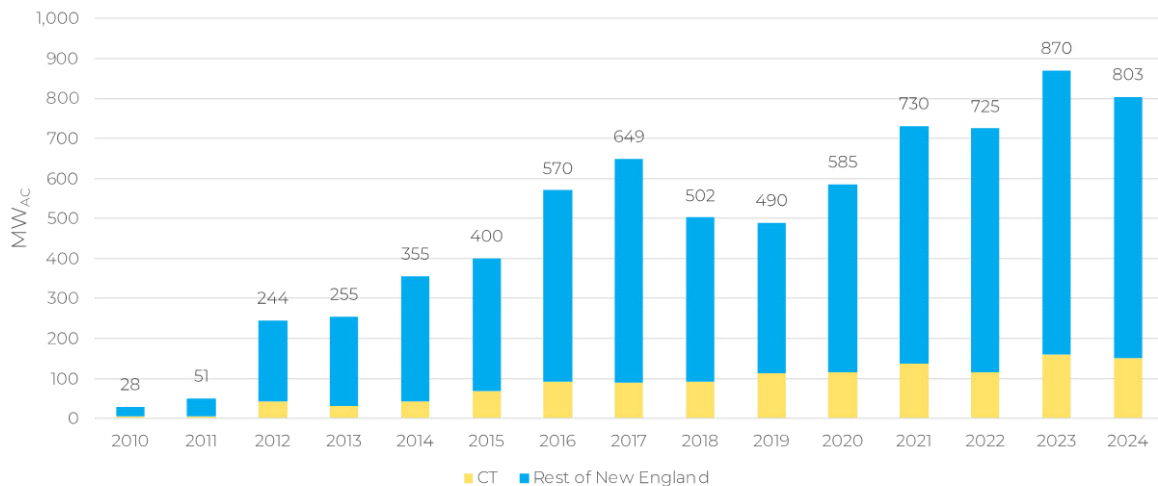
**Table 3 - State-Administered Energy Storage Programs**

Program	1 <sup>st</sup> Yr of Program	Program Size
Energy Storage Solutions (Residential & Commercial)	2022	1 GW of energy storage by the end of 2030 (includes utility scale) Interim targets of 300 MW of storage by the end of 2024 and 650 MW by the end of 2027.
ConnectedSolutions Demand Response (Residential & Commercial)	2020	11,041 kW total enrolled residential capacity 950 kW total enrolled C&I capacity



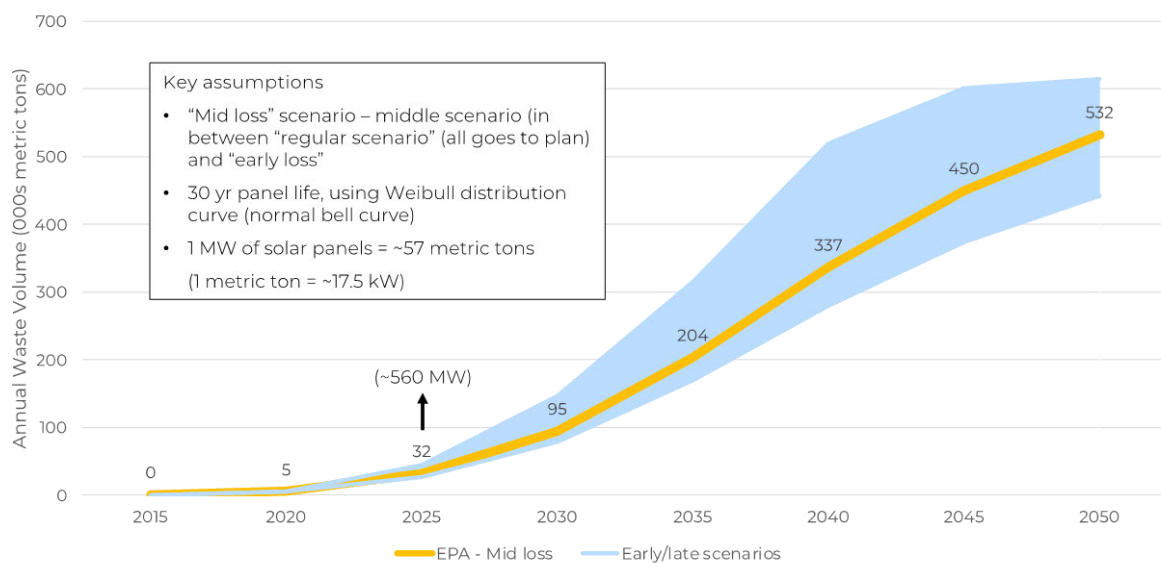
**Figure 2: Solar Installations in CT, 2010-2024 (MW<sub>ac</sub>).** Note that as of July 2024, installed storage projects totaled 1.8 MW of residential and 0.4 MW of commercial. Source: ISO-New England 2024 Final PV Forecast, Eversource

However, when discussing solar and storage waste, it is important to consider the regional and national volumes that will be generated, as solutions will likely benefit from a regional approach.



**Figure 3: Solar Installations in New England, 2010-2024 (MW<sub>AC</sub>).** *Source: ISO-New England 2024 Final PV Forecast*

Combining these trends with the average life expectancy for solar panels and storage, it is possible to estimate at what point Connecticut may start to see high volumes of solar and storage waste – see Figure 3. It should be noted that, at present, the estimated life expectancy of these technologies is not definitively characterized, and that different industry stakeholders have widely differing views as to reasonable life expectancies.

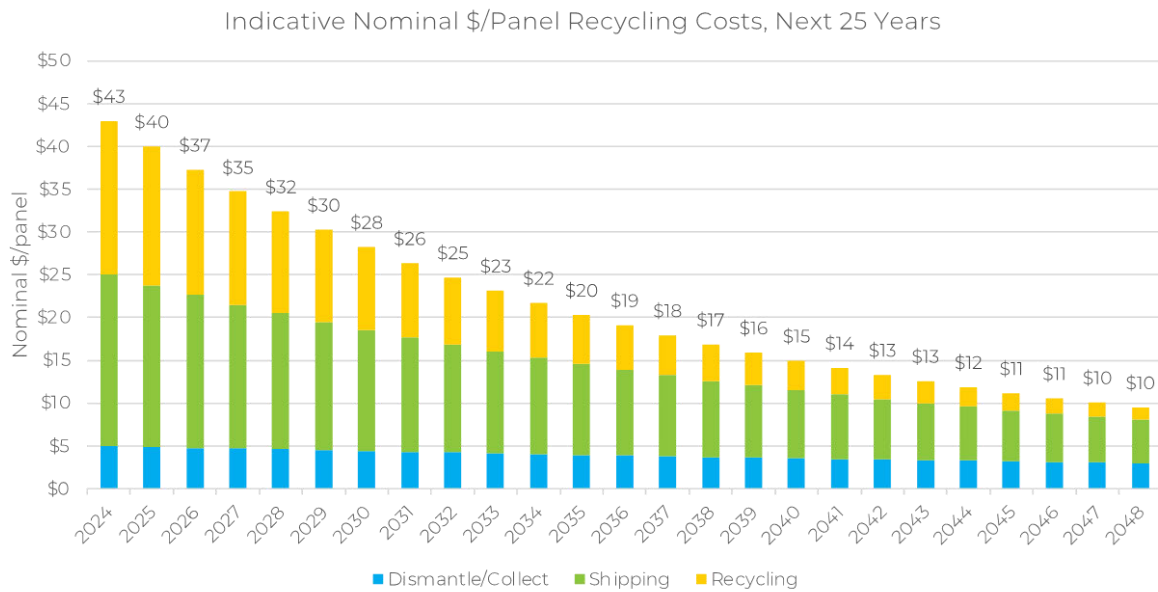


**Figure 4: US Annual PV Waste Volume Forecast.** *Source: US EPA, 2023; "early/late" scenarios are Power Advisory rough estimates*

### Economic Considerations

Today, the economic value derived from recycling solar panels means that the market for recycling is in an early stage of development; as costs come down, the economics and uptake of solar panel recycling are expected to improve considerably. However, currently, the costs associated with the dismantling, transporting, and recycling solar panels often exceed the value of the materials recovered, such as aluminum, glass, and semiconductors. This negative economic balance – where recycling costs outstrip material resale value – can make private sector investment in solar panel recycling infrastructure more challenging. Consequently, many solar panels risk ending up in landfills rather than being recycled, especially where (as is the case in Connecticut) there is no legal impediment to landfill

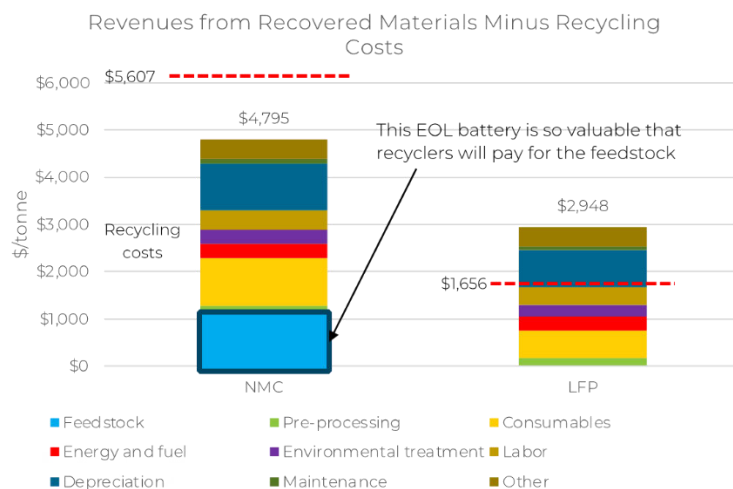
disposal once a panel can be demonstrated to be non-toxic. In contrast, the economics of battery recycling present a more promising landscape.



**Figure 5: Indicative Pricing of Solar Panels – Commercial Scale Systems.** *Source: Power Advisory estimates based on stakeholder feedback*

In contrast to solar panels, lithium-ion batteries, particularly those used in energy storage systems, contain valuable materials such as lithium, cobalt, nickel, and manganese. These materials have a high market value and are in increasing demand, especially as the electric vehicle (EV) and renewable energy sectors expand. The substantial market interest in reclaiming these materials has led to the development of profitable recycling processes and a growing private market for battery recycling. In addition, manufacturers of stationary batteries (and EV batteries, which can be repurposed for stationary use) have expressed clear interest in recovering used batteries for refurbishment and recycling, given the value of the materials contained therein. Companies are incentivized to invest in battery recycling technologies, as the reclamation of these materials not only offsets the recycling costs but can also generate significant profits, making the economics of battery recycling far more favorable than that of solar panels.





**Figure 6: Indicative Economics of Batteries.** *Source: Circular Energy Storage*

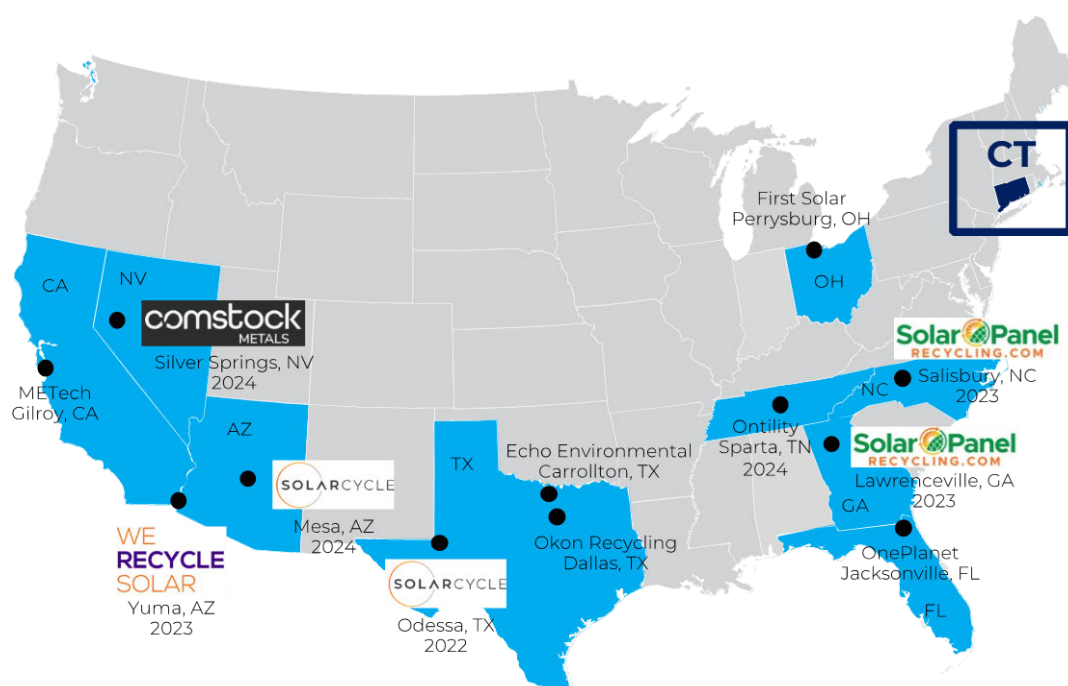
### Solar PV and Battery Storage Removal Options

When solar panels and batteries begin experiencing reduced output or functionality and approach the end of their useful life, there are several options for managing the equipment: reuse, landfilling, or recycling. Each of these options has distinct implications for the environment, economics, and the sustainability of renewable energy technologies.

1. **Reuse** – involves refurbishing and redeploying solar panels and batteries that are still functional but have been removed from service for various reasons, such as system upgrades or repowering. Reusing equipment extends its lifespan and delays the need for recycling or disposal, which can provide significant environmental and economic benefits. For example, solar panels removed from one site might be installed in another location where lower efficiency is acceptable, such as in off-grid or developing regions. Similarly, batteries that still have some useful capacity might be repurposed for less demanding applications. The secondary market for reused equipment is growing, particularly for solar panels, as more systems reach the end of their initial deployment. However, the success of reuse depends on the condition of the equipment and the availability of markets for second-hand products. Given that some Connecticut program rules restrict the use of used/refurbished equipment, the Green Bank and the state of Connecticut have opportunities to consider how, if at all, solar panels and batteries can be reused for energy generation/storage purposes within the state, as well as what the appropriate role of the Green Bank might be in making that determination.
2. **Landfilling** – is the least desirable option for managing EOL solar panels and batteries, as it can pose significant environmental risks; for example, certain types of solar panels, such as cadmium telluride (CdTe) panels, can release hazardous substances like cadmium, which may leach into the soil and groundwater if not properly managed. Similarly, improperly landfilled batteries can release toxic chemicals and pose fire risks due to the potential for thermal runaway. While landfilling is often the most cost-effective option in the short term, it fails to recover valuable materials and contributes to environmental degradation. The eventual goal is to minimize the reliance on landfills as the end point for renewable energy

technologies, in favor of more circular economic models that emphasize resource recovery and environmental protection.

3. **Recycling** – is the most environmentally responsible option for managing EOL solar panels and batteries. In the recycling process, valuable materials such as glass, aluminum, and semiconductor materials from solar panels, as well as lithium, cobalt, nickel, and manganese from batteries, are extracted and processed for reuse in new products. Recycling helps to reduce the need for virgin materials, conserving natural resources and minimizing environmental impacts. However, the current economics of solar panel recycling are challenging, as the costs (both for transportation to recycling facilities and the recycling process itself) often outweigh the value of the recovered materials. Despite these challenges, recycling is crucial for creating a sustainable lifecycle for renewable energy technologies and is expected to become more viable as technology advances and economies of scale are achieved. In contrast, battery recycling is more economically favorable, driven by the high value of the reclaimed materials, which are in demand for new batteries and other technologies.



**Figure 7: Select Solar Panel Recycling Facilities**

#### Environmental Impacts of Solar and Storage Waste

The environmental impacts of improperly managed solar and battery waste are substantial and must be carefully mitigated through effective recycling and disposal strategies.

- **Solar Panels:** Solar panels, particularly those containing cadmium, can pose significant environmental risks if not properly managed. The leaching of toxic substances into the soil and groundwater is a primary concern, especially if panels are disposed of in landfills. The smelting process, one of the primary methods for recycling solar panels, produces slag, which can either be reused in industrial applications or, if improperly managed, contribute to environmental degradation.

- **Batteries:** Lithium-ion batteries, commonly used in energy storage systems, present unique challenges. These batteries contain valuable materials like cobalt, nickel, and lithium, which can be recovered through recycling. However, improper disposal can lead to contamination, fire risks, and the loss of these critical resources. Advanced recycling techniques, such as hydrometallurgy, offer more environmentally friendly alternatives to traditional methods like pyrometallurgy, which are less efficient and have higher environmental impacts.

The environmental impacts of solar and battery waste extend beyond direct contamination. The energy consumption, emissions, and material loss associated with the recycling processes themselves must also be considered. For instance, hydrometallurgy is favored for its lower environmental footprint compared to pyrometallurgy, but it requires careful management of chemical waste. Additionally, the disposal of "black blob" slag from smelting processes can either minimize or exacerbate environmental harm, depending on how it is managed.

## Targets

As aforementioned, Connecticut's CMMS established a 60% waste diversion target by 2024, emphasizing a holistic approach to sustainable materials management. While there are no specific targets for the EOL management of solar PV panels and battery storage systems, these materials align with broader CMMS objectives to reduce disposal and increase recycling of complex waste streams.<sup>16</sup>

## Funding and Financing Programs

While there are numerous state and federal programs designed to support the deployment of solar PV and battery storage systems, there are few programs that specifically address this equipment at EOL.

- **Bipartisan Infrastructure Law ("BIL")** – Federal funding opportunities, such as those provided by the DOE under the BIL, can support Connecticut's recycling infrastructure. These funds could be used to establish new recycling facilities or upgrade existing ones, ensuring that Connecticut can manage the EOL materials generated by its growing solar and storage sectors. For example, the DOE's Advanced Energy Manufacturing and Recycling Grant Program offers \$750 million to re-equip, expand, or establish facilities dedicated to recycling solar equipment.

For insight on potential sources of financing, see Funding and Financing Programs under Expand & Scale Organic Waste Management section below.

## Other Programs

The following are other programs or coalitions of note with respect to solar and PV battery storage:

- **National PV Recycling Program** – A network of recycling and refurbishment providers founded in 2016 by the Solar Energy Industries Association ("SEIA") with EOL management services for solar and storage installers, project and system

---

<sup>16</sup> Connecticut DEEP, *Comprehensive Materials Management Strategy (CMMS)*, 7.

owners, developers, distributors and other parties. Participants can repair, refurbish, resell, and recycle PV modules, inverters and other equipment.

## **Stakeholder Outreach: End-of-life Working Group**

The End-of-Life Working Group ("EOL Working Group") was formed in response to the PURA directive to develop a proactive approach to managing solar and battery waste. The group included representatives from DEEP, electric distribution companies ("EDCs"), solar developers, battery manufacturers, and recycling firms. The working group was convened to allow the Green Bank and its consultant, Power Advisory, to gather comprehensive insights into the challenges and opportunities associated with the disposal and recycling of solar panels and batteries. The EOL Working Group held five monthly meetings from March to July 2024, which were designed to facilitate open dialogue among stakeholders, allowing identification of key issues and development of potential policy recommendations. The meetings also served as a platform for stakeholders to present their perspectives on existing practices, regulatory gaps, and the economic implications of various EOL management strategies.

In addition to these group meetings, Power Advisory conducted sixteen one-on-one interviews with key industry and government stakeholders. These interviews provided a more in-depth understanding of specific concerns and priorities. Industry stakeholders, including original equipment manufacturers ("OEMs"), developers, and recyclers, were asked about their current and future plans for managing EOL panels and batteries, the economics of recycling, market readiness, and the environmental impacts of different disposal options. Government stakeholders, including state and federal agencies, were interviewed to gain insights into their jurisdiction's existing policies and their experience in developing and implementing new recycling regulations. The input from these interviews was invaluable in shaping the working group's recommendations, ensuring that they were grounded in practical experience and aligned with both industry capabilities and environmental goals.

Overall, these meetings and interviews played a critical role in building a shared understanding among stakeholders and laying the groundwork for Power Advisory's recommended framework for EOL management of solar and battery technologies in Connecticut. The collaborative nature of these discussions helped to identify common goals, potential challenges, and areas where further research or policy development is needed.

### **Diverse Opinions**

Throughout the EOL Working Group process, stakeholders expressed a wide range of opinions on the best approaches to managing the disposal and recycling of solar panels and batteries. This diversity of perspectives underscored the complexity of the issue, and the challenges involved in developing a cohesive strategy that meets the needs of all parties.

A key area of discussion revolved around the costs of recycling versus the value of recovered materials. While some stakeholders emphasized the long-term environmental benefits and the need for robust recycling infrastructure, many industry participants highlighted the current economic realities. Solar panel manufacturers and developers pointed out that the costs associated with recycling, such as transportation and recycling often outweigh the value of the materials recovered, making it difficult to justify large-scale investment in recycling facilities without significant policy incentives or subsidies. They

expressed concerns that mandating recycling could impose additional financial burdens on the industry, potentially stifling innovation and growth.

In contrast, there was more consensus around the recycling of batteries, driven by the substantial market value of reclaimed materials like lithium, cobalt, and nickel. Battery manufacturers and recyclers were generally more optimistic about the economic prospects of battery recycling and supported the development of policies that would facilitate the growth of this market. However, opinions varied on the necessity of government involvement in setting or mandating recycling policy. Some industry players advocated for a market-driven approach, arguing that the high value of battery materials would naturally lead to the development of a robust recycling market without the need for heavy-handed regulation. Others suggested that formal policymaking, for example by instituting an EPR framework, would be necessary to ensure that all batteries are properly recycled and that environmental impacts are minimized. Overall, Connecticut will need to evaluate the tradeoffs of requiring EPR for battery energy storage systems versus relying on market-based solutions, both in terms of the current landscape for battery recycling and with reference to the state's experience with existing (and other proposed-but-not-implemented) EPR policies.

Stakeholders also differed in their views on the timing and urgency of implementing new policies. Environmental groups and some government representatives advocated for immediate action, citing the growing volume of solar panels and batteries reaching the end of their life and the environmental risks associated with improper disposal. In contrast, some industry participants favored a more cautious, phased approach, arguing that the market for recycling these technologies is still emerging and that premature regulation could have unintended consequences.

## **Recommendations**

In developing the Report, Power Advisory identified three primary waste management strategies:

- **Extended Producer Responsibility ("EPR"):** EPR is a policy approach that places the responsibility for EOL management of products on its manufacturers. Under EPR, manufacturers are accountable for the collection, recycling, and disposal of a given product. This framework encourages manufacturers to design products that are easier to recycle and have a lower environmental impact.
- **Advanced Fee Administration ("AFA"):** AFA involves collecting a fee at the point of sale to fund future recycling efforts. This fee ensures that adequate resources are available for the proper disposal and recycling of equipment at the end of its life cycle. This method provides a sustainable funding source and promotes responsible EOL management without imposing a significant financial burden on end-users at the time of disposal.
- **Decommissioning Bonds:** Decommissioning bonds are financial instruments that project owners must secure to cover the costs of decommissioning project sites at the end of their operational life. These bonds ensure that funds are available to properly dismantle (and ideally recycle) systems and remediate project lands, preventing them from becoming a burden on local communities or the environment.

This approach aligns the financial responsibility with the project owners and promotes sustainable practices.

The EOL Working Group included many different types of stakeholders with nuanced and divergent opinions as to the best path forward. Based on this feedback and informed by successes in other states, Power Advisory's report includes the following high-level recommendations:

**Table 4 - End-of-Life Management Framework Recommendations**

Infrastructure Type	End-of-Life Management Framework		
	Extended Producer Responsibility	Advanced Fee Administration	Decommissioning Bond
Solar – residential-scale		X	
Solar – commercial-scale			X
Battery Storage – residential-scale	X		
Battery Storage – commercial-scale	X		

## Findings

The EOL Working Group's efforts have yielded several important findings that will guide Connecticut's approach to managing solar and battery waste.

- **Connecticut as a Policy Leader:** Connecticut is positioned to be a leader in solar and battery waste management, with few states having developed comprehensive strategies for these materials. By taking a proactive approach, Connecticut can set an example for other states to follow. The EOL Working Group also identified the risk of being an early mover in this space. While Connecticut's leadership position offers many advantages, it also comes with the challenge of navigating uncharted territory; regional coordination could alleviate some of these risks. Stakeholders expressed concerns about the potential costs and logistical challenges associated with implementing comprehensive recycling policies, particularly in the absence of national standards.
- **Divergent Views Persist:** Despite the progress made, stakeholders remain divided on the optimal policy approach. This reflects the complexity of the issue and the early stage of the market's development.
- **Current Market Status:** The market for recycling solar panels and batteries in Connecticut is still emerging. While there is increasing recognition of the need for effective EOL management, the infrastructure and policies required to support these activities are not yet fully established.

## Opportunities

- **Role of the Green Bank in Facilitating Recycling Solutions:** The Green Bank has the potential to play a key role in establishing recycling facilities in the Northeast by exploring partnerships, co-investments, or incentives. Supporting the development of a local facility – whether an entirely new one or a dedicated recycling line within an existing facility – could significantly reduce logistics costs and provide an accessible solution for recycling solar panels and batteries. Additionally, the Green Bank could assist these facilities in navigating permitting and regulatory processes.
- **Enhancing Collection and Shipping Logistics:** There is an opportunity to strengthen the recycling supply chain by supporting logistics solutions that include backhauling. This would optimize the use of transportation resources and potentially involve landfills or transfer stations as consolidation points, reducing overall recycling costs.
- **Ongoing Task Force Engagement and Stakeholder Coordination:** Establishing a task force or small dedicated team within the Green Bank could support continuous involvement in solar and battery recycling developments. Regular meetings would help refine strategies, monitor policy shifts, and stay aligned with regional efforts. This task force could work on:
  - **Regional Collaboration:** Engage with stakeholders such as DEEP, neighboring states, and organizations like SEIA to foster regional solutions for recycling. Collective action and consistency in policies across the region would strengthen the overall recycling ecosystem.
  - **Due Diligence and Market Research:** Continue gathering information on market dynamics such as pricing, logistics, and cost structures. Research could include field visits to recycling facilities, meeting with investors, and reviewing supply chain dynamics to better inform the Green Bank's potential investment priorities.
- **Supporting Policy Advancement and Market Development:** The Green Bank can advance recycling policy by supporting or potentially leading a task force at the legislative level. Additionally, conducting a survey of existing and new solar installers and OEMs involved in energy storage could provide insights into their recycling plans, helping shape the Green Bank's strategy.
- **Preparing for Potential Capital Solutions Investment:** Conducting further market analysis will be essential in assessing investment opportunities. Understanding facility costs, profit margins, and operational needs will provide a foundation for a potential capital solutions investment, aligning with the Green Bank's objective of fostering sustainable recycling infrastructure.



# Expand & Scale Organic Waste Management

## Overview

The overarching policy framework for managing MSW in Connecticut is provided by the 2016 CMMS. The policy has three objectives: 1) to improve municipal recycling programs, reduce waste, and increase participation, 2) to develop and improve recycling and waste conversion technologies, and 3) to encourage organizations in EPR obligations. Through these objectives, the policy aims to achieve three goals: 1) reduce MSW by 10%, 2) increase the recycling rate from 35% to 45%, and 3) divert 300,000 tons of organic waste annually. The long-term goal is to divert 60% MSW by 2024 which is codified in Connecticut General Statute Section 22a-241a.<sup>17</sup>

Due to the closure of MIRA, which reduced the state's capacity to manage MSW by nearly 40%, CMMS released a draft<sup>18</sup> amended in 2023 to restore self-sufficiency in managing MSW through accelerated diversion solutions and investments in disposal infrastructure. The amendment recommends legislation for an EPR program and implementation of organic reuse and diversion strategies to reduce the self-sufficiency deficit from -860,000 to -485,000 tons per year. For the remaining 485,000 annual tons, DEEP aims to build additional disposal infrastructure for which it issued an RFI in February of 2023 and received 19 responses from individuals and organizations.

Though Connecticut has the potential to aerobically compost, anaerobically digest, or otherwise recycle up to 41% or 1.49 million tons of suitable organic MSW, only a fraction of that material was diverted in 2022 (nearly 326,000 tons)<sup>19</sup>, indicating greater potential for scaling up solutions to organic waste management.

## Key Public Policies

### **Federal Public Policies**

At the federal level, the EPA, the US Department of Agriculture ("USDA"), and the US Food and Drug Administration ("FDA") are the three main institutions that formulate policies and programs for food systems. The three agencies signed a formal interagency agreement to coordinate and cooperate on efforts to address food loss and waste in 2018, detailed below.

- **National Strategy for Reducing Food Loss and Waste and Recycling Organics** – In June 2024, the USDA released the National Strategy for Reducing Food Loss and Waste and Recycling Organics to support EPA's goal of reducing food loss and waste by 50% by 2030 and its own Climate Smart Agriculture and Forestry Strategy and US Methane Emissions Reduction Plan. Following the EPA food waste hierarchy, the four objectives of the strategy are to 1) prevent food loss, 2) prevent food waste, 3) increase recycling rate of all organics, and 4) support policies to incentivize and encourage the achievement of the first three objectives. Recognizing the challenges in food waste diversion, such as limited awareness, poor infrastructure, and small organics recycling market, the document goes on to identify specific strategies for each objective.

---

<sup>17</sup> Conn. Gen. Stat. § 22a-241a.

<sup>18</sup> Connecticut DEEP, *Comprehensive Materials Management Strategy (CMMS) Amendment*, 2023.

<sup>19</sup> Connecticut DEEP, *Solid Waste Disposal & Diversion Report*, 2022, 15.

- **National Recycling Strategy** – Released in 2020, the National Recycling Strategy aims to create a more robust and cost-effective MSW recycling system to achieve the national goal of 50% recycling rate by 2030. It is one part of a larger effort of EPA to build a circular economy. The strategy does not address food waste directly.
- **Federal Interagency Collaboration to Reduce Food Loss and Waste (FIFLAW) Agreement** – EPA, FDA, and USDA signed an interagency agreement to coordinate and communicate their strategies towards reducing food loss and waste by adopting a whole-of-government approach with the ultimate target of 50% recycling rate. First formed in 2018, it has been renewed twice since then, once in December 2020 and once in May 2024. In the latest renewal, the US Agency for International Development (USAID) also joined the alliance to increase the reach to a wider group of international stakeholders. The National Strategy for Reducing Food Loss and Waste and Recycling Organics is a direct outcome of this interagency agreement.
- **ReFED Food Waste Roadmap to 2030**<sup>20</sup> – In collaboration with the Interagency Agreement, ReFED, a national nonprofit working on food waste solutions, has designed a roadmap to 2030 to achieve a 50% recycling rate across the country. The roadmap identifies key areas of action across prevention, rescue, and recycling strategies and provides a set of recommended solutions along with their estimated net benefits (i.e. tons of food waste diverted and GHG emissions avoided). The recommended solutions and associated metrics have informed the Green Bank's organic waste and recycling strategy and can be accessed on ReFED's "Insights Engine."<sup>21</sup>

## **State Public Policies**

All policies and programs related to solid waste management in Connecticut derive their authority from Chapter 446d in Title 22a of Volume 8 of the General Statutes of Connecticut, which outlines the regulations for the sector.<sup>22</sup> Some of the key policies and bills in the statute are listed below. This list is not exhaustive but rather represents the key policies and bills that contained targets or actionable items related to organic waste.

- **Comprehensive Materials Management Strategy ("CMMS") (CGS 22a-241a)**<sup>23</sup> – To expand on the targets detailed above, the first 2016 CMMS target aims for the reuse, recycling, and composting of 1.46 million tons of materials and the second target aims to divert 300,000 tons of waste towards waste conversion processes, including anaerobic digestion, that would otherwise be disposed in traditional waste-to-energy or landfill.<sup>24</sup>

<sup>20</sup> ReFED, *Roadmap to 2030: Reducing U.S. Food Waste* and the ReFED Insights Engine (New York: ReFED, 2021), [https://refed.org/uploads/refed\\_roadmap2030-FINAL.pdf](https://refed.org/uploads/refed_roadmap2030-FINAL.pdf).

<sup>21</sup> ReFED, *Insights Engine*, <https://insights.refed.org/>.

<sup>22</sup> Connecticut General Statutes, Chapter 446d, § 22a (2023), [https://www.cga.ct.gov/2021/pub/chap\\_446d.htm](https://www.cga.ct.gov/2021/pub/chap_446d.htm).

<sup>23</sup> Conn. Gen. Stat. § 22a-241a.

<sup>24</sup> Connecticut DEEP, *Comprehensive Materials Management Strategy (CMMS)*, 7.

- **Commercial Organics Recycling Law (CGS Sec. 22a-226e)**<sup>25</sup> – The Commercial Organics Recycling Law requires large-scale commercial establishment, defined as those establishments generating more than 26 tons of source-separated organic material, to keep separate other solid waste and ensure that the organic material is recycled at a DEEP-authorized composting or clean waste-to-energy facility. While there are no fines for failing to comply with the law, DEEP can seek enforcement in alignment with the Enforcement Response Policy. The quantity threshold under this law is determined by the rate at which organic waste is generated, not disposed. Establishments can meet compliance requirements through methods like food donation or on-site composting. However, any organic waste not diverted through these means must still be recycled at DEEP-authorized composting or clean waste-to-energy facilities. The facility is not required to be located within the state of Connecticut.

The law has tightened over time. First passed in 2014, the bill initially defined large commercial establishments as those that generate more than 104 tons per year which was reduced to 52 tons per year through an amendment in 2020 and then 26 tons per year in 2022. Prior to January 1, 2025, there was a 20-mile proximity requirement, meaning the law only applied to establishments within 20 miles of a DEEP-authorized composting or clean waste-to-energy facility, and the definition of commercial establishments was limited to commercial food wholesalers or distributors, industrial food manufacturers or processors, supermarkets, and resorts or conference centers. As of January 1, 2025, previously exempted institutions generating over 26 tons per year such as hospitals, public or independent institutions of higher education, and correctional facilities are now subject to the law. After March 1, 2025, all establishments subject to the law will newly be required to submit annual compliance reports to DEEP summarizing the entity's total edible food donated, the amount of food scraps recycled, and which organics recyclers and collectors were used. Beginning July 1, 2026, K-12 public and private schools will also be regulated.

- **Solid Waste Advisory Committee (“SWAC”)** – SWAC was created following the passing of the State Solid Waste Management Plan in 2006 to guide the implementation of the plan. The committee is meant to meet once every quarter to discuss progress and learnings from ongoing pilot programs, funding opportunities, and required legislative and policy support.
- **Executive Order 21-3 (A)**<sup>26</sup> – The order mandated that by 2024, to the extent practicable, all executive branch agency facilities shall implement an organic and food waste diversion program.

---

<sup>25</sup> Connecticut General Statutes § 22a-226e (2023), [https://www.cga.ct.gov/2021/pub/chap\\_446d.htm#sec\\_22a-226e](https://www.cga.ct.gov/2021/pub/chap_446d.htm#sec_22a-226e).

<sup>26</sup> Connecticut, *Executive Order No. 21-3(A)* (2021), <https://portal.ct.gov/-/media/office-of-the-governor/executive-orders/lamont-executive-orders/executive-order-no-21-3.pdf>.

- **Public Act 24-151 (House Bill 5524)**<sup>27</sup> – The 2024 Bond Bill directed up to \$10 million in bond proceeds to DEEP for solid waste reduction strategies. These funds are to be allocated to municipal food scrap diversion programs and a variety of other waste reduction and diversion initiatives in the state. The specific program or use of funds has not yet been determined.
- **Public Act 17-218 Section 5 (Senate Bill 943)**<sup>28</sup> – The act requires PURA to authorize \$3 million per year in virtual net metering credits for agricultural customers with anaerobic digestion facilities. PURA must use at least half of the \$3 million for anaerobic digestion facilities 1) located on dairy farms that aim to use 100% of the manure generated on the farm and 2) that complement the farm’s nutrient management plan. The act’s credits are in addition to the credits already allocated to agricultural customers under the law’s virtual net metering credit cap. In general, virtual net metering allows EDC customers to 1) receive retail-rate billing credits for excess power they generate with a renewable energy facility and 2) share the credits with their other designated electric accounts. The law limits virtual net metering to agricultural, municipal, and state agency customers. It also caps the total amount of virtual net metering credits available each year (PA 19-35 Section 7 increases the annual cap from \$10 million to \$20 million). The law further limits each eligible customer class (agricultural, municipal, and state) to 40% of the available credits. In 2013, the legislature established a process (similar to the one established by PA 19-35) for the DEEP commissioner to procure power from Class I hydropower, landfill methane gas, or biomass resources.
- **Public Act 17-144 Section 10 (House Bill 7036)**<sup>29</sup> – The act expanded DEEP’s energy procurement authority to also allow for Class I fuel cells, offshore wind, or anaerobic digestion facilities; energy storage systems; or any combination of them. The commissioner may procure up to 6% of the EDCs’ load (i.e. demand) through this procurement.
- **Public Act 18-50 Section 7 (Senate Bill 9)**<sup>30</sup> – The act requires the EDCs, DEEP, and PURA to establish new tariff-based programs for EDCs to purchase energy and RECs from low-emission, zero-emission, and shared clean energy facilities. Anaerobic digesters may qualify as eligible low-emission projects under the new programs, as

---

<sup>27</sup> Connecticut General Assembly, *House Bill No. 5524, Public Act No. 24-151: An Act Authorizing and Adjusting Bonds of the State and Concerning Provisions Related to State and Municipal Tax Administration, General Government and School Building Projects* (2024), <https://www.cga.ct.gov/2024/act/pa/pdf/2024PA-00151-R00HB-05524-PA.pdf>.

<sup>28</sup> Connecticut General Assembly, *Senate Bill No. 943, Public Act No. 17-218: An Act Concerning the Installation of Certain Solar Facilities on Productive Farmlands, Incentives for the Use of Anaerobic Digesters by Agricultural Customer Hosts, Applications Concerning the Use of Kelp in Certain Biofuels and the Permitting of Waste Conversion Facilities*, § 5 (2017), <https://www.cga.ct.gov/2017/act/pa/pdf/2017PA-00218-R00SB-00943-PA.pdf>.

<sup>29</sup> Connecticut General Assembly, *House Bill No. 7036, Public Act No. 17-144: An Act Promoting the Use of Fuel Cells for Electric Distribution System Benefits and Reliability and Amending Various Energy-Related Programs and Requirements*, § 10 (2018), <https://www.cga.ct.gov/2017/act/pa/pdf/2017PA-00144-R00HB-07036-PA.pdf>.

<sup>30</sup> Connecticut General Assembly, *Senate Bill No. 9, Public Act No. 18-50: An Act Concerning Connecticut’s Energy Future*, § 9 (2018), <https://www.cga.ct.gov/2018/act/pa/pdf/2018PA-00050-R00SB-00009-PA.pdf>.

long as they also meet various criteria required by the act (e.g., under two MW in size, built after November 7, 2019).

- **PURA Docket No. 19-07-04<sup>31</sup>** – In 2021, PURA approved a gas quality and interconnectedness standard for injecting renewable natural gas derived from organic waste sources into the state’s natural gas distribution system as a transition fuel, which could allow the state to decarbonize its fuel consumption.

## Market Potential

In 2015, food waste accounted for approximately 520,000 tons (22%) of Connecticut’s MSW (273,000 tons or 53% from residential and 247,000 tons or 47% from institutional, commercial, and industrial sources), the second highest source of waste generation after paper.<sup>32</sup> This figure has only grown from 2010, when food waste accounted for only 13.5% of MSW, and is the waste category with the most significant increase.<sup>33</sup> DEEP’s 2015 Statewide Waste Characterization Study showed the potential to divert up to 41.4%<sup>34</sup> of MSW generated across the state as compostable organics, including food waste, green waste, and compostable paper.<sup>35</sup> A high fraction of these compostable organics remain in disposed waste sent to landfills or to four in-state RRFs. As such, organic waste management solutions, especially food scrap diversion, have great potential to contribute toward the state’s 60% waste diversion target alongside other benefits.

Increased organic waste diversion represents a significant opportunity for GHG reduction. Landfills are one of the largest sources of methane emissions, with food waste accounting for nearly 60% of these emissions.<sup>36</sup> Unrecovered food waste also results in the wasted GHG emissions from the resources used to grow, process, transport, and cool or store food.

Further, local organic waste processing solutions can also reduce GHG emissions associated with avoided MSW transportation. The recent closure of the MIRA facility in July of 2022<sup>37</sup>

---

<sup>31</sup> Public Utilities Regulatory Authority, *Adoption of Gas Quality and Interconnection Standards for the Injection into the Natural Gas Distribution System of Conditioned Biogas Derived from Organic Material*, Docket No. 19-07-04 (New Britain, CT: Public Utilities Regulatory Authority, Ten Franklin Square), July 2019.

<sup>32</sup> Connecticut Department of Energy and Environmental Protection (DEEP), *Statewide Waste Characterization Study, 2015* (Hartford, CT: Connecticut DEEP, 2015), 3-1, [https://portal.ct.gov/-/media/deep/waste\\_management\\_and\\_disposal/solid\\_waste\\_management\\_plan/cmmsfinal2015mswc\\_haracterizationstudypdf.pdf?rev=e42fc570bb604483bb35c00e3dbca669&hash=61D61099597658DF0830E9B2CBA5C2F8](https://portal.ct.gov/-/media/deep/waste_management_and_disposal/solid_waste_management_plan/cmmsfinal2015mswc_haracterizationstudypdf.pdf?rev=e42fc570bb604483bb35c00e3dbca669&hash=61D61099597658DF0830E9B2CBA5C2F8).

<sup>33</sup> Connecticut DEEP, *Statewide Waste Characterization Study, 2015*, 3-2.

<sup>34</sup> It is important to note that this 41.4% figure for potential diversion includes compostable organics that are not easily source-separated due to difficulties with sorting or cross-contamination before and after disposal. For example, mixed food scraps may be irrecoverable when mingled with other non-recoverables, rendering them unsuitable for reuse and recycling in the absence of infrastructure or technologies that could segregate them. Such bottlenecks point to opportunities to improve sorting technology that separates recoverable waste and adequately minimizes contamination.

<sup>35</sup> Connecticut DEEP, *Statewide Waste Characterization Study, 2015*, 3-3.

<sup>36</sup> U.S. Environmental Protection Agency, *Quantifying Methane Emissions from Landfilled Food Waste* (Washington, DC: EPA, 2023), [https://www.epa.gov/system/files/documents/2023-10/food-waste-landfill-methane-10-8-23-final\\_508-compliant.pdf](https://www.epa.gov/system/files/documents/2023-10/food-waste-landfill-methane-10-8-23-final_508-compliant.pdf).

<sup>37</sup> MIRA’s closure represents an additional 720,000 tons of annual MSW processing capacity that Connecticut will need to replace.

led to Connecticut losing one-third of its capacity to process MSW and significant increase in exported waste, mainly to Pennsylvania and Ohio, representing additional GHG emissions related to transportation of that waste out of state, an estimated average of nearly 400 miles per ton<sup>38</sup> and approximately .65 Mtco2 per ton transported by freight truck.<sup>39</sup>

Municipalities in Connecticut are required by law<sup>40</sup> to provide pathways for solid waste disposal and recycling, often relying on tipping fees to cover costs. These fees reflect the cost of various pathways for disposing of waste at landfills, transfer stations, or RRFs,<sup>41</sup> and where applicable, diverting and processing recyclable or compostable materials. Funding for these expenses typically comes from property taxes, user fees, or other municipal revenue streams. Municipalities using unit-based pricing ("UBP") may reduce waste disposal costs by incentivizing households to generate less waste. Additional funding can come from transfer station permits or private hauling subscriptions.<sup>42</sup> Current municipal budget outlays represent a potential ability to pay for or save costs from reduced MSW and alternative waste solutions.

## Targets

Substantial scaling and investment are needed to increase organic waste diversion from 9.3% to 41%. Analogous to that outlined in Connecticut General Statutes (CGS) Section 22a-228(b), the EPA food waste management hierarchy provides an effective framework to reduce the environmental impact of the food waste sector. Investments in preferred solutions such as reducing and recycling, composting, and sustainable waste-to-energy conversion will lead to better management of food waste. The stated goals of the 2016 CMMS to reuse, recycle, and compost 1.46 million tons of material and divert 300,000 tons of food waste to more sustainable waste-to-energy technologies like anaerobic digestion already recognizes the importance of investments in these preferred solutions.

---

<sup>38</sup> Connecticut DEEP, *Solid Waste Disposal & Diversion Report, 2022*, 10.

<sup>39</sup> Per EDF carbon calculator for freight trucking

<sup>40</sup> Connecticut General Statutes § 22a-220(a) 2023, [https://www.cga.ct.gov/2021/pub/chap\\_446d.htm#sec\\_22a-220a](https://www.cga.ct.gov/2021/pub/chap_446d.htm#sec_22a-220a).

<sup>41</sup> DSM Environmental Services Inc., *Solid Waste Management and Municipal Finance*, prepared for the Connecticut Governor's Recycling Working Group (Hartford, CT: Connecticut Department of Energy and Environmental Protection, 2012), 2, [https://portal.ct.gov/-/media/deep/waste\\_management\\_and\\_disposal/solid\\_waste/transforming\\_matls\\_mgmt/gov\\_recycling\\_work\\_group/appendixd.pdf?rev=86bbad1e54ce4d77bb600e0e03677ae5&hash=E50BEEC5E2D8A1FF7DB55734581ECCB7](https://portal.ct.gov/-/media/deep/waste_management_and_disposal/solid_waste/transforming_matls_mgmt/gov_recycling_work_group/appendixd.pdf?rev=86bbad1e54ce4d77bb600e0e03677ae5&hash=E50BEEC5E2D8A1FF7DB55734581ECCB7).

<sup>42</sup> DSM Environmental Services, *Solid Waste Management and Municipal Finance*, 4.





## Wasted Food Scale

How to reduce the environmental impacts of wasted food

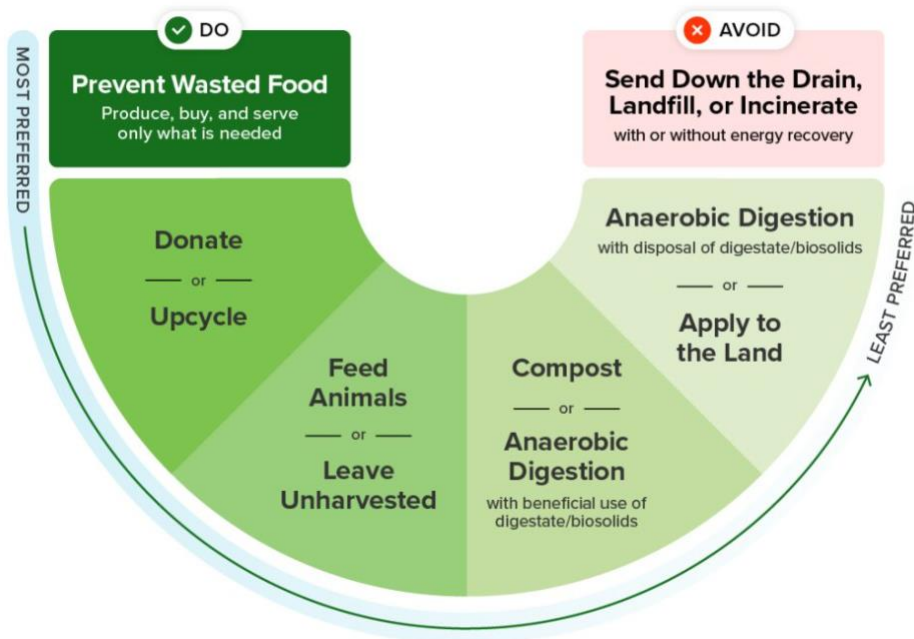


Figure 8: EPA Food Waste Hierarchy. Source: EPA

## Waste Management Hierarchy

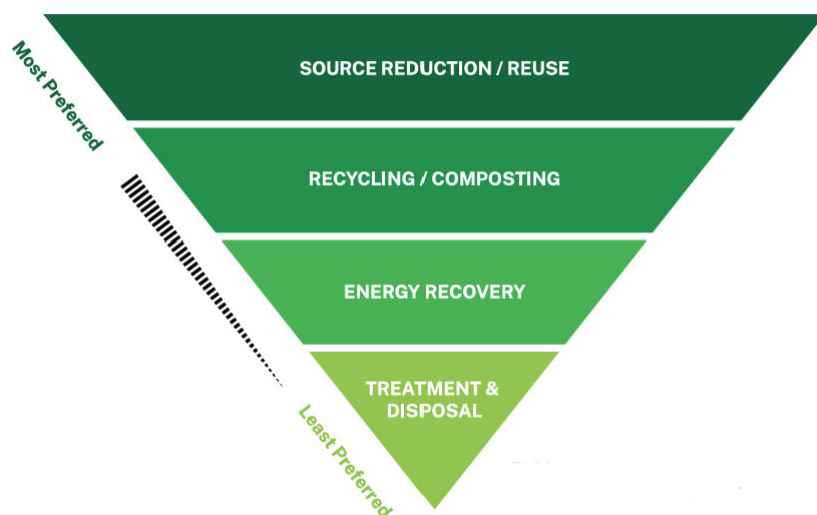


Figure 9: CT DEEP Waste Management Hierarchy established in Sec. 22a-228. Source: DEEP 2022 Solid Waste Disposal & Diversion Report.

ReFed, a leading national nonprofit focused on solutions to reduce food loss and waste, developed a "Roadmap to 2030" framework to reduce food waste in the US by 50% by 2030 as part of an interagency agreement between the USDA, EPA, and FDA. The framework's key action areas are well-aligned with CT DEEP's waste management hierarchy and 2016 CMMS food waste solutions framework as well as other state targets for materials management and organic waste diversion.





**Figure 10: Key Action Areas from "Roadmap to 2030: Reducing U.S. Food Waste." Reproduced with permission from ReFED.**

**Table 5: Key Action Areas Adapted from ReFED "Roadmap to 2030: Reducing U.S. Food Waste by 50%"**

Prevent	<b>Optimize the Harvest:</b> Avoid over-production, then harvest as much as possible. For wild caught products, source only what is needed.
	<b>Enhance Product Distribution:</b> Leverage technology to create smart systems that help efficiently move products to maximize freshness and selling time.
	<b>Refine Product Management:</b> Align purchases with sales as closely as possible and find secondary outlets for surplus. Build out systems and processes for optimal on-site handling.
	<b>Maximize Product Utilization:</b> Design facilities, operations, and menus to use as much of each product as possible. Upcycle surplus and byproducts into food products.
	<b>Reshape Consumer Environments:</b> Drive consumers towards better food management and less waste by creating shopping, cooking, and eating environments that promote those behaviors. Shift culture to place more value on food and reduce waste.
Rescue	<b>Strengthen Food Rescue:</b> Further the rescue of high-quality, nutritious food by increasing capacity, addressing bottlenecks, and improving communication flow.
Recycle	<b>Recycle Anything Remaining:</b> Find the highest and best use for any remaining food or food scraps in order to capture nutrients, energy, or other residual value.

- **Key Action Areas for Preventing Organic Waste:** Preventing organic food waste can include production or harvest management approaches and other solutions which are technology-oriented or induce behavioral change. They include both system level changes as well as incremental improvements to existing systems. For example, irregular produce, or produce which does not conform to conventional commercial color, shape, or size, is a substantial source of food waste and in recent years has compelled several businesses to capture the beneficial use of this produce (e.g. Imperfect Product, Misfits Market, etc.).
- **Key Action Areas for Strengthening Food Waste Rescue:** This includes solutions that prevent high-quality food from going to waste and instead divert it for donations. Solutions in this focus area typically include strengthening the operations

of organizations involved in collection of food that may not be appropriate for sale but remains safe for donation and consumption. This can include improving compliance with food donation laws, improving infrastructure facilities like transportation and cold-storage facilities, technology to support rescue operations, and other approaches.

- **Key Action Areas for Increasing Organic Waste Infrastructure:** This includes solutions which allow to recycle food to capture the nutrients, energy or any other residual value. The solutions in this focus area can include anything from home composting to centralized infrastructure (e.g. commercial aerobic composting and anaerobic digestion facilities).

## Funding and Financing Programs

The following is a breakdown of the funding (i.e., grant) programs as of January 15, 2025, in support of organic waste management in Connecticut, including, but not limited to:

- **Clean Heavy-Duty Vehicles Grant Program** – Under the IRA, the EPA-administered 2024 Clean Heavy-Duty Vehicles Grant program will award up to \$932 million in funding to replace existing non-zero emission Class 6 and 7 heavy-duty vehicles with eligible Class 6 and 7 zero-emission vehicles. Communities living in areas that do not comply with the National Ambient Quality Standards will receive at least \$400 million in funding. This grant can be used to electrify and decarbonize fleets of waste collection trucks. Other eligible costs cover general zero-emission vehicle refueling infrastructure, workforce development and training, and project implementation.
- **Climate Pollution Reduction Grant Program** – Under the IRA, the EPA-administered grant provides nearly \$5 billion in funding for states, local governments, tribes, and territories to reduce greenhouse gas emissions and other harmful air pollution, including through sustainable waste management strategies. The two-phase program will allocate \$250 million for non-competitive planning grants and \$4.6 billion for competitive implementation grants. The former's grantees must develop both a Comprehensive Climate Action Plan (CCAP) and Priority Climate Action Plan (PCAP) that detail measures to reduce GHG emissions across six key sectors, notably including waste management in addition to electricity generation, industry, transportation, buildings, and agriculture/natural and working lands, and waste management); the latter's represent lead organizations from the planning stage, as well as other federal agencies, state departments, municipalities, Tribes, and related entities for follow-through on implementing identified measures in an applicable PCAP.
- **Composting and Food Waste Reduction Cooperative Agreements ("CFWR")** –Through a partnership between the USDA's Office of Urban Agriculture and Innovative Production ("OUIAP") and the National Institute of Food and Agriculture ("NIFA"), CFWR agreements enable projects to assist eligible entities with testing and implementing municipal compost and food waste reduction programs. Eligible entities include but are not limited to municipalities, Tribes, RWAs, and school districts. Successful CFWR projects deliver economic benefits, improve compost

accessibility to farmers, strengthen food recovery efforts, and center strategic partnerships. Awardees must commit a 25% matching contribution to satisfy the statutory requirement.

- **Consumer Recycling Education and Outreach Grant Program** – This EPA grant provides funding to increase awareness about community recycling and composting, acceptable materials for recycling and composting, increasing collection rates, and decreasing contamination. The BIL has provided \$75 million throughout fiscal years 2022 to 2026 with awards ranging from \$250,000 to \$2 million. As of early 2025, the EPA has announced 25 tribal and inter-tribal groups to receive more than \$33 million in funding through this program. 40% of the announced funding was dedicated to disadvantaged communities and at least 20% was dedicated to low income, rural, and Native American communities. Grants are available to states, Tribes, territories, local governments, nonprofits, and public-private partnerships.
- **DECD Community Investment Fund 2030 (CGS Sec. 32-285a)**<sup>43</sup> – Authorized in Section 32-285a of the Connecticut General Statutes, the Community Investment Fund (“CIF”) awards up to \$175 million each fiscal year, for a total of \$875 million, towards projects that foster economic development in underserved communities. Eligible applicants include Public Investment Communities, Alliance Districts (Connecticut’s lowest performing districts), non-profits, and community development organizations. As the lead administrator, the Department of Economic Development oversees the application process for the grant program across two funding installments per year. Funded projects have launched food hubs or community kitchens to serve under-resourced residents, ensuring that equitable and just food systems are accessible while strengthening the local food economy. The CIF remains open for application, allowing municipalities to leverage this opportunity as a resource to further empower local businesses, expand workforce development, and create new avenues for economic growth.
- **DEEP Materials Management Infrastructure Grant Program (MMI Grant)** – CT DEEP has announced a \$15 million grant opportunity to municipalities, councils of government (“COGs”), and RWAs to develop MMI that enhance ongoing waste reduction and diversion efforts. Grant funds will span two separate installments, with administration of the second round being dependent on the first. Eligible proposals will help to advance the state’s self-sufficiency in MSW management while reducing the costs and environmental damages resulting from current disposal methods. Priority project proposals will demonstrate a high potential for waste diversion across a wider, regional scale, in addition to addressing environmental justice concerns. The grant follows DEEP’s launch of the SMM Grant program, where the former will be a supplementary source of funding for waste reduction and diversion by bolstering regional and local MMI.
- **DEEP Regional Waste Authority (“RWA”) Grant Program** – This program provides \$2 million in state grant funding through the Sustainable Materials

---

<sup>43</sup> Connecticut General Statutes § 32-285a (2023), [https://cga.ct.gov/2022/sup/chap\\_588n.htm#sec\\_32-285a](https://cga.ct.gov/2022/sup/chap_588n.htm#sec_32-285a).

Management Grant Program to assist Connecticut municipalities and state entities with forming and expanding RWAs by offering support on technical, legal, and administrative needs. As codified in statutory language, Section CGS 7-273 describes the range of powers vested in RWAs, most importantly issuing bonds, negotiating multi-year MSW service agreements, and implementing regional waste and recycling programs. Funding can thus provide further impetus for centrally organized governance to realize readily, actionable MSW.<sup>44</sup> Awarded participants agree to disclose progress reports on their proposed project as agreed upon with DEEP, from which the findings will be instructive for further planning, designing, and establishing RWAs that advance the state's waste diversion goals and ameliorate capacity deficits.

- **DEEP Sustainable Materials Management Grant Program (SMM Grant)** – Launched in September 2021, the SMM Grant authorized over \$5 million across 15 municipalities to develop pilot programs for food scrap collection, UBP, collection strategies, and regional infrastructure projects. Six of the participating municipalities— Bethel, Guilford, Madison, Kent, Woodbury and Middletown—have decided to convert these pilots into permanent programs. CT DEEP is planning to make an additional \$10 million available for waste diversion and reduction programs.
- **Healthy Communities Grant Program for New England** – Launched in 2003 under the authority of the Clean Air Act, Section 103(b)(3), the Healthy Communities Grant Program is EPA New England's primary grant program that targets environmental risks to protect and improve human health. Eligible applicants include state and local governments, public and private nonprofit organizations, federally recognized Tribal governments, K-12 schools and school districts, and grassroots and community-based organizations. Proposed projects must adhere to the following criteria: 1) be located in and/or benefit target investment areas,<sup>45</sup> and 2) describe how the project would achieve measurable environmental and/or public health impacts in target investment areas. Target program areas should address one or more of the following: capacity building on environmental and/or public health issues, clean, green, and healthy schools, energy efficiency, healthy indoor environments, healthy outdoor environments, pollution prevention, and sustainable materials management.
- **ReFed Catalytic Grant Fund** – These grants are designed to accelerate the creation and adoption of food waste solutions across the food system by offering both recoverable and non-recoverable funding alongside post-grant support. The fund prioritizes initiatives with strong potential to reduce food waste and GHG emissions. Funding is distributed through recurring open calls which advance priority food waste themes.

---

<sup>44</sup> Connecticut General Statutes, § 7-273aa to 7-273pp (2023), [https://www.cga.ct.gov/2023/pub/chap\\_103b.htm](https://www.cga.ct.gov/2023/pub/chap_103b.htm).

<sup>45</sup> As defined by the EPA's RFA for the 2024 Healthy Communities Grant Program. Available here: <https://www.epa.gov/system/files/documents/2024-07/2024-healthy-communities-rfa.pdf>

- **Rural Energy for America Program (REAP)** - Under the IRA, the USDA-administered program makes loan financing and grant funding available to agricultural producers and small rural businesses for renewable energy systems or energy efficiency improvements. Funds support agricultural producers with installing renewable energy infrastructure for agricultural production or processing, including anaerobic digestors or biogas projects. Recipients must be located in rural areas with populations of 50,000 residents or less, notwithstanding adhering to other requirements and restrictions, including funding caps.
- **Solid Waste Infrastructure for Recycling Grant Program ("SWIFR")** – Launched by the EPA in September 2023, the SWIFR grant program will invest \$55 million throughout fiscal years 2022 – 2026 to expand recycling infrastructure and improve waste management systems across the country and provide assistance to states, communities (e.g. local waste management authorities), and Tribes or intertribal consortia. This is the largest investment in recycling made by the department in the last 30 years and enables implementation of the National Recycling Strategy. Eligible activities for targeted applicants will vary but may support the development or implementation of plans – including data collection efforts to demonstrate progress – that advance post-consumer materials management, or support more localized and physical actions, such as constructing and upgrading organic waste facilities via direct grants to communities. For example, in 2023 the City of Stamford received a community grant over \$2 million for strengthening food scrap collection, implementing compost programs, and promoting a recycling education and outreach program to the general public. DEEP was also awarded SWIFR funding to refine its data management and analyses capabilities and expand capacity support for the Northeast Waste Management Official Association.
- **Sustainable CT Community Match Fund** – Sustainable CT operates a program of crowdsourced funding matched with grant funds for projects that align with their identified areas of action. A typical funding structure for a \$15,000 project will crowdsource \$7,500 with Sustainable CT matching that amount with \$7,500 in grants. The proportion of crowdsourced funding and grant funding vary across project types. The Community Match Fund has been used to finance small projects for community composting, food scrap and organic waste collection bins, and education awareness.

The following is a non-comprehensive summary of different sources of finance that might support organic waste management projects in Connecticut:

- **Connecticut Green Bank:** works to mobilize greater investment in environmental infrastructure and works with a variety of capital providers to successfully finance projects and accelerate the growth of the green economy.
- **Community Development Financial Institutions ("CDFIs"):** These entities are often open to longer or more flexible financing and terms than commercial lenders. CDFIs focus on offering local financial services tailored to underserved populations. Like green banks, CDFIs can play a catalytic role in making impactful investments that often would not have happened otherwise.

- **Impact investors:** These investors balance financial performance alongside measurable social and environmental outcomes and may be motivated by investments with specific impact objectives to take market risks other lenders would not or invest at a lower rate of return. There are a number of firms with an aligned interest in organic waste management.
- **Commercial Financing:** These firms prioritize returns for their stakeholders by only making investments that meet minimum requirements for forecasted growth, a demonstrated history of performance, or where the value of their investment is otherwise secured.

## Other Programs

The following are other programs or coalitions of note with respect to organic waste management in Connecticut:

- **Connecticut Coalition for Sustainable Materials Management ("CCSMM"):** CCSMM is a coalition of over 90 municipalities with DEEP formed in September 2020 to reduce, recycle, and divert solid waste. The coalition is chaired by the Commissioner of DEEP. The coalition has established four working groups: Food Scraps/Organics Collection and Diversion, EPR, Reuse and Recycling, and Unit-Based Pricing. CCSMM has issued a public request for solutions to implement its goals and received 43 submissions. During meetings between October and December 2020, each working group designed a menu of options to pursue to improve waste management in Connecticut. For food waste, the coalition followed the EPA food waste hierarchy and identified options in three broad areas as seen in Table 6. After the recommendation of the Food Scraps/Organics Collection and Diversion Working Group, CCSMM started the Organics Infrastructure Initiative. The last CCSMM meeting for which meeting materials are available is September 19, 2023.

**Table 6: Recommendations of the CCSMM Food Scraps/Organics Collection and Diversion Working Group**

Promote Collection and Diversion of Food Scrap/Organics	Infrastructure Development	Expand, Strengthen, and Increase Compliance with Existing Organics Diversion Laws
<ul style="list-style-type: none"> <li>• Support food donation for human consumption</li> <li>• Expand education, outreach, and support for composting of food scraps</li> <li>• Expand education, outreach, and support for collection</li> </ul>	<ul style="list-style-type: none"> <li>• Anaerobic Digestors <ul style="list-style-type: none"> <li>○ Authorize DEEP to initiate power purchase agreements ("PPAs").</li> <li>○ Increase share of non-agricultural feedstock in on-farm anaerobic digestors</li> </ul> </li> <li>• Encourage the development of food waste to animal feed facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen the requirement for commercial generators to divert organics from the waste stream to be donated, composted or processed in anaerobic digestion facilities</li> <li>• Increase compliance assistance to the</li> </ul>

and diversion of food scraps/organics • Promote co-collection of food scrap/organics with MSW	• Establish a transfer station food waste drop off location and option for in-vessel composting • Promote the inclusion of food waste composting with leaf composting • Streamline siting and permitting for composting facilities	food waste generators withing the commercial organics recycling law; develop enforcement strategy
--	--	---

- **Connecticut Compost Alliance:** A coalition of composting advocates from nonprofits, state and federal agencies, and businesses dedicated to advancing composting education, resources, and activities across the state. With a mission to support and educate current and future composters, the Alliance fosters collaboration and engagement among stakeholders to promote aerobic composting practices that enhance and improve soil health.
- **Connecticut Zero Waste Coalition** – Established in 2020, the coalition aims to address the state's waste crisis by promoting zero waste solutions that enhance environmental and economic well-being and seeks to reduce the negative impacts and disproportionate burden of the impacts of waste management on low income and communities of color. The coalition's initiatives include advocating for waste reduction, opposing trash incineration, and supporting innovative and sustainable waste management practices (e.g. organic waste management solutions and "pay" or "save-as-you throw" unit-based pricing programs).
- **Sustainable CT** – Commits municipalities to take on a variety of tasks to promote sustainability and earn points for community designation, including:
  - **9.4 Reduce and Compost Organic Waste** – Reduce or eliminate food and organic waste and increase food scrap recovery.

## Stakeholder Outreach

The Green Bank met with key stakeholders and attended the 2024 ReFED Food Waste Solutions Summit to explore the public policy and marketplace context for organic waste management in Connecticut.

These entities represented primarily public and for-profit organizations. The objectives of these conversations included sharing information on the scope expansion in environmental infrastructure and eliciting discussion in the following areas:

- **Sector Insight and Experience** – Exploring stakeholders' direct experiences with operating and market conditions for organic waste management in areas such as collection, transportation, pre-processing, composting, anaerobic digestion, municipal programs, and the broader waste management ecosystem.
- **Policies and Targets** – what local, state, and federal policies are important from the stakeholder's perspective, and what targets are they seeking to achieve;
- **Vulnerable Communities** – how the stakeholder's organization thinks about the impacts that must be addressed from climate change to build the resilience of vulnerable communities; and



- **Stakeholder Identification** – learning more about other key entities in the sector.

Through this targeted engagement, the Green Bank refined its understanding of the challenges and opportunities of organic waste management in Connecticut and the role it might play in terms of financing solutions from the perspective of its mission – to confront climate change.

## Findings

Given its experience investing in food- and farm-waste to energy facilities and various meetings with stakeholders, the following are key findings with respect to organic waste management:

- **Prevent food from becoming waste:** Multiple approaches have been proven to support the prevention of food and other organic materials from ending up in the waste stream, including strategies and approaches on display at the 2024 ReFED Food Waste Conference. These include technological innovations and educational campaigns that help to enact behavioral change, innovative ways to sell imperfect produce to consumers, and the reuse of food scraps in consumer product creation. Among potential approaches, the web application company Flash Foods has partnered with Stop and Shop locations across Connecticut to offer discounts on groceries that are nearing their “best by” date to reduce food waste and address food insecurity, including meat, dairy, seafood, fruits, vegetables, and snack foods. Nationwide across all 1,100 Flash Food partner stores in 2023, 37 million pounds (18,500 tons) of food were diverted from landfill.<sup>46</sup>
- **Supporting Connecticut's food rescue network:** Connecticut’s network of food rescue organizations often provides services and benefits to vulnerable communities while preventing food that is no longer fit for sale—but still suitable for consumption—from ending up in the waste stream. In some instances, these entities also provide offtake services for commercial and industrial consumer product processing facilities that would otherwise need to pay for product disposal. One such organization, Food Rescue US, was founded in Fairfield, Connecticut in 2011 and has since expanded to 43 locations across 23 states and the District of Columbia, preventing 199 million pounds (99,500 tons) of excess food from going to landfill while addressing food insecurity. Their web application and network of volunteers help to transfer surplus food from local businesses to social service agencies and other support organizations. Haven’s Harvest, an affiliate nonprofit partner of Food Rescue US, is a New-Haven based non-profit that collects and distributes excess and recovered food to over 200 sites. Since 2021, they have recovered 1.5 million pounds (750 tons) of food. Other national solutions providers active in Connecticut include organizations like FoodRecovery.org, which operates a web platform to connect organizations with surplus food to food rescue organizations and food insecure communities with a network of over 3,400 food partners across the country. Also, Connecticut Foodshare (formerly the Connecticut Food Bank) has been a member of Feeding America since 1982 and is part of their nationwide network of

---

<sup>46</sup> Flashfood, *2023 Impact Report* (Toronto: Flashfood, 2023), 3, <https://cdn.sanity.io/files/7topkt8d/production/8d57fbba40b60a275d84b1532ed2cf8d51076081.pdf?dl=1>.

food banks. Overall, increasing the operational efficiency and capacity of food rescue organizations could support the dual outcomes of food insecurity and organics diversion, though the scaling of these operations through conventional financing may be difficult, especially for storage and distribution centers funded through nonprofit grants and donations.

- **Organic Waste Diversion and Recycling, from Collection to Transit to Processing:** Organic waste diversion in Connecticut faces a variety of challenges across efforts to collect, transport, and process organic waste generated from residential and industrial, commercial, and institutional stakeholders. Collection is a critical, costly, and complicated piece of logistics and infrastructure for many municipalities. Collection efforts must address disparities in access to food scrap separation programs, particularly in vulnerable communities, while maintaining low degrees of material contamination for effective downstream processing. Transportation logistics are complicated by the need for regional transfer stations and optimized routes, particularly for municipally managed organic waste, which often requires adjustments to infrastructure and carry municipal budget implications. Processing solutions, including anaerobic digestion, composting facilities, and upcycling (e.g. animal feed) operations, must navigate regulatory hurdles such as permitting and site constraints, as well as comply with important environmental justice policies, alongside economic considerations for scaling operations to meet the diverse needs of residential and industrial, commercial, and institutional waste generators.
- **Elevated need for organic waste infrastructure:** The closure of the MIRA RRF and the volume of MSW it previously processed has heightened the importance of organic waste diversion and processing solutions to address the state's waste management challenge. Centralized composting of food waste and centralized approaches to anaerobic digestion represent the most impactful ways to increase the total tons of organic waste diverted, currently contributing 13.8 and 3.8 million tons of diversion, respectively.<sup>47</sup> In addition, the January 1, 2025 expansion of the Commercial Organics Law represents a greatly expanded set of regulated entities, and DEEP is committed to increased enforcement of the law. The expanded law paired with enforcement could help to increase the reliable diversion of organic waste feedstock to aerobic composting, anaerobic digestion, and upcycling facilities, create new market opportunities, and bolster Connecticut's self-sufficiency.
- **RWAs can help to address fragmented governance of waste management:** Connecticut municipalities have a variety of circumstances that have led to individual programs, approaches, and contracts for MSW collection, hauling, and processing. Disparate or small-scale approaches can limit municipal contract negotiating power and can be difficult for service providers to navigate given the need for economies of scale and business efficiency, which increases the operational cost of service provision. RWAs could help to address these challenges through regional coordination and contracting capabilities. DEEP has extended funding through the RWA grant for municipalities to conduct a needs assessment to estimate their waste

---

<sup>47</sup> ReFED, *Roadmap to 2030*, 11.

generation and handling capacity as well as infrastructure requirements. The grant also encourages the creation of RWAs by providing technical support to municipalities in drafting legal documents and ordinances. Several municipalities have shown interest in the formation of RWAs and view DEEP's related funding program as an opportunity to explore feasibility and address the fragmentation of municipal-level waste management. Best practice guidance for RWA administration remains consequential for most municipalities and COGs, given the lack of experience and expertise in opting for centralized waste management strategies, all while learning how to navigate a dynamic regulatory environment.

- **Municipalities are sensitive to future price risk and seek control of waste management options:** For many years, MIRA acted as the public option for waste management and provided a ceiling on waste disposal pricing, which the RWAs could seek to emulate. Municipalities and COGs will expect to confront sweeping changes in the waste industry in the wake of MIRA's closure, with a need for new solutions and contract agreements, tip fee management, and the predictable flow of waste processing streams. For instance, as a result of its dissolution MIRA will no longer be engaged in tip fee stabilization, which has provided significant price control for certain municipalities. There is some hesitancy to shift to private contracts for MSW management given the price risk over time.
- **Municipal Pilot Programs demonstrate solutions:** Outcomes from the SMM grant have yielded some of the most substantial findings on municipal-scale waste collection to date, highlighting the advantages and limitations of the methods employed. Through the program, DEEP funded seven transfer station drop-off programs, five co-collection programs, and three separate collection programs, which diverted over 1 million pounds of food scraps cumulatively. Co-collection was more cost effective in increasing diversion but had the drawback of increasing contamination rates. Conversely, drop-off and separate collection programs had lower contamination rates but were more expensive to implement. Results from the pilots have effectively demonstrated widespread success in reducing food waste, leading the six aforementioned municipalities - Bethel, Guilford, Madison, Kent, Woodbury and Middletown - to adopt permanent programs. These findings underscore the potential scalability of such initiatives across the state, especially when equipped with the appropriate financial and technical resources.
- **Transit costs of organic waste are a significant barrier to diversion and limit service sheds of processing infrastructure:** Transportation costs and related investment in equipment, logistics and infrastructure are critical barriers to the effectiveness and affordability of organic waste diversion strategies. Current challenges related to the price and distance of transporting organic waste to processing facilities significantly limit the service area and efficacy of existing infrastructure, especially for the management of municipally generated organic waste. Strategies such as establishing satellite collection facilities can significantly reduce transportation costs, create opportunities for municipal collection programs, and increase the predictable supply of organic feedstock. Satellite collection facilities act as localized hubs for organic waste consolidation, reducing the distance and associated costs of transporting materials to centralized processing facilities. Alternately, high transportation costs of MSW to out-of-state landfills due to the

shortage of in-state disposal capacity may create opportunities to incentivize organic waste diversion, as reducing the volume of MSW being transported long distances for disposal could yield potential cost savings for municipalities and haulers. By addressing these barriers or seeking price and logistics efficiency, Connecticut can bolster organic waste diversion efforts.

- **Utilizing Current Infrastructure and Permitting Pathways:** Municipalities can further enhance organic waste diversion by leveraging existing transfer stations and exploring expanded permitting pathways for food waste management with DEEP. Both public and private waste facilities may seek to obtain permits to offer food waste collection and transfer or provide processing or composting services. As examples, the Mansfield and Ridgefield transfer stations accept food scraps, coupled with leaf composting, while private facilities like WeCare Denali, LLC and BrightFeeds provide organic waste services for municipal and commercial needs.
- **Current organic waste processing is under permitted capacity:** Connecticut's existing organic waste processing capacity is underutilized, with only about 40% of the permitted 100,000 tons being processed. This inefficiency stems from several factors, including a lack of predictable feedstock supply, limited enforcement of the Commercial Organics Recycling Law, and reliance on out-of-state sources for organic waste. Facilities like Quantum Biopower, for instance, derive only 15% of their feedstock locally, highlighting the challenges of ensuring a steady, in-state supply. The state's commitment to enhancing compliance with food scrap diversion laws and expanding mandatory participation under the Commercial Organics Law presents an opportunity to address these issues.
- **Expressed interest in private sector partnership and support programs:** Comments from the project sponsor community note that current grant funding and support programs for food waste and organics processing focus on municipalities, nonprofits, and other public entities. They note that limited grant funding, support programs, or other incentives for private industry is a potential barrier to the expansion of centralized or larger scale organic waste processing solutions in the state. For example, the expansion of virtual net metering for on-farm anaerobic digestion, or funding or other incentives for pre-processing infrastructure (e.g. depackaging facilities) could support private sector development of additional processing capacity. There is broad interest in public-private coordination or partnership to explore support mechanisms for private companies to advance organic waste management solutions.
- **Increasing the Recyclability of Organic Waste as a "Feedstock:"** Solution providers must consider the ability to convert organic waste streams into usable feedstocks for either compost or digestion, through a series of pre-processing steps which may include depackaging, purifying, sizing, shredding, or homogenizing. Logistics and infrastructure innovation which helps to create predictable feedstocks can help to increase the ability for organic waste to be diverted and recycled for beneficial use.
- **Enforcement needed for Connecticut's mandatory food scrap diversion law (Public Act 11-217) to be effective:** Lack of enforcement of the existing food scrap diversion law reduces compliance. The state is committed to increasing compliance. It would require a huge investment of state resources for enforcement to be effective.

**Table 7. Relevant Metrics Identified by Stakeholders on Organic Waste Management**

<b>Inputs</b>	<b>Outputs</b>	<b>Outcomes</b>
<ul style="list-style-type: none"> <li>• Collection systems and infrastructure</li> <li>• Logistics infrastructure (including transportation and equipment)</li> <li>• Pre-processing infrastructure (depackaging, homogenization)</li> <li>• Regional waste authorities</li> <li>• Municipal pilot programs</li> <li>• Technological innovation (e.g. compost grinding and dehydrating, app for discounts on food near the end of its shelf life, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Food scraps diverted (tons)</li> <li>• Yard waste diverted (tons)</li> <li>• Wood waste diverted (tons)</li> <li>• Compostable paper diverted (tons)</li> <li>• Power, heat, and/or transportation fuel generated</li> <li>• Finished compost and soil amendments</li> <li>• More affordable food</li> </ul>	<ul style="list-style-type: none"> <li>• Methane and other GHG reduction</li> <li>• Waste self-sufficiency</li> <li>• Price control/certainty</li> <li>• Reduced food insecurity</li> <li>• Household savings (from food cost reduction and/or waste management)</li> </ul>

## Opportunities

The Green Bank will pursue opportunities related to the market development and scaling of existing solutions for organic waste management through Green Bank investments (see Capital Solutions below) and related initiatives. The Green Bank strategy will seek to:

1. Prevent Organic Waste by investing in solutions that prevent the creation of food and other forms of organic waste.
2. Strengthen Food & Organic Waste Rescue by investing in solutions that increase food and organic waste rescue and reuse, including strategies meant to capture food that would otherwise go to waste and increase diversion to beneficial use, especially to use by food banks or other organizations working with vulnerable communities.
3. Increase Organic Waste Processing Capacity by investing in solutions that help to capture, segregate, collect, transport, pre-process, and process organic waste, including scaling up solutions that increase materials management and food waste processing infrastructure like aerobic or anaerobic digestion of food and farm waste.

**Table 8: Examples of Potential Investment Opportunities**

Impact	Opportunity
Prevent	Technology and equipment adoption to reduce harvest losses (e.g. on-farm solar-powered frost fans or field cooling units)
	Food aggregation and distribution facilities for improved supply chain efficiencies
	Facility upgrades for improved produce management and reduced loss
	New commercial services to reduce food waste, save costs and improve supply chain efficiency
	Processing capacity expansion for upcycling defect produce into value-added products
Rescue	Working capital support for food rescue initiatives
Recycle	Pre-processing infrastructure (e.g. depackaging, homogenizing)
	Increased regional processing capacity (e.g. commercial aerobic composting, anaerobic digestion, etc.)
	Regional infrastructure to support organic waste processing capacity
	Increased capacity for organic waste management and compost (on-farm, at food-processing facilities, etc.)
	Expanding or improving organic waste hauling services
	Feedstock offtake agreements
	Support the development of onsite capacity to divert organic waste and generate products and energy for waste producers
	End product creation (e.g. finished compost, power, heat, or transportation fuels)
	Organic waste tracking and aggregation services

The Green Bank is poised to address municipal and industrial, commercial, and institutional waste management challenges through targeted investments that bolster organic waste management systems, create cost-effective municipal organic waste solutions and commercialize emissions reductions from organic waste prevention, rescue, and recycling. Realizing this vision will require strong partnerships among municipalities, DEEP, RWAs,

nonprofits, private sector businesses, community leaders, research institutions, and investors. The Green Bank aims to leverage its financing capacity to play a catalytic role in structuring these partnerships to secure the necessary capital.

The Green Bank provides catalytic capital for investments that—but for the Green Bank’s participation—would either not happen, happen at a much slower pace, or happen with less impact. The Green Bank can provide competitive project financing for bespoke projects through the Capital Solutions program, which maintains an open rolling request for proposals (RFP)<sup>48</sup> that align with the strategy and opportunities outlined in this primer. This Open RFP will support a variety of developers and capital providers—from emerging developers of commercially established technologies to well-established manufacturers of emerging technologies, to lenders and investors of all types. It is important to note that the Open RFP is not intended to be a venture capital program, nor will it seek to assume risks that are more appropriate for other elements of a project or business’s capital stack. At its core, the Green Bank is a special purpose financial institution, with a responsibility to be good stewards of funds committed to it by statute to promote the clean energy and environmental infrastructure goals of the state. Prospective borrowers that are interested in financing through the Capital Solutions RFP should review the program criteria and contact the Green Bank to express interest or ask questions.

---

<sup>48</sup> <https://www.ctgreenbank.com/wp-content/uploads/2024/07/Open-RFP-for-Green-Bank-Capital-Solutions-for-Clean-Energy-and-Environmental-Infrastructure-Investment.pdf>



# References

## **References for Support the State**

The Green Bank reviewed the following documents to support its outlook:

- Connecticut Public Act No. 23-170 “AAC the Management of Solid Waste and Establishing the MIRA Dissolution Authority”

## **References for Solar PV & Battery Storage End-of-Life**

In addition to the conversations with stakeholders, Power Advisory and the Green Bank reviewed the following documents to support its findings and opportunities:

- **End-of-Life Management of Photovoltaic Solar Panels in the United States** (EPA/600/R-23/186). U.S. Environmental Protection Agency. (2023). Office of Research and Development, Center for Environmental Solutions and Emergency Response. Retrieved from [https://cfpub.epa.gov/si/si\\_public\\_file\\_download.cfm?p\\_download\\_id=547839&Lab=CESER](https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=547839&Lab=CESER)
- **ISO New England 2024 Final PV Forecast**. ISO New England. (2024). *Final 2024 Photovoltaic (PV) Forecast*. Retrieved from [2024 pv forecast final updated.pdf](#)
- **Global EV Outlook 2024**. International Energy Agency. (2024). *Global EV Outlook 2024: Moving Towards Increased Affordability*. Retrieved from [Global EV Outlook 2024 – Analysis - IEA](#).
- **The 50 States of Solar Decommissioning: 2023 Snapshot**. North Carolina Clean Energy Technology Center. (2024). *The 50 States of Solar Decommissioning: 2023 Snapshot*. North Carolina State University. Retrieved from [NCCETC Releases New 50 States of Solar Decommissioning 2023 Snapshot Report | NC Clean Energy Technology Center](#).
- **NREL Study on Solar Photovoltaic Module Recycling**. Curtis, T. L., Buchanan, H., Heath, G., Smith, L., & Shaw, S. (2021). *Solar Photovoltaic Module Recycling: A Survey of U.S. Policies and Initiatives* (NREL/TP-6A20-74124). National Renewable Energy Laboratory. Retrieved from <https://www.nrel.gov/publications>.
- **New Jersey Solar Panel Commission Report**. New Jersey Solar Panel Recycling Commission (2023). *Report of Investigation of Recycling and other Management Methods for Solar Panels, and Recommendations by the New Jersey Solar Panel Commission*. New Jersey Department of Environmental Protection. Retrieved from <https://www.nj.gov/dep/dshw/recycling/Solar%20Panel%20Commission.pdf>

## **References for Expand & Scale Organic Waste Management**

In addition to the conversations with stakeholders, the Green Bank reviewed the following documents to support its findings and opportunities:

- **Comprehensive Materials Management Strategy (CMMS)**. Connecticut Department of Energy and Environmental Protection. (2016). *Comprehensive Materials Management Strategy*. Retrieved from [Connecticut Solid Waste Management Plan](#).
- **Draft Amendment to the Comprehensive Materials Management Strategy**. Connecticut Department of Energy and Environmental Protection. (2023). *Draft Amendment to the Comprehensive Materials Management Strategy*. Retrieved from [CMMS Amendment](#).

- **Statewide Waste Characterization Study.** Connecticut Department of Energy and Environmental Protection. (2015). *Statewide Waste Characterization Study*. Retrieved from [2015 MSW Characterization Study](#).
- **2022 Solid Waste Disposal & Diversion Report.** Connecticut Department of Energy and Environmental Protection. (2024). *2022 Solid Waste Disposal & Diversion Report*. Retrieved from [https://portal.ct.gov/-/media/deep/reduce\\_reuse\\_recycle/data/diversion\\_report\\_2024\\_3.pdf](https://portal.ct.gov/-/media/deep/reduce_reuse_recycle/data/diversion_report_2024_3.pdf).
- **ReFED 2030 Roadmap.** ReFED. (2021). *Roadmap to 2030: Reducing U.S. Food Waste by 50% and the ReFED Insights Engine*. Retrieved from [https://refed.org/uploads/refed\\_roadmap2030-FINAL.pdf](https://refed.org/uploads/refed_roadmap2030-FINAL.pdf)

## Definitions

The following are important definitions referenced in this primer:

- **Advanced Fee Administration (AFA)** – A program that charges a fee at the point of sale to fund end-of-life management of products.
- **Anaerobic Digestion** — an organic waste management process that utilizes specialized bacteria in the absence of oxygen to convert organic materials into biogas. Biogas can then be used as a renewable fuel to generate electricity and heat, among other purposes. The material leftover after anaerobic digestion, the digestate, is rich in nutrients and can be put to beneficial use as compost, fertilizer, bio-based products, and animal bedding.
- **Co-collection** – A method of source-separated recycling without the high costs and logistics of separate collection systems. By using color-coded bags for different materials such as food scraps, it integrates with certain existing logistics and equipment (e.g. haulers pick up source-separated organic material alongside other waste) and can be adapted over time as waste management needs evolve. Some co-collection programs may complement unit-based pricing to further enhance waste diversion efforts.
- **Compost** - a biological process that occurs when microorganisms, bacteria and insects break down organic materials such as leaves, grass clippings and certain kitchen scraps into a soil-like product called compost. Composting is a natural way of recycling, returning nutrient-dense material back to the soil.
- **Performance (Decommissioning) Bond** – A financial guarantee or assurance that ensures the completion of decommissioning and recycling activities for solar and battery projects at end of life.
- **End-of-Life Management** – The process of collecting, processing, and reusing materials that would otherwise be considered waste. It can involve converting these materials into new products, thereby reducing the need for raw materials, minimizing environmental impact, and conserving natural resources. Within the context of this report, recycling occurs the end-of-life of a battery or solar panel. Repurposed batteries and solar panels are not considered recycling.
- **Extended Producer Responsibility (EPR)** – A policy approach where producers are given significant responsibility for the cotreatment or disposal of post-consumer products, such as lithium-ion batteries. In Connecticut, EPR policies already apply to paint, mattresses, electronic waste, mercury thermostats, gas cylinders, and, beginning in 2025, tires.
- **Municipal Solid Waste** – Solid waste from residential, commercial, institutional (e.g. schools and hospitals), and industrial sources, excluding solid waste consisting

of significant quantities of hazardous, land-clearing debris, demolition debris, biomedical waste, sewage sludge and scrap metal.

- **Organic Waste** – biodegradable wastes that can be processed through composting or anaerobic digestion, including but not limited to food waste, compostable paper, and manure. Organic waste encompasses a wide range of material, some of which may not be easily separated prior to the point of disposal or processing for anaerobic digestion or composting.
- **Recycling** – The process of collecting, processing, and reusing materials that would otherwise be considered waste. It can involve converting these materials into new products, thereby reducing the need for raw materials, minimizing environmental impact, and conserving natural resources. Within the context of this report, recycling occurs the end-of-life of a battery or solar panel. Repurposed batteries and solar panels are not considered recycling.
- **Source Separated Organic Material** – Organic material, including, but not limited to, food scraps, food processing residue, and soiled or unrecyclable paper that has been separated at the point or source of generation from nonorganic material.
- **Unit-Based Pricing** – commonly referred to as “pay-as-you-throw,” the variable rate pricing structure institutes a per unit of waste collected fee for MSW management services as opposed to a fixed one. By charging households based on the amount of trash they generate, the system not only incentivizes waste reduction and prevention but is a much more equitable alternative to traditional pricing models that charge a flat rate.
- **Virtual Net Metering** – a program that enables a participating customer, otherwise known as the “host,” to absorb or share the billing credits for excess power generated when the renewable energy system produces more power than the owner uses. Eligible participants include 1) municipalities and state agencies with class I (e.g. solar or wind) or class III (cogeneration) energy systems and 2) agricultural customers with class I energy systems, both of which must be served by an EDC and hold a generating capacity no greater than three megawatts.

# Appendix A: Societal Impact Report

Since the Connecticut Green Bank's inception through the bipartisan legislation in July 2011, we have mobilized more than \$2.88 billion of investment into the State's green economy. To do this, we used \$409.4 million in Green Bank dollars to attract \$2.47 billion in private investment, a leverage ratio of \$7 for every \$1. The impact of our deployment of renewable energy and energy efficiency to families, businesses, and our communities is shown in terms of economic development, environmental protection, equity, and energy (data from FY 2012 through FY 2024).\*

## ECONOMIC DEVELOPMENT

**JOBS** The Green Bank has supported the creation of more than **29,248** direct, indirect, and induced job-years.



### TAX REVENUES

The Green Bank's activities have helped generate an estimated **\$148.0** million in state tax revenues.



**\$56.4 million**  
individual income tax

**\$58.0 million**  
corporate taxes

**\$32.0 million**  
sales taxes

**\$1.5 million**  
property taxes

## ENERGY

### ENERGY BURDEN

The Green Bank has reduced the energy costs on families, businesses, and our communities.



### DEPLOYMENT

The Green Bank has accelerated the growth of renewable energy to more than **707.2 MW** and lifetime savings of over **89.3 million MMBTUs** through energy efficiency projects.



## ENVIRONMENTAL PROTECTION

**POLLUTION** The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including **7.0** million pounds of SOx and **8.7** million pounds of NOx lifetime.



**11.4 MILLION**  
tons of CO<sub>2</sub> :  
**EQUALS**

**172 MILLION**  
tree seedlings  
grown for 10 years

OR

**2.3 MILLION**  
passenger vehicles  
driven for one year

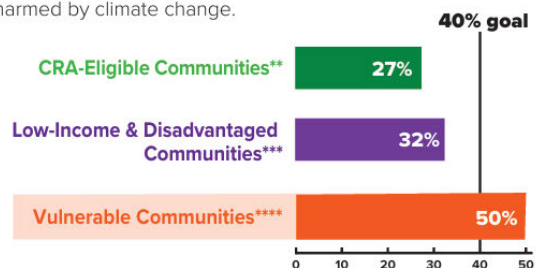
**PUBLIC HEALTH** The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.

**\$218.9 – \$494.9 million of lifetime**  
**public health value created**



## EQUITY

**INVESTING** in vulnerable communities, The Green Bank has set **goals** to reach **40% investment** in communities that may be disproportionately harmed by climate change.



\*\* Community Reinvestment Act (CRA) Eligible Communities – households at or below 80% of Area Median Income (AMI)

\*\*\* Low-Income and Disadvantaged Communities – those within federal Climate and Economic Justice Screening Tool and Environmental Justice Screening Tool

\*\*\*\* Vulnerable Communities – consistent with the definition of Public Act 20-05, including low- to moderate-income communities (i.e., less than 100% AMI), CRA-eligible communities, and environmental justice communities (e.g., including DECD distressed communities)



\* Includes projects, deployment, and investments approved, but not yet interconnected under Energy Storage Solutions.

Learn more by visiting [ctgreenbank.com/strategy-impact/societal-impact/](https://ctgreenbank.com/strategy-impact/societal-impact/)

Winner of the 2017 Harvard Kennedy School Ash Center Award for Innovation in American Government, the Connecticut Green Bank is the nation's first green bank.

[www.ctgreenbank.com](https://www.ctgreenbank.com) © 2024 CT Green Bank. All Rights Reserved  
Sources: Connecticut Green Bank Comprehensive Annual Financial Reports

## Appendix B: Anaerobic Digestion Pilot Program Case Studies

As implementor of Section 103 of Public Act 11-80, "An Act Concerning Anaerobic Digestion," the Connecticut Green Bank financed the state's first two anaerobic digestors under a pilot program created to pair organic waste with on-site anaerobic digestion facilities through loans, grants, or PPAs. Anaerobic digestion is an organic waste management process that utilizes specialized bacteria in the absence of oxygen to convert organic materials into biogas. Biogas can then be used as a renewable fuel to generate electricity and heat, among other purposes. The material leftover after anaerobic digestion, the digestate, is rich in nutrients and can be put to beneficial use as compost, fertilizer, bio-based products, and animal bedding.

### **Quantum Biopower**

In 2016, the Green Bank issued a \$2 million subordinated loan to Quantum Biopower for Connecticut's first anaerobic digester facility. The loan financed a portion of Quantum's \$12 million food-waste-to-energy facility capable of providing up to 1.1 MW of electricity. The facility accepts organic materials from commercial food processors, restaurants, supermarkets, and municipalities. The Green Bank's investment was made through the state's pilot program and supports the evolution of policy on organic waste management, i.e., Connecticut's Commercial Organics Recycling Law which mandates that commercial or industrial food wholesalers, distributors, and manufacturers generating in excess of 26 tons of source separated organic material a year divert their organic waste to a DEEP-authorized composting or clean waste-to-energy facility.

The Green Bank's investment helped to mobilize additional private sector support for this project from M&T Bank (formerly Peoples United Bank), which issued an \$8 million loan to finance the balance of the facility. By financing the state's first anaerobic digester, the Green Bank helped to catalyze innovative organic waste diversion solutions to meet Connecticut's goal of self-sufficiency.

### **Ag-Grid Energy**

In 2020, the Green Bank issued a \$850,000 loan to Fort Hill Ag-Grid LLC, a joint venture between Ag-Grid and Fort Hill Farms, for Connecticut's first farm-waste-to-energy anaerobic digester facility. The loan financed a portion of the \$4 million facility, which generates approximately 3,500 MWh of electricity. The system's energy is supplied to the municipalities of New Britain and Middletown, with Eversource facilitating virtual net metering and interconnection to the grid.

The project received additional funding and financing from various sources, including a senior loan from Live Oak Bank as well as grants from the USDA's Rural Energy for America Program ("REAP") and Connecticut's Department of Agriculture. As the state's first on-site dairy digester, the farm realized energy savings by utilizing power generated through the digester and generated revenue by supplying surplus energy to Eversource, collecting tipping fees from other farmers' organic waste and manure, and capturing Renewable Energy Credits ("RECs").

Fort Hill Ag-Grid LLC was an innovative demonstration of farm waste solutions. Fort Hill, together with Hytone Ag-Grid (an additional dairy digester completed in 2023), Ag-Grid's Connecticut facilities processed 4.8 and 5.8 million gallons of food waste in 2024 respectively, or close to 42,000 tons annually. By financing the state's first farm-waste-to-energy facility, the Green Bank helped to catalyze innovative organic waste diversion solutions to meet Connecticut's goal of self-sufficiency.







# Memo

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

**From:** Bryan Garcia (President and CEO), Bert Hunter (EVP and CIO), Stefanie Keohane (Associate Director of Strategic Initiatives), Priyank Bhakta (Associate Director, Investments) and Sara Harari (Director of Innovation)

**CC:** Brian Farnen (General Counsel and Chief Legal Officer), Eric Shrago (VP of Operations), Mackey Dykes (EVP of Financing Programs and Officer), Sergio Carrillo (Managing Director of Incentive Programs), and Leigh Whelpton (Director of Environmental Infrastructure)

**Date:** March 14, 2025

**Re:** Greenhouse Gas Reduction Fund – National Clean Investment Fund: Connecticut Green Bank Investment Policy

---

## Overview

This memo seeks approval of the Connecticut Green Bank's ("Green Bank") Investment Policy that would apply to projects supported by the Green Bank's National Clean Investment Fund ("NCIF") federal subaward.

As presented to the Green Bank Board of Directors ("Board") on prior occasion,<sup>1</sup> the Green Bank is a Subrecipient under the Coalition for Green Capital's ("CGC") winning NCIF award through the Greenhouse Gas Reduction Fund ("GGRF") competition. The GGRF program was established by the Inflation Reduction Act ("IRA") and is administered by the U.S. Environmental Protection Agency ("EPA"). In 2024, EPA awarded CGC a \$5 billion NCIF grant to partner with green banks and the private sector to provide accessible, affordable financing for tens of thousands of clean technology projects across the country.

It should be noted that Bryan Garcia is the Chair of the Board of Directors of CGC in a volunteer capacity.

On January 3, 2025, the Green Bank executed a Subgrant Agreement with CGC ("CGC Subgrant Agreement") to deploy or otherwise obligate \$93.53 million (i.e., \$40.8MM to the Green Bank, \$37.8MM to the Puerto Rico Green Energy Trust and \$14.9MM to the New Hampshire Community Loan Fund) to support EPA's distributed energy generation and storage, zero-emissions transportation, and net-zero emissions buildings priority project categories and focus on deployment in low-income and disadvantaged communities ("LIDACs").

---

<sup>1</sup> See memos dated December 8, 2023, April 26, 2024, June 14, 2024, July 19, 2024, December 6, 2024, and January 21, 2025.

The Subgrant Agreement requires the Green Bank to comply with CGC's Investment Policy, approved by CGC's Board of Directors on November 5, 2024, "unless and until Subrecipient's written investment and credit underwriting policies are deemed reasonably satisfactory by CGC (such approval not to be unreasonably withheld, conditioned, or delayed), after which, Subrecipient shall comply at all times with such approved investment and credit underwriting policies..."<sup>2</sup> Section 3 of CGC's Investment Policy applies to Coalition Member Investments (e.g., the Green Bank); see **attached**. CGC has established a process for Subrecipients to seek a waiver from CGC for a project that either requires an exemption from CGC's Investment Policy or does not fall under one of EPA's three priority project categories. To date, Green Bank has not submitted any such project waiver requests to CGC.

---

### **Green Bank's Proposed NCIF Investment Policy**

The Green Bank presents the attached draft NCIF Investment Policy for the Board's approval. The Green Bank developed its NCIF Investment Policy using CGC's Investment Policy as a framework, and modified sections based on the scope of our award tailored to the Green Bank's specific financing programs and investment activities. Green Bank's NCIF Investment Policy supports CGC's portfolio target of 9-14x mobilization over 10 years via a combination of mobilization of capital at the investment level (i.e., total cost divided by CGC at-risk capital invested), expected CGC portfolio monetization for further deployment, and/or recycling of capital via maturities and refinancings.

If approved, the Green Bank will submit its proposed NCIF Investment Policy to CGC for final review and approval.

---

<sup>2</sup> Subgrant Agreement, Sec. 6.5(a), Policies and Controls, p. 16.

## **Resolutions**

**WHEREAS**, within the Inflation Reduction Act of 2022 (“IRA”) there is a \$27 billion Greenhouse Gas Reduction Fund (“GGRF”) inclusive of a \$14 billion National Clean Investment Fund (“NCIF”) modelled after the Connecticut Green Bank (“Green Bank”);

**WHEREAS**, the Coalition for Green Capital (“CGC”), a 501(c)3 nonprofit organization, applied for a grant through the GGRF NCIF on October 12, 2023, in the amount of \$10 billion, inclusive of eighteen (18) Subgrantees, including the Green Bank; and,

**WHEREAS**, on January 3, 2025, the Green Bank entered into an NCIF Subgrant Agreement with CGC totaling \$93.53 million, and on January 16, 2025, CGC transferred the total funding amount to the Green Bank’s account at Citibank in accordance with the Account Control Agreement the Green Bank executed with CGC and Citibank on January 14, 2025.

**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 submit the Green Bank’s NCIF Investment Policy to CGC for review and approval; and,

**RESOLVED**, that the Board hereby approves of the Green Bank adhering to its NCIF Investment Policy in all future disbursements of NCIF funds for Qualified Projects.

## **ATTACHMENTS**

- Green Bank Proposed NCIF Investment Policy
- CGC Investment Policy

## **Connecticut Green Bank Investment Policy**

**March 14, 2025**

The U.S. Environmental Protection Agency (“EPA”) awarded the Coalition for Green Capital (“CGC”) a grant (Grant Number 84094201) under the Greenhouse Gas Reduction Fund (“GGRF”) National Climate Investment Fund (“NCIF”) competition (“NCIF Grant Agreement”). In the NCIF Grant Agreement, CGC was awarded \$5 billion to establish the CGC Fund as a national green bank to reduce emissions of greenhouse gases (“GHGs”) and other Air Pollutants (unless defined herein capitalized terms are defined in the NCIF Grant Award); deliver benefits of GHG- and air pollution-reducing projects to American communities, particularly Low-Income and Disadvantaged Communities (“LIDACS”); and mobilize financing and private capital to stimulate additional deployment of GHG- and air pollution-reducing projects (the “GGRF Program Objectives”).

Connecticut Green Bank (“CGB”) entered into a subaward agreement with CGC to deploy or otherwise obligate \$93.53 million (i.e., \$40.8 million to CGB, \$37.8 million to the Puerto Rico Green Energy Trust (“PRGET”) and \$14.9 million to the New Hampshire Community Loan Fund (“NHCLF”) as Financial Intermediary Subrecipients, as defined in the NCIF Grant Award) to support EPA’s distributed energy generation and storage, zero-emissions transportation, and net-zero emissions buildings priority project categories with a focus on deployment in LIDACs. CGB will both invest directly in Qualified Projects (as defined in the NCIF Grant Award) and foster an ecosystem of green banks, community lenders, and community partners by providing them with capital, co-investment opportunities, and other services. CGB will invest in Qualified Projects in Connecticut that provide significant GGRF Program Objective benefits. CGB will provide financial and support services to facilitate the use of standardized financial products, accelerate the recycling of capital sourced from GGRF grant funds, and expand private capital investment in Qualified Projects in LIDACs and rural and Tribal communities. In furtherance of these objectives, CGB will invest at least 40% of its grant award in LIDACs. In addition, CGB will use commercially reasonable efforts to ensure that at least 20% of its grant award (excluding Operating Funds) are used for the purposes of providing Financial Assistance to Qualified Projects in rural communities and at least 2% of its grant award (excluding Operating Funds) are used for the purposes of providing Financial Assistance to Qualified Projects in Tribal communities.

CGB’s expected deliverables under the NCIF Grant Agreement include deployment of Financial Assistance (as defined in the NCIF Grant Award) to Qualified Projects, including Financial Assistance to LIDACs, private capital mobilization, and reductions in emissions of GHGs and other Air Pollutants. Specifically, CGB will support CGC’s portfolio target of 9-14x mobilization over 10 years via combination of mobilization of capital at the investment level (total cost divided by CGC at-risk capital invested), expected CGC portfolio monetization for further deployment, and/or recycling of capital via maturities and refinancings. The expected outcomes from CGB’s activities include the creation of new jobs, cost savings and a reduction in instances of mortality, heart attacks, hospital emissions, asthma, and lost workdays. The intended beneficiaries of CGB’s activities include diverse communities across Connecticut, including LIDACs, and rural and tribal communities.

# Connecticut Green Bank Investment Policy

March 14, 2025

---

## **CGB GENERAL INVESTMENT CRITERIA & ADDITIONAL CONSIDERATIONS**

To all potential CGB NCIF investments, CGB applies the following General Investment Criteria:

1. Investments will be expected to result in a reduction or avoidance of emissions of GHGs and other Air Pollutants;
2. On a portfolio basis, investments will be expected to provide returns that exceed expected portfolio losses and cost of operations and produce a positive entity level return in most market environments; and
3. On a portfolio basis, investments will be expected to result in financing market transformation in terms of private capital mobilization and accelerating the availability of private capital in support of economically viable clean energy projects and companies that provide clean energy products, technologies and services;
4. At least 40% invested capital expected to be related to Qualified Projects in LIDACs; and
5. Investments will be expected to meet all applicable legal and regulatory requirements, including compliance with Davis Bacon and Build America Buy America requirements when applicable.

The General Investment Criteria are underpinned by the following additional considerations:

- 1) Investments are limited to those that are in forms of Financial Assistance, which means financial products, including
  - a. debt (such as loans, partially forgivable loans, forgivable loans, zero-interest and below-market-interest loans, loans paired with interest rate buydowns, secured and unsecured loans, lines of credit, subordinated debt, warehouse lending, loan purchasing programs, and other debt instruments),
  - b. equity investments (such as equity project finance investments, private equity investments, and other equity instruments),
  - c. hybrids (such as mezzanine debt (possibly with warrants), preferred equity, and other hybrid instruments), and
  - d. credit enhancements (such as loan guarantees, loan guarantee funds (whether full or partial), loan loss reserves, and other credit enhancement instruments).
- 2) Investments are limited to those in Qualified Projects, which means any project, activity, or technology that (A) reduces or avoids GHG emissions and other forms of air pollution in partnership with, and by leveraging private investment from, the private sector; or (B) assists communities in their efforts to reduce or avoid GHG emissions and other forms of air pollution. A project, activity, or technology comprising a Qualified Project must also meet all six of the following requirements at the time that Financial Assistance is provided:
  - a. Reduce or avoid GHG emissions.
  - b. Reduce or avoid emissions of other Air Pollutants.

## Connecticut Green Bank Investment Policy

March 14, 2025

---

- c. Deliver additional benefits (i.e., in addition to primarily reducing or avoiding emissions of GHGs and other Air Pollutants) to communities within one or more of the following seven categories: climate change; clean energy and energy efficiency; clean transportation; affordable and sustainable housing; training and workforce development; remediation and reduction of legacy pollution; and development of critical clean water infrastructure.
  - d. May not have otherwise been financed.
  - e. Would mobilize private capital.
  - f. Would support only commercial technologies, defined as technologies that have been deployed for commercial purposes at least three times for a period of at least five years each in the US for the same general purpose as the project, activity or technology.
- 3) On a portfolio basis, investments will be expected to provide returns that exceed expected portfolio losses and cost of operations and produce a positive entity-level return in most financial market environments while also enabling CGB to fully perform all of its investment-related duties under the NCIF Grant Award and otherwise further the GGRF Program Objectives, including, investing at least 40% of its grant award in and with LIDACs. Moreover, each and every individual investment will be considered both for its impact on CGB's financial sustainability, such as its impact on CGB's investment portfolio, but also its impact on CGB's ability to fully perform its investment-related duties under the NCIF Grant Award, including robust and consistent application of its Equitable Investment Framework (as detailed in CGC's EPA-approved workplan) and otherwise further the GGRF Program Objectives.

### **CGB SUB-COMMITMENTS / USE OF PROCEEDS**

Direct Investments: CGB expects to invest approximately \$36.4 million<sup>1</sup> of its grant award directly into Qualified Projects ("Direct Investments").

Financial Intermediary Subrecipients: CGB intends to provide up to \$52.7 million as a combination of (1) a loan and security agreement for Financial Assistance to Qualified Projects structured as a forgivable loan and (2) subgrant agreement for technical assistance<sup>2</sup> totaling \$37.8 million to PRGET and \$14.9 million to NHCLF. PRGET and NHCLF will be required to submit their own investment policy to CGB for approval as a condition of the executed agreements outlined above or otherwise comply with CGC's Investment Policy.

---

<sup>1</sup> This does not include additional Direct Investment over time via Program Income (as defined in the NCIF Grant Award), recycling of investments, portfolio monetization, and/or other sources of capital.

<sup>2</sup> Consistent with the EPA's NCIF Terms and Conditions, Technical Assistance Subrecipients may receive a subgrant to be used exclusively for Predevelopment Activities, Market-Building Activities and/or Program Administration Activities.

# Connecticut Green Bank Investment Policy

March 14, 2025

Approximately \$4.08 million<sup>3</sup> of CGB's NCIF grant award will be used for expenditures related to operating expenditures.

## **PORTFOLIO ALLOCATION**

### **Direct Investments<sup>4</sup>**

#### *a) Direct Investment Portfolio Target Investment Characteristics*

- i) Primarily debt or debt-like investment which may be either senior or subordinate in priority;
- ii) Primarily current cash pay;
- iii) Interest rates will be fixed or floating as deemed appropriate for specific transactions by staff;
- iv) Maturities will be tied to the expected useful life of the improvement and are generally expected to be between 3-20 years;
- v) Commercially proven technologies being deployed with proven management team;
- vi) Substantial equity cushion, financial sponsorship, and/or contractual relationships such that borrower can withstand reasonably expected potential market volatility without default;
- vii) Initial or near-term investment opportunity for any investment expected to be at least \$50,000 in investment amount (provided, however, lower amounts are permissible for single family home investments)
- viii) Returns<sup>5</sup> should (i) reflect the overall risk of the investment and (ii) exceed expected losses;
- ix) While CGB's returns on a portfolio basis and returns on most<sup>6</sup> individual investments should be at a level that private sector lenders and investors will find appropriate for recycling upon scale, seasoning, and/or greater standardization, CGB will retain flexibility to offer concessional interest rates for projects where financial innovation, environmental impact, community benefit or other key performance indicators are expected to be achieved;

---

<sup>3</sup> This does not include Program Income that may be utilized to fund operation expenditures.

<sup>4</sup> Direct Investments includes at-risk capital that is funded with cash (or committed to be funded with cash) and various forms of non-cash credit enhancements (i.e. loss guarantees, contractual credit enhancements, and letter of credit).

<sup>5</sup> Returns may include cash pay interest and dividends, accrued or paid-in-kind interest and dividends, warrants and other forms of upside participation, gain on sale, and/or value created by monetization at materially reduced discount rates. Given that CGB has other sources of income, CGB is not relying on NCIF funds to cover all operating expenses.

<sup>6</sup> There may be certain circumstances in which CGB will make concessional loans at a return that it is unlikely to be viewed as attractive now or in the future by the private sector, but where there is substantial demonstration of other material investment impacts.



# Connecticut Green Bank Investment Policy

March 14, 2025

- 
- x) At transaction close, it should be expected that the borrower will remain solvent and be able to meet its contractual commitments under the financing obligations to CGB such that investment impairment is not expected;
  - xi) Consistent with Direct Investment Portfolio Risk Management Principals as discussed below.

## *b) Direct Investment Portfolio Risk Management Principals*

- i) CGB will evaluate each at-risk capital investment and apply an internal risk rating consistent with market practices observed and/or inferred in rating agency publications and discussions. Investment structures that isolate assets from sponsor and/or operator risk should be considered, and the impact of such structures will be reflected in the internal risk rating. An expected loss will be estimated for each investment and updated quarterly based upon the risk rating and industry sector historical recovery guidelines<sup>7</sup>.
- ii) Risk exposure beyond the guidelines below will require CGB Audit, Compliance and Governance Committee approval<sup>8</sup>:
  - (1) 25% maximum at-risk investment exposure if a Sponsor Risk Mitigated Investment<sup>9</sup> or an Offtaker Risk Mitigated Investment<sup>10</sup>;
  - (2) 5% maximum at-risk investment exposure if a Non-Sponsor Risk Mitigated Transaction<sup>11</sup>;
  - (3) 50% maximum portfolio maturities in excess of 25 years
  - (4) 20% maximum portfolio Paid-in-Kind interest
  - (5) 20% maximum indirect portfolio exposure via LP fund or JV investment structures where other asset managers would earn management fees and carry

## *c) Leverage Limits*

---

<sup>7</sup> If GAAP for CGB requires CECL reserves, this analysis will also be the basis of establishing and maintaining such reserves.

<sup>8</sup> Concentration limit percentages will be applied to greater of (i) \$40.8 million (initial Direct Investment portfolio capital allocation) and (ii) total at-risk Direct Investments (may in future be greater than \$40.8 million via additional capital sources).

<sup>9</sup> A sponsor risk mitigated investment ("Sponsor Risk Mitigated Investment") is where via the use of special purpose vehicles, independent managers in place or identified third party servicers / O&M providers, manager replacement rights, etc., it is expected that the investment will continue to perform with minimal interruption if the transaction sponsor and/or operator were to become insolvent.

<sup>10</sup> CGB has considerable experience working with state agencies, municipalities, school districts and housing authorities. The use of these highly creditworthy, most often investment grade, offtakers substantially mitigate project risk ("Offtaker Risk Mitigated Investment"). CGB has determined that concentrated exposures of this type do not lead to adverse risk of loss.

<sup>11</sup> Investments where third-party operators cannot be identified and/or the financing is corporate level debt would typically not be viewed as being sponsor risk mitigated ("Non-Sponsor Risk Mitigated Investment").

## Connecticut Green Bank Investment Policy

March 14, 2025

---

- i) A key strategy of recycling capital for further deployment and mobilization will be debt monetization of the Direct Investment portfolio. Potential debt monetization structures include (i) corporate and infrastructure debt CLO methodologies via warehouse to term capital markets take outs and similarly structured bank balance sheet aggregation to term facilities, (ii) private credit rated note structures, and/or (iii) other investment fund debt financing methodologies (joint ventures, SMAs, LP vehicles, etc.). The portfolio construction and related limits defined above in Direct Investment Portfolio Risk Management Principals are designed to provide a framework to support senior financings against the CGB Direct Investment Portfolio to achieve leverage at an investment grade attachment point (BBB- or higher) to minimize cost at a meaningful level of leverage (60-70% portfolio leverage).
- ii) A maximum of 70% Direct Investment portfolio leverage.
- iii) In addition to cost efficiencies, limiting leverage to an investment grade attachment point also supports a conservative approach from a CGB standpoint, as the achievement of investment grade must be validated by our portfolio being capable of absorbing stress and volatility without default.
- iv) In addition to the Direct Investment Portfolio design for debt issuance and third-party validation of portfolio characteristics to support investment grade attachments, CGB must independently develop its view that there will not be CGB debt defaults under a variety of market stress scenarios.

### d) Liquidity

- i) CGB cannot have an obligation to fund that it cannot meet, interest or principal due on debt it cannot meet, or any operating expenditure it cannot meet. Therefore, CGB must be prudently conservative in terms of (i) expected loss estimation, (ii) when refinancings and related liquidity will occur, (iii) when committed at-risk capital will be called, (iv) estimated costs of operations, and (v) all other matters related to cash inflow and outflows.
- ii) Liquidity should be maintained at all times above and beyond forecast needs to absorb unknown and unforeseen events and support a full year of operating expenses. Liquidity will include cash on hand, amounts available to be drawn upon via the EPA process in place at the time, funds held on reserve for CGB draws, and/or other credit facilities available to be drawn upon notice by CGB.

### e) Processes and Procedures

- i) Investment-related processes and procedures separately approved by the CGB Audit, Compliance and Governance Committee, or its senior staff, and as described in CGB's GGRF Financial Risk Management Plan and Legal and Compliance Risk Management Policies (collectively, the "CGB Policies and Procedures") will be followed in application of the Investment Policy described herein.

## **Connecticut Green Bank Investment Policy**

**March 14, 2025**

---

- ii) Investments within the guidelines of the Investment Policy and the approved processes and procedures will not require further CGB Audit, Compliance and Governance Committee approval.
- iii) In addition to the periodic review and reporting requirements set forth in the CGB Policies and Procedures, ongoing reporting to the CGB Audit, Compliance and Governance Committee will include all items identified in the processes and procedures documents, which includes a quarterly investment review written report and discussion capturing the following portfolio attributes:
  - (1) Exposure (committed and funded);
  - (2) Key transaction terms;
  - (3) CGB objectives;
  - (4) Reporting and performance (actual vs base case projections) (credit and impact);
  - (5) Compliance with covenants (e.g., debt service coverage ratio, delinquency or default rates, etc.);
  - (6) CGB internal rating, estimated annual default rate and ultimate recovery, estimated annual loss rate;
  - (7) Upcoming developments, issues and concerns;
  - (8) Recommendations for Impairment or adjustment capital mobilization or GHG targets; and
  - (9) Summary of active pipeline description and characteristics.

## **CGC Investment Policy**

### **November 5, 2024**

---

The U.S. Environmental Protection Agency (“EPA”) awarded the Coalition for Green Capital (“CGC”) a grant (Grant Number 84094201) under the Greenhouse Gas Reduction Fund (“GGRF”) National Climate Investment Fund (“NCIF”) competition (“NCIF Grant Agreement”). In the NCIF Grant Agreement, CGC was awarded \$5 billion to establish the CGC Fund (referred to herein as CGC) as a national green bank to reduce emissions of greenhouse gases (“GHGs”) and other Air Pollutants (unless defined herein capitalized terms are defined in the NCIF Grant Award); deliver benefits of GHG- and air pollution-reducing projects to American communities, particularly Low-Income and Disadvantaged Communities (“LIDACS”); and mobilize financing and private capital to stimulate additional deployment of GHG- and air pollution-reducing projects (the “GGRF Program Objectives”). CGC will both invest directly in Qualified Projects (as defined in the NCIF Grant Award) and foster an ecosystem of green banks, community lenders, and community partners by providing them with capital, co-investment opportunities, and other services. CGC will invest in regional and national-level Qualified Projects and larger-scale Qualified Projects across the US that provide significant GGRF Program Objective benefits.

Under the NCIF Grant Agreement and CGC’s EPA-approved workplan incorporated therein, CGC will provide financial and support services to facilitate the use of standardized financial products, accelerate the recycling of capital sourced from GGRF grant funds, and expand private capital investment in Qualified Projects in LIDACs and rural and Tribal communities. In furtherance of these objectives, CGC will invest at least 50% of its grant award in LIDACs, will invest at least 20% of its grant award in rural and 2% in Tribal communities, and will make commercially reasonable efforts to leverage its grant award to achieve private capital mobilization rates of 3-4X in its first year of performance, 5-6X by its seventh year of performance, and 10-14X by its tenth year of performance.

CGC will also strive to support the creation of a self-sustaining network of state and local green banks to drive the deployment of Qualified Projects in every LIDAC across the US. CGC’s expected deliverables under the NCIF Grant Agreement include deployment of Financial Assistance (as defined in the NCIF Grant Award) to Qualified Projects, including Financial Assistance to LIDACs, private capital mobilization, and reductions in emissions of GHGs and other Air Pollutants. The expected outcomes from CGC’s activities include the creation of new jobs, cost savings and a reduction in instances of mortality, heart attacks, hospital emissions, asthma, and lost workdays. The intended beneficiaries of CGC’s activities include geographically diverse communities across all ten EPA regions, including LIDACs, and rural and tribal communities.

## **CGC GENERAL INVESTMENT CRITERIA & ADDITIONAL CONSIDERATIONS**

To all potential investments, CGC applies the following General Investment Criteria:

1. Investments will be expected to result in a reduction or avoidance of emissions of GHGs and other Air Pollutants;
2. On a portfolio basis, investments will be expected to exceed expected portfolio losses and cost of operations and produce a positive entity level return in most market environments; and
3. On a portfolio basis, investments will be expected to result in financing market transformation in terms of private capital mobilization and accelerating the availability of private capital in support of economically viable clean energy projects and companies that provide clean energy products, technologies and services;
4. At least 50% invested capital expected to be related to Qualified Projects in LIDACs; and
5. Investments will be expected to meet all applicable legal and regulatory requirements, including compliance with Davis Bacon and Build America Buy America requirements when applicable.

The General Investment Criteria are underpinned by the following additional considerations:

- 1) Investments are limited to those that are in forms of Financial Assistance, which means financial products, including
  - a. debt (such as loans, partially forgivable loans, forgivable loans, zero-interest and below-market-interest loans, loans paired with interest rate buydowns, secured and unsecured loans, lines of credit, subordinated debt, warehouse lending, loan purchasing programs, and other debt instruments),
  - b. equity investments (such as equity project finance investments, private equity investments, and other equity instruments),
  - c. hybrids (such as mezzanine debt (possibly with warrants), preferred equity, and other hybrid instruments), and
  - d. credit enhancements (such as loan guarantees, loan guarantee funds (whether full or partial), loan loss reserves, and other credit enhancement instruments).
- 2) Investments are limited to those in Qualified Projects, which means any project, activity, or technology that (A) reduces or avoids GHG emissions and other forms of air pollution in partnership with, and by leveraging private investment from, the private sector; or (B) assists communities in their efforts to reduce or avoid GHG emissions and other forms of air pollution. A project, activity, or technology comprising a Qualified Project must also meet all six of the following requirements at the time that Financial Assistance is provided:
  - a. Reduce or avoid GHG emissions.

- b. Reduce or avoid emissions of other Air Pollutants.
  - c. Deliver additional benefits (i.e., in addition to primarily reducing or avoiding emissions of GHGs and other Air Pollutants) to communities within one or more of the following seven categories: climate change; clean energy and energy efficiency; clean transportation; affordable and sustainable housing; training and workforce development; remediation and reduction of legacy pollution; and development of critical clean water infrastructure.
  - d. May not have otherwise been financed.
  - e. Would mobilize private capital.
  - f. Would support only commercial technologies, defined as technologies that have been deployed for commercial purposes at least three times for a period of at least five years each in the US for the same general purpose as the project, activity or technology.
- 3) On a portfolio basis, investments will be expected to provide returns that exceed expected portfolio losses and cost of operations and produce a positive entity-level return in most financial market environments while also enabling CGC to fully perform all of its investment-related duties under the NCIF Grant Award and otherwise further the GGRF Program Objectives, including, investing at least 50% and 2% of its grant award in and with LIDACs and rural and tribal communities, respectively. Moreover, each and every individual investment will be considered both for its impact on CGC's financial sustainability, such as its impact on CGC's investment portfolio, but also its impact on CGC's ability to fully perform its investment-related duties under the NCIF Grant Award, including robust and consistent application of its Equitable Investment Framework (as detailed in its EPA-approved workplan) and otherwise further the GGRF Program Objectives.

### **CGC SUB-COMMITMENTS / USE OF PROCEEDS**

Direct Investments: CGC expects to invest approximately \$2.9 billion<sup>1</sup> of its grant award directly into Qualified Projects ("Direct Investments").

Network Investments: CGC may provide up to \$200 million initially and up to \$1 billion over ten years of some combination of subgrants and subawards to build out a network of state and local green banks across the US ("Network Investments").

Coalition Member Investments: CGC may provide approximately \$1.8 billion in the form of subawards as grants and/or loans, or some combination thereof to entities that are named Coalition Partners in CGC's EPA-approved workplan ("Coalition Members"). CGC may provide more than this approximate \$1.8 billion if and to the extent that it is provided in the form of a loan that is repayable with a return to CGC.

---

<sup>1</sup> This does not include additional Direct Investment over time via Program Income (as defined in the NCIF Grant Award), recycling of investments, portfolio monetization, and/or other sources of capital.

Approximately \$278 million<sup>2</sup> of the grant award will be used for expenditures related to operating expenditures and approved grants.

## **PORTFOLIO ALLOCATIONS**

### **1) Direct Investments<sup>3</sup>**

#### *a) Direct Portfolio Target Investment Characteristics*

- i) Primarily debt or debt-like investment which may be either senior or subordinate in priority;
- ii) Primarily current cash pay;
- iii) Primarily floating rate (with SOFR floor where can be negotiated)<sup>4</sup>;
- iv) Primarily maturities of 3-7 years (with mini-perm structures for long lived project finance assets);
- v) Commercially proven technologies being deployed with proven management team;
- vi) Substantial equity cushion, financial sponsorship, and/or contractual relationships such that borrower can withstand reasonably expected potential market volatility without default;
- vii) Initial or near-term investment opportunity for any investment expected to be at least \$50 million in investment amount
- viii) Returns<sup>5</sup> should (i) reflect the overall risk of the investment, (ii) exceed expected losses, and (iii) on a portfolio basis exceed (after taking into account expected losses) the expected operating costs of CGC (the Direct Investment portfolio on a standalone basis should be expected to sufficiently cover CGC operating expenses upon scaling the portfolio).
- ix) Returns on a portfolio basis must be and returns on most<sup>6</sup> individual investments should be at a level that private sector lenders and investors will find appropriate for recycling upon scale, seasoning, and/or greater standardization;

---

<sup>2</sup> This does not include Program Income that may be utilized to fund operation expenditures.

<sup>3</sup> Direct Investments includes at-risk capital that is funded with cash (or committed to be funded with cash) and various forms of non-cash credit enhancements (i.e. loss guarantees, contractual credit enhancements, and letter of credit).

<sup>4</sup> Interest caps or other interest rate hedging strategies can be implemented as relates to fixed rate investments where a floating rate investment not achievable.

<sup>5</sup> Returns may include cash pay interest and dividends, accrued or paid-in-kind interest and dividends, warrants and other forms of upside participation, gain on sale, and/or value created by monetization at materially reduced discount rates.

<sup>6</sup> There may be certain circumstances in which CGC will make concessional loans at a return that it is unlikely to be viewed as attractive now or in the future by the private sector, but where there is substantial demonstration of other material investment impacts.



- x) At transaction close, it should be expected that the borrower will remain solvent and be able to meet its contractual commitments under the financing obligations to CGC such that investment impairment is not expected;
- xi) Expectation that the investments on a portfolio basis will result in the following private capital mobilization rates: 3-4:1 in Year One; 5-6:1 by Year Seven; and 9-14:1 by Year Ten.<sup>7</sup> The private capital mobilization rate is the total amount of direct and indirect private capital investment in Qualified Projects divided by the direct and indirect investment of at-risk capital in those Qualified Projects by CGC using its NCIF grant funds. Indirect private capital investment in Qualified Projects includes private capital investments in CGC, such as balance sheet leveraged financing, green bonds, and collateralized loan obligations (“CLOs”), that enable greater private capital investments in Qualified Projects; and
- xii) Consistent with Direct Portfolio Risk Management Principals as discussed below.

*b) Direct Portfolio Risk Management Principals*

- i) CGC will evaluate each at-risk capital investment and apply an internal risk rating consistent with market practices observed and/or inferred in rating agency publications and discussions. Investment structures that isolate assets from sponsor and/or operator risk should be considered, and the impact of such structures will be reflected in the internal risk rating. An expected loss will be estimated for each investment and updated quarterly based upon the risk rating and industry sector historical recovery guidelines<sup>8</sup>.
- ii) Risk exposure beyond the guidelines below will require CGC Board Investment and Risk Committee approval<sup>9</sup>:
  - (1) 10% maximum at-risk investment exposure if a Sponsor Risk Mitigated Investment<sup>10</sup>;
  - (2) 5% maximum at-risk investment exposure if a Non-Sponsor Risk Mitigated Transaction<sup>11</sup>;
  - (3) 5% maximum at-risk investment exposure if risk rated below BB-

---

<sup>7</sup> Specifically, the work plan calls for the following mobilization outputs: 4:1 by year 2 (meaning for every dollar of GGRF financial assistance, 4 dollars of private capital are mobilized), 4-5:1 by year 4, 5-6:1 by year 6, and 5-6:1 by year 7.

<sup>8</sup> If GAAP for CGC requires CECL reserves, this analysis will also be the basis of establishing and maintaining such reserves.

<sup>9</sup> Concentration limit percentages will be applied to greater of (i) \$[2.9] billion (initial Direct Portfolio capital allocation) and (ii) total at-risk Direct Investments (may in future be greater than \$[2.9] billion via additional capital sources).

<sup>10</sup> A sponsor risk mitigated investment (“Sponsor Risk Mitigated Investment”) is where via the use of special purpose vehicles, independent managers in place or identified third party servicers / O&M providers, manager replacement rights, etc., it is expected that the investment will continue to perform with minimal interruption if the transaction sponsor and/or operator were to become insolvent.

<sup>11</sup> Investments where third-party operators cannot be identified and/or the financing is corporate level debt would typically not be viewed as being sponsor risk mitigated (“Non-Sponsor Risk Mitigated Investment”).

- (4) 2.5% maximum at-risk investment exposure if risk rated below B-
- (5) 35% maximum portfolio unhedged fixed rate exposure (vs. floating rate exposure)
- (6) 35% maximum portfolio single regional power grid or wholesale market region (e.g., regional grids and markets administered by Regional Transmission Organizations and Independent System Operators)
- (7) 15% maximum portfolio Puerto Rico exposure
- (8) 35% maximum portfolio construction finance obligations
- (9) 20% maximum portfolio maturities in excess of 10 years
- (10) 20% maximum portfolio Paid-in-Kind interest
- (11) 20% maximum portfolio exposure to equity and/or debt risk rated less than B-
- (12) 20% maximum indirect portfolio exposure via LP fund or JV investment structures where other asset managers would earn management fees and carry

c) Leverage Limits

- i) A key strategy of recycling capital for further deployment and mobilization will be debt monetization of the Direct Investment portfolio. Potential debt monetization structures include (i) corporate and infra debt CLO methodologies via warehouse to term capital markets take outs and similarly structured bank balance sheet aggregation to term facilities, (ii) private credit rated note structures, and/or (iii) other investment fund debt financing methodologies (joint ventures, SMAs, LP vehicles, etc.). The portfolio construction and related limits defined above in Direct Portfolio Risk Management Principals are designed to provide a framework to support senior financings against the CGC Direct Portfolio to achieve leverage at an investment grade attachment point (BBB- or higher) to minimize cost at a meaningful level of leverage (60-70% portfolio leverage).
- ii) A maximum of 70% portfolio leverage.
- iii) In addition to cost efficiencies, limiting leverage to an investment grade attachment point also supports a conservative approach from a CGC standpoint, as the achievement of investment grade must be validated by our portfolio being capable of absorbing stress and volatility without default.
- iv) In addition to the Direct Investment Portfolio design for debt issuance and third-party validation of portfolio characteristics to support investment grade attachments, CGC must independently develop its view that there will not be CGC debt defaults under a variety of market stress scenarios.
- v) Although there may be operating company corporate facilities available to CGC as operating track record is established, meaningful near-term debt will likely be limited to portfolio related asset-based facilities.

d) Liquidity

- i) CGC cannot have an obligation to fund that it cannot meet, interest or principal due on debt it cannot meet, or any operating expenditure it cannot meet. Therefore, CGC must be prudently conservative in terms of (i) expected loss estimation, (ii) when refinancings and related liquidity will occur, (iii) when committed at-risk capital will be called, (iv) estimated costs of operations, and (v) all other matters related to cash inflow and outflows.
- ii) Liquidity should be maintained at all times above and beyond forecast needs to absorb unknown and unforeseen events and support a full year of operating expenses. Liquidity will include cash on hand, amounts available to be drawn upon via the EPA process in place at the time, funds held on reserve for CGC draws, and/or other credit facilities available to be drawn upon notice by CGC.

e) Processes and Procedures

- i) Investment-related processes and procedures separately approved by the CGC Board, its Investment Committee (“Board IC”), or its Risk Management Committee (“Board RC”), and as described in CGC’s GGRF Financial Risk Management Policies and Procedures and Legal and Compliance Risk Management Policies and Procedures (collectively, the “CGC Policies and Procedures”) will be followed in application of the Investment Policy described herein.
- ii) Investments within the guidelines of the Investment Policy and the approved processes and procedures will not require further Board, Board IC or Board RC approval. The Board IC will review the first five investments prior to final approvals by the CGC Investment Committee.
- iii) In addition to the periodic review and reporting requirements set forth in the CGC Policies and Procedures, ongoing reporting to the Board IC will include all items identified in the processes and procedures documents, which includes a quarterly investment review written report and discussion capturing the following portfolio attributes:
  - (1) Exposure (committed and funded);
  - (2) Key transaction terms;
  - (3) CGC objectives;
  - (4) Reporting and performance (actual vs base case projections) (credit and impact);
  - (5) Compliance with covenants (e.g., debt service coverage ratio, delinquency or default rates, etc.);
  - (6) CGC internal rating, estimated annual default rate and ultimate recovery, estimated annual loss rate;
  - (7) Upcoming developments, issues and concerns;
  - (8) Recommendations for Impairment or adjustment capital mobilization or GHG targets; and

(9) Summary of active pipeline description and characteristics.

## **2) Network Investments**

### **a) Network Investments Target Investment Considerations**

The NCIF Grant Agreement in Attachment 1 – Project Description specifies that “CGC will strive to support the creation of a self-sustaining nationwide network of state and local green banks to drive the deployment of Qualified Projects in or directly benefiting every LIDAC across the United States.” CGC also has a stated goal in its EPA-approved workplan to develop at least one self-sustaining green bank in every state over time.

To be self-sustaining, a green bank is expected to need up to \$50 million of assets under management (“AUM”) or otherwise have sufficient operating income to cover operating expenses.

Green banks selected to receive Network Investments from CGC (“Network Members”) may receive catalytic capital in the form of Subawards to reach the self-sustaining goal of up to \$50 million of AUM. Returns on these Network Investments will need to at least cover the cost of providing such capital and deliver meaningful community benefits.

Network Members will need to use funds from the Network Investments to provide Financial Assistance to Qualified Projects. Financial Assistance provided by Network Members will be expected to meet the same standards as Coalition Members as set forth below in Coalition Member Investment Target Investment Considerations and Risk Management Principals, except that if the total AUM<sup>12</sup> of a Network Member are less than \$50 million, then the Coalition Member Investment Target Investment Risk Management Principals concentration limits will not be applicable and the concentration limit will instead be \$5 million for any single transaction or counterparty.

## **3) Coalition Member Investments**

- a) Subawards to Coalition Members are being provided under Subaward Agreements. Under the Subaward Agreements, an agreed upon amount of the Subaward may be in the form of grants for Program Administration, Market-Building Activities, and Predevelopment Activities (as each such term is defined in the NCIF Grant Agreement), and to provide Financial Assistance to Qualified Projects. An agreed

---

<sup>12</sup> Concentration limit percentages will be applied to the total investment assets of the Network Member including unfunded capital committed and available for investment such as the amount of grants and/or loans provided by CGC net of grants allocated to market-building, pre-development activities, program administration activities and operating expenditures.

upon amount of each Subaward to named Coalition Members, may also be provided in the form of a loan, for the purpose of providing Financial Assistance to Qualified Projects. The term “Coalition Member Investments” refers to Financial Assistance to Qualified Projects provided by Coalition Members using Subaward funds received through a combination of grants and loans.

- b) Named Coalition Member Investments must meet the following Target Investment Considerations and Risk Management Principals. At each draw, the Coalition Member will represent and warrant to CGC that the investment is within the Target Investment Considerations and Risk Management Principals described below. Remedies for noncompliance with this Investment Policy will be set forth in the definitive agreement(s) between CGC and each Coalition Member.
- c) An agreed upon contracted third-party will also independently review the risk policies and related process and procedures in order to confirm that appropriate practices are in place. On at least an annual basis, the contracted third-party will independently review funded investments and ongoing operations to confirm that they are consistent with the representations and warranties made. If the contracted third-party finds operations and procedures deficiencies that are not cured within an agreed upon amount of time, then no future draws may be made until such deficiencies are cured.
- d) Coalition Member Investment Target Investment Considerations
  - i) Primarily debt or debt-like investment which may be either senior or subordinate in priority;
  - ii) Primarily current cash pay;
  - iii) Primarily maturities of 3-10 years (with mini-perm structures for long lived project finance assets);
  - iv) Commercially proven technologies being deployed with proven management team;
  - v) Equity cushion, financial sponsorship, and/or contractual relationships such that borrower can withstand reasonably expected potential market volatility without default;
  - vi) Returns on a portfolio basis will be expected to exceed portfolio losses and cost of operations and produce a positive entity-level return in most financial market environments;
  - vii) Investments must provide Financial Assistance to Qualified Projects in accordance with the NCIF Grant Award;
  - viii) At financial close for an investment, it should be expected that the Target Investment borrower will remain solvent and be able to meet its contractual commitments under the financing obligations to Coalition Members such that impairment of the investment is not expected;

- ix) Expectation that the investments on a portfolio basis will support CGC's portfolio target of 9-14x mobilization over 10 years via combination of mobilization of capital at the investment level (total cost divided by CGC at-risk capital invested), expected CGC portfolio monetization for further deployment, and/or recycling of capital via maturities and refinancings; and
- x) Consistent with Coalition Member Investment Target Investment Risk Management Principles as discussed below.

e) Coalition Member Target Investment Risk Management Principles

- i) Coalition Members will evaluate each at-risk capital investment and apply an internal risk rating consistent with market practices observed and/or, to the extent applicable, inferred in rating agency publications and discussions. Investment structures that isolate assets from sponsor and/or operator risk should be considered, and the impact of such structures will be reflected in the internal risk rating. An expected loss will be estimated for each investment and updated quarterly based upon the risk rating and industry sector historical recovery guidelines.
- ii) Risk exposure beyond limits set by the guidelines below will require CGC approval<sup>13</sup>:
  - (a) 10% maximum at-risk investment exposure per transaction if a Sponsor Risk Mitigated Investment<sup>14</sup>;
  - (b) 5% maximum at-risk investment exposure per transaction if a Non-Sponsor Risk Mitigated Transaction<sup>15</sup>;
  - (c) 5% maximum at-risk investment exposure per transaction if internally risk rated below BB- equivalent
  - (d) 2.5% maximum at-risk investment exposure per transaction if internally risk rated below B- equivalent
  - (e) 25% maximum total portfolio Puerto Rico exposure
  - (f) 35% maximum total portfolio construction finance obligations
  - (g) 50% maximum total portfolio maturities in excess of 10 years
  - (h) 20% maximum total portfolio for Paid-in-Kind interest (not applicable to capitalized interest for construction financings)

---

<sup>13</sup> Concentration limit percentages will be applied based on the total investment assets of the Coalition Member including unfunded capital committed and available for investment such as the amount of grants and/or loans provided by CGC net of grants allocated to market-building, pre-development activities, program administration activities and operating expenditures.

<sup>14</sup> A sponsor risk mitigated investment ("Sponsor Risk Mitigated Investment") is where via the use of special purpose vehicles, independent managers in place or identified third party servicers / O&M providers, manager replacement rights, etc., it is expected that the investment will continue to perform with minimal interruption if the transaction sponsor and/or operator were to become insolvent.

<sup>15</sup> Investments where third-party operators cannot be identified and/or the financing is corporate level debt would typically not be viewed as being sponsor risk mitigated ("Non-Sponsor Risk Mitigated Investment").

- (i) 20% maximum total portfolio exposure to equity and/or debt internally risk rated less than B- equivalent



Article

Brian Farnen, Max Mrus<sup>al</sup>

Copyright © 2024 Vermont Law & Graduate School; Brian Farnen, Max Mrus

# NAVIGATING THE GREEN PATH: THE GREENHOUSE GAS REDUCTION FUND AND THE HURDLES TO DEPLOYING FEDERAL FUNDS

ABSTRACT	95
INTRODUCTION	95
I. THE GREENHOUSE GAS REDUCTION FUND (GGRF): PROGRAM BASICS	98
A. General Assistance and Low-Income and Disadvantaged Communities	99
B. Zero-Emissions Technologies	100
II. FEDERAL MONEY, FEDERAL REQUIREMENTS	100
A. Build America, Buy America	101
B. Implementation Issues: BABA	103
C. Davis Bacon Act	107
D. Implementation Issues: DBA	109
E. Disadvantaged Business Enterprises	111
F. Implementation Issues: DBE	112
G. National Environmental Policy Act	113
H. National Historic Preservation Act	114
I. Implementation Issues: NHPA	115
J. Justice40	116
III. EXTERNAL PRESSURES ON THE GGRF	117
A. 2024 Presidential Election	117
B. The Chevron Deference Issue	118
CONCLUSION	119

**\*95 ABSTRACT**

*The Greenhouse Gas Reduction Fund (GGRF) represents America's largest step forward to developing a clean energy economy. However, to obtain federal funding, awardees must comply with a multitude of requirements. To awardees, contractors, and developers, these requirements are a quagmire of conditions precedent to federal funding that increase the time and cost of infrastructure projects. To others, the requirements are vehicles for policy goals that can achieve considerable progress toward equity and inclusion. Whether funds are obligated and deployed into projects depends not only on the feasibility of compliance with these requirements, but also the ability of states, developers, contractors, and financiers to navigate and prove their compliance with the GGRF requirements.*

*This article delves into specifics of the GGRF program, requirements for federal funding under the GGRF, and potential issues that may arise with the implementation of this program and its requirements. Although the GGRF's requirements reflect valuable policy goals, this article suggests that these requirements must be flexible enough to account for the practical realities of compliance. However, in their current state, these requirements may make it more difficult and costly to deploy funds into projects.*

## INTRODUCTION

To address the existential threat posed by climate change, the U.S. economy must drastically reduce emissions and electrify.<sup>1</sup> The transportation sector, industrial sector, and, most crucially, the electric power sector are all prime targets for decarbonization and electrification, each making up about a quarter of total U.S. greenhouse gas (“GHG”) emissions in 2022.<sup>2</sup>

But funding this transition requires money—a lot of money, especially for the electric power industry. We need to design, deploy, and operate new \*96 equipment and supply chains across the energy sector, from residential-to utility-scale. To achieve net-zero emissions by 2050, the U.S. must invest \$360 billion through 2030 and \$2.4 trillion by 2050 into new transmission lines alone.<sup>3</sup> Funding the clean energy transition is no easy task, especially in today's hyperpolarized political reality.

The passage of the Inflation Reduction Act (IRA) in 2022 offers a path forward to funding a transition to a greener economy. Receiving no bipartisan support,<sup>4</sup> this law invested in domestic energy production, domestic energy manufacturing, and aims to reduce carbon emissions by roughly 40% by 2030.<sup>5</sup> Put simply, the IRA is the largest investment in reducing carbon pollution in U.S. history.<sup>6</sup>

The IRA also champions clean energy and environmental justice. The IRA extends and expands two tax credits that allow taxpayers to deduct a percentage of the cost of renewable energy systems from their federal taxes: the Investment Tax Credit (ITC)<sup>7</sup> and the Production Tax Credit (PTC).<sup>8</sup> Section 48(e) of the IRA offers new access to clean energy tax credits that emphasizes reaching disadvantaged populations and communities with environmental justice concerns. Certain ITC projects may be eligible for bonus credits up to 20% if the projects are built in low-income communities, on Indian land, is a qualified low-income residential building project, or is a \*97 qualified low-income economic benefit project.<sup>9</sup> In sum, the IRA provides incentives to states and industries that go further in offering actual community benefits.<sup>10</sup>

The focus of this article, however, is one program created under the IRA: the Greenhouse Gas Reduction Fund (GGRF). This \$27 billion fund,<sup>11</sup> administered through the Environmental Protection Agency (EPA), focuses on deploying clean energy projects using the green bank model,<sup>12</sup> which the \*98 Connecticut Green Bank, a quasi-governmental state agency, pioneered in 2011.<sup>13</sup> The GGRF selected awardees who can leverage this public funding to attract private capital<sup>14</sup> for clean energy and clean air investments.<sup>15</sup> EPA Administrator Michael S. Regan stated, “[T]his program will mobilize billions more in private capital to reduce pollution and improve public health, all while lowering energy costs, increasing energy security, creating good-paying jobs, and boosting economic prosperity in communities across the country.”<sup>16</sup>

## I. THE GREENHOUSE GAS REDUCTION FUND (GGRF): PROGRAM BASICS

Section 60103 of the IRA<sup>17</sup> created the GGRF and appropriated \$27 billion to the program. The GGRF aims to: “(1) reduce emissions of GHGs and other air pollution; (2) deliver benefits of GHG- and air pollution-reducing projects to American communities, particularly low-income and disadvantaged communities;”<sup>18</sup> and (3) mobilize financing and private \*99 capital to stimulate additional deployment of GHG- and air pollution-reducing projects.<sup>19</sup> EPA intends to distribute GGRF funds through three competitions: the approximately \$14 billion National Clean Investment Fund (NCIF) competition, the \$6 billion Clean Communities Investment Accelerator (CCIA) competition, and the \$7 billion Solar for All competition.<sup>20</sup> The enabling statute provides two sets of requirements by creating the following categories: \$19.97 billion for General and Low-Income Assistance and \$7 billion for Zero-Emissions Technologies.<sup>21</sup>

### A. General Assistance and Low-Income and Disadvantaged Communities

Under this category, EPA receives a total of \$19.97 billion in appropriations to develop competitive grants for eligible recipients.<sup>22</sup> EPA shall use \$11.97 billion to provide general financial and technical assistance.<sup>23</sup> With the remaining \$8 billion, EPA shall provide the same assistance specifically to low-income and disadvantaged communities.<sup>24</sup>

The statute lays out two pathways for the use of funds. First, eligible recipients may make “direct investment[s].”<sup>25</sup> Eligible recipients must also prioritize investment in qualified projects<sup>26</sup> that would otherwise lack access to financing.<sup>27</sup> Second, eligible recipients may make “indirect investment[s]”<sup>28</sup> to provide funding and technical assistance to establish “new, or support[] existing, public, quasi-public, not-for-profit, or nonprofit entities that provide financial assistance to qualified projects.”<sup>29</sup> This would occur at the state, local, territorial, or Tribal level or in the District of Columbia, “including community- and low-income-focused lenders and capital providers.”<sup>30</sup> EPA had two competitions under this category of funding; one for direct investments (i.e., NCIF) and one for indirect investments (i.e., CCIA).<sup>31</sup>

### ***B. Zero-Emissions Technologies***

Under this category, EPA receives \$7 billion to “make competitive grants to states, municipalities, Tribal governments, and eligible recipients to provide subgrants, loans, or other forms of financial assistance and technical assistance to enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies [], and to carry out other GHG emissions reduction activities.”<sup>32</sup> EPA established a third competition (nicknamed Solar for All) through a strong legislative effort from U.S. Senator Bernie Sanders to implement this category of funding, which focuses on distributed solar technologies.<sup>33</sup> This program prioritizes residential and community solar projects, as well as storage technologies and upgrades related to these projects.<sup>34</sup>

## **II. FEDERAL MONEY, FEDERAL REQUIREMENTS**

Like any federal program, recipients must meet a myriad of requirements to use GGRF funding. But deployment becomes complicated as the goal of the GGRF is to provide financing, not grants and subsidies. Stated another way, when the federal government partially funds a school or other government project, developers and states understand the strings attached with federal grant awards.<sup>35</sup> However, when financing and leveraging private capital is a key policy goal, the baseline program requirements can be a barrier for deployment, as it adds additional requirements on top of existing underwriting and stakeholder engagement processes.

Compliance with federal requirements is a prerequisite to the possibility of funding projects, which is why it is imperative for awardees to understand the requirements and the associated hurdles to compliance. One of the key priorities of the GGRF is using public funding to attract private capital to the green economy. To achieve this priority, both public GGRF award recipients and their private capital partners must be aware of and assume the risk of compliance with the federal requirements. This section details key GGRF requirements, and whether compliance may pose a barrier to the deploying GGRF funds.

### ***A. Build America, Buy America***

Congress enacted the Build America Buy America Act (BABA) as part of the Bipartisan Investment Law (BIL) in 2021.<sup>36</sup> BABA established a “domestic content procurement preference for all Federal financial assistance obligated for infrastructure projects.”<sup>37</sup> Put simply, BABA requires that all iron, steel,<sup>38</sup> manufactured products, and construction materials<sup>39</sup> used in covered infrastructure projects<sup>40</sup> are produced in the United States.<sup>41</sup> BABA<sup>42</sup> is a key component of U.S. policy to rebuild a domestic manufacturing base—it ensures that as new technology is deployed across the American economy, the benefits of this transition are felt across the supply chain.<sup>42</sup> By implementing BABA, the U.S. can also increase national security by reducing exposure to supply chain risks, such as the shortages and delays experienced by many Americans during the COVID pandemic.<sup>43</sup>

BABA applies to “Federal awards where funds are appropriated or otherwise made available for infrastructure projects in the United States, regardless of whether infrastructure is the primary purpose of the Federal award.”<sup>44</sup> Not all GGRF-funded projects, however, will be considered public infrastructure projects.<sup>45</sup> Applicable public<sup>46</sup> infrastructure projects can include everything from transportation infrastructure to drinking and wastewater systems to energy infrastructure.<sup>47</sup> BABA applies

to “articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project.”<sup>48</sup> It does not apply to tools, equipment, supplies, or other items that are not an “integral part” of the infrastructure, or which are not permanently affixed to the structure.<sup>49</sup> It also does not apply to residential projects.<sup>50</sup> GGRF fund recipients may obtain a certification from **\*103** an applicable item manufacturer that the item meets the requirements.<sup>51</sup> Further, BABA has no sunset date; it is a permanent new requirement.<sup>52</sup>

Federal agencies can waive the Buy America Preference<sup>53</sup> in any of the following circumstances: nonavailability,<sup>54</sup> unreasonable cost,<sup>55</sup> and public interest.<sup>56</sup> A federal awarding agency can develop and implement “general applicability” waivers, which can apply generally across multiple federal awards.<sup>57</sup> BABA “does not apply to expenditures for assistance ... relating to a major disaster or emergency declared by the President ... or pre and post disaster or emergency response expenditures.”<sup>58</sup>

### ***B. Implementation Issues: BABA***

With minimal federal guidance, coalition groups must fend for themselves on how the waiver process works, the extent of the review period by the EPA before a waiver is granted, and other BABA mechanics. There is little formal guidance available on BABA, which contributes to the uncertainty.<sup>59</sup> Consequently, program participants have little clue on how to operationalize BABA for domestic steel production which is not yet in a position to transition to the clean energy economy through the GGRF.

**\*104** Now, contractors must prepare for the influx of infrastructure dollars and attempt to “manage ongoing projects that are now suddenly subject to new, onerous domestic preference requirements that have yet to be fully understood by agencies.”<sup>60</sup> Additionally, there must be structures in place to facilitate implementing and verifying BABA compliance.<sup>61</sup> However, the practical realities of BABA forced many agencies to issue a range of waivers to reflect those realities.<sup>62</sup> Compliance structures are either not yet in place to implement these requirements or are in a fledgling state.<sup>63</sup> Currently, not enough content is domestically produced to keep pace with the deployment of funds into projects.<sup>64</sup> This push to boost domestic production clashes with the “reality that some materials are not available from U.S. sources in the amount or time required.”<sup>65</sup> For instance, “many iron, steel, manufactured products, and construction materials are ‘not produced in the United States’ such that they are available for use in all covered infrastructure projects.”<sup>66</sup> Finally, in some cases, “the goal of increasing domestic content in these projects is outweighed by the administrative burden of implementation and enforcement.”<sup>67</sup>

Following BABA's passage, many GGRF awardees, subawardees, and contractors were left “without agency guidance as to what, exactly, would be required.”<sup>68</sup> The timing of guidance is a crucial element as well. Without guidance on complying with BABA (or any other GGRF requirements) **\*105** before deploying funds, awardees and subawardees risk the EPA determining that the investments were non-compliant and incurring associated penalties.

Further, agencies themselves are struggling to figure out how to comply. The Department of Education found 32 of its own programs that would be classified as “infrastructure” under BABA.<sup>69</sup> The Federal Emergency Management Agency (FEMA) found 23 programs.<sup>70</sup> Finally, in April 2022, the Office of Management and Budget (OMB) issued guidance to federal agencies. However, because of its extraordinary complexity and the conflicts it creates with other domestic-preference laws,<sup>71</sup> the new OMB guidance<sup>72</sup> may impose “heavy compliance burdens on contractors and suppliers, disrupt existing supply chains, and trigger disputes (through bid protests or otherwise) over states' prior commitments to open their procurement markets under international trade agreements.”<sup>73</sup> Additionally, OMB's guidance could only take the horse to water, not make it drink. OMB's guidance still requires agencies to “determine how this guidance is best applied to their infrastructure programs and processes, and consult with OMB, as needed, on establishing criteria, processes, and procedures for applying a Buy America preference and issuing waivers.”<sup>74</sup> In short, these expanding mandates to use American-made products “has confused federal, state and local governments, and created new levels of bureaucratic waste.”<sup>75</sup>

**\*106** Besides issues understanding BABA requirements, there is another issue: China--“the biggest influencer on global steel” production.<sup>76</sup> China has “approximately 10 times” the steelmaking capacity of the United States.<sup>77</sup> Much of this capacity derives from China’s “advantages of industrial chain clusters, logistics supply chain advantages, industrial workers advantages ... [and factories with] the dual advantages of high production efficiency and low production costs.”<sup>78</sup> China also has a foothold in specialty manufacturing processes that are crucial for BABA compliance. In more niche industries, like steel powder coating, the market power is held outside the United States.<sup>79</sup> In fact, only 20% of the global powder coating market is in the Americas.<sup>80</sup> Steel powder coating is only one infinitesimal part of the entire process, but because BABA requires “all manufacturing processes, from the initial melting stage through the application of coatings”<sup>81</sup> to take place in the U.S., everything starts to add up. Further, this becomes a larger issue when more integral parts of the steel and iron manufacturing process, like casting, are consolidated under Asian market power.<sup>82</sup> Thus, with critical manufacturing processes consolidated outside the U.S., GGRF program participants must have BABA waivers ready until domestic steel production ramps up.

BABA is based on solid policy goals. However, it may be more cumbersome than anticipated and require more direct government support to boost U.S. steel production. From the basics of compliance to global manufacturing market power, there are countless features that make BABA implementation and compliance more difficult. Despite this, BABA carves out exemptions covering instances where, for example, a product may not be **\*107** available domestically.<sup>83</sup> Yet, “all the mandates, waivers, and ‘box ticking’” add uncertainty, time, and cost to government procurement and federally-led development.<sup>84</sup> The Federal Highway Administration projected that “some of the new BABA requirements could cost more than \$700 million a year to implement, although the agency admitted it didn’t calculate the expense of compliance and delays.”<sup>85</sup> Thus, federal grant requirements require a bit of flexibility to account for the realities on the ground so that money can be obligated and invested into projects.<sup>86</sup>

### *C. Davis Bacon Act*

As a Clean Air Act (CAA) program, GGRF construction activities must comply with the prevailing wage requirements of the Davis Bacon Act (DBA).<sup>87</sup> The DBA requires “all laborers and mechanics employed by contractors and subcontractors performing construction work under federal contracts in excess of \$2,000 pay their laborers and mechanics not less than the prevailing wage and fringe benefits for the geographic location.”<sup>88</sup> The DBA is designed to create middle-class jobs with livable wages for blue-collar workers across the country as the U.S. ramps up infrastructure development. Additionally, the DBA protects against unethical contractors undercutting the local workforce, shoddy construction, construction site accidents due to an unskilled and untrained workforce and cost over-runs and delays.<sup>89</sup>

The definition of “construction activities” applies generally; it can include common projects such as installing solar panels and heat pumps, and energy efficiency building retrofits.<sup>90</sup> However, whether pre-construction **\*108** development work triggers the DBA depends on the nature of that work.<sup>91</sup> The DBA extends beyond commercial projects, too. The DBA statute governing the use of funds under the CAA is broad and extends to all construction projects funded under the GGRF, including single-family residential construction projects.<sup>92</sup> Four distinct types of construction work exist under DBA: Building, Heavy, Highway, and Residential.<sup>93</sup>

Reporting requirements under the DBA differ between the construction contractors and the GGRF fund recipients.<sup>94</sup> The “contracting agency” is required to collect and review the “weekly certified payrolls and ‘Statement of Compliance’ submitted [] by the prime Contractor.”<sup>95</sup> This review should verify compliance with the DBA, including “ensuring the use of the correct wage rate determination, proper work classification, number of hours worked, and hourly rate of pay for each employee on a project.”<sup>96</sup> Further, the recipient and any subrecipient are responsible for “maintaining organized, accessible records of all weekly certified payrolls (including the requirement to preserve such records for a minimum of 3 years after project completion).”<sup>97</sup> Separately, “the Recipient is responsible for aggregating select information<sup>98</sup> from weekly certified payrolls for all covered projects under its program [] and reporting them to EPA” on a semi-annual basis.<sup>99</sup>



**\*109 D. Implementation Issues: DBA**

Some critics<sup>100</sup> of the DBA argue that its methodology is outdated and flawed, and results in inflated wage expenses.<sup>101</sup> A 2022 industry-funded study<sup>102</sup> estimated that the DBA costs taxpayers \$21 billion per year, increases the cost of construction by 7.2%, and increases construction workforce wages by 20.2%.<sup>103</sup> Other studies, however, have found more modest increases, and that work productivity gains largely offset costs related to prevailing wage mandates.<sup>104</sup>

In addition to direct cost increases due to wage increases, “contractors will incur costs related to administrative compliance with the DBA.”<sup>105</sup> The DBA requires contractors and subcontractors to comply with numerous requirements and to maintain records to verify compliance.<sup>106</sup> Therefore, contractors that want to participate in programs subject to the DBA will incur costs for transition, maintenance and operation, and administration.<sup>107</sup> Such administrative costs may include the following: new payroll systems, payroll \*110 administrators, reporting analysts, subcontractor auditing systems and processes, and modification of internal policies and employee handbooks.<sup>108</sup>

Outside of additional administrative and labor costs, contractor experience is another crucial factor. While compliance with DBA may not be an issue for more experienced contractors with portfolios of larger projects, residential contractors likely do not have the same experience of complying with DBA federal requirements. In fact, it may prove devastating for small contractors working on federal contracts. Testifying before the U.S. House Committee on Small Business, Mario Burgos of Prairie Band LLC stated that the U.S. Department of Labor's (DOL) rulemaking<sup>109</sup> updating the DBA will “only make compliance challenges worse, driving small contractors out of public works projects or even out of business.”<sup>110</sup> For Burgos and small businesses alike, the ever-changing and ever-increasing federal and state regulatory requirements excessively burden small contractors, forcing some to shut down. Burgos remarked, the DBA “is just the latest example of additional burdens and barriers erected, which make it more difficult for small businesses to participate in the economic investments of the [BIL] ...”<sup>111</sup> And with small businesses comprising over half of the construction industry, the DBA is sure to make waves.<sup>112</sup>

Residential projects will face the greatest barrier with the DBA prevailing wage requirements due to project size as well as the fact that smaller, local contractors may not have experience working and complying with the DBA. There is a long history of government contractors and other larger contractors satisfying the DBA requirements to get work done.<sup>113</sup> The next few years will determine whether smaller contractors in the residential sector can get up to speed on DBA compliance. This will determine whether DBA compliance results in a stronger middle class created from well-paying jobs, or a lack of deployment of GGRF funds in the residential market.

**\*111 E. Disadvantaged Business Enterprises**

The requirements of the Disadvantaged Business Enterprises (DBE) program apply to procurement under EPA financial assistance agreements performed in the U.S., “whether by a recipient or its prime contractor, for construction, equipment, services and supplies.”<sup>114</sup> Under EPA's 8%<sup>115</sup> and 10%<sup>116</sup> statutes, an entity must establish that it is 8-10% “owned and controlled by socially and economically disadvantaged individuals who are of good character and citizens of the United States.”<sup>117</sup> To meet these objectives, recipients are required to make six good faith efforts<sup>118</sup> whenever procuring construction, equipment, services, and supplies under an EPA financial assistance agreement.<sup>119</sup> To document compliance with the six good faith efforts, recipients could provide, for example, use of current bidders/solicitation list or databases that include DBEs; how DBEs were made aware of the solicitation; samples of letters or records of communication with DBEs; sample of advertisement and duration of advertisement; and so on.<sup>120</sup> \*112 Entities that meet the certification criteria under at least one of the EPA statutes<sup>121</sup> are qualified for EPA's DBE program.<sup>122</sup>

A recipient may apply for a waiver from any of the requirements that are not specifically based on a statute or Executive order by submitting a written request to the Director of the Office of Small and Disadvantaged Business Utilization (OSDBU).<sup>123</sup> The request must document “special or exceptional circumstances that make compliance with the requirement impractical, including a specific proposal addressing how the recipient intends to achieve the objectives of this part as described in section 33.101.”<sup>124</sup>

The OSDBU Director has the authority to approve a recipient's request<sup>125</sup> and end a program waiver at any time upon notice to the recipient and require the recipient's compliance.<sup>126</sup> Further, the Director may extend the waiver if they determine that all requirements continue to be met.<sup>127</sup>

If a recipient fails to comply with any requirements, EPA may take remedial action under 2 CFR § 200.339.<sup>128</sup> This includes, but is not limited to, “temporarily withholding cash payments pending correct of the deficiency by the recipient, disallowing all or part of the cost of the activity or action not in compliance, wholly or partly suspending or terminating the current award, or withholding further awards for the project or program.”<sup>129</sup>

#### ***F. Implementation Issues: DBE***

Complying with DBE requirements may be easier than other GGRF requirements for grant recipients and contractors, so waivers and enforcement actions will likely be rare occurrences. This is not to say that DBE requirements are unenforceable and unproblematic. For instance, it can be difficult for small businesses to hear about current contracting opportunities, especially those that are not connected to existing contractors or procurement agencies.<sup>130</sup> Adopting more user-friendly processes and \*113 technology can take time, but are generally worth the investment.<sup>131</sup> Upon failure to meet DBE requirements, EPA may take remedial action under 2 CFR § 200.339.<sup>132</sup> Therefore, these good faith efforts must be taken seriously, but complying with them is not an insuperable task.

Many states have established programs that focus on getting financing, renewable energy upgrades and benefits, and other support to disadvantaged communities, marginalized groups, and low- to moderate-income families.<sup>133</sup> States that already have such programs in place, like Connecticut, may be in a prime position to comply with DBE. States without such programs may find it more difficult to comply with DBE.

#### ***G. National Environmental Policy Act***

The National Environmental Policy Act (NEPA) was one of the “first laws ever written that establishes the broad national framework for protecting our environment.”<sup>134</sup> NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.<sup>135</sup> Section 102 in Title I of the Act requires federal agencies to prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment.<sup>136</sup>

However, Section 7(c) of the Energy Supply and Environmental Coordination Act of 1974<sup>137</sup> exempts all actions under the CAA from the requirements of NEPA.<sup>138</sup> As a grant program authorized under the CAA, NEPA will not apply to GGRF projects, unless part of a project is also carried \*114 out with funding from another federal agency.<sup>139</sup> As a result, NEPA should not present any barriers to deployment of GGRF funds.

#### ***H. National Historic Preservation Act***

The National Historic Preservation Act (NHPA) requires federal agencies to consider the effect<sup>140</sup> of their undertakings<sup>141</sup> on historic properties.<sup>142</sup> Specifically, Section 106 of the NHPA aims to “identify historic properties<sup>143</sup> potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize, or mitigate any adverse effect<sup>144</sup> to historic properties.”<sup>145</sup>

A Section 106 review is required under NEPA for Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements.<sup>146</sup> The review begins by determining whether the proposed undertaking is an activity that could cause effects to historic properties.<sup>147</sup> Projects that involve earth disturbances or construction activities can affect historic properties.<sup>148</sup> These projects must then undergo further review, considering the actions potential for both direct and indirect



effects on historic properties and Section 106 consultation.<sup>149</sup> The review will result in one of the following determinations: (1) “no historic properties affected;” \*115 (2) “no adverse effect to historic properties;” or (3) “adverse effect to historic properties.”<sup>150</sup>

Grant recipients have two options. Either demonstrate compliance or “assist EPA with complying with Section 106 for a project.”<sup>151</sup> Once a recipient decides to apply for an EPA-funded grant, the recipient should collaborate with the EPA to determine the level of involvement in the Section 106 process.<sup>152</sup> The onus is on the recipient to provide EPA with the information “needed to properly characterize impacts.”<sup>153</sup>

### *I. Implementation Issues: NHPA*

Complying with the NHPA will likely not pose a major obstacle to deployment of GGRF funds but will require greater attention in certain regions that have an older building stock. If any undertaking<sup>154</sup> does not affect historical properties, then NHPA requirements will not apply. Regardless, project developers will have to undergo site assessments to determine if NHPA is triggered anyway.

However, the historical particularities of certain regions, namely the Northeast, may make compliance with NHPA more difficult. The Northeast is home to most of the Nation's old homes.<sup>155</sup> While properties under 50 years old can be listed in the National Register of Historic Places for being “exceptionally important,” most eligible properties are at least 50 years old.<sup>156</sup> Therefore, many Northeastern buildings that want renewable energy or energy efficiency upgrades will likely trigger NHPA review.

A model for effective streamlining exists to prioritize federal fund obligations. The American Recovery and Reinvestment Act (ARRA) marked \*116 the beginning of the fast-tracking era.<sup>157</sup> The government fast-tracked permitting processes to use ARRA funds to “further the goal of rapidly installing renewable energy projects on public lands as part of a concerted effort to promote America's ‘green energy future.’”<sup>158</sup> The contemporary political and economic environments also contributed to the impetus for fast-tracking. It was the “need for recession recovery [that] created strong reasons for approving projects in short time periods and for spending money as quickly as possible.”<sup>159</sup> The same political and economic rationales exist today. Thus, instead of piecemeal NHPA reviews, projects could be aggregated to be reviewed collectively to quickly assure compliance so funds can be deployed. Such a streamlined review process would allow projects to obtain compliance and not get bogged down in potential “endless feedback loops” of mismanaged Programmatic Agreements.<sup>160</sup>

### *J. Justice40*

The GGRF falls under the Justice40 initiative.<sup>161</sup> Every GGRF competition “will align with the Justice40 initiative, ensuring that 40% of the overall benefits from the program flow to disadvantage communities.”<sup>162</sup> Applicants will be evaluated by EPA on their “plans and capabilities for deploying this grant funding to improve equity and environmental justice.”<sup>163</sup> Grantees must also regularly report the benefits they have delivered to low-income and disadvantaged communities.<sup>164</sup> Because of the alignment \*117 between GGRF programs and Justice40 goals, this requirement should not pose any barriers to deployment of GGRF funds. However, it is unclear whether there are enough shovel-ready projects in these target areas to facilitate deploying GGRF funds. Thus, worthy policy goals must be balanced with the practicalities of GGRF fund deployment.

## **III. EXTERNAL PRESSURES ON THE GGRF**

The GGRF's success depends not only on its participants' ability to navigate and comply with the numerous requirements, but also on political and judicial externalities. Namely, the 2024 presidential election and the overruling of *Chevron*.<sup>165</sup> These two externalities will affect the GGRF to some degree, adding more uncertainty and complication.

### A. 2024 Presidential Election

Any federal election can shift program oversight as new administrations implement their priorities. However, the 2024 presidential election brings a level of uncertainty with regards to programs like the GGRF. With diverging climate and energy goals between Democrats and Republicans, President Donald Trump's election may heavily influence the degree of governmental support for clean energy policy.

President Trump's advisors have indicated that dismantling the IRA sits at the top of his agenda.<sup>166</sup> However, a wholesale repeal of the IRA may be unlikely due to its success and the bipartisan support of non-GGRF components in the IRA such as investment tax credits.<sup>167</sup> As more and more renewables projects, mineral processing facilities, battery plants, and electric vehicle factories bring jobs and tax revenue to Republican-majority states, “the politics around clean energy are shifting.”<sup>168</sup>

**\*118** However, given the outcome of the 2024 election,<sup>169</sup> Republicans will have the political power to effect change come Inauguration Day. Further, President Trump's nominee for EPA administrator, Lee Zeldin,<sup>170</sup> could make GGRF requirements more burdensome if it is a priority. Despite this, if the Department of Energy (DOE) and EPA worked fast enough, GGRF funds could be spent or obligated before the new administration makes the requirements more burdensome.<sup>171</sup> EPA must also cement protections on air, climate, and water to avoid a Republican-led Congress and White House from burying those rules. Rules not completed by early 2024 could be overruled by the inbound administration under the Congressional Review Act.<sup>172</sup> Ultimately, only time will tell whether President Trump's second term will affect EPA in obligating GGRF funds.

### B. The Chevron Deference Issue

The *Chevron* decision marked a massive victory for the regulatory state and established the start of forty years of environmental and administrative precedent. Courts and scholars cited *Chevron* over “19,000 times, making it the third-most cited civil case ever.”<sup>173</sup> However, legal scholars saw the writing on the wall that the current Supreme Court would continue to limit and eventually overturn the long-standing precedent.<sup>174</sup>

Overruling *Chevron*<sup>175</sup> has incredibly expansive implications, especially for environmental and energy arenas. ClearView Energy Partners analysts **\*119** suggest *Loper Bright* may have “significant implications for U.S. energy infrastructure on its own.”<sup>176</sup> *Chevron* provided a degree of certainty to investors about the durability of new agency rules. But without *Chevron*, investors may be wary to invest, and regulated entities “may forego early compliance with anticipated or pending regulations.”<sup>177</sup> Most importantly, a regulated entity's “interpretation of a statute could be given just as much weight as the agencies.”<sup>178</sup> Additionally, litigation timelines may be extended because “judges will no longer be able to rely on agency expertise when writing decisions on often technical and complex issues.”<sup>179</sup>

Thus, investors and developers face uncertainty not only from the baseline of federal requirements and compliance with them, but also from the 2024 presidential election and from recent Supreme Court decisions. While neither the election nor Supreme Court decisions should pose an immediate threat to GGRF requirements and funding, these pressure points must still be kept in mind.

## CONCLUSION

The IRA is already having significant impacts on clean-energy finance and development. The GGRF is positioned to have similar impacts. Billions of dollars are primed for deployment into shovel-ready projects. However, to get shovels in the ground, program participants must successfully navigate and comply with GGRF requirements.

Whether the GGRF can match other IRA provisions' success depends primarily on three factors. First, states, developers, contractors, and financiers must be able to navigate federal requirements to deploy money. Second, GGRF requirements must feasibly allow participants to comply without drastically increasing material, labor, and administrative costs. Finally, this

feasibility must not exclude disadvantaged groups from participating and receiving direct benefits. If these three factors align, then America can achieve significant progress in the campaign toward securing a clean energy economy.

### Footnotes

- <sup>a1</sup> Brian Farnen is a professor at Fairfield University and General Counsel at the Connecticut Green Bank. He has directed all legal, legislative, and regulatory affairs at the CT Green Bank since its inception in 2011. Max Mrus is a rising third-year joint JD/ Master of Energy Regulation and Law (MERL) student at Vermont Law and Graduate School. They would like to thank Sara Harari for her helpful insights and diligent review of this article.
- <sup>1</sup> Courtney Lindwall, *Decarbonization: Why We Must Electrify Everything Even Before the Grid is Fully Green*, NRDC (Dec. 1, 2022), <https://www.nrdc.org/stories/why-we-must-electrify-everything-even-grid-fully-green>; DANIEL STEINBERG ET AL., *ELECTRIFICATION & DECARBONIZATION: EXPLORING U.S. ENERGY USE & GREENHOUSE GAS EMISSIONS IN SCENARIOS WITH WIDESPREAD ELECTRIFICATION & POWER SECTOR DECARBONIZATION* (2017).
- <sup>2</sup> *Greenhouse Gas Emissions: Sources of Greenhouse Gas Emissions*, EPA, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions> (last updated Oct. 22, 2024) (explaining that the transportation, electric power, and industrial sectors make up about 28%, 25%, and 23% of the total U.S. GHG emissions, respectively).
- <sup>3</sup> ERIC LARSON ET AL., *NET-ZERO AMERICA: POTENTIAL PATHWAYS, INFRASTRUCTURE, & IMPACTS*, PRINCETON UNIV. (2020); Jacob Knutson, *Why the High Price of Modernizing the U.S. Power Grid Is Worth It*, AXIOS (July 11, 2023), <https://www.axios.com/2023/07/11/us-power-grid-modernize-climate-change>.
- <sup>4</sup> Melissa Quinn, *Senate Passes Democrats' Sweeping Climate, Health and Tax Bill, Delivering Win for Biden*, CBS NEWS (Aug. 8, 2022, 7:16 PM), <https://www.cbsnews.com/news/inflation-reduction-act-senate-pass-climate-healthcare-tax-bill/> (“The plan, called the Inflation Reduction Act, cleared the upper chamber by a vote of 51 to 50 along party lines, with Vice President Kamala Harris providing the tie-breaking vote in the evenly divided Senate.”).
- <sup>5</sup> *Summary: The Inflation Reduction Act of 2022*, U.S. CONG., [https://www.democrats.senate.gov/imo/media/doc/inflation\\_reduction\\_act\\_one\\_page\\_summary.pdf](https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_one_page_summary.pdf) (last visited Nov. 1, 2024).
- <sup>6</sup> Eric Van Nostrand & Arik Levinson, *The Inflation Reduction Act: Pro-Growth Climate Policy*, U.S. DEP'T OF THE TREASURY (Nov. 13, 2023), <https://home.treasury.gov/news/featured-stories/the-inflation-reduction-act-pro-growth-climate-policy>.
- <sup>7</sup> *Federal Solar Tax Credits for Businesses February 2024*, U.S. DEP'T OF ENERGY & OFF. OF ENERGY EFFICIENCY & RENEWABLE ENERGY (last updated Dec. 2024), <https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses> (“The [ITC] is a tax credit that reduces the federal income tax liability for a percentage of the cost of a solar system that is installed during the tax year.”) [hereinafter *Federal Solar Tax Credits*].
- <sup>8</sup> *Summary of Inflation Reduction Act Provision Related to Renewable Energy*, EPA, <https://www.epa.gov/green-power-markets/summary-inflation-reduction-act-provisions-related-renewable-energy>; (last visited Nov. 1, 2024); *Federal Solar Tax Credits*, *supra* note 7, at 2 (“The [PTC] is a per kilowatt-hour (kWh) tax credit for electricity generated by solar and other qualifying technologies for the first 10 years of a system's operations. It reduces the federal income tax liability and is adjusted annually for inflation.”) [hereinafter *Summary of IRA Provision*].

- 9 *Summary of IRA Provision, supra* note 8.
- 10 *The Bipartisan Infrastructure Law Advances Environmental Justice*, THE WHITE HOUSE (Nov. 16, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/11/16/the-bipartisan-infrastructure-law-advances-environmental-justice/> (explaining that the BIL aims at ensuring clean drinking water, targets legacy pollution, and clean public transit); Hannah Perls, *Breaking Down the Environmental Justice Provisions in the 2022 Inflation Reduction Act*, HARV. L. SCH. ENVT & ENERGY L. PROGRAM (Aug. 12, 2022), <https://eelp.law.harvard.edu/2022/08/ira-ej-provisions/> (detailing that the IRA will direct “billions of dollars to communities based on various EJ-related criteria, including income, energy burden, and demographics”); Evana Said et al., *U.S. Clean Energy Projects Need Public Buy-in. Community Benefits Agreements Can Help*, WORLD RES. INST. (Aug. 31, 2023), <https://www.wri.org/insights/community-benefits-agreements-us-clean-energy#>. The authors detail DOE's EJ scoring requirements:
- The [DOE] now requires developers to submit community benefits plans as part of all BIL and IRA funding opportunities and loan applications. These are evaluated based on four pillars -- implementing Justice40; investing in America's workforce; engaging communities and labor; and advancing diversity, equity, inclusion, and accessibility -- and will count for 20% of a project's overall score during the review process. *Id.*
- 11 Aditi Srivastava, *The Greenhouse Gas Reduction Fund, Green Banks, & Nature-Based Solutions: An Interview with Matt Carney, Quantified Ventures*, THE CONSERVATION FIN. NETWORK (May 23, 2024), <https://www.conservationfinancenetwork.org/2024/05/23/the-greenhouse-gas-reduction-fund-green-banks-nature-based-solutions-an-interview-with/> (“Programs under the [GGRF], such as NCIF and CCIA, offer loans rather than grants. While this capital is cost-effective, it requires repayment, a shift from the traditional grant funding ...”); *Grants vs. Loans: What's the Difference?*, ROCKET LAWYER, <https://www.rocketlawyer.com/business-and-contracts/business-operations/corporate-finance/legal-guide/grants-vs-loans-whats-the-difference> (last visited July 31, 2024) (“Grants are also limited in the amount of financing they can provide. In most cases, grant programs are sponsored by government departments and only a certain amount of funding is available each year. With a loan, you can obtain as much funding as your credit and ability to repay will allow.”); *Financing v Funding: There Is a Difference*, VT. BOND BANK, <https://www.vtbondbank.org/resource/financing-v-funding-there-difference> (last visited July 31, 2024) (“Grant sources are time consuming to access and highly competitive and can obscure the true cost of infrastructure investment.”). In other words, financing programs like the GGRF create a sustainable funding source for future projects instead of having a finite funding source from a grant program.
- 12 *Three Ways the Inflation Reduction Act Advances Green Banking*, BURR & FORMAN (Aug. 19, 2022), <https://www.burr.com/newsroom/articles/three-ways-the-inflation-reduction-act-advances-green-banking> (“Green banks have momentum and are a proven financial model that uses public ... funds to mobilize private investment in renewable energy, energy efficiency, and other decarbonization technologies. With the [IRA] now law, more states will form green banks and ... [can] capitalize on the federal funding and further green projects.”); Ilmi Granoff, *The End of the Beginning for U.S. Green Banks*, ROOSEVELT INST. (Apr. 5, 2024), <https://rooseveltinstitute.org/2024/04/05/the-end-of-the-beginning-for-us-green-banks/> (explaining that public capital can have a “powerful role in steering private capital toward the communities and technologies that need it most. It can take calculated and compensated bets in technologies and markets in which the private sector is slow to act, or by demonstrating the commercial viability of new technologies or business models.”).
- 13 *About the Greenhouse Gas Reduction Fund*, EPA, <https://www.epa.gov/greenhouse-gas-reduction-fund/about-greenhouse-gas-reduction-fund> (last updated Aug. 16, 2024); 2011 Conn. Pub. Acts 11-80.
- 14 This is typically quantified as a balance sheet leverage ratio, which measures the “financial leverage on the balance sheet of a company, or the reliance a company has on creditors to fund its operations.” A high leverage ratio indicates significant reliance on external debt financing sources, while a low leverage ratio indicates that operations are funded mostly with internally generated cash. *Leveraging a Green Bank's Balance Sheet to Develop More Socioeconomic Projects*, COHNREZNICK (May 6, 2024), <https://www.cohnreznick.com/insights/green-banks-balance-sheet-expansion-tools-overview> (“Green banks can leverage their balance sheets primarily by mobilizing capital

from various sources, including the U.S. government, [NGOs], capital markets, and other financial institutions ... By leveraging their capital, green banks can significantly increase the overall monies flowing to projects and amplify the impact of their investments.”); *Leverage Ratio*, WALL STREET PREP, <https://www.wallstreetprep.com/knowledge/leverage-ratio/> (last updated July 10, 2024); *Connecticut Green Bank FY22 Annual Report*, CONN. GREEN BANK (2022), <https://www.ctgreenbank.com/wp-content/uploads/2023/01/Connecticut-Green-Bank-FY22-Annual-Report-Final-12-27-2022.pdf> (“[The Connecticut Green Bank has] mobilized nearly \$2.3 billion by investing public funds to attract private investment at seven-to-one ratio.”); Ilmi Granoff, *The End of the Beginning for U.S. Green Banks*, ROOSEVELT INST. (Apr. 5, 2024), <https://rooseveltinstitute.org/2024/04/05/the-end-of-the-beginning-for-us-green-banks/> (“Green banks will unlock clean energy financing everywhere.”).

- 15 See *EPA Announces Initial Program Design of Greenhouse Gas Reduction Fund*, EPA 4 (Feb. 14, 2023), <https://www.epa.gov/newsreleases/epa-announces-initial-program-design-greenhouse-gas-reduction-fund> (“Over the next decade, [green banks] will help us build on current efforts by mobilizing financing and private capital for a range of clean energy projects to decarbonize communities—including low-income and disadvantaged communities—across the United States.”).
- 16 *Id.* at 2.
- 17 Clean Air Act, 42 U.S.C. § 7434.
- 18 *Low Income and Disadvantaged Communities (LIDAC) Climate Action Plan Assessment - ARPA Question + Answer Session*, CITY OF EL PASO, TEX. (June 20, 2024), <https://www.elpasotexas.gov/assets/Documents/CoEP/Community-Development/Climate-Action/LIDAC-NOFA-Q+A-Draft.pdf> (EPA defines low-income and disadvantaged communities as “communities with residents that have low incomes, limited access to resources, and disproportionate exposure to environmental or climate burdens”).
- 19 *About the Greenhouse Gas Reduction Fund*, *supra* note 13, at 2.
- 20 *Id.*
- 21 *EPA's Implementation Framework for the Greenhouse Reduction Act*, EPA 5 (2023), [https://www.epa.gov/system/files/documents/2023-04/GGRFImplementationFramework\\_730am.pdf](https://www.epa.gov/system/files/documents/2023-04/GGRFImplementationFramework_730am.pdf) [hereinafter *EPA's Implementation Framework*].
- 22 Congress limited the definition of “eligible recipients” to mean a nonprofit organization that:  
  
(A) is designed to provide capital, leverage private capital, and provide other forms of financial assistance for the rapid deployment of low- and zero-emission products, technologies, and services; (B) does not take deposits other than deposits from repayments and other revenue received from financial assistance using the grant funds; (C) is funded by public or charitable contributions; and (D) invests in or finances projects alone or in conjunction with other investors.  
*Id.* at 5-6.
- 23 42 U.S.C. § 7434(a)(2).
- 24 *EPA's Implementation Framework*, *supra* note 21, at 5; 42 U.S.C. § 7434(a)(3).
- 25 See *EPA's Implementation Framework*, *supra* note 21, at 5 (explaining that direct investments are those that use grant funds as financial assistance for qualified projects at the national, regional, state, and local levels. Simply put, a direct investment occurs when a GGRF awardee uses grant money to invest directly into a qualified project. For example, a



direct investment would be a green bank's investment into energy efficiency upgrades in a LIDAC.) *See also* 42 U.S.C. § 7434(b)(1).

26 42 U.S.C. § 7434(c)(3) (detailing that a qualified project is “any project, activity, or technology that (A) reduces or avoids greenhouse gas emissions or other forms of air pollution in partnership with, and by leveraging investment from, the private sector; or (B) assists communities [] to reduce or avoid greenhouse gas emissions and other forms of air pollution.”)

27 *Id.*; 42 U.S.C. § 7434(b)(1)(B).

28 *See EPA's Implementation Framework*, *supra* note 21, at 5 (describing indirect investments as those that use grant funds to prop up financing institutions, such as green banks or community development financial institutions (“CDFIs”) that then provide financial assistance to qualified projects. In other words, an indirect investment occurs when a GGRF awardee uses grant funds to invest in an institution that can invest in qualified projects. For instance, an indirect investment would be a state government's investment into the establishment of a green bank that provides financial assistance within that state.); *See also* 42 U.S.C. § 7434(b)(2).

29 42 U.S.C. § 7434(b)(2).

30 42 U.S.C. § 7434(b)(2).

31 *EPA's Implementation Framework*, *supra* note 21, at 6.

32 *Id.*

33 Kenny Stancil, *EPA, Sanders Launch \$7 Billion Program to Expand Rooftop Solar in Poor Neighborhoods*, COMMON DREAMS (June 28, 2023), <https://www.commondreams.org/news/biden-epa-sanders-7-billion-residential-solar-for-all>.

34 *EPA's Implementation Framework*, *supra* note 21, at 41.

35 *Cf. Grants 101: Pre-Award Phase*, grants.gov (last visited Dec. 7, 2024), <https://www.grants.gov/learn-grants/grants-101/pre-award-phase#applicationreviewprocess>, (“[The grant applicant] should spend time analyzing [their] own capabilities as compared to the specific eligibility and technical requirements detailed in the application instructions.”); *Researching Subsidy Programs and Laws*, good jobs first (last visited Dec. 7, 2024), <https://goodjobsfirst.org/researching-subsidy-programs-and-laws/> (explaining that the legislative and administrative processes create subsidy programs and that agencies add administrative rules or operating procedures to these laws to set out how the law will be implemented and what requirements will apply).

36 Off. of Acquisition Mgmt., *Build America Buy America*, U.S. DEPT OF COM., <https://www.commerce.gov/oam/build-america-buy-america> (last visited July 22, 2024).

37 *Id.*; 2 C.F.R. § 184.3 (2023).

38 All manufacturing processes, from the initial melting stage through the application of coatings, must take place in the U.S. Federal Emergency Management Agency. *Build America, Buy America Act Frequently Asked Questions*, FED. EMERGENCY MGMT. AGENCY, <https://www.fema.gov/fact-sheet/build-america-buy-america-act-frequently-asked-questions-faqs> (last updated Oct. 2, 2024) [hereinafter *BABA FAQs*].

- 39 *Id.* (“[M]anufactured product[s] [must be] manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States [must be] greater than 55% of the total cost of all components of the manufactured product.”).
- 40 *DOE's Implementation of the Buy America Requirement for Infrastructure Projects*, DEP'T OF ENERGY (Nov. 2022), <https://www.energy.gov/sites/default/files/2023-06/DOE.sImplementationoftheBuyAmericaPreference11-17.pdf>.
- 41 *BABA FAQs*, *supra* note 38.
- 42 *Key Provisions in the Build America, Buy America Act Guidance*, the white house (last visited Dec. 7, 2024), [https://www.whitehouse.gov/wp-content/uploads/2023/08/QA-BABA-Guidance.Final\\_.pdf](https://www.whitehouse.gov/wp-content/uploads/2023/08/QA-BABA-Guidance.Final_.pdf), (“Through industry engagement, complementary initiatives to boost our industrial base, and the use of transparent, targeted waivers, we are working to ensure that [BABA] requirements are integrated with industrial strategies to increase opportunities for domestic producers and fill gaps in our supply chain.”).
- 43 *BABA Expansion and New Optional Tools*, Dep't of Hous. and Urban Dev. (Aug. 23, 2024), <https://www.hudexchange.info/news/new-build-america-buy-america-resources-available/> (“BABA aims to bolster America's domestic manufacturing and supply chain, protect national security, support high-paying jobs, increase community investment, create economic prosperity, and spur innovation.”).
- 44 2 C.F.R. § 184.4(a) (2023).
- 45 2 C.F.R. § 184.3 (“Infrastructure project means any activity related to the construction, alteration, maintenance, or repair of infrastructure in the United States regardless of whether infrastructure is the primary purpose of the project.”).
- 46 BABA does not apply to “non-public” infrastructure. *DOE's Implementation of the Buy America Requirement for Infrastructure Projects*, *supra* note 40. Federal agencies should interpret “infrastructure” broadly. 2 C.F.R. § 184.4(d). When determining if a particular project constitutes ““infrastructure,” agencies should consider whether the project serves a public function, whether the project is publicly owned and operated, whether it is privately operated on behalf of the public or is a place of public accommodation. *Id.*
- 47 For a longer list of what is included in the definition of ““infrastructure,” see 2 C.F.R. § 184.4(c), (d).
- 48 *Build America, Buy America Act Frequently Asked Questions*, *supra* note 38.
- 49 *Id.*
- 50 *Id.* (“Projects consisting solely of the purchase, construction, or improvement of a private home for personal use (i.e., not serving a public function) do not constitute an infrastructure project.”)
- 51 See *BABA FAQs*, *supra* note 38 (explaining “[a]s an additional step to ensure compliance[,] ... FEMA award recipients or subrecipients may request a certification letter from the product manufacturer to demonstrate compliance with BABAA requirements.”).
- 52 *Id.*



- 53 2 C.F.R. § 184.3 (defining the Buy America Preference as a domestic content procurement preference that “requires the head of each Federal agency to ensure that none of the funds made available for a federal award for an infrastructure project may be obligated unless all of the iron, steel, manufactured products, and construction materials incorporated into the project are produced in the United States.”).
- 54 *Id.* at § 184.7(a)(2) (“Types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality ...”).
- 55 *Id.* at § 184.7(a)(3) (“The inclusion of iron, steel, manufactures products, or construction materials produced in the United States will increase the cost of the overall infrastructure project by more than 25 percent ...”).
- 56 *Id.* at § 184.7(a)(1) (“Applying the Buy America Preference would be inconsistent with the public interest ...”).
- 57 *Id.* at § 184.7(e).
- 58 *Id.* at § 184.8(a).
- 59 *Cf.* Julie Strupp, *Readers Respond: IJIA is boosting business for many contractors*, CONSTRUCTION DIVE (Aug. 11, 2023), <https://www.constructiondive.com/news/readers-respond-ijia-infrastructure-law-help-construction/690584/> (“Another challenge relates to the specific requirements that IJIA work entails ... ‘Delays by our government regarding definition of what constitutes Made in USA products [poses a challenge].’”); Charlotte Erhlich, *Industry leaders address shortfalls of Build America, Buy America provisions*, UNITED PRESS INT’L (Feb. 15, 2024), [https://www.upi.com/Top\\_News/US/2024/02/15/build-america-buy-america-hearing/7551708033325/](https://www.upi.com/Top_News/US/2024/02/15/build-america-buy-america-hearing/7551708033325/) (“‘We ask suppliers for compliance and receive asterisks on their quotes saying they cannot certify compliance,’ Edmondson said. ‘Put simply, there is uncertainty, and in construction, that means increased costs because contractors must account for that in their bids to mitigate risk.’”).
- 60 Cara Wulf, *Les Misérables - Contractors and Agencies Struggle to Navigate Build America, Buy America Requirements One Year Later*, GOV’T. CONTRACTOR (2022), at 2.
- 61 Erhlich, *supra* note 59(b); Chad Brinkle, *The Build America Buy America Act: Enhancing Domestic Manufacturing and Supply Chain*, THOMAS PUBL’G CO. (July 28, 2023), <https://www.thomasnet.com/insights/build-america-buy-america-act/> (“At the time of writing this article, there is no logo or badge you can show on your website or other official documents to indicate that you are BABA-compliant.”).
- 62 *Id.* at 4.
- 63 *Id.*
- 64 *See, e.g.*, Todd Overman, *Buy America Update: BAA Requirements Make Compliance Complex, Yet Necessary*, BASS, BERRY & SIMS (Aug. 28, 2023), <https://www.bassberrygovcontrade.com/buy-america-update/> (explaining the GAO found that only one domestic firm could produce BAA-compliant valves); David J. Lynch, *Biden’s ‘Buy America’ Bid Runs Into Manufacturing Woes it Aims to Fix*, WASHINGTON POST (Feb. 18, 2023), <https://www.washingtonpost.com/us-policy/2023/02/18/biden-buy-america-roads-bridges/> (“The ‘Buy America’ initiative that President Biden says will promote domestic manufacturing and fuel a blue-collar renaissance is running into a problem: The United States no longer produces many of the items needed to modernize roads, bridges and ports.”).

- <sup>65</sup> David J. Lynch, *Biden's 'Buy America' Bid Runs into Manufacturing Woes it Aims to Fix*, WASH. POST (Feb. 18, 2023), <https://www.washingtonpost.com/us-policy/2023/02/18/biden-buy-america-roads-bridges/>.
- <sup>66</sup> Wulf, *supra* note 60, at 4.
- <sup>67</sup> *Id.*
- <sup>68</sup> *Id.*
- <sup>69</sup> Judge Glock, *Buy American, Build Nothing*, WALL ST. J. (Mar. 25, 2024), <https://www.wsj.com/articles/buy-american-build-nothing-infrastructure-bill-requirements-complicate-construction-941e0694>.
- <sup>70</sup> *Id.*
- <sup>71</sup> Christopher Yukins & Kristen Ittig, *OMB Issues Final Build America, Buy America (BABA) Guidance Which May Trigger Compliance, Enforcement and Trade Issues -- And Bid Protests*, MONDAQ (Sept. 18, 2023), <https://www.mondaq.com/unitedstates/government-contracts-procurement--ppp/1366952/omb-issues-final-build-america-buy-america-baba-guidance-which-may-trigger-compliance-enforcement-and-trade-issues--and-bid-protests>. The authors discuss the following conflict:
- One example of this conflict between new and old laws arose in the infrastructure legislation's definition of “construction materials.” In traditional federal procurement, the implementing clauses for the Buy American Act defined “construction materials” as “an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work,” or “an item brought to the site preassembled from articles, materials, or supplies.” This could be called the “truck bed” rule--“construction materials” under the older Buy American Act would be those items brought to a construction site on a truck bed. As the discussion below explains, however, OMB's final BABA guidance defined “construction materials” much more narrowly--though with more stringent requirements, which raises compliance challenges for contractors and suppliers that serve diverse federal, state and local markets. *Id.* (citations omitted).
- <sup>72</sup> OMB Memorandum M-22-11, *Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure* (2022).
- <sup>73</sup> Yutkins, *supra* note 71.
- <sup>74</sup> Wulf, *supra* note 60, at 5.
- <sup>75</sup> Glock, *supra* note 69, at 1.
- <sup>76</sup> Shobhit Seth, *How China Impacts the Global Steel Industry*, INVESTOPEDIA, <https://www.investopedia.com/articles/investing/021716/how-china-impacts-global-steel-industry.asp> (last updated Dec. 29, 2024).
- <sup>77</sup> *Id.*

- 78 Felicia Ying, *The Scale of China's Manufacturing Industry Has Been the World's No. 1 for 13 Consecutive Years*, LINKEDIN (Apr. 7, 2023), <https://www.linkedin.com/pulse/scale-chinas-manufacturing-industry-has-been-worlds-1-Wak-W>.
- 79 Ashish Ladha & Aditya Birla, *Emerging Trends in the Powder Coatings Market*, PAINT & COATINGS INDUS. (Aug. 7, 2023), <https://www.pcimag.com/articles/111658-emerging-trends-in-the-powder-coatings-market>.
- 80 *Id.*
- 81 2 C.F.R. § 184.3 (2024).
- 82 Kiran Pulidindi & Akshay Prakash, *Iron & Steel Casting Market - By Material (Iron, Steel), By Process (Sand Casting, Die Casting), By Application (Automotive, Industrial Machinery, Pipe, Fittings & Valves, Power & Electrical, Sanitary) & Forecast, 2024 - 2032*, GLOB. MKT. INSIGHTS (June 2024), <https://www.gminsights.com/industry-analysis/iron-and-steel-casting-market> (“Asia Pacific dominated the iron & steel casting market in 2023 ... Countries such as China, India, and Japan are leading contributors to market growth, with substantial investments in construction, automotive, and manufacturing sectors.”).
- 83 *See* Glock, *supra* note 69.
- 84 *Id.*; Erhlich, *supra* note 59 (“Put simply, there is uncertainty, and in construction, that means increased costs because contractors must account for that in their bids to mitigate risk.”).
- 85 Glock, *supra* note 69.
- 86 Wulf, *supra* note 60, at 4.
- 87 *EPA's Implementation Framework*, *supra* note 21, at 8. (“Section 314 of the Clean Air Act requires that construction projects funded under the Clean Air Act comply with the Davis Bacon Act. As a Clean Air Act program, GGRF construction activities will be subject to prevailing wage requirements, where applicable.”).
- 88 *Id.*
- 89 *Davis Bacon Act and Prevailing Wage Laws Fact Sheet: Davis-Bacon Prevailing Wage Requirements*, LIUNA LABORER'S INT'L UNION OF N. AM., <https://www.liuna.org/prevailing-wage-and-davis-bacon> (last visited Nov. 16, 2024).
- 90 *NCIF & CCIA FAQs for Selected Applicants*, EPA (June 3, 2024), <https://vjel.vermontlaw.edu/wp-content/uploads/2025/01/NCIF-CCIA-FAQs-for-Selected-Applicants-Farnen-Mrus-Article-Supplement.pdf>.
- 91 *NCIF & CCIA FAQs*, *supra* note 90, at 37 (“Pre-construction activities such as environmental assessments, site acquisition, permitting, and engineering and design work do not in and of themselves trigger DBRA. Site preparation activities such as remediation of contaminated soil, abatement of asbestos or lead based paint, demolition, and similar construction activities are subject to DBRA.”).

- 92 *Id.* (“Some federal grant programs have statutory authority that provides for exclusions to DBRA labor standards on single-family residential construction projects. There are no similar exclusions in Section 314 of the Clean Air Act.”).
- 93 *Residential Construction*, DEPT OF LAB. WAGE & HOUR DIV., <https://www.dol.gov/agencies/whd/government-contracts/construction/surveys/residential> (last visited Nov. 16, 2024).
- 94 *NCIF & CCIA FAQs*, *supra* note 90, at 40 (“It is important to draw a distinction between the DBRA reporting that construction Contractors must submit to the ‘contracting agency’ (Recipient or Subrecipient) versus the summary DBRA reporting that the Recipient will submit to their EPA Project Officer on a semi-annual basis as part of the performance reports.”).
- 95 *Id.*
- 96 *Id.*
- 97 *Id.*
- 98 *Id.* (“Aggregated by month and DBRA construction type (‘Residential’ or ‘Business’): 1. Total number of projects, 2. Total number of workers, 3. Total hours worked, 4. Rate of pay (per worker median), 5. Share of workers above DBA prevailing wage.”).
- 99 *NCIF & CCIA FAQs*, *supra* note 90, at 40.
- 100 *See, e.g.*, William F. Burke & David G. Tuerck, *The Federal Davis-Bacon Act: Mismeasuring the Prevailing Wage*, BEACON HILL INST. (May 16, 2022), <https://www.beaconhill.org/BHISTudies/2022/FINAL-BHI-DBA-2022-05-16.pdf>; HAYLEY RAETZ ET AL., *THE HARD COSTS OF CONSTRUCTION: RECENT TRENDS IN LABOR AND MATERIAL COSTS FOR APARTMENT BUILDINGS IN CALIFORNIA*, UC BERKELEY 2 (Mar. 2020), [https://turnercenter.berkeley.edu/wp-content/uploads/pdfs/Hard\\_Construction\\_Costs\\_March\\_2020.pdf](https://turnercenter.berkeley.edu/wp-content/uploads/pdfs/Hard_Construction_Costs_March_2020.pdf); James Sherk, *Labor Department Can Create Jobs by Calculating Davis-Bacon Rates More Accurately*, HERITAGE FOUND. (Jan. 21, 2017), <https://www.heritage.org/jobs-and-labor/report/labor-department-can-create-jobs-calculating-davis-bacon-rates-more>; *Studies on the Negative Impact of the Davis-Bacon Act and Prevailing Wage Policies*, ASSOCIATED BUILDERS AND CONTRACTORS, <https://www.abc.org/Portals/1/2023/PoliticsPolicy/DavisBacon/ABCPrevailingWageDavisBaconStudiesSummaryUpdatedJanuary2023.pdf?ver=MV0cholNm20wd5Mr60SxMw&timestamp=1673554159098#> (last updated Jan. 2023).
- 101 Vero Bourg-Meyer, *Davis-Bacon Primer for States Implementing the Greenhouse Gas Reduction Fund Solar for All Program*, CLEAN ENERGY STATES ALL. 16 (Jan. 11, 2024), <https://www.cesa.org/wp-content/uploads/Davis-Bacon-Primer-GGRF-Solar-for-All.pdf>.
- 102 *DOL Increases Costs for Contractors and Taxpayers with Davis-Bacon Final Rule*, ASSOCIATED BUILDERS AND CONTRACTORS (Aug. 9, 2023), <https://www.abc.org/News-Media/Newsline/dol-increases-costs-for-contractors-and-taxpayers-with-davis-bacon-final-rule#>.
- 103 Bourg-Meyer, *supra* note 101, at 16.

- 104 Betony Jones, *Prevailing Wage in Solar Can Deliver Good Jobs While Keeping Growth on Track*, UC BERKELEY LAB. CTR. (Nov. 12, 2020), <https://laborcenter.berkeley.edu/prevailing-wage-in-solar-can-deliver-good-jobs-while-keeping-growth-on-track/>.
- 105 Bourg-Meyer, *supra* note 101, at 16.
- 106 The authors discuss the numerous responsibilities of contractors under the DBA:  
Beyond wages and benefits, DBA requires that contractors and subcontractors comply with weekly payment schedules, maintain payrolls and records that list specific job classifications, wages, and time spent in detail, submit weekly records for all weeks in which contract work is performed and certify payrolls using WHD forms, keep records for three years after the end of a project, periodically review processes and documentation to ensure compliance with applicable prevailing wages, including with subcontractors, and perform audits. *Id.* at 16.
- 107 Bourg-Meyer, *supra* note 101, at 16.
- 108 Bourg-Meyer, *supra* note 101, at 16.
- 109 29 C.F.R. pt. 1 (2024); 29 C.F.R. pt. 3 (2024); 29 C.F.R. pt. 5 (2024).
- 110 *New Davis-Bacon Rule Will Devastate Small Construction Contractors Working on Federal Contracts*, ASSOCIATED BUILDERS & CONTRACTORS (Oct. 19, 2023), <https://www.abc.org/News-Media/News-Releases/abc-new-davis-bacon-rule-will-devastate-small-construction-contractors-working-on-federal-contracts>.
- 111 *Id.*
- 112 Christine Tracey, Comment, *An Argument for the Repeal of the Davis-Bacon Act*, 5 J. SMALL & EMERGING BUS. L. 285, 287 (2001).
- 113 *See generally* Frank Osborn, *Five Facts on Davis-Bacon Wages Every Contractor Needs to Know*, FOUND. SOFTWARE (Jan. 3, 2019), <https://www.foundationsoft.com/learn/tips-davis-bacon/> (“Contractors who complete this ‘Davis-Bacon Wage Survey’ provide DOL’s primary source of information for making Davis-Bacon wage determinations ... Therefore, it’s in contractors’ best interest to return data whenever possible ...”); *But see What Is the Davis Bacon Act of 1931?*, INTUIT QUICKBOOKS, <https://quickbooks.intuit.com/time-tracking/resources/what-is-davis-bacon-act/> (“There have been over 119,000 reported violations of the Davis Bacon Act over the last 32 years ...”).
- 114 40 C.F.R. § 33.102.
- 115 Codified at 42 U.S.C. § 4370d.
- 116 Codified at 42 U.S.C. § 7601 note (Disadvantaged Business Concerns).
- 117 *Disadvantaged Business Enterprise Program Requirements*, EPA, <https://www.epa.gov/grants/disadvantaged-business-enterprise-program-requirements> (“The statute[s] presume[] HBCUs, Black Americans, Hispanic Americans, Native Americans, Women, and Disabled Americans are socially and economically disadvantaged individuals.”) (last updated Sept. 1, 2023).

118 These good faith efforts include the following:

- (1) Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State, and Local Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources;
- (2) Make information on forthcoming opportunities available to DBEs, arrange time frames for contracts, and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date;
- (3) Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State, and Local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process;
- (4) Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually;
- (5) Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce; and
- (6) If the prime contractor awards subcontracts, require the prime contractor to take the steps in items 1 through 5. *Id.*

119 *Id.*

120 For a more complete list of examples of compliance, see *Frequently Asked Questions for Disadvantaged Business Enterprises*, EPA (last updated Feb. 14, 2024), <https://www.epa.gov/grants/frequently-asked-questions-disadvantaged-business-enterprises#q06>.

121 I.e., EPA 8% or 10% statutes.

122 *Frequently Asked Questions for Disadvantaged Business Enterprises*, EPA (last updated Feb. 14, 2024), <https://www.epa.gov/grants/frequently-asked-questions-disadvantaged-business-enterprises#q06> [hereinafter *FAQs for Disadvantaged Businesses*].

123 40 C.F.R. § 33.103(a) (2024).

124 *Id.* at § 33.104(b).

125 *Id.* at § 33.104(c).

126 *Id.* at § 33.104(d).

127 *Id.*

128 40 C.F.R. § 33.105.

129 *Id.*

- 130 Theodos et al., *Removing Barriers to Participation in Local and State Government Procurement and Contracting for Entrepreneurs of Color*, URB. INST. 1, 6 (2024), <https://www.urban.org/sites/default/files/2024-04/RemovingBarrierstoParticipationinLocal%20andStateGovernmentProcurementandContractingforEntrepreneursOfColor.pdf>.
- 131 Theodos et al, *supra* note 130, at 11 (“[S]everal jurisdictions we interviewed saw higher numbers of MBEs submitting bids, quotes, or proposals as a result.”).
- 132 40 C.F.R. § 33.105 (2024); See *FAQs for Disadvantaged Businesses*, *supra* note 122 for examples of EPA remedial measures.
- 133 *Directory of State Low- and Moderate-Income Clean Energy Programs*, CLEAN ENERGY STATES ALL. (last updated June 2021), <https://www.cesa.org/resource-library/resource/directory-of-state-low-and-moderate-clean-energy-programs/> (listing states such as NJ, CA, CO, MA, ME, and NY).
- 134 *Summary of the National Environmental Policy Act*, EPA, <https://www.epa.gov/laws-regulations/summary-national-environmental-policy-act> (last updated Sept. 6, 2023).
- 135 *What Is the National Environmental Policy Act?*, EPA, <https://www.epa.gov/nepa/what-national-environmental-policy-act#> (last updated July 15, 2024).
- 136 *Id.*
- 137 Codified at 15 U.S.C. § 793(c)(1).
- 138 EPA, EPA'S IMPLEMENTATION FRAMEWORK FOR THE GREENHOUSE GAS REDUCTION FUND (2023), [https://www.epa.gov/system/files/documents/2023-04/GGRF%20ImplementationFramework\\_730am.pdf](https://www.epa.gov/system/files/documents/2023-04/GGRF%20ImplementationFramework_730am.pdf); 15 U.S.C. § 793(c)(1) (“No action taken under the Clean Air Act shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969.”).
- 139 EPA, *supra* note 138.
- 140 36 C.F.R. § 800.16(i) (2024) (An “effect” is defined as an “alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register.”).
- 141 36 C.F.R. § 800.16(y) (2024) (An “undertaking” is defined as “a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.”).
- 142 36 C.F.R. § 800.1(a) (2024); *National Historic Preservation Act (NHPA) Section 106*, EPA, <https://www.epa.gov/system/files/documents/2023-07/NHPA-Overview.pdf> (last visited July 24, 2024) [hereinafter *NHPA*].
- 143 36 C.F.R. § 800.16(l)(1) (2024) (A “historic property” is defined as the following:  
 “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains



that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.”).

- 144 36 C.F.R. § 800.5(a)(1) (2024) (An “adverse effect” is an effect that would “diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.”).
- 145 36 C.F.R. § 800.1(a) (2024); *NHPA*, *supra* note 142(b).
- 146 *NHPA*, *supra* note 142(b).
- 147 *Id.*
- 148 *Id.*
- 149 *NHPA*, *supra* note 142(b) (explaining that the “alteration or removal of a resource” can be a direct effect of an action and describing that the “introduction of modern intrusions to the viewshed of a resource, such as the addition of a modern facility in a historic district, or other impacts to the scenic values of the resource” can be an indirect effect of an action).
- 150 *NHPA*, *supra* note 142(b).
- 151 *Id.*
- 152 *Id.*
- 153 *Id.*
- 154 *Id.* (An undertaking is “[a] project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.”).
- 155 David Heacock, *U.S. Cities with the Largest Share of Homes Built Prior to 1940*, FILTERBUY, <https://filterbuy.com/resources/across-the-nation/cities-with-oldest-homes/#> (last visited Nov. 17, 2024); Coty Perry, *The Median Age of Homes in the United States by Build Year [Data Study]*, Today's Homeowner, <https://todayshomeowner.com/home-finance/guides/median-home-age-us/> (last updated Apr. 9, 2024) (explaining NY, RI, MA, PA, and CT have the oldest median home age, ranging from 55-60 years old).
- 156 *National Register of Historic Places FAQs*, NAT'L PARK SERV., <https://www.nps.gov/subjects/nationalregister/faqs.htm#> (last updated Sept. 5, 2024).
- 157 Nathaniel Logar, Note, *When the Fast Track Hits the Off Ramp: Renewable Energy Permitting and Legal Resistance on Western Public Lands*, 27 COLO. NAT. RES., ENERGY & ENV'T L. REV. 361, 374-375 (2016) (“Under this initiative, the Bureau of Land Management (“BLM”) assigned twenty-four large tracts of land as Solar Energy Study Areas to be evaluated for environmental sensitivity and renewable resources suitability. The aggregated tracts of land were then permitted under an expedited process.”)

- 158 *Id.* at 374 (quoting Press Release, Bureau of Land Mgmt., *BLM Concentrating on Renewable Energy Projects That Could Meet Stimulus Funding Deadline* (Dec. 29, 2009), <http://www.blm.gov/wo/st/en/info/newsroom/2009/december/0.html>).
- 159 *Id.* at 385.
- 160 Glenn Darrington, *Programmatic Agreements--Streamlining the Section 106 Process Guide*, POWER ENG'RS (May 30, 2019), <https://cdn2.hubspot.net/hubfs/4836571/PrismicFiles/CurrentsSpring2019/Sect.106Processfinal.pdf>; 36 C.F.R. § 800.14(b) (explaining Programmatic Agreements “govern the implementation of a particular program or the resolution of adverse effects from certain complex project situations or multiple undertakings.”).
- 161 *EPA's Implementation Framework*, *supra* note 21, at 8-9.
- 162 *Id.*
- 163 *EPA's Implementation Framework*, *supra* note 21, at 8-9.
- 164 *See id.* (“EPA expects to define ‘low-income and disadvantaged communities’ as inclusive of geographically defined disadvantaged communities identified through the Climate and Economic Justice Screen Tool (CEJST), and inclusive of the limited supplemental set of census block groups that are at or above the ninetieth percentile for EJ Screen’s Supplement Indexes.”). *See also* Said et al., *supra* note 10 (“The [DOE] now requires developers to submit community benefits plans as part of all BIL and IRA funding opportunities and loan applications ... If a developer is selected to receive funding, its CBP will be part of the contractual agreement.”).
- 165 *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984).
- 166 James Temple, *Trump Wants to Unravel Biden’s Landmark Climate Law. Here Is What’s Most at Risk*, MIT TECH. REV. (Feb. 26, 2024), <https://www.technologyreview.com/2024/02/26/1088921/trump-wants-to-unravel-bidens-landmark-climate-law-here-is-whats-most-at-risk/>.
- 167 Temple, *supra* note 166 (“By some accounts, the law has helped spur hundreds of billions of dollars in private investment into projects that could create nearly 200,000 jobs--and get this: eight of the ten congressional districts set to receive the biggest clean-energy investments announced in recent quarters are led by Republicans ...”).
- 168 *Id.*
- 169 Tracy Grant & Brian Duignan, *United States presidential election of 2024*, BRITANNICA (last updated Nov. 25, 2024), <https://www.britannica.com/event/United-States-presidential-election-of-2024#ref397331> (summarizing Trump’s victory over Harris in the 2024 presidential election); Riley Beggin, *Trump’s dream scenario: Republicans win control of House and Senate in Congress sweep*, USA TODAY (Nov. 13, 2024), <https://www.usatoday.com/story/news/politics/elections/2024/11/13/republicans-win-house-senate-2024/75734400007/> (describing Republicans winning control of Congress in the 2024 election).
- 170 Elena Moore, *Trump picks former Rep. Lee Zeldin to be his EPA administrator*, NPR (Nov. 11, 2024), <https://www.npr.org/2024/11/11/nx-s1-5187039/trump-lee-zeldin-epa-environment>.

- 171 Temple, *supra* note 166.
- 172 Kevin Bogardus, 'Maximum Urgency and De Facto Risk' - EPA Braces for 2024, POLITICO: E&E NEWS (Jan. 12, 2024), <https://www.eenews.net/articles/maximum-urgency-and-de-facto-risk-epa-braces-for-2024/>.
- 173 John P. Elwood et al., *Chevron Overturned: What Does It Mean for Life Sciences Companies?*, ARNOLD & PORTER (July 1, 2024), <https://www.arnoldporter.com/en/perspectives/advisories/2024/06/chevron-overturned#>.
- 174 See, e.g., Kristin E. Hickman & Aaron L. Nielson, *Narrowing Chevron's Domain*, 70 DUKE L. J. 931 (Feb. 2021); Nathan Richardson, *Deference Is Dead (Long Live Chevron)*, 73 RUTGERS U. L. REV. 441 (2021); Kristin E. Hickman & Aaron L. Nielson, *The Future of Chevron Deference*, 70 DUKE L. J. 1015 (Feb. 2021).
- 175 In *Loper Bright Enterprises v. Raimondo*, the Supreme Court held that the Administrative Procedure Act ("APA") requires courts to exercise their *independent judgment* in deciding whether an agency has acted within its statutory authority, and courts *may not defer* to an agency interpretation of the law simply because a statute is ambiguous. As a result, *Chevron* was overruled. *Loper Bright Enterprises v. Raimondo*, 144 S. Ct. 2244 (2024) (emphasis added).
- 176 Ethan Howland, *Supreme Court's Chevron, Corner Post Decisions Could Delay Energy Investments, Spur Litigation: Analysts*, UTILITY DIVE (July 2, 2024), <https://www.utilitydive.com/news/supreme-court-chevron-corner-post-energy-sector-ferc-transmission/720413/>.
- 177 *Id.*
- 178 *Id.*
- 179 *Id.*

26 VTJENVTL 94

---

End of Document

© 2025 Thomson Reuters. No claim to original U.S. Government Works.

### Office locations

75 Charter Oak Ave., Suite 1 – 103, Hartford, CT 06106  
700 Canal Street, 5th Floor, Stamford, CT 06902

### Phone

T: 860.563.0015  
F: 860.398.5510

