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March 27, 2018

Dear Connecticut Green Bank Board of Directors:

We have a meeting of the Board of Directors scheduled for next week for Tuesday, April 3, 2018 from 9:30-11:30 a.m. in the Colonel Albert Pope Board Room of the Connecticut Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

As we continue to focus our efforts to execute on our new sustainability strategy given the sweeps, the format of the agenda focuses on our lines of business.

On the agenda we have the following:

- **Consent Agenda** – approval of the meeting minutes for February 15, 2018.
- **Investment Business** – as we work to implement our sustainability strategy for the core business of clean energy financing, we will be bringing forth proposed C-PACE guideline revisions. The Program Guidelines are currently in their fifth iteration. Staff is seeking approval for the sixth version of the Program Guidelines. Staff is proposing options for a programmatic structure to review the savings to investment ratio (SIR) of a project and making several recommended updates which are summarized in the memo attached. The Deployment Committee is reviewing the staff proposed revisions this week – and therefore final materials are forthcoming by the close of business Thursday, March 29, 2018.
- **Nonprofit Organization** – we will present the progress and request the Green Bank to participate in the formation of a non-profit to further the purposes of the Green Bank. This non-profit organization will not only help the Green Bank reduce its operating expenses per the sustainability strategy, but it will also allow Connecticut to continue to receive positive impact from clean energy deployment in underserved markets while providing opportunities for private investment. The memo and business plan for the Nonprofit will be available by the close of business on Thursday, March 29, 2018. We will also present our work on Green and Healthy Homes Initiative.
- **Incentive Business** – we will provide an update on the progress we are making and the challenges we are facing with respect to the SHREC.
- **Legislative Business** – we will provide an update on the status of the legislative session.

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

We look forward to seeing you next week.

Sincerely,

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

Bryan Garcia
President and CEO



AGENDA

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

Tuesday, April 3, 2018
9:30-11:30 a.m.

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

1. Call to order
2. Public Comments – 5 minutes
3. Consent Agenda – 5 minutes
4. Investment Business – Clean Energy Finance – 30 minutes
 - a. C-PACE Guidelines
5. Non-Profit Organization – Underserved Markets – 60 minutes
 - a. Non-Profit Organization
 - b. Green and Healthy Homes Initiative
6. Incentive Business – RSIP/SHREC – 10 minutes
 - a. SHREC Update
7. Other Business – 10 minutes
8. Adjourn

Next Regular Meeting: Friday, April 27, 2018 from 9:00-11:00 a.m.
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT



RESOLUTIONS

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

Tuesday, April 3, 2018
9:30-11:30 a.m.

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

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

Resolution #1

Motion to approve the minutes of the Board of Directors Meeting for February 15, 2018.

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 Green Bank Board of Directors (the "Board") had previously approved and authorized the President of the Green Bank to execute financing agreement for the C-PACE project described in the Memo submitted to the Board on March 27, 2018 (the "Finance Agreement");

WHEREAS, the Finance Agreement were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board and s executed no later than 120 days from the date of Board approval; and

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

NOW, therefore be it:

RESOLVED, that the Board extends authorization of the Finance Agreement to no later than 120 days from April 3, 2018 and consistent in every other manner with the original Board authorization for the Finance Agreement.

4. Investment Business – Clean Energy Finance – 30 minutes
 - a. C-PACE Guidelines

Resolution #3

WHEREAS, Conn. Gen. Stat. Section 16a-40g (the “Authorizing Statute”) authorizes what has come to be known as the Commercial Property Assessed Clean Energy Program (“C-PACE”), the Authorizing Statute designates the Connecticut Green Bank (“Green Bank”) as the state-wide administrator of the program;

WHEREAS, the Authorizing Statute charges the Green Bank to develop program guidelines (the “Program Guidelines”) governing, among other things, the (i) terms and conditions under which state and third-party financing may be made available to C-PACE, and (ii) standards to ensure that the energy cost savings of energy improvements financed through C-PACE over the useful life of such improvements exceed the costs of such improvements;

WHEREAS, the Green Bank staff seeks to update the Program Guidelines and seeks Board approval of the Program Guidelines in light of structural changes included therein, including but not limited to, how projects must demonstrate compliance with the savings to investment test.

NOW, therefore be it:

RESOLVED, the Green Bank Board of Directors (the “Board”) approves the C-PACE Program Guidelines submitted to the Board on March 29, 2018.

5. Non-Profit Organization – Underserved Markets – 60 minutes
 - a. Non-Profit Organization

Resolution #4

RESOLVED, that the Board of Directors of the Connecticut Green Bank (Green Bank) authorize the President of the Green Bank and any other duly authorized officer of the Green Bank to participate in the formation of an independent non-profit non-stock corporation to further the purposes of the Green Bank, including by achieving operating leverage and attracting mission-oriented investors for a set of products serving underserved market segments.

- b. Green and Healthy Homes Initiative

Resolution #5

WHEREAS, the Connecticut Green Bank (“Green Bank”) actively seeks to support the goal of supporting affordable and healthy buildings in low-to-moderate income and distressed communities across the state, as articulated in an organizational goal in its Comprehensive Plan.

WHEREAS, the Connecticut Green and Healthy Homes Project involves the following state agencies and organizations that are aligned in their common goals related to health, housing and energy: Connecticut Green Bank, Department of Public Health, Green & Healthy Homes Initiative, Department of Social Services, Department of Energy & Environmental Protection, Department of Housing, Department of Children and Families, Office of Early Childhood, Office of Chief State's Attorney, United Illuminating, and Eversource.

WHEREAS, Green and Healthy Homes Initiative (GHHI) has proposed a scope of work for research and project design for Phase II of the Project for \$200,000 to support the Green Bank's efforts to accelerate energy efficiency and clean energy generation across Connecticut; and

WHEREAS, Project partners are securing foundation and other grant funding in addition to Department of Energy Solar Energy Technologies Office grant funds to cover the full cost of GHHI's engagement.

WHEREAS, the proposed scope of work as a strategic selection and award pursuant to Green Bank Operating Procedures Section XII pursuant to the rationale in the memorandum to the Board of Directors dated March 27, 2018 setting forth GHHI's unique opportunity and approach to developing an integrated model to address health, housing, and energy needs in the Connecticut Green and Healthy Homes Project;

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 accept the GHHI proposal, and in so doing obligate the Green Bank in a total amount not to exceed \$200,000 with terms and conditions consistent with the memorandum submitted to the Board of Directors dated March 27, 2017, 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 March 27, 2018; and

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

6. Incentive Business – RSIP/SHREC – 10 minutes
 - a. SHREC Update
7. Other Business – 10 minutes
8. Adjourn

Next Regular Meeting: Friday, April 27, 2018 from 9:00-11:00 a.m.
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT



CONNECTICUT
GREEN BANKSM

Board of Directors Meeting

April 3, 2018

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** – approval of meeting minutes of February 15, 2018

2. **C-PACE Transaction** – approval of extension for project located in Oxford, CT
 - **Under \$500,000 and No More in Aggregate than \$1,000,000** – report out and clear the queue for staff-approved transactions consistent with the Comprehensive Plan and Budget

 - **Financial Statements** – through January 2018 (February complete – coming at End of April)

Consent Agenda

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



Project Name	Comprehensive Plan	Amount	Type
18 Industrial Dr. (Waterford)	C-PACE – PV	\$227,738	Benefit Assess.
55 Middletown Ave. (North Haven)	C-PACE – PV	\$98,859	Benefit Assess.
270 Temple Street (New Haven)	C-PACE – EE	\$53,879	Benefit Assess.
230 Locust Street (Harford)	C-PACE – EE and PV	\$406,527	Benefit Assess.
Total		\$787,003	

Approximately \$790,000 in loans

Board of Directors
Agenda Item #4
Investment Business
C-PACE Guidelines

CPACE Program Guidelines

Background



Statute

The Bank “shall develop program guidelines governing the terms and conditions under which state and third-party financing may be made available to the commercial sustainable energy program...”

- Sixth version of CPACE Program Guidelines

Process

1. Deployment Committee Approval
2. Board of Director Approvals
3. Public Comments
4. Board Approval (if necessary)

CPACE Program Guidelines

SIR



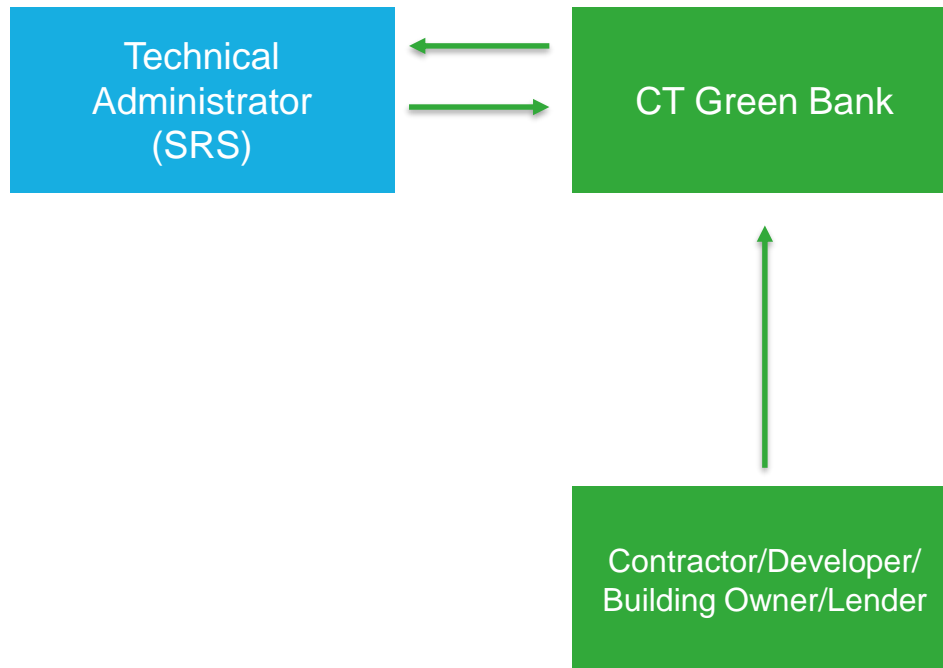
Statute

“Shall adopt standards to ensure that the energy cost savings of the energy improvements over the useful life of such improvements exceed the costs of such improvements”

- Developed the “Savings to Investment Ratio” test to meet this requirement.
 - that the ratio of savings (total avoided energy costs plus project revenues, including all ancillary value streams such as environmental incentives and tax benefits, earned over the estimated useful life of the financed energy conservation measures) to investment (total projected debt service due in respect of the C-PACE financing, including all principal, interest, and any fees over the term of the financing) be greater than 1
- Developed the technical guidelines to provide the framework for this energy saving analysis and required that this analysis be **reviewed by a third-party engineer to validate the energy baseline and the reasonableness of the energy savings assumptions**

CPACE Program Guidelines

SIR



CPACE Program Guidelines

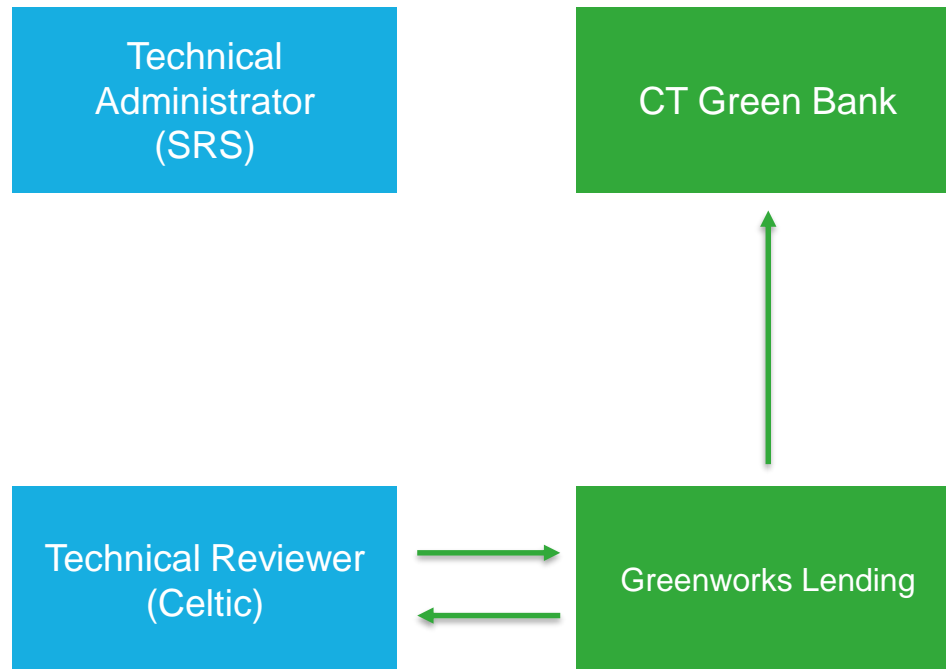
Open Platform SIR Administrator



1. Submit the energy audit or feasibility study and supporting documentation to SRS. The fee for this review is 1% of the financed amount, not to exceed \$5,000.
2. Submit a technical application, prepared by a certified energy engineer, with all the technical info for the project to CGB. CGB would then work with the Technical Administrator to review the project. The fee for this review is 1.25% of the financed amount, not to exceed \$7,500.
3. Propose a process or project development platform through which an audit and/or feasibility study and requisite supporting documentation that demonstrates an SIR greater than 1 may be provided to the Program Administrator in a standard format.

CPACE Program Guidelines

SIR



CPACE Program Guidelines

Open Platform SIR Administrator



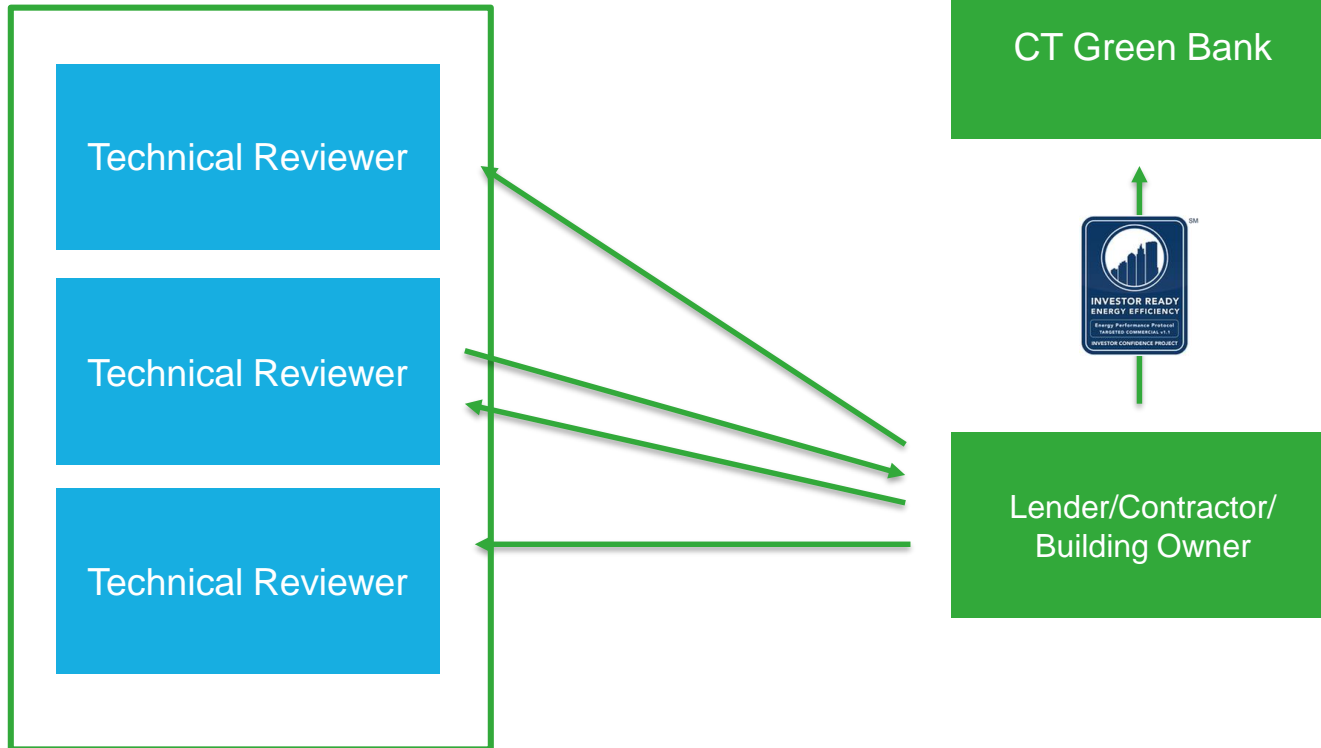
Ideal process as CGB was in the early stages of opening up the market for third-party lending.

As market grows, the program needs clearer guidance around what is acceptable for technical review.

- 3. Propose a process or project development platform through which an audit and/or feasibility study and requisite supporting documentation that demonstrates an SIR greater than 1 may be provided to the Program Administrator in a standard format.**

CPACE Program Guidelines

Open Market



Investor Ready Energy Efficiency™



Standardized
Development



Third-Party
Verification



Certification



CPACE Program Guidelines

Open Market



Pros

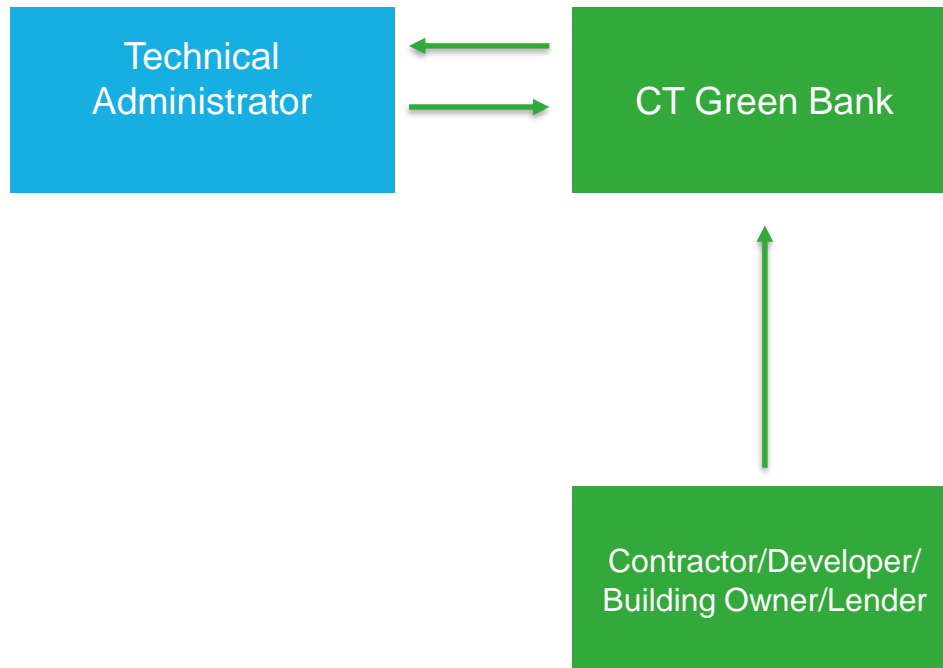
- allow the market to choose a reviewer that matches their needs, including project development, speed, cost
- Constant price discovery
- Ability to scale as demand grows

Cons

- Competition around speed and price can lead to reductions in quality
- A desire for future business from a capital provider or contractor could cause a technical reviewer to “cut corners” in their review

CPACE Program Guidelines

Centralized



CPACE Program Guidelines

Centralized



Pros

- Technical reviewer customer is CGB
- Less incentive to cut corners for future business

Cons

- Less flexibility around pricing and services
- Greater time is required of CGB staff to manage every project's technical review instead of relying on the developer or capital provider to do this, creating an additional drain on already stressed resources given the existing budget environment.
- Not as quickly scalable

CPACE Program Guidelines

SIR Recommendation



- The program would maintain the option to let capital providers use CGB's selected Technical Administrator for the independent project review or propose other technical reviewers, with a minimum set of qualifications in place.
- If a proposed technical reviewer met the qualifications, CGB staff would conduct a more thorough vetting, including site visits and reviews of their project review process.
- Any independent reviewer approved through this process would be made public and available for others in the market to use.
- CGB would conduct random project audits to ensure reviews are done in accordance with the CPACE program guidelines. Independent reviewers' approval to participate in the program would also have to be renewed on an annual basis
- IREE Certification would also be accepted

CPACE Program Guidelines

Other Updates



- Incorporates new construction guidelines previously approved by the Board of Directors
- Defines program guidelines appendixes as supplemental documents that can be modified at staff discretion
- Permits for:
 - one assessment to cover multiple tax parcels under certain conditions
 - financing of eligible improvements made in the last year
 - eligible improvements made over the course of a year to qualify as one project
 - electric vehicle charging station eligibility
- Provides a list of eligible associated measures including:
 - equipment extended warranties
 - program and permit fees
 - energy audit costs
 - LEED certification fees and non-energy capital improvement costs made as part of LEED certification
- Implements cosmetic clean-ups and changes to bring language more in line with program's operation and C-PACE statute

Board of Directors
Agenda Item #5a
Nonprofit Organization

Nonprofit Organization

Part of Sustainability Strategy



- One of 3 pillars adopted by Board in December
 - Help Green Bank focus on its Core Investing Business by creating an independent Nonprofit for products that serve underserved market segments

- Goals of the Nonprofit:
 - Allow products serving underserved market segments to stay in CT market at critical point of investment needed for next level of scale
 - Achieve operating leverage
 - Access new capital providers, including mission-oriented capital and CRA

- Board asked us to come back with a business plan, budget, and staffing plan

Nonprofit Organization

Programs It Would Administer/Support



Shared rationale for programs and products going to Nonprofit – centered on need for investment and scale

Challenge Being Addressed in Nonprofit	Multifamily Products	Commercial Solar Fund	Solar for All / PosiGen	Smart-E Loan Program
More investment needed, but doesn't match Green Bank's target return profile	X			X
Greater scale needed to attract necessary private investment	X	X	X	
Mission-oriented investors reluctant to invest at Green Bank given budget sweeps	X		X	
More operating support needed at critical juncture, but Green Bank resources limited	X	X		X
Greater scale needed for sustainability	X			X

Nonprofit Organization Structure and Governance



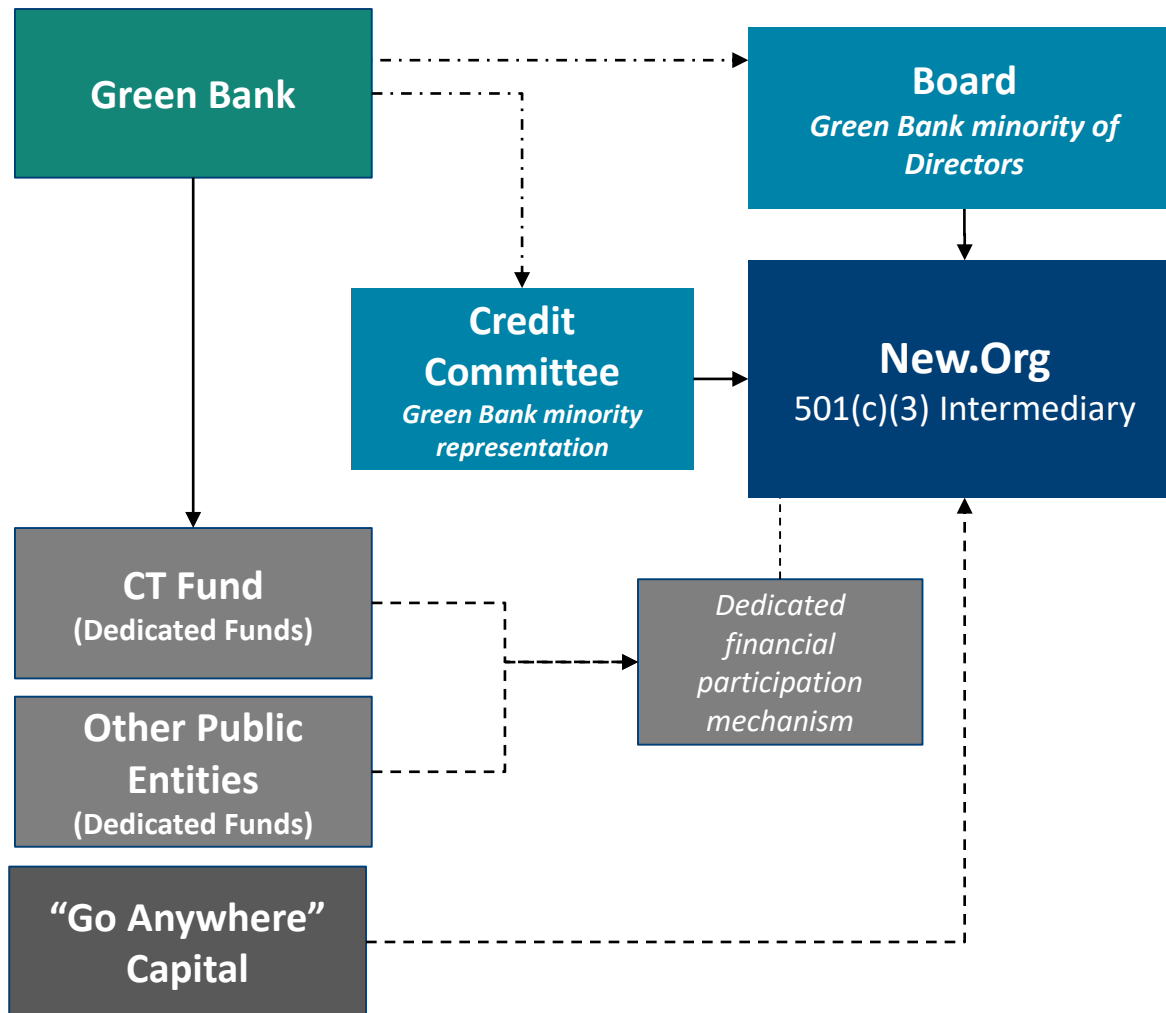
- **Independent 501(c)(3) organization**
 - Charitable mission proposed makes it exempt from federal and state taxes, eligible for charitable donations – particularly important for foundations who want to invest

- **Independence is critical** – for investors looking for distance from Green Bank’s budget issues
 - Own mission, complementary to Green Bank and mission-driven supporters
 - Own Board in control of legal entity

- **Form of organization** – Non-member Connecticut non-stock corporation with self-perpetuating board

Nonprofit Organization Structure and Governance (cont'd)

Conceptual Legal Organization



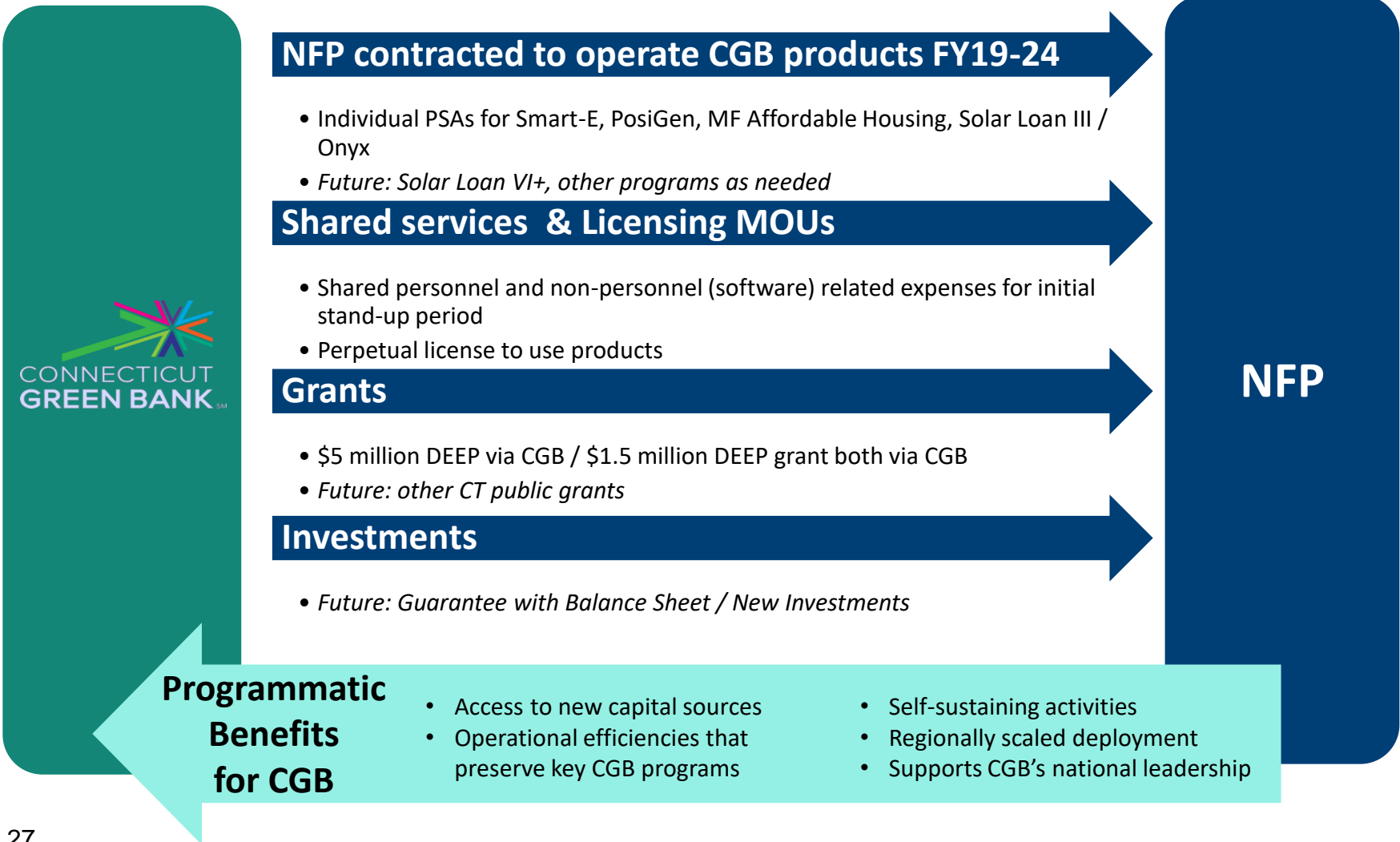
- The entity will be an independent, but affiliated 501(c)(3) non-profit organization.
- Will maintain independence from Green Bank while meeting legal and political parameters for affiliated entity.
 - Green Bank will be represented as a minority of the entity’s board.
 - Green Bank will control CT Fund.
 - Green Bank will have minority representation on credit committee.
- Other public entities that provide funding may desire to maintain programmatic input and/or segregation of resources for their funding.

Nonprofit Organization Structure and Governance (cont'd)



- **Board structure and make-up** – 2 representatives from Green Bank, 2 executive staff of Nonprofit (transitioned from Green Bank), 1 independent or investor representative
- **Principles of governance** –
 - Under a non-stock and non-member structure, ultimate control of the organization rests with the Board
 - A supermajority of the Nonprofit may amend or modify the governance and mission, per Bylaws
 - Funding streams from the Green Bank and foundations through PRIs will restrict the Nonprofit Board from materially modifying the Nonprofit's core mission and purpose
 - The Bylaws and Articles of Incorporation being developed by outside counsel are typical for a 501(c)(3) charitable organization.
 - Note that Green Bank will not approve of these governance documents as the Nonprofit will be an independent organization.

Nonprofit Organization Relationship to Green Bank



Nonprofit Organization Relationship to Green Bank



- **\$6.5M performance-based grant investment** – via DEEP Grants
 - \$1.5M EnergizeCT Health and Safety Revolving Loan Fund
 - \$5M proposed grant to Green Bank for express purpose of regrant to Nonprofit for LMI investing in CT
 - Grants will be in a CT-dedicated Fund in Nonprofit, restricted to CT activities and uses per grant investment agreements
- **Provides initial capital base for Nonprofit** – used to attract other foundation investors to leverage with other layers of debt
- **Future investments possible** – Green Bank could choose to invest in a Nonprofit product in the future, if investment funds were available and it met target return profile

Will be coming back in June for approval of grant investments

Nonprofit Organization Relationship to Green Bank



Ability to influence Nonprofit through 4 program-specific PSAs and an MOU for shared services

Product or Program Area	Nonprofit Role
Multifamily Suite of Products	Outsourced program administration
Residential 1-4 Low-Income Programs	PosiGen partnership and investment / asset management support Support for other low-income initiatives such as CT Green and Healthy Homes Project and DOE's Clean Energy Low Income Communities Accelerator
Smart-E Loan Program	Outsourced program administration
Commercial Solar Fund	Administrative support for the existing Green Bank Commercial Solar fund Outsourced program administration for a new fund being raised in the Nonprofit

Nonprofit Organization Relationship to Green Bank



▪ **MOU for Shared Services and Licensing**

- Transition services including accounting, financial, marketing, legal and operational functions
- Licensing of intellectual property related to specific products and programs, for both Connecticut and outside Connecticut including marketing assets, marketing data and terms of use

▪ **Staff transitions** – 7 staff would transition to Nonprofit on July 2, 2018, and 1 staff in July 2019

▪ **\$10M estimated value of PSAs and MOU** – 6-year term for PSA, budgets and work scopes will be finalized in May/June

Will be coming back on April 27th for staff transition approvals and June for approval of PSAs and MOUs

Nonprofit Organization

Code of Ethics Considerations



Formation of the Nonprofit, the anticipated contracts between Green Bank and the Nonprofit, and the transition of current employees to the Nonprofit raise issues under the Code of Ethics for Public Officials

Proactively sought out Office of State Ethics Advice

Received informal opinion and expect an Advisory Opinion in April

Main Findings of Informal Opinion

- Transitioning Employees Not Misusing their Official Position by Creating an Outside Employment Opportunity
- Jobs Ban Not Triggered but Employees Must Transition Before Contract(s) Execution
- One-Year Limitation on Types of Interaction (e.g., can't reopen PSAs)

Nonprofit Organization



GASB Potential Component Unit Considerations

- **Auditor input from Blum Shapiro** – on establishment, governance and contracting between the Green Bank and the Nonprofit to ensure that Nonprofit wouldn't be treated as a Potential Component Unit of the Green Bank and require consolidation onto its audited financials

- **Critical factors that support this:**
 - Green Bank will have minority representation on Nonprofit Board and any Committees responsible for the Nonprofit's financial operating budget
 - Green bank will not be responsible for any Nonprofit financial deficits
 - Green bank will not assume any Nonprofit debt
 - Green bank will not hold an equity interest in the Nonprofit

Nonprofit Organization Business Lines



- **Nonprofit will be self-sustaining and will have 2 business lines:**
 - **Investing business – earning a margin off the spread**
 - Single Family Project Finance with Implementer
 - Multifamily and Community Facility Term Lending
 - Commercial Solar Fund
 - Flexible Project Finance
 - **Smart-E Loan Program – fee-for-service business designed to be break even,** supported by program administration fees and ultimately contractor origination fees at scale

- **Origination strategy:**
 - Contractor channels such as solar, fuel cell developers
 - Portfolio owners and multifamily housing and nonprofit program partners
 - Government partners (municipalities, housing authorities, state agencies)
 - Other green banks, NRDC initiatives (EEFA, SPARCC, etc.)

Nonprofit Organization



Financials – Balance Sheet, Revenues & Non-Interest Expenses

■ Balance Sheet:

- Key to sustainability is **building a balance sheet:**
 - **Recurrent revenue streams** based on businesses known to us
 - **Layers of funding sources** from foundations, CRA lenders, other lenders & investors

■ Revenue sources:

- Net interest income from investments in investing business
- Contract with Green Bank to administer Green Bank programs in Connecticut
- Startup grants from foundations in years 1-3
- Additional contracts with public entities to administer Smart-E
- Fees from commercial solar development

■ Non-Interest Expenses:

- Personnel is largest expense with an overhead rate estimate of 40% (vs. 78%)
- Other expenses related to business development and marketing, origination, and administration of products
- Connecticut operations are majority of expenses initially
- **Investment business staffing / other expenses can scale w/pace of origination activity**
- **Smart-E Loan Program would only expand/add expenses if contract was in place**

Nonprofit Organization



Financials – Pro Forma Balance Sheet (Figures in '000s)

	FY19 Year End	FY20 Year End	FY21 Year End	FY22 Year End
Assets				
Cash / Cash Equivalents				
Loans				
Single Family				
Multifamily				
Commercial Solar PPAs				
Total Investment Assets				
<u>Total Assets</u>				
Liabilities				
Senior Debt Capital				
Subordinate Debt Capital				
<u>Total Liabilities</u>				
Net Assets				
Equity-Equivalent PRIs				
Grants				
Retained Earnings				
<u>Total Net Assets</u>				
<u>Liabilities + Net Assets</u>				

In Directors' Packages Only

Nonprofit Organization

Financials – Pro Forma P&L



Pro Forma Sources of Revenue and Expenses (Figures in '000s)

	FY19	FY20	FY21	FY22
Revenue				
Net Interest Income				
Green Bank Contract				
Operating Grants				
Smart-E Contracts				
Solar Development Fees				
Total Revenue				
Less: Op Ex				
Operating Income				
Less: Provision for Loan Loss				
Net Income				

In Directors' Packages Only

Nonprofit Organization



Capitalization Strategy and Sensitivity Analysis

- **Capital Stack** – a layer of grants, equity-equivalent, and PRI/MRI investment leveraged with subordinate and senior capital

- **Sensitivity analysis** – for investment business only, since Smart-E designed to be breakeven
 - Looked at 2 scenarios for scale of investing activity, regional scale and Connecticut-only scale, and looked at a range of loss rate and cost of senior capital scenarios
 - Only regional scale scenario can be self-sustaining within a reasonable timeframe
 - Drivers are higher origination volume from operating regionally, more favorable cost of senior capital at the larger scale
 - Regional scenario is also more robust – can withstand higher senior capital interest rates and more adverse loan loss scenarios

Nonprofit Organization

Financials – Sensitivity Analysis



Break-Even Values for Cost of Capital and Loan Loss Rates FY 2021 Year End (Year 3)

Net Interest Revenue
 Alone Covers OpEx for
 Investment Business

SCENARIO 1 (Regional expansion)

Full projected commercial solar,
 single-family project finance and
 term lending origination

Senior Debt Capital @ ■■■
 Loan Loss @ ■■■

Loan Loss Rate (@ ■■■ Capital)

■■■

Senior Capital Rate (@ ■■■ Loan
 Loss)

■■■

SCENARIO 2 (Connecticut Only)

40% of commercial solar
 origination
 50% of projected single-family
 project finance origination
 28% of term lending origination

Senior Debt Capital @ ■■■
 Loan Loss @ ■■■

Loan Loss Rate (@ ■■■ Capital)

■■■%

Senior Capital Rate (@ ■■■ Loan
 Loss)

■■■

Nonprofit Organization Timeline



Q1

- Initial Capital Raising Outreach and Legal Analysis / Review

April

- Receive Green Bank Board approval for participation in enabling an independent Nonprofit
- File Nonprofit organization incorporation in CT; develop governance docs

May

- File 501(c)(3) application with IRS
- Green Bank staff transitioning to the Nonprofit are officially notified of termination of employment on June 29, 2018
- Nonprofit officially notices the staff transitioning from the Green Bank of an offer of employment starting on July 2, 2018
- Ongoing capital raising
- Draft and complete PSAs and MOU between the Green Bank and the Nonprofit

June

- Board approves PSAs and MOU between the Green Bank and the Nonprofit and for re-grant of DEEP grants

July

- July 2, 2018: Transferred staff begin employment at Nonprofit
- July 3, 2018: The Green Bank and the Nonprofit execute the PSAs, MOU and investment grant agreements; funds are wired to the Nonprofit based on contracts executed, including \$6.5 million DEEP grant funds

Nonprofit Organization Resolution



Resolved, that the Board of Directors of the Connecticut Green Bank (Green Bank) authorize the President of the Green Bank and any other duly authorized officer of the Green Bank to participate in the formation of an independent non-profit non-stock corporation to further the purposes of the Green Bank, including by achieving operating leverage and attracting mission-oriented investors for a set of products serving underserved market segments.

Board of Directors

Agenda Item #5b

Green and Healthy Homes Initiative

CT Green and Healthy Homes Project

Connecticut's Energy and Housing Needs



- The **average energy burden** for a Connecticut low income household is **11.8% of annual income, 30% higher than the national average** energy burden. The Energy Affordability Gap in Connecticut ranges from **\$1,250 to \$2,500/year**.
- The energy burden is higher for Connecticut's lowest income families can be as much as 58% of annual income on energy.
- The **average energy burden for low-income households is 60% higher than the national average**.
- **Over 430,000 households are at <=80% AMI** (if below 60% SMI, then eligible for free energy efficiency program)
 - 25% of customers seeking Home Energy Solutions services are deferred due to health and safety issues
 - 25% are older adults living alone
 - 16% have a child younger than 6 years
 - 12% are non-elderly disabled

CT Green and Healthy Homes Project

Connecticut's Health Outcomes Related to Poor Housing Conditions



- The state had **over 21,700 annual asthma-related hospitalizations**, and over **\$102 million in Medicaid claims related to asthma**.
- Statewide, falls are the leading injury-related cause of mortality for older adults, and the fourth leading cause across all ages. **Falls were involved in over 42,000 hospitalizations statewide over 5 years.**
- Over **2,100 children under the age of six are diagnosed with elevated blood lead levels in Connecticut**. Just under 75% of these children were diagnosed with blood lead levels of 5-9 mg/dL.

The GHI Model: “No Wrong Door”

Aligning services and funding, braiding relevant resources, coordinating service delivery to produce results



Philanthropy



Government



Private-sector



System

- Single intake system
- Comprehensive assessment
- Coordinate services
- Integrated interventions
- Cross-trained workers
- Shared data

Outcomes

- Lead-hazard reduction
- Asthma-trigger control
- Household injury prevention
- Energy efficiency
- Weatherization
- Housing rehabilitation

Vision for Health + Energy + Housing Collaboration in CT

- Solve the funding gaps for health and safety remediation
- Break down silos – on the funding side and the delivery side

And do this *sustainably* – so we can solve the problem *at scale* all across the state

CT Green and Healthy Homes Project

Strong Agency / Partner Buy-In



CT Green and Healthy Homes Project

GHHI to assist with Sustainable Funding



Connecticut Energy Efficiency Fund Home Energy Solutions Program is a strong framework for housing health and safety interventions in low income households, sustainably supported through a mix of public, philanthropic and private capital investment:

- **Health Insurance Value-based and Performance-based Payments**
- **Funding medically-necessary housing interventions through CHIP & Medicaid**
- **Hospital Community Benefits Investment**
- **Public/Philanthropic Investment (leveraged to attract private capital)**
- **Federal Funds: Fannie Mae, USDA Rural Development Housing Preservation, Maternal/Child Health Block Grant Funds**

CT Green and Healthy Homes Project

Phase II: GHHI SOW for Project Design and Implementation Strategy for Pilots



Project Design –

- Investigation of sustainable funding via Medicaid other reimbursement avenues; development of a project design report.

Medicaid Data Analysis and Report –

- Preparation of medical cost savings and aggregate state return on investment projections associated with home interventions leading to reductions in the treatment of asthma and injuries related to trips and falls.

Project Work Plan –

- In collaboration with the partners and key stakeholders, propose integrated service delivery model, processes and costs; identify any workforce development and training areas, assist in the selection of project sites for Phase III.

Stakeholder Convenings, Philanthropic Engagement and Project Management –

- Work with project partners to hold additional stakeholder convenings; overall project management for the partners for Phase II.

Cost – \$200,000 to be covered by foundation grants

CT Green and Healthy Homes Project

Strategic Selection Criteria for GHHI



Uniqueness:

- GHHI is the nation's leader in addressing issues in health, safety, housing, and energy with a mature model and proven (ROI)

Strategic Importance:

- This project supports the Green Bank's fourth organizational goal, as identified in the Comprehensive Plan – Fiscal Years 2017 and 2018, and has been prioritized by partner agencies.

Urgency and Timelines:

- Participating state agencies will need to make any budget requests for FY19 related to the pilot implementation phase (Phase III) of the project in the next few months..
- GHHI and DPH have an executed data sharing agreement in place that would be difficult to replace in a timely manner, given the timing of the next budget cycle.
- Acting now allows the program to build off of funding while it exists, and the momentum of current partnerships in place.

Special Capabilities:

- GHHI has pioneered the model of unlocking funding from the health sector and has worked with states to obtain necessary waivers from the Center for Medicaid Services. GHHI has also pioneered using pay for success models and social impact bonds for healthy housing interventions that lead to better asthma health outcomes, lower energy burdens, and savings in public health expenditures.

Strategic Selection of GHHI Resolutions



RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to accept the GHHI proposal, and in so doing obligate the Green Bank in a total amount not to exceed \$200,000 with terms and conditions consistent with the memorandum submitted to the Board of Directors dated March 27, 2017, 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 March 27, 2018; and

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

Board of Directors
Agenda Item #6
Incentive Business
SHREC Update

SHREC Securitization

Status Update



- **Underwriter** – 2 finalists still under negotiation for Warehouse and Term Financing.
- **Bridge Loan** – Green Bank is discussing with local Connecticut Banks potential bridge loans that would be used as a warehouse.
- **Independent Engineering Partner** – The Green Bank selected DNV GL and is in progress of supporting their review.
- **Green Opinion** – Staff are presently reviewing responses to an RFP for bond reviewer who can attest to the issuance’s impact and “Greenness”

Board of Directors
Agenda Item #7
Other Business

Legislative Session Overview



- **Governor’s Bill 9** – advancing key energy efficiency (e.g., goal, CAM, etc.), renewable energy (e.g., net metering, RPS, etc.), and Green Bank legislation
Green Bank clarifying (i.e., technical fixes) revisions include:
 - **Subsidiary formation** ability to receive tax-advantaged status as governmental entity
 - **Non-impairment of funds** so that if the State impairs the Green Bank from meeting third party contractual obligations then the State must make the third party whole
- **Quasi-Public Agency bills** – proposals to “rein in” autonomy of independent quasi-agencies, spurred by other agencies’ real or perceived missteps
 - SB-180 and HB-5178 – imposes AGO/CGA review of certain employment and consulting contracts
 - SB-494 – requires contractors to adopt sexual harassment policies
 - HB 5267 – imposes review by the State Contracting Standards Board
- **SCRF** –secures a DEC. 2017 solar PPA deal with CSCU system
- **Solar PV Property Tax Exemption** (SB-420) - municipal effort to remove exemption for residential TPO systems. Industry seeks to clarify existing statute.

Legislative Session

Other Issues



- **Information Requests** – various information requests following on salary information, including:
 - ❑ **Appropriations Committee** – request on February 28, 2018 on personnel salaries;
 - ❑ **Energy & Technology Committee** – follow-up request on March 5, 2018 from Representative Tweedie on operating expenses and overhead rates; and
 - ❑ **Senator Fasano** – follow-up information request from Appropriations Committee on five (5) staff salary adjustments and compensation process

- **Anonymous Package** – document intended to do reputational harm to the CTGB distributed to key legislative leaders including bad information

Board of Directors
Agenda Item #8
Adjourn

CONNECTICUT GREEN BANK
Board of Directors
Draft Minutes
Thursday, February 15, 2018

A special meeting of the Board of Directors of the **Connecticut Green Bank (the “Green Bank”)** was held on February 15, 2018 at the office of the Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope board room.

1. Call to Order

Catherine Smith, Chairperson of the Green Bank, called the meeting to order at 5:07 p.m. Board members participating: Bettina Bronisz (by phone), John Harrity, Matt Ranelli, Rob Klee, Eric Brown, and Gina McCarthy (by phone)

Members Absent: Tom Flynn, Kevin Walsh, and Betsy Crum

Others Attending:

Staff Attending: Bryan Garcia, Mackey Dykes, Brian Farnen (by phone), Kerry O’Neill (by phone), Eric Shrago, George Bellas, Bert Hunter, Cheryl Samuels, Craig Connolly Kim Stevenson, Dale Hedman and Mike Yu.

2. Public Comments

There were no public comments.

3. Consent Agenda

Bert Hunter provided an update on the SHREC. He stated that both the Independent Engineer (IE) and the underwriting portions of the RFP had been closed. He said that the SHREC working group had a kickoff meeting yesterday with the IE and that the process is moving along and on track. He stated that for the underwriting portion the Green Bank received six proposals, one of which was an advisory proposal. He stated that as the RFP required actual funding, the advisory proposal has been effectively eliminated, so the working group has five proposals to consider with a variety of financing approaches having been presented. He said that the working group is in the process of scoring and ranking those five proposals with the idea of “down selecting” to two or three finalists and then proceed with further negotiations until a decision is made to move forward with one proposal.

Commissioner Smith questioned if the numbers they received in the proposals were in the ballpark of what is needed. Bert Hunter stated that the interest rates at the lower end were within the working group’s expectations. Commissioner Smith questioned if there was enough room to make something work. Bert Hunter noted that yes, but it will depend on which proposal they take. He stated that if the working group decides on a

proposal that is fully underwritten, the Green Bank may be able to avoid a bridge facility. He reported that the Finance team is testing the market for a separate bridge facility. He stated that the benefit would be that a separate bridge facility would allow them time to negotiate with the other parties to offer the best possible deal. He said that if they go with a capital markets approach with a public issuance of bonds, the Green Bank would definitely need a bridge facility in order to provide financial liquidity needed within the time frame expected, since a bond issue would take until the late Summer to complete.

George Bellas provided an overview of the cash flow projections. He stated that the projections presented follow the same format as the cash flow models presented at the December Board meeting. He said that moving forward, at the end of every month, he will provide the Board with actual monthly cash flow data, as well as, monthly projections. He said that there are two parts to the model, the investment business segment and the incentive business segment. As of January 31st, the Green Bank had, approximately \$12.5 million in unrestricted cash, and \$21.5 million restricted cash on hand. He stated that in general, from November through January, actual cash flows are in line with what had been projected for this period.

Commissioner Smith questioned the incentive business net cash position and it being a negative. George Bellas stated that for modeling purposes this is just a temporary situation until the SHREC securitization is completed.

Upon a motion made by John Harrity, and seconded by Rob Klee----, the Consent Agenda was unanimously approved.

Resolution #1

Motion to approve the minutes of the Board of Directors Meeting for January 26, 2018.

4. Legislative Business

Bryan Garcia provided a high-level overview of the legislative objectives. He stated that the staff have been doing significant outreach to legislative leaders. He said that the staff are out there speaking to elected officials as well as their staff. He stated that educating their staff has been very important regarding what the Green Bank does.

Bryan Garcia discussed the quarterly financial reports submitted to the Office of Fiscal Analysis, stating that the legislative leaders believed and kept saying that the Green Bank had \$130 Million of cash on their books. He noted that \$130 million is the net position not cash on the books or liquid assets. He said that the staff have had conversations with OFA staff educating them about the Green Bank and its financial position. He stated that staff are working together to revise the Green Bank's quarterly submission so that it is more self-explanatory. He stated that staff are putting descriptions on those submissions, as well to further clarify what the numbers mean.

Bryan Garcia discussed the Office of Legislative Research. He stated that Representative Lonnie Reed has been doing an OLR report on the Green Bank. He said that staff are breaking down the annual sources of funds (e.g., Clean Energy Fund, RGGI, etc.), sweeps (including bond authorizations), and the impact that the Green Bank is delivering to the State, regarding jobs, public and private investment, environmental protection, and tax revenues. He stated staff are also breaking down their social impact. He said that staff feel that this will set a baseline with regards to what the Green Bank is delivering to the state and how the legislators will look at the Green Bank. This OLR document will provide legislative leaders with basic information on the Green Bank.

Bryan Garcia discussed public policy support and priorities, including the restoration of the RGGI and System Benefit Funds (e.g., Clean Energy Fund). He stated that it is important that the priority be to restore RGGI as this source of funding benefits all stakeholders – DEEP, utilities, and the Green Bank. He said that they feel that it's important to be working together to support restoring the systems benefit funds and to prevent deeper sweeps.

Matt Ranelli stated that they should be looking at it all, not one or the other. He said that they need a legislative leader to be the champion. Bryan Garcia noted that the sweep was so large that it's difficult restoring everything given the budget. He stated that the Governor has put forward the restoration of RGGI and the Clean Energy Fund in FY 2019. He said that they have been working hard to communicate that they're trying to move things together. Bryan Garcia stated that there are some activities from energy and community members sharing opinions to finding ways to restore the funds. He said that they are very public about the need to restore the funds and that it was a big mistake by sweeping them.

Eric Brown questioned if other folks are pushing equally as hard for the Green Bank and Efficiency Fund. Bryan Garcia stated that they're focused on doing both. He said that they are out there advocating for the restoration of the RGGI Funds as a priority because this source of funds benefits everyone.

Brian Farnen stated that based on what they saw the last session with a lack of coordination, both SBC funds are much stronger working together. He said that there are groups out there pitting the funds against each other and that is not helpful to the Green Bank or the Efficiency Fund. He stated that he feels it's most important to get their message out and focus on education as there was a lot of confusion last session. Brian Farnen noted that they've been very proactive and that if they can show the value, that will directly help the Green Bank.

Bryan Garcia provided an overview of the Governor's Bill. He stated that this is an aggressive energy bill that proposes a number of things to advance clean energy in Connecticut.

Commissioner Klee stated that they need to keep things relatively within the same sort of cost zone, throughout procurement the costs will hopefully go down. He said that it does potentially bring in other things other than the utilities.

Bryan Garcia discussed the increase in the Class I RPS from 20 percent by 2020 to 40 percent by 2030, along with including language that would reduce the Alternative Compliance Payment to \$40, as well as the provisions around residential solar. He stated that the Governor's bill is looking at a tariff structure as a follow-on to net metering. He noted that the bill includes a tariff pilot and that the Green Bank will work with DEEP and the local solar installers to implement and understand it.

Bryan Garcia discussed the C&I clean energy market. He stated that staff are looking for a fix for the next year and beyond to accommodate for the conclusion of the ZREC and LREC policy.

Commissioner Klee stated that the DEEP staff attempted to look at both C&I and the residential side. He said that one option was to extend them for another ten years. He stated that it is expensive. He reported that they saw with these proposals the ability to save over a billion dollars. He said that they need to find the right balance and not overpay, as well as receive a reasonable return. He stated that they need five years of this to keep going in an orderly fashion and not be subject to wild fluctuations.

Dale Hedman stated that the tariff structure allows them to incentivize the things that they want to happen and to have significant advancements like time of use rates.

Bryan Garcia pointed out the policy proposal in the Governor's Bill that would increase the Clean Energy Fund by a mill and sunset it at the conclusion of FY 2025. He stated that the senior staff feels that there's an alternative approach to address the issue of self-sufficiency. He noted two proposals, including a System Benefit Assessment, which would require the legislature to assess as to how any proposed sweeps would impact the Green Bank; and a strengthening of statutory Non-Impairment provisions, which would protect the rights of counterparties that the Green Bank has engaged with.

Brian Farnen discussed the System Benefit Assessment policy language. He stated that staff is trying to get the legislature to better understand the impact of what the sweep did. He said our alternative legislative proposal is meant to address the lack of understanding of the what the effect of the sweeps would be. He said that staff want the legislature committed to doing an assessment of the funds and the impact that it would have on both the Green Bank and the State. He stated that it would not prohibit them from being able to sweep the funds, it's just meant to be like a pause button prior to sweeping the funds to make all stakeholders aware of the impact of any potential sweep.

Gina McCarthy stated that she feels that staff need to narrow the language so that everyone can't just utilize this same type of approach. Brian Farnen stated that staff could do that.

Commissioner Klee stated that the language is essential, but that the legislature can disregard it. He said that it's not an easy task to come up with something that's foolproof.

Commissioner Smith inquired into the Sunset for the additional mill. She stated that they need to understand the tradeoff.

Bert Hunter stated that the tradeoff is coming on the heels of the sweep. He noted that since the General Assembly showed a willingness to take all of the Green Bank funds (and eventually settled on half of the Green Bank's funds) this has created a negative perception with capital providers. He stated that Bank of America withdrew their commitment and that they had another major capital provider pull out of the SHREC discussions due to the sweeps. He said that the gaps in the market are long term. He stated that it's much easier to get capital for five to seven years, but beyond ten years, it's challenging, and the sunset will make it even more challenging and costlier for the Green Bank to fill these longer term gaps.

Commissioner Smith suggested that this is the case with or without the Sunset Provision. She stated that they could get swept any day. Bert Hunter agreed but noted that the sunset would create a lack of long term stability on top of that and would lead to capital flight.

Gina McCarthy stated that she's reluctant to argue against something that the Governor put down without giving some leeway.

Brian Farnen stated that they did consider that approach. He noted that the Green Bank had a pretty good run over the past five years and fundamentally changing the organization at a time when we are still gaining our footing from the sweeps would be difficult.

John Harrity stated that they need to study the impact of how the Green Bank reaches its goals and that the issue is climate change.

Bettina Bronisz stated that she feels that staff should be more engaged with the legislature.

Mackey Dykes stated that he doesn't feel that the Green Bank is getting protection from future raids by agreeing to sunset the CGB funding in 2025 because our balance sheet could still be swept and the SBC would be gone to help mitigate the damage. Commissioner Smith stated that it is very early in the process. She stated that they need to continue talking about the issues.

Eric Brown stated that the argument of the Green Bank heading towards self-sufficiency is a powerful one. He said that in terms of the future, maybe they should put language in about the Sunset Provision, but they can always go back again.

5. **Adjourn**

Upon a motion made by John Harrity, and seconded by Commissioner Klee, the meeting was adjourned at 6:25 p.m.

Respectfully Submitted,

Catherine Smith, Chairperson

DRAFT



Memo

To: The Connecticut Green Bank Board of Directors

From: Mackey Dykes, Vice President, Commercial, Industrial and Institutional Programs, C&I; Alex Kovtunenکو, Senior Counsel, Commercial, Industrial and Institutional Programs

CC: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO

Date: March 27, 2018

Re: Extending timeline for closing certain C-PACE transaction

Summary

The Connecticut Green Bank Board of Directors (the “Board” or “BOD”) has previously approved and authorized C-PACE financing for the following property:

Project Address	Approved	Expired
300 Oxford Road, Oxford CT 06478	9/28/17 by Board	1/26/18

The financing agreement was authorized to be consistent with the terms, conditions, and memorandums submitted to the Board and made no later than 120 days from the date of Board approval.

Due to delays in fulfilling pre-closing requirements, including lender consent, for this transaction, the C-PACE program staff requests more time to close this transaction and execute the financing agreement. The staff requests an additional 120 days from the date of this Board meeting to execute the financing agreement for the transaction 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 Green Bank Board of Directors (the “Board”) had previously approved and authorized the President of the Green Bank to execute financing agreement for the C-PACE project described in the Memo submitted to the Board on March 27, 2018 (the “Finance Agreement”);

WHEREAS, the Finance Agreement were authorized to be consistent with the terms, conditions, and memorandums submitted to the Board and s executed no later than 120 days from the date of Board approval; and

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

NOW, therefore be it:

RESOLVED, that the Board extends authorization of the Finance Agreement to no later than 120 days from April 3, 2018 and consistent in every other manner with the original Board authorization for the Finance Agreement.

Submitted by: Bryan Garcia, President and CEO, Bert Hunter, EVP and CIO, Mackey Dykes, Vice President, Commercial, Industrial and Institutional Programs, Brian Farnen, General Counsel and CLO

300 Oxford Road: A C-PACE Project in Oxford, CT

Address	300 Oxford Road, Oxford CT 06478			
Owner	Oxford Towne Center, LLC			
Proposed Assessment	\$486,157			
Term (years)	15			
Term Remaining (months)	Pending construction completion			
Annual Interest Rate¹	5.5%			
Annual C-PACE Assessment	\$48,258			
Savings-to-Investment Ratio	1.73			
Average DSCR	■			
Lien-to-Value	■			
Loan-to-Value	■			
Projected Energy Savings (mmBTU)		EE	RE	Total
	Per year		785	785
	Over EUL		15,713	15,713
Estimated Cost Savings (incl. ZRECs and tax benefits)	Per year		\$61,864	\$61,864
	Over EUL		\$1,237,284	\$1,237,284
Objective Function	32.32 kBTU / ratepayer dollar at risk			
Location	Oxford			
Type of Building	Retail			
Year of Build	2016			
Building Size (sf)	89,933 ²			
Year Acquired by Owner	2000			
As-Complete Appraised Value				
Mortgage Lender Consent	■			
Proposed Project Description	198 kW Solar PV Roof Mount			
Est. Date of Construction Completion	Pending closing			
Current Status	Awaiting Board of Directors Approval			
Energy Contractor	■			
Notes				

¹ Nominal rate unadjusted for actual/360 calculation

■



Memo

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

From: Bryan Garcia (President and CEO)

Date: April 3, 2018

Re: Approval of Funding Requests below \$500,000 – Update

At the October 20, 2017 Board of Directors (BOD) meeting of the Connecticut Green Bank (“Green Bank”) it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve funding requests less than \$500,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Comprehensive Plan, approved within Green Bank’s fiscal budget and in an aggregate amount not to exceed \$1,000,000 from the date of the last Deployment Committee meeting. This memo provides an update on funding requests below \$500,000 that were evaluated and approved. During this period, 4 projects were evaluated and approved for funding in an aggregate amount of approximately \$787,003. If members of the board would be interested in the internal documentation of the review and approval process Green Bank staff and officers go through, then please request it.

Project Name: Horse & Buggy LLC (Dawley Collision and Custom)

Amount: \$227,738

Comprehensive Plan: CPACE

Description

The property at 18 Industrial Drive is an 8,140 medium retail box industrial building (the “Property”) that is owner-occupied and leased to Dawley Collision, LLC (“Dawley” or the “Company”), a provider of auto body repair services. The Property is owned by Horse & Buggy, LLC (the “Borrower”) which shares common ownership with Dawley. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank (the "Green Bank") would provide construction financing in the amount of \$227,738, at a per annum 5.5% interest rate, converting to a 10-year term loan post construction, at an interest rate of 5.5% per annum. The financing will support a 77.04 kW roof-mounted solar system installed by Earthlight Technologies ("Contractor"). The project's SIR over the useful life of measures is 1.39. A C-PACE assessment through the Town of Waterford will provide security. The Green Bank intends to initially hold this asset on its balance sheet until it can be sold to another capital provider. Staff believes HA C-PACE LLC, the special purpose entity set up between Hannon Armstrong and the Green Bank to buy C-PACE assessments, to be a likely purchaser of this asset.

Financial Metrics: Based on a value of \$1,671,105 (comprised of \$1,450,000 appraised value set in 2016 by Buckley Appraisal Services, Inc. plus 50% of CPACE hard costs of \$221,105) and a current mortgage balance of \$716,209 (November 2017), the Lien-to-Value ("LiTV") and the Loan-to-Value "LTV") for this investment are 14.59% and 56.5%, respectively, within standard Green Bank and HA CPACE LLC underwriting guidelines. The current and tangible net worth ratios are healthy at 4.95 and 2.92, respectively.

With respect to other key financial metrics, the projected Debt Service Coverage Ratio ("DSCR") averages 0.95x over the term of the financing based on pro forma rental revenues of \$78,200 and keeping expenses in line with the prior year. Given the marginal property level DSCR and the owner-occupied nature of the Property, staff looked through the property holding company to Dawley. An underwriting analysis on the Company shows that is in strong financial health, with revenue over \$1.2 M in the last two fiscal years and EBITDA between \$81,900 - \$170,900. The average DSCR on the Company level over the financing term is 1.77x.

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

Project Name:	Granite Property Holdings
Amount:	\$98,859
Comprehensive Plan:	CPACE

Description

The property at 55 Middletown Ave is a 7,743 square foot commercial office building (the "Property") owned by Granite Property Holdings, LLC (the "Borrower"). [REDACTED]

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank (the "Green Bank") will provide construction financing in the amount of \$98,859, at a per annum 5.0% interest rate, converting to a 20-year term loan post construction, at an interest rate of 6.25% per annum. Given that this project qualifies for consideration by Hannon

Armstrong, it is anticipated that 90% of the financing will come from the HA C-PACE facility barring any unforeseen circumstances.

The C-PACE financing will be used to install a 26.5kW solar PV array on the Property (the "Project"). The Project has an SIR over its useful life of 1.33 and is expected to generate total gross savings of \$234,628 over the useful life. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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

Project Name: United Church on the Green – 270 Temple St
Amount: \$53,879
Comprehensive Plan: CPACE

Description
The property at 270 Temple St, New Haven, Connecticut is the church (the "Property") for the United Church, a progressive Protestant church with roots dating back to the 17th century. The Property is owned by United Church on the Green ("UCG" or "Property Owner") that, in addition to providing traditional church services, also operates the United Community Nursey School ("USNC"), an early education program serving wide variety of ethnic and cultural backgrounds as well as special needs children. Given the historic nature of the

Property, there is an agreement with the Connecticut Historical Commission that restricts the current and future use of the Property to “ecclesiastical, educational and cultural” purposes.

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank (“Green Bank”) would provide construction financing (at a per annum 5.0% interest rate) and a 10-year term loan commitment (5.5% interest rate), in the amount of \$53,879 to support the installation of \$126,634 of HVAC and lighting measures. The project’s savings-to-investment ratio is 1.0 over the effective useful life and reflects a cash contribution of \$72,755 by the UCG to the cost of the project. A C-PACE assessment through the City of New Haven will provide security. Given the historic and special purpose nature of the Property, the Green Bank would hold the C-PACE investment on its balance sheet until it can opportunistically sell it, likely as part of a larger asset sale, to a third-party capital provider. However, upon reviewing the title search for this property, two issues were identified, but both are not considered barriers to placing a benefit assessment lien on the improved property. First, the deed on the property was dated in 1779, where there are no clear boundaries to the land the church owns. Second, New Haven has a Preservations Restrictions agreement on the property, which requires that the building remain as it is now and can only be used for “ecclesiastical, educational and cultural” purposes. While these issues may make the future sale of this transaction challenging, the Green Bank is comfortable keeping this transaction on its balance sheet throughout its repayment.

[REDACTED]

Project Name: 230 Locust Street

Amount: \$406,527

Comprehensive Plan: CPACE

Description

The property at 230 Locust Street, CT (“230 Locust Street” or the “Property”) is a 30,208-square foot owner-occupied building solely occupied by Plastonics, Inc (“Tenant” or “Operating Business”), a provider of specialized plastic powder coating services for industrial applications. Built in 1960, the Property sits upon a 1.78 acre site and is owned by Locust Holdings, LLC (“Locust”, or the “Company”), which shares common ownership with Plastonics, Inc. [REDACTED]

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank (“Green Bank”) would provide construction financing (at a per annum 5.0% interest rate) and a 15-year term loan commitment (5.75% interest rate), in the amount of \$406,527. The proposed investment would support the installation of a 100-kW solar PV system as well as several energy efficiency measures: installation of LED lighting, roof insulation, repair of a compressed air leak, and a HVAC burner upgrade. The project is immediately cash flow positive, and the savings-to-investment ratio (“SIR”) is 1.29 over the effective useful life. A C-PACE assessment through the City of Hartford will provide security. The Green Bank intends to initially hold this asset on its balance sheet until it can be sold to another capital provider. Staff believes HA C-PACE LLC, the special purpose entity set up between Hannon Armstrong and the Green Bank to buy C-PACE assessments, to be a likely purchaser of this asset.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Memo

To: Connecticut Green Bank Board of Directors

From: Mackey Dykes, Vice President, Commercial, Industrial, and Institutional Programs

CC: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO

Date: March 29, 2018

Re: C-PACE Program Guidelines Update

Overview

Conn. Gen. Stat. Section 16a-40g authorizes the Commercial Property Assessed Clean Energy Program (“C-PACE”) and designates the Connecticut Green Bank (“CGB”) as the state-wide administrator of the program. CGB is required to “develop program guidelines governing the terms and conditions under which state and third-party financing may be made available to the commercial sustainable energy program” and to “adopt standards to ensure that the energy cost savings of the energy improvements over the useful life of such improvements exceed the costs of such improvements.” Since 2013, CGB has develop and maintained the “Program Guidelines” for the C-PACE program in accordance with this language. It sets out such key aspects of the program as:

- Benefits of C-PACE to building owners, energy auditors and contractors, municipalities, capital providers and mortgage holders
- Statutory and programmatic criteria such as mortgage lender consent, building eligibility criteria, project eligibility criteria and municipality opt-in
- “Open-market” C-PACE platform which allows private capital providers to offer financing secured by C-PACE directly to building owners
- Technical standards to evaluate projects to ensure they meet the statutory criteria that the energy cost savings of the energy improvements over the useful life of such improvements exceed the cost.

The Program Guidelines are currently in their fifth iteration. The most consequential change is to update the programmatic structure to review the savings to investment ratio (SIR) of a project. Other recommended updates are also summarized in this memo.

SIR Review

The C-PACE authorizing statute says CGB “shall adopt standards to ensure that the energy cost savings of the energy improvements over the useful life of such improvements exceed the costs of such improvements.” Recognizing that CGB or the program could not ensure specific

energy savings for due to, among other things, the fact that (1) property owners own and operate any improvements financed through the program, (2) building use and occupancy may change thought the term of the financing, and (3) building owners contract directly for the installation of the specific measures, CGB developed the savings to investment ratio test standard to meet this statutory requirement. This requires that the ratio of estimated savings (total avoided energy costs plus project revenues, including all ancillary value streams such as environmental incentives and tax benefits, earned over the estimated useful life of the financed energy conservation measures) to investment (total projected debt service due in respect of the C-PACE financing, including all principal, interest, and any fees over the term of the financing) be greater than 1. The program guidelines contain technical guidelines to provide the framework for the SIR analysis. Contractors or auditors are required to complete an energy audit or feasibility study and develop a scope of work for the proposed C-PACE project, which includes an energy baseline and energy savings expected from the proposed project. The C-PACE program requires that this scope of work to be reviewed by a third-party engineer to validate the energy baseline and the reasonableness of the energy savings assumptions. Over time, the process for this third-party review has evolved.

Initially, the program required all projects to be reviewed by its selected "Technical Administrator." Sustainable Real Estate Solutions ("SRS") was selected through an RFP in 2013 as the Technical Administrator and has remained in that role. That role has expanded to include services such as contractor training, commissioning, EM&V, and project development. SRS's SIR review has become more robust and now includes the Paceworx report which is a stand-alone (separate from the contractor's proposal) customer-facing financial summary of the project and financing. They are involved in the project development and sales side, as opposed to solely reviewing the technical details of a project after the fact.

In late 2014, CGB "opened up" the C-PACE platform and allowed third-party lenders, such as Clean Fund or Greenworks Lending LLC, to directly lend to building owners and secure that financing with a C-PACE assessment. To meet the SIR requirement, CGB outlined three options:

- 1) Submit the energy audit or feasibility study and supporting documentation to SRS. The fee for this review is 1% of the financed amount, not to exceed \$5,000.
- 2) Submit a technical application, prepared by a certified energy engineer, with all the technical info for the project to CGB. CGB would then work with the Technical Administrator to review the project. The fee for this review is 1.25% of the financed amount, not to exceed \$7,500.
- 3) Propose a process or project development platform through which an audit and/or feasibility study and requisite supporting documentation that demonstrates an SIR greater than 1 may be provided to the Program Administrator in a standard format.

Greenworks Lending LLC, the most active third-party lender in the state, chose option 3 and proposed a process where they would contract with Celtic Energy, Incorporated to do the independent review. As part of their submission package to CGB for C-PACE approval, Greenworks Lending LLC would include a report from Celtic Energy, Incorporated that verified the SIR was greater than 1. This process was accepted by CGB and the majority of third-party funded deals in the state have utilized that path.

This process worked as CGB was in the early stages of opening up the market to third-party lenders. Today, that market is growing and more lenders are expressing interest in doing business in the state. The proposed new program guidelines provide clear guidance as to what

is allowable for technical review for the program. This new guidance is important because the existing options provide little framework for deciding who would be allowed to review projects.

There are two general directions for the program to move towards in administering SIR review of projects: open market or centralized.

Open Market Model

The C-PACE program can continue on the path of allowing lender-sourced technical review and create a more transparently open market for technical review of C-PACE projects. Rather than have capital providers independently propose their own process or reviewer, CGB could run an RFQ process to qualify “Technical Reviewers” of proposed C-PACE projects or set a minimum set of standards for independent reviewers to meet. Capital providers, contractors and building owners could contract with and work directly with any qualified Technical Reviewer to perform the required review and SIR validation of their project. This review and SIR validation would be included as part of the submission package to CGB for C-PACE approval. This open market approach would allow the market to choose a reviewer that matches their needs, including project development, speed, cost and sales assistance. It would also provide multiple options for project review, therefore providing a greater ability to scale as demand grows rather than concentrating demand through one provider.

There are potential risks to an open market approach. Competition around speed and price can lead to reductions in quality. A desire for future business from a capital provider or contractor could cause a technical reviewer to “cut corners” in their review. Future project performance issues, whether resulting from poor independent review or not, could cause the integrity of the program to suffer. If a more open market does pose greater risk that bad projects are financed, there could be a reputational risk to the entire program.

Under the Open Market Model, CGB would maintain the Technical Administrator partner as a technical advisor to the program and preferred reviewer of CGB-funded projects but retain the option to use other reviewers.

Centralized Model

The C-PACE program can adopt a structure similar to the early days of the program when CGB was the only active capital provider. CGB would contract with a single “Technical Administrator” who would be responsible for doing the third-party evaluation on all projects. Capital providers, contractors, or building owners would develop the project scope and submit it, along with all the technical data, to CGB and the Technical Administrator. Rather than negotiating their own price for review directly as in the open market model, CGB would charge a set fee to cover the cost of handling the independent review.

This centralized model structures the contractual relationship with the independent review with CGB rather than the capital provider. This would reduce the risk of independent reviewers “cutting corners” to curry favor with capital providers or in response to pressure from them to increase loan amounts. However, there are downsides to this model. Competition is reduced and there is greater potential for bottlenecks. Greater time is required of CGB staff to manage every project’s technical review instead of relying on the developer or capital provider to do this, creating an additional drain on already stressed resources given the existing budget environment. This approach can be seen as addressing the greatest risk of the open market approach, which is that bad projects are financed. However, there is no guaranty that a CGB selected reviewer will not make mistakes.

SIR Recommendation

Some members of the Deployment Committee (the “DC”) have recently met with CGB staff, both individually and collectively, to discuss the options for administering independent review of C-PACE projects. Scheduling conflicts and a lack of quorum prevented a formal meeting of the DC to consider this issue. In such discussions, the consensus seemed to be that given the current hybrid structure where multiple technical reviewers are allowed has been the most successful in the country (outside of California), a return to centralized structure wasn’t ideal. However, given the potential risks to the program, neither the CGB staff nor any of the DC members who provided input were comfortable moving to a fully open-market solution. Therefore, a compromise solution is proposed as part of the program guidelines.

The program would maintain the option to let capital providers use CGB’s selected Technical Administrator for the independent project review or propose other technical reviewers, with a minimum set of qualifications in place. If a proposed technical reviewer met the qualifications, CGB staff would conduct a more thorough vetting, including site visits and reviews of their project review process. Any independent reviewer approved through this process would be made public and available for others in the market to use.

To maintain the ongoing quality of the review, CGB would conduct random project audits to ensure reviews are done in accordance with the CPACE program guidelines. Independent reviewers’ approval to participate in the program would also have to be renewed on an annual basis

In addition to this CGB-administered review structure, it is also recommended that the program accept projects that receive Investor Ready Energy Efficiency (IREE) certification and have an SIR greater than one.

Investor Ready Energy Efficiency (IREE) Certification

The IREE certification is administered by the Investor Confidence Project (ICP), an initiative of Green Business Certification Inc. (GBCI) which administers LEED, WELL, PEER and other green building, project and professional credentials. The IREE certification designates that certified efficiency retrofit projects have been developed by trained ICP Credentialed Project Developers and conform to the requirements of the ICP Protocols as verified by independent ICP-certified. Essentially, this platform would be a proxy for the C-PACE technical guidelines and independent review. The ICP protocols provide comprehensive technical standards to provide assurance in a standardized way that certified projects have been well-engineered and that the savings projections are predictable. The certification requires, similar to C-PACE, independent review of the project by a certified reviewer.

Connecticut’s partnering with GBCI on this initiative brings benefits to both sides. This national initiative seeks to transform the energy efficiency marketplace from one-off projects to a true marketplace where projects can be aggregated into portfolios, traded on secondary markets, and securitized. Connecticut C-PACE projects that choose to use the IREE certification pathway would have access to this broader market. In return, CGB can help shape this market and contribute directly to its growth. It could also provide a future technical evaluation framework that would be standardized nationally, replacing Connecticut’s and other C-PACE districts.

Other Updates

The draft guidelines include the following additional revisions:

- Incorporates new construction guidelines previously approved by the Board of Directors
- Defines program guidelines appendixes as supplemental documents that can be modified at staff discretion
- Permits for:
 - one assessment to cover multiple tax parcels under certain limited conditions
 - financing of eligible improvements made in the last year
 - eligible improvements made over the course of a year to qualify as one project
 - electric vehicle charging station eligibility
- Provides a list of eligible associated measures including:
 - equipment extended warranties
 - program and permit fees
 - energy audit costs
 - LEED certification fees and non-energy capital improvement costs made as part of LEED certification
- Implements cosmetic clean-ups and changes to bring language more in line with program's operation and C-PACE statute

Recommendation

Staff recommends that the CGB Board of Directors (the “Board”) approve the updated C-PACE Program Guidelines, materially in the form of attached to this memo. These Program Guidelines would then go through a thirty-day public comment period. If, after public comments are received, CGB staff considers that significant changes are needed to the Program Guidelines as currently drafted, then staff will come back to the Board for an updated approval. If no significant changes result from the public comment process, then the final form of the Program Guidelines shall be deemed approved by the Board and CGB staff with proceed with implementation of such Program Guidelines.

Resolutions

WHEREAS, Conn. Gen. Stat. Section 16a-40g (the “Authorizing Statute”) authorizes what has come to be known as the Commercial Property Assessed Clean Energy Program (“C-PACE”), the Authorizing Statute designates the Connecticut Green Bank (“Green Bank”) as the state-wide administrator of the program;

WHEREAS, the Authorizing Statute charges the Green Bank to develop program guidelines (the “Program Guidelines”) governing, among other things, the (i) terms and conditions under which state and third-party financing may be made available to C-PACE, and (ii) standards to ensure that the energy cost savings of energy improvements financed through C-PACE over the useful life of such improvements exceed the costs of such improvements;

WHEREAS, the Green Bank staff seeks to update the Program Guidelines and seeks Board approval of the Program Guidelines in light of structural changes included therein, including but not limited to, how projects must demonstrate compliance with the savings to investment test.

NOW, therefore be it:

RESOLVED, the Green Bank Board of Directors (the “Board”) approves the C-PACE Program Guidelines submitted to the Board on March 29, 2018.



SPARKED BY
CONNECTICUT GREEN BANK

C-PACE PROGRAM GUIDELINES

Version 56

Released: ~~January 19, 2016~~ _____, 2018

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I. OVERVIEW/INTRODUCTION

In 2012, the Connecticut legislature passed legislation that gives property owners access to a new form of financing for building Public Act 12-2, codified in Connecticut General Statutes Section 16a-40g (as amended, the "C-PACE Legislation"), which authorized the commercial sustainable energy upgrades (Appendix A) program more commonly known as the Commercial & Industrial Property Assessed Clean Energy (Program ("C-PACE;"). C-PACE is a financing program that allows Connecticut building owners to access cleaner, cheaper, and more reliable energy. The C-PACE Legislation authorized Connecticut Green Bank, a Connecticut quasi-public agency ("Green Bank") was empowered by legislation, to administer C-PACE and establish program guidelines for the implementation of the program.

C-PACE allows qualifying commercial real property owners to access financing to undertake qualifying energy efficiency and clean energy improvements on their buildings and repay the investment through an additional charge (assessment) along with their real property tax bill. Similar to a sewer assessment, capital provided under a project financed through C-PACE program is secured by a benefit assessment lien on the owner's improved real property and paid back, which lien is repaid over time. Like other benefit assessments, C-PACE is a non-accelerating, senior lien secured by the property. The repayment obligation transfers automatically to the next owner if the property is sold and in the event of default, only the payments in arrears come due. This arrangement spreads the cost of clean energy improvements – such as energy efficient boilers, upgraded insulation, new windows, or solar installations – over the expected life of the measure. Because the payment is tied to the property's real property tax billing, a secure payment stream, C-PACE projects are seen as less risky than typical loans, and low interest capital can be raised from the private sector with little or no government financing required.

Benefit assessments are a familiar tool which municipalities levy on real estate parcels to finance projects including street paving, water and sewer systems, and street lighting. C-PACE builds on a long history of using such benefit assessments and serves a public purpose through reducing energy costs, stimulating the economy, improving property valuation, reducing greenhouse gas emissions and creating jobs.

C-PACE is a proven and effective tool to attract private capital into the clean energy and energy efficiency market. It is available to Commercial and Industrial properties, as well as to multifamily properties with five or more units.

The following pages outline the program guidelines established by Green Bank for the implementation of C-PACE (the "Program Guidelines that will"), which Program Guidelines govern all program C-PACE participants.

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~~BENEFITS~~ All Appendixes attached are supplemental program documents used by Green Bank in implementation of the Program Guidelines and may be modified or amended by Green Bank, in its sole discretion, from time to time. Current versions of all Appendixes may be found [website link].

II. OUTLINE OF C-PACE BENEFITS

C-PACE offers multiple benefits to a broad range of stakeholders, including but not limited to: building owners, municipalities, mortgage holders, lenders and energy efficiency/renewable energy contractors.

For Building Owners: C-PACE helps minimize the up-front investment, installation, and performance risk of energy upgrades, while helping owners lower their operating costs, improve the value and market competitiveness of their asset, and comply with energy mandates. C-PACE does this in several ways:

- *Many owners lack capital to do energy improvements.* C-PACE provides up to 100% up-front, long-term financing to property owners for qualified energy upgrades. ~~That means no money down.~~ Audits, construction costs and M&V can be wrapped into C-PACE financing.
- *Owners often want to sell the building before an energy upgrade loan is repaid.* The C-PACE assessment obligation is attached to the property and transfers to the new owner. Payments do not accelerate in case of default.
- *Many owners feel energy improvements do not yield an adequate return on investment.* The C-PACE program requires that the estimated energy savings from a project exceed the up-front investment and financing costs, leading ~~projects to be the expected~~ cash flow to be positive over the useful life of the equipment. Deeper energy upgrades and savings are possible because assessments match the useful life of equipment, which for certain improvements can extend up to 25 years.
- *Other owners are uncertain that energy savings will perform as advertised.* C-PACE helps building owners understand their future energy savings by requiring that an energy audit and/or feasibility study be done to estimate energy savings **and** that a Commissioning, Measurement & Verification plan be in place to ensure that equipment is installed correctly and that energy consumption or production may be tracked by the owner over time.
- *Owners need tenants to share in the costs of energy upgrades.* As a benefit assessment repaid through the property tax bill, under typical leases, C-PACE payments – as well as energy savings – can often be passed along to tenants.

For Energy Auditors and Contractors: The biggest barrier to converting leads to deals for energy upgrades is the lack of access to up-front financing. C-PACE solves this. By allowing a property owner to access 100% up-front financing for up to 25 years, deeper energy efficiency and clean energy improvements are now affordable. The demand for building energy improvements will grow in Connecticut and jobs will be created. The Green Bank also provides energy auditors and contractors access to training, market research, and marketing materials.

For Municipalities: C-PACE is an economic development tool for municipalities. Energy upgrades create a more competitive environment for retaining and attracting new businesses by lowering energy costs. Energy upgrades also create jobs and reduce greenhouse gases and other pollutants.

For ~~Lenders~~Third Party Capital Providers: C-PACE has created a very secure, clean energy financing product for ~~lenders~~Third Party Capital Providers (TPCD). The security comes from its position similar to a tax lien on a property. The lien, like ~~all other~~ public benefit assessments, sits in a senior position to other encumbrances on the property, including mortgage debt and liens other than municipal real property tax liens. The repayment is also tied to property taxes, which are a very secure stream of payment.

Finally, Connecticut statutes require C-PACE approved projects to have a “Savings to Investment Ratio” (SIR) greater than ~~1~~one, meaning that projected estimated lifetime savings from the ~~energy~~ measures must exceed the total investment, inclusive of financing costs, over the lifetime of the measures. Connecticut streamlined the C-PACE program by establishing a single statewide C-PACE program administered by the Green Bank. Connecticut’s C-PACE maintains an open market approach to its C-PACE program, encouraging private capital to be the primary financier of these assessments and supporting building owners who wish to source their own C-PACE lender (see C-PACE OPEN MARKET AND ELIGIBILITY CRITERIA FOR C-PACE CAPITAL PROVIDERS section). Additionally, the Green Bank currently has dedicated capital to invest in C-PACE projects. At certain intervals through the year, the Green Bank may periodically “sell-down” its portfolio of C-PACE transactions to qualified Capital Provider(s) (as defined herein) who desire to be the secondary financiers of these assessments. The sell-down process replenishes the Green Bank’s capital, enabling a sustainable source of funding for C-PACE projects.

For Mortgage Holders: The structure of C-PACE allows participating buildings to pay for improvements to their property out of the savings the project creates. Connecticut statutes require C-PACE approved projects to have a SIR greater than 1, meaning that projected lifetime savings from the energy measures must exceed the total investment, inclusive of financing costs, over the lifetime of the measures. The Green Bank has instituted technical underwriting standards for C-PACE that provides a robust framework for measuring the estimated SIR (Appendix ED), which all C-PACE Projects must meet. Under the C-PACE financing structure, the building should experience increased net operating income, often an immediate return on investment, and ~~as a consequence~~therefore becomes more attractive to current and potential tenants and future buyers. Additionally, C-PACE Assessments do not accelerate. In the event of a foreclosure of the property for any reason, only the amount of the C-PACE assessment currently due and/or in arrears, a relatively small proportion of the entire C-PACE assessment, would come due. In the event of a property sale, C-PACE assessments automatically transfer to the new property owner unless the buyer or seller decides to prepay the assessment. Finally, the Connecticut statute require that property owners receive the written consent of their existing mortgage holder before being eligible for C-PACE financing (Appendix C). Mortgage lenders will be at the table helping to determine whether a property can undertake this voluntary assessment.

III. C-PACE STATUTORY AND PROGRAMMATIC REQUIREMENTS UNDER C-PACE

~~C-PACE was established through Public Act 12-2 (PA 12-2) on June 15, 2012 (Appendix A). There are four major features of the C-PACE legislation that govern the program.~~

~~The following is an outline of the various C-PACE requirements in the C-PACE Statute as well as those established by the Green Bank.~~

1. **Mortgage Lender Consent**

~~The Green Bank's C-PACE program requires that the property owner receive consent of the mortgage holder before they can obtain financing. There are many benefits for a mortgage holder to consent to a C-PACE assessment obtaining a senior position to their mortgage (See BENEFITS OF C-PACE section).~~

~~**Building**The C-PACE Legislation requires that the property owner (A) provide written notice to any existing mortgage holder of the Qualifying Property (as defined below), at least thirty days before the recording of a benefit assessment lien on such property, of the property owner's intent to finance a project through C-PACE, and (B) obtain the written consent to the C-PACE financing from any existing mortgage holder of the Qualifying Property. Green Bank's model mortgage holder notice and consent is attached as Appendix C. C-PACE participants may elect to use a different form of documents for the purposes of evidencing mortgage holder consent, any other such document will be subject to review and approval by Green Bank in its sole discretion.~~

2. **Real Property Eligibility**

~~In order to be~~To be considered a "Qualifying Property" eligible for C-PACE financing~~Financing~~, the property seeking financing must meet the following requirements:

- ~~A. A property must~~Must be located within the boundaries of a ~~municipality that has adopted a resolution supporting the C-PACE program and signed~~Participating Municipality.¹
- ~~A.B. Must be owned in fee by a legal agreement with the Green Bank~~Benefited Property Owner.
- ~~B. The applicant must provide evidence that it is the legal owner~~Must not contain a Residential Dwelling of the property, and all the legal owners of such property agree to participate.
- ~~C. The property must be a nonresidential property~~four units or less. Multifamily properties containing five dwelling units or more are eligible.
- ~~D. The property must have a property tax identification number. For building owners who are exempt from property tax liability, the municipality must agree to issue a property tax ID~~Not for collection purposes. Non-profit buildings with a property tax ID number and agricultural properties may also be

¹ ~~The C-PACE template municipal participation agreement is attached as Appendix B, as may be amended or modified from time to time by Green Bank in its sole discretion. Green Bank facilitates municipal outreach and coordination with municipalities, and their legislative bodies, interested in entering into the Participation Agreement.~~

~~eligible in. If the eligibility of a certain cases where a participating municipality issues that non-profit entity a property tax bill.~~

~~E. The property owner must provide evidence that the mortgage holder (or holders) on the property consents to the C-PACE assessment.~~

~~F.C. A disclosure of risk form signed by the property owner summarizing the risks to the property owner for C-PACE financing, as may be modified from time to time by the property is not clear, Green Bank may determine property eligibility in its sole reasonable discretion based on site specific considerations including, but not limited to, zoning designation and current/past/future land use. Multiple abutting parcels may be included under one benefit assessment lien if (1) each parcel, by itself, is a Qualifying Property (2) each parcel is owned by the same Benefited Property Owner, and (3) each parcel benefits from the same Project.~~

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3. Project Eligibility

~~C-PACE transactions~~To be considered a “Qualifying Project” eligible for financingC-PACE Financing, a project must meet the following requirements:

~~A. A~~A. Contain at least one Energy Improvement.

~~B. Since Energy Improvement projects typically have associated costs in addition to the hard costs of the improvements (e.g. closing/lender fees, consultant/development fees, soft costs, or other associated project costs, each being an “Associated Cost”), all such Associated Costs may, subject to Green Bank approval, be included in the Financed Amount.~~

~~C. Energy Improvement(s) which have already been made to a Qualifying Property may be eligible for financing if such Energy Improvements were completed less than a year prior to Green Bank approval of such Project. Additionally, subsequent Energy Improvements to a Qualifying Property, made within one calendar year from the close of the original C-PACE financing, may be considered as one Project for the purposes herein.~~

~~A.D. Obtain an energy audit or feasibility study must be completed for the proposed Energy Improvement(s).~~

~~B. Upgrades must lower the energy consumption of the building or enable the building to produce clean energy.~~

~~C.E. Upgrades must be “permanently affixed” to the property; with the exception of district heating and cooling systems and microgrids. The measures proposed for the projectEnergy Improvement(s) must be permanently fixed to the property (i.e. the C-PACE improvements cannot be removed from the property; except for district heating and cooling systems and microgrids (as provided for in the event of a change of ownership), or associated with a district heating or cooling system or microgrids (Appendix E)-C-PACE Legislation).~~

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~~D-F.~~ The term of the C-PACE benefit assessment must may not exceed the weighted average expected useful life ("EUL") of the measures, Energy Improvement(s). EUL is determined through the energy audit and approved is subject to approval by C-PACE's (1) either the Technical Administrator ("Technical Administrator") or a Technical Reviewer ("Reviewer") as well as, and (2) the Green Bank in its sole discretion. Regardless of a project's Project's EUL, the term of the C-PACE benefit assessment may not exceed 25 years unless approved in writing by the Green Bank, in its sole discretion.

~~•~~ All energy measures together must meet a SIR of greater than 1, meaning that projected lifetime savings from the energy measures must exceed the total investment, inclusive of financing costs over the full term of the C-PACE assessment, over the useful life of the measures. A complete technical review of the proposed C-PACE project will be undertaken by the Green Bank's Technical Administrator, or a Reviewer approved by the Green Bank in its sole discretion, to confirm the accuracy of the estimated projected savings and the computation of this ratio (Appendix E).

~~G.~~ All C-PACE transactions Projected Energy Savings combined with Projected Associated Savings (together being, the "Projected Total Cost Savings") must exceed the Projected Financing Cost. In other words, the savings-to-investment ration ("SIR") of the Project must be SIR of greater than one. To demonstrate that SIR requirement has been satisfied the Project must be either (1) reviewed and approved by the Technical Administrator, (2) reviewed and approved by a Technical Reviewer, or (3) be certified as Investor Confidence Project "Investor Ready Energy Efficiency"² Project. For the avoidance of doubt, the SIR calculation for the Project must meet the requirements set forth in Article IV below.

~~H.~~ All Projects require the written approval of the Green Bank, as the statewide administrator of the C-PACE Program.

~~I.~~ All Benefited Property Owner(s) associated with the Project must sign a disclosure of risk form, in the form attached as Appendix H (the "Disclosure of Risk Form").

~~J.~~ Projects which closed on C-PACE financing may not be eligible for refinancing through the C-PACE Program.

~~4.~~ If Statewide Program — Municipalities Opt in

C-PACE is a statewide program administered by the Green Bank. Municipalities interested in extending this type of financing to their property owners must opt in to the statewide program by passing a resolution through their legislative body and entering into a Legal Agreement with the Green Bank (Appendix B).

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² For more information on Investor Ready Energy Efficiency certification, please visit <http://www.eepformance.org/iree-certification.html>.

K. the Energy Improvement(s) are wholly owned by any party or parties which is/are not the Benefited Property Owner, then the Project must meet the requirements set forth in Section 4 of Appendix E.

IV. TECHNICAL STANDARDS OVERVIEW

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~~The Technical Administrator is responsible for ensuring that all C-PACE applications meet the statutory requirements for project eligibility. The Technical Administrator has drafted Technical Standards to qualify eligible energy upgrades. The Green Bank requires a third-party review of the proposed Project to demonstrate that the SIR requirement has been met. The following provides a summary of the technical review process. Please refer to the full C-PACE Technical Standards (Appendix ED) for a full description of audit requirements, technical review methodology and standards, and eligible and ineligible measures, and energy savings insurance information. Technical review may be completed by the Green Bank's selected Technical Administrator or Technical Reviewer. As an alternative to this process, the Green Bank will also accept Investor Confidence Project-certified Investor Ready Energy Efficiency Projects that demonstrate the SIR is greater than one.~~

1. Defining a Scope of Work

Building owners should work with a qualified energy auditor and/or contractor with demonstrated experience to define a scope of work for ~~saving energy in their building-proposed project~~. This scope can range from installation of a single ~~energy conservation measure (ECM), Energy Improvement~~, such as a new high efficiency boiler or a renewable energy system, to a whole building energy upgrade involving multiple, interactive ~~ECMs, Energy Improvements~~. A general list of eligible ~~ECMs, Energy Improvements~~ and their typical energy saving characteristics can be found in the full Technical Standards document (Appendix ~~E~~).

2. C-PACE Application Requirements

~~Upon receipt D). The scope of an initial application and confirmation of work for the property's eligibility, Green Bank will then notify eligible applicants to submit a full application (See C-PACE APPLICATION SUBMISSION & REVIEW PROCESS section).~~

~~Applications proposed project must be prepared and submitted by an energy engineer a Qualified Contractor or by a team including an energy engineer. An energy engineer is defined as a professional holding a Certified Energy Manager (CEM) or Certified Energy Auditor (CEA) accreditation, a Professional Engineer (PE) with demonstrated relevant energy experience, or a contractor with relevant demonstrated experience as determined by the Technical Administrator. Applications Registered Contractor. Projects require the applicant to conduct an energy audit or renewable energy feasibility study. For all projects involving the installation of ECMs, Energy Improvements, depending on project type, size and complexity, the energy audit may range from a simple walkthrough of the building to an investment grade audit.³ The energy engineer The Qualified Contractor or Registered Contractor will determine the minimum required energy audit level consistent with the C-PACE~~

³ Connecticut utilities may provide what can be considered an ASHRAE Level I audit at no cost to applicants. The Connecticut Green Bank can provide applicants referrals to qualified energy auditors to do higher level audits, the costs of which may be included in C-PACE financing.

program technical standards. The audit should identify the building's representative baseline energy use, identify and recommend ~~ECMs~~Energy Improvements, estimate the useful life of each ~~ECM~~Energy Improvement, determine total project capital cost and the projected energy savings that can be confidently achieved, evaluate key financial metrics, and provide an energy savings equipment commissioning (Cx) and measurement and verification (M&V) plan. All projects involving a renewable energy system are required to complete a Renewable Energy Feasibility Study (Appendix F). ~~feasibility study, Green Bank recommends that any feasible study follow the guidelines set forth in Appendix D.~~

~~When an energy audit and/or renewable energy feasibility study has been completed, the applicant will be able to complete an Excel-based form, furnished by the Technical Administrator, which accepts information on:~~

- ~~• Building type, gross square footage, occupancy and operating hours~~
- ~~• Building utility cost and energy consumption~~
- ~~• ECMs
 - ~~○ Name/Description~~
 - ~~○ Expected Start (installation) and completion date~~
 - ~~○ EUL~~
 - ~~○ Estimated implementation cost~~
 - ~~○ Projected annual savings~~
 - ~~○ Electricity demand and consumption impact (existing & proposed per unit)~~
 - ~~○ Fuel consumption impact (existing & proposed per unit)~~
 - ~~○ Water consumption impact (existing & proposed per unit)~~
 - ~~○ Renewable energy produced (if applicable)~~
 - ~~○ Rebates/incentives (if known)~~
 - ~~○ Tax incentives/credits (if known).~~~~

~~For project applications submitted to the Green Bank for C-PACE financing, the data in this form, along with all other supporting project documents (e.g., the energy audit, manufacturer's ECM/renewable energy system cut sheets, or building modeling results) will be entered into a web-based C-PACE Data Management Platform (CDMP). This database supports the technical and financial underwriting process required to meet the reporting requirements of the multiple interdependent stakeholders, including but not limited to Green Bank management, mortgage holders, building owners/managers, and capital providers and/or insurers.~~

~~For projects submitted to a qualified Capital Provider for C-PACE financing, the data along with all other supporting project documents may be entered into the CDMP or provided to the Green Bank in an alternative form; see the Summary of Terms and Conditions for Origination, Funding and Administration of C-PACE Transactions ("Standard Offer") (Appendix H) for details. **ALL PROJECT APPLICATIONS REGARDLESS OF CAPITAL PROVIDER** must include the information and abide by the standards described in these C-PACE Program Guidelines; all project applications will be reviewed by the Technical Administrator, or a Reviewer approved by the Green Bank in its sole discretion.~~

3-2. Technical Review

The Technical Administrator and/or ~~approved~~ **Technical** Reviewer will conduct a Technical Review, the purpose of which is to validate the reasonableness of project costs and energy savings projections. The Technical Administrator and/or ~~approved~~ **Technical** Reviewer will also confirm the projected SIR of the project ~~and verify that it is greater than 1. SIR means the ratio of (x) avoided energy costs plus project revenues, including all ancillary value streams such as environmental incentives and tax benefits, earned over the EUL of the ECMs to (y) projected debt service due in respect of the C-PACE financing—including all principal, interest, and any fees over the term of the financing—as well as fixed or variable costs associated with the maintenance or performance of the ECMs over their EUL. Further: one.~~

- ~~• EUL for each ECM is determined through the energy audit and approved by the Technical Administrator and/or Reviewer. Both costs and savings for each ECM will be calculated over the EUL of that ECM.~~
- ~~• The C-PACE financing term may not exceed the EUL of the installed ECMs. For projects with multiple ECMs, a weighted average EUL will be calculated.~~
- ~~• Regardless of a project's weighted average EUL, C-PACE financing terms may not exceed 25 years unless approved in writing by the Green Bank.~~

In addition, the methodology for tracking energy savings over an agreed upon term will be reviewed, thereby verifying for project stakeholders the extent to which projected energy savings are being achieved in an ongoing fashion.

Technical Review consists of four tasks:

- 1) Establish the building's representative energy consumption baseline,
- ~~2) Provide third-party technical review of the project including validation of 2) Validate~~ the reasonableness of projected energy savings;
- 3) Confirm that an adequate commissioning plan exists; and
- 4) Confirm that an adequate M&V plan exists to assess the effectiveness of the energy conservation measures and/or renewable energy system after project completion.

The first two tasks are necessary to determine the SIR on the project and verify that it is greater than 1. The third task ensures a property owner and the contractor have planned to confirm the correct installation and operational performance of the installed measures. The last task ensures that the property owner and the contractor have planned to evaluate the energy savings effectiveness of the measures after they have been installed.

The ~~Technical Administrator~~ **Green Bank** has developed a methodology for this technical review process, which relies upon three established industry protocols:

Baseline Energy Use: ASTM E2797-15, Building Energy Performance Assessment (BEPA) Standard directed at data collection and baseline calculations for the energy audit;

ECM Energy Improvement & Energy Savings: ASHRAE Level I, Level II and Level III Energy Audit Guidelines;

Measurement and Verification: International Performance Measurement and Verification Protocol (IPMVP) providing guidance for measurement and verification of the energy savings.

The Technical Administrator or Technical Reviewer will qualify the proposed ~~ECMs~~Energy Improvements and validate the projected energy savings consistent with these protocols and, in conjunction with the applicant, will confirm a baseline financing scenario that meets the SIR ~~>1~~ criteria.

4.3. ~~Measurement & Project~~ Verification and Measurement and Verification

~~In order to~~In order to verify that the project was installed according to the evaluated scope and evaluate the energy savings effectiveness of projects after they have been installed, all project applications are required to include a Cx and M&V plan to ensure that the property owner is in a position to collect energy consumption and/or clean energy production data. A report by a Qualified Contractor or Registered Contractor that confirms the measures were properly installed and that the project is operated as intended must be submitted to the Green Bank once project construction is complete.

The Green Bank requires C-PACE applicants to develop an M&V plan consistent with guidance provided by the International Performance Measurement and Verification Protocol (IPMVP) **or propose an alternative methodology** as appropriate for the project size and ~~ECMs installed~~Energy Improvements installed (which proposal may be to simply not develop an M&V plan). The Green Bank may elect to facilitate M&V on projects submitted to the Green Bank for financing. Property owners and/or ~~qualified Capital Providers~~TPCP may request M&V services from the Green Bank ~~—, for more details see Standard Offer (Appendix H), the Third-Party Capital Provider Term Sheet.~~ M&V activities may be financed as an eligible measure under the C-PACE program.

4. **ALTERNATIVE TO TECHNICAL REVIEW**

The Green Bank will consider a project to have met the Technical Review requirement that:

- (1) receives Investor Ready Energy Efficiency certification from the Investor Confidence Project (ICP); and
- (2) includes a letter from the ICP Quality Assurance Provider that the SIR is greater than 1.

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V. C-PACE OPEN MARKET AND ELIGIBILITY CRITERIA FOR C-PACE CAPITAL PROVIDERS

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Concept of 'Open Market'

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Connecticut maintains an "open market" approach to its C-PACE program, encouraging ~~Capital Providers~~ capital providers to be the primary financier of ~~these assessments~~ Qualifying Projects and supporting ~~building owners~~ Benefited Property Owners who wish to source their own ~~Capital Provider~~ capital provider. For ~~Capital Providers~~ capital providers wishing to directly offer C-PACE ~~Financing~~ financing, thereby becoming a "Third-Party Capital Provider" or "TPCP", the Green Bank has created a ~~standard~~ term sheet, ~~attached hereto as Appendix F (the Standard Offer, "Third-Party Capital Provider Term Sheet")~~, which outlines the key material terms of the relationship between the ~~Capital Provider~~ capital provider and the Green Bank as the program administrator (~~Appendix H~~). ~~This also includes an offer for a credit enhancement from the Green Bank to fund C-PACE transactions.~~ Only Qualifying Capital Providers (as defined below) may execute ~~this term sheet~~ the Third-Party Capital Provider Term Sheet with ~~the~~ Green Bank.

Additionally, the Green Bank currently maintains dedicated capital to finance C-PACE projects. ~~Pursuant~~ Benefited Property Owner looking to Requests for Proposals finance a project with Green Bank sourced capital may apply directly to Green Bank and follow the process outlined in Appendix F. From time to time and through the RFP process, the Green Bank may "sell-down" portfolios of its C-PACE transactions to ~~qualified~~ Qualifying Capital Provider Providers (s) who partner with Qualifying Capital Providers for the purpose of originating transactions, which Qualifying Capital Providers desire to be the secondary or co-financiers of these assessments. The "sell-down" process replenishes or leverages the Green Bank's capital, enabling a sustainable source of funding for C-PACE projects. ~~Capital Providers must be qualified by the Green Bank to receive information about and participate in these activities.~~

The 'open market' program offers multiple financing options to ~~building owners~~ Benefited Property Owners, enabling the Green Bank to achieve its mission of making financing accessible and affordable.

Qualified Capital Provider

Any ~~lender~~ capital provider or other entity interested in purchasing C-PACE transactions from the Green Bank or offering C-PACE financing directly to borrowers must become a qualified Capital Provider through the C-PACE Program. The process for becoming a ~~C-PACE qualified~~ "Qualified Capital Provider" is as follows:

- ~~1.~~ The interested ~~Capital Provider~~ capital provider must respond to the open C-PACE CGB Request for Qualifications from Interested Capital Providers ~~in order to become registered on the Green Bank's list of qualified Capital Providers. The link outlines the details of all requirements and process to be considered by the Green Bank.~~
1. roviders.
2. Green Bank shall review the submission and may approve the capital provide. Upon approval, the ~~lender~~ capital provider will be considered a ~~qualified~~ "Qualified Capital Provider." Qualified Capital Providers are listed on ~~the~~ Green Bank's C-PACE website and receive information from the Green Bank

regarding financing opportunities as well as pertinent information about ~~the Program~~C-PACE. Qualified Capital Providers wishing to directly offer C-PACE financing must also execute the ~~Standard Offer term sheet~~Third-Party Capital Provider Term Sheet.

~~Standard Offer~~

~~C-PACE Third-Party~~Capital Providers

~~Qualified Capital Provider~~ should execute the ~~Standard Offer~~Third-Party Capital Provider Term Sheet **ONLY** if they anticipate directly offering C-PACE financing to ~~property owners, or known as the Borrower,~~Benefited Property Owners in Connecticut. The ~~Standard Offer~~Third-Party Capital Provider Term Sheet outlines the key material terms of the relationship between the ~~Capital Provider~~TPCP, the Green Bank, and the ~~Borrower~~Benefited Property Owners. In summary, the process for project origination, funding and administration is as follows:

1. ~~Capital Provider or Borrower~~The TPCP or Benefited Property Owners may submit a completed C-PACE Application and all associated documents described in Capital Provider's or ~~Borrower's~~Benefited Property Owner's Obligations for any Eligible Project, as such terms are defined in the ~~Standard Offer~~Third-Party Capital Provider Term Sheet.
2. Green Bank shall review such documents and, in its sole discretion, provide Green Bank Approval of the Eligible Project (thereby becoming an "Approved Project").
3. ~~Capital Provider~~The TPCP may then enter into a Financing Agreement with Borrower (thereby becoming a "Closed Project").
4. ~~Capital Provider~~The TPCP shall enter into an Administration Agreement ~~(attached as Appendix I, the Administration Agreement)~~ with the Green Bank for such Closed Project, with a Credit Enhancement if applicable.
5. Green Bank will facilitate the filing and assignment to ~~Capital Provider~~the TPCP of Benefit Assessment Lien.
6. Green Bank will work with the ~~Participating~~ Municipality to collect any payments received pursuant the Benefit Assessment Lien and remit such payments to ~~Capital Provider~~.

~~6. Each Capital Provider, including the Green Bank,~~TPCP.

~~The TPCP~~ maintains its own financial underwriting criteria and financing terms and conditions for a C-PACE transaction. ~~Borrowers may find the financing terms and conditions for the Green Bank's capital facility, as well as contact information for qualifying Capital Providers, here.~~ Qualified Capital Providers seeking credit enhancement support from the Green Bank should contact the Green Bank directly regarding its underwriting criteria for such transactions.

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C-PACE APPLICATION SUBMISSION & REVIEW PROCESS

The process for a property owner to access C-PACE financing is summarized below.

1. Initial Application

An interested property owner, contractor, consultant, ESCO submits an initial application on the C-PACE website: www.c-pace.com. The Green Bank reviews initial application. Applicants receive a response within 1 week to identify missing information, to confirm that the property is eligible for C-PACE, and to provide instructions to complete the application. Applicant is responsible for providing all information and documentation required in the initial application.

2. Full Application: Financial & Technical Review

If the Green Bank's review of the initial application suggests that the property is eligible, applicants are then invited to submit a full application to either the Green Bank or a qualified Capital Provider, consisting of the documentation required in the Technical Standards of the C-PACE Program Guidelines and any other documentation required by the Capital Provider or Green Bank for purposes of their underwriting. At this time, the Capital Provider or Green Bank will put the contractor on the project in touch with the C-PACE Technical Administrator and/or approved Reviewer to review and approve the proposed energy conservation measures. Meanwhile, the Capital Provider or Green Bank will work with the building owner to conduct a financial review.

3. Mortgage Holder Consent

Proposed C-PACE transactions that have completed C-PACE technical review are presented to all existing mortgage lenders using the standard Request for Lender Consent form (Appendix C). The Capital Provider works with the building owner to engage the mortgage lender and notify them that their consent will be needed.

4. Application Approval

For projects submitted to the Green Bank for financing, the Green Bank may approve the project for its financing and will also confirm that the project meets all statutory and programmatic requirements. For projects financed by a qualified Capital Provider, the Capital Provider may approve the project for its financing; the Green Bank will provide notice of approval that the project has met all statutory and programmatic requirements upon receipt of all requisite materials in the Standard Offer (Appendix H). In summary, these are:

~~Recent (within sixty days) title search of the real property on which Eligible Project would be located.~~

VI. DEFINED TERMS

“Associated Cost” shall have the meaning ascribed to it in Article III Section 3(b).

“Benefit Assessment” shall have the meaning ascribed to it in the C-PACE Legislation.

“Benefit Assessment Lien” shall mean a lien which evidences a Benefit Assessment and is recorded by a Participating Municipality against a Qualifying Property. The form of such Benefit Assessment Lien is attached hereto as _____, as may be modified or amended by Green Bank, in its sole discretion, from time to time.

“Benefited Property Owner” shall have the meaning ascribed to it in the C-PACE Legislation.

“C-PACE Legislation” shall mean Section 16a-40g of the Connecticut General Statutes, as may be amended.

“Disclosure of Risk Form” shall have the meaning ascribed to it in Article III Section 3(J).

“Energy Engineer” shall mean a professional or entity who/which meets one of the following: (1) holds a Certified Energy Manager or Certified Energy Auditor accreditation, (2) is a Professional Engineer with demonstrated relevant energy experience, or (3) a contractor with relevant demonstrated experience as determined by the Technical Administrator.

“Energy Improvement” shall have the meaning ascribed to it in the C-PACE Legislation.

“Financed Amount” means the combined costs of the Energy Improvement(s) and Associated Cost(s) which has been or will be financed through C-PACE for any Qualifying Project.

“Mortgage Holder” shall mean any entity which is the holder of a mortgage pertaining to and recorded against any Qualifying Property.

“Participating Municipality” shall have the meaning ascribed to it in the C-PACE Legislation.

“Professional Engineer” shall mean a professional who is licensed as a professional engineer and in good standing with the relevant licensing authorities in the State of Connecticut.

“Projected Associated Savings” shall mean non-energy savings which have a close nexus to the Energy Improvement(s) which are part of a Project. Examples include, but are not limited to, federal tax credits, depreciation, and revenues from the sale of environmental attributes. Green Bank, in its sole discretion, may determine which types of savings may be considered to fall under this definition.

“Projected Energy Savings” shall mean the estimated energy savings, calculated in accordance with the Technical Standards, from any Energy Improvement(s) over the EUL of such improvements.

“Projected Financing Cost” shall mean the total projected debt service due in respect of the C-PACE financing including, but not limited to, all principal, interest, and any fees over the term of the financing. This does not include any potential late fees or penalties.

“Projected Total Cost Savings” shall have the meaning ascribed to it in Article III Section 3(G).

“Qualified Contractor” shall mean as a professional or entity who/which meets one of the following: (1) holds a Certified Energy Manager or Certified Energy Auditor accreditation, (2) is a Professional Engineer with demonstrated relevant energy experience, or (3) a contractor with relevant demonstrated experience.

“Qualifying Capital Provider” or “QCP” shall have the meaning ascribed to it in Article Section .

“Qualifying Project” shall have the meaning ascribed to it in Article III Section 3.

“Qualifying Property” shall have the meaning ascribed to it in Article III Section 2.

“Registered Contractor” shall mean a contractor who has registered with Green Bank, via the contractor registration process ([website link]), and remains in good standing with Green Bank.

“Residential Dwelling” shall mean a structure used or occupied, or intended to be used or occupied, in whole or in part, as the home or residence of one or more persons. Residential dwelling shall not include any structure which is:

1. A home or residence which is part of public or private institution, if such residence is incidental to provision of medical, geriatric, educational, counseling, religious, or similar services;

2. A campground, hotel, motel, extended stay facility, vacation residential facility, boardinghouse, fraternal or social organization, or similar lodgings; and

3. Primarily used for business, commercial, charitable, not-for-profit, or agricultural purposes.

“SIR” shall have the meaning ascribed to it in Article III Section 3(G).

“Technical Administrator” shall mean the entity, selected by Green Bank pursuant to an RFP process, which conducts technical review of certain Projects and helps establish C-PACE’s technical guidelines which energy auditors and contractors follow in developing C-PACE projects. The Technical Administrator can work with contractors to help them develop a building’s baseline energy consumption and energy savings estimates for a project.

“Technical Reviewer” shall mean an entity which has been approved by and in good standing with Green Bank in accordance with the standard set forth in Appendix J. Technical reviewers may be proposed to Green Bank for approval by Third-Party Capital Providers. For a list of Technical Reviewers which are currently approved and in good standing with Green Bank, please visit [website link].

“Third-Party Capital Provider” or “TCP” shall mean a third-party capital provider, as such term is in the C-PACE Legislation, which entity has also (1) been approved by Green Bank as a Qualifying Capital Provider, (2) executed a Third-Party Capital Provider Term Sheet, and (3) is in good standing with the Green Bank.

~~If applicable, a mortgage holder consent form signed by the Borrower and any mortgage holder(s) of any mortgage(s) on the property on which the Eligible Project is located. The mortgage holder consent shall be materially consistent with the form of Appendix C, and such consent must be for not less than the financing amount of the Eligible Project for which Borrower is seeking Green Bank Approval.~~

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- ~~• If applicable, copies of filed releases for any mortgages that appear on the title search but have since been released. Any releases which cannot be obtained must be addressed through a title affidavit acceptable to Green Bank in its sole discretion.~~
- ~~• A completed energy audit or feasibility study of the Eligible Project as described in the Program Guidelines.~~
- ~~• Any documentation reasonably required by Green Bank which demonstrates that the Eligible Project meets the SIR Requirement.~~
- ~~• A disclosure of risk form signed by the Borrower summarizing the risks to Borrower for C-PACE financing in the form of Appendix C, as may be modified from time to time by Green Bank in its sole discretion.~~
- ~~• Current assessor property card describing the property on which the Eligible Project is located and any additional documentation reasonably required by Green Bank to confirm that the Eligible Project is located on a qualifying property pursuant to the Act and the Program Guidelines.~~

5. Financing Agreement Between Borrower and Capital Provider

~~Based upon Capital Provider and Green Bank's approval, the Capital Provider will enter into a financing agreement with the Borrower to implement the project. Each Capital Provider may determine the interest rate, term, and any fees for a C-PACE project that Capital Provider finances; however the term of the C-PACE financing cannot exceed the weighted average EUL of the energy measures installed. For projects financed by a qualified Capital Provider, the Capital Provider's financing agreement must contain terms and documentation consistent with the Standard Offer (Appendix H) and the C-PACE Statute (Appendix A) and must include a standard rider setting forth the Green Bank's role and responsibilities in administering the C-PACE Program. The form of such financing agreement must be approved by Green Bank in its reasonable discretion.~~

6. Assessment, Repayment, and Measurement & Verification

~~The Green Bank will facilitate the filing and assignment of the C-PACE Benefit Assessment Lien to the Capital Provider. Over the term of the assessment, the property owner will receive a bill in the same manner as real property taxes and will submit payments in the same manner as payments for real property taxes to the municipality in which the property is located. The Green Bank will work with the Municipality to collect any payments received pursuant the Benefit Assessment and remit such payments to Capital Provider.~~

~~For the purposes of the C-PACE benefit assessment lien, the Green Bank and any future successors, assigns or heirs of such lien shall be bound by and irrevocably subordinated to any environmental land use restriction recorded on the land records of the Municipality pursuant to Conn. Gen. Stat. § 22a-133e after the C-PACE benefit assessment lien is filed on the land records of the Municipality.~~

~~Measurement & Verification (M&V) term and reporting frequency shall be determined by the project stakeholders based on the type and complexity of the installed measures, per the Technical Standards (Appendix E).~~

ABOUT THE CONNECTICUT GREEN BANK

The Green Bank was created by the Connecticut General Assembly in 2011. It is the successor organization to the Connecticut Clean Energy Fund. The Green Bank's mission is to promote, develop and invest in clean energy and energy efficiency projects in order to strengthen Connecticut's economy, protect community health, improve the environment, and promote a secure energy supply for the state. The Green Bank is governed by an 11 member board of directors appointed by the governor and the leadership of the State Legislature. As the nation's first full-scale clean energy finance authority, the Green Bank leverages public and private funds to drive investment and scale-up clean energy deployment in Connecticut. For more information on the Green Bank, please visit www.ctgreenbank.com.

Contact Information

Visit our website at www.cpace.com

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(860) 258-7825

Appendix A: C-PACE LEGISLATION

Connecticut General Statutes Section 16a-40g. Commercial sustainable energy program.

(a) As used in this section:

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

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

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

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

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

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

(7) “Municipality” means a municipality, as defined in [section 7-369](#); [section 7-369](#);

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

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

(10) “Bank” means the Connecticut Green Bank; and

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

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

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

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

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

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

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

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

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

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

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

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

(2) The bank or the third-party capital provider shall disclose to the property owner the costs and risks associated with participating in the commercial sustainable energy program established by this section, including risks related to the failure of the property owner to pay the benefit assessment. The bank or the third-party capital provider shall disclose to the property owner the effective interest rate of the benefit assessment, including fees charged by the bank or the third-party capital provider to administer the program, and the risks associated with variable interest rate financing. The bank or the third-party capital provider shall notify the property owner that such owner may rescind any financing agreement entered into pursuant to this section not later than three business days after such agreement.

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

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

(h) Any participating municipality may assign to the bank any and all liens filed by the tax collector, as provided in the written agreement between the participating municipality and the bank. The bank may sell or assign, for consideration, any and all liens received from the participating municipality. The consideration received by the bank

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

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Appendix B: THE CONNECTICUT GREEN BANK AND MUNICIPALITY AGREEMENT

COMMERCIAL PROPERTY ASSESSED CLEAN ENERGY ("C PACE") AGREEMENT

~~THIS AGREEMENT is made and entered into as of the ____ day of _____, 2016, by and between [TOWN NAME], CONNECTICUT, a municipal corporation organized and existing under the laws of the State of Connecticut (the "Municipality"), and the CONNECTICUT GREEN BANK, a quasi-public agency of the State of Connecticut, having its business address at 845 Brook Street, Rocky Hill, Connecticut 06067 (the "Green Bank").~~

RECITALS

~~WHEREAS, Commercial Property Assessed Clean Energy ("C PACE") is a program to facilitate loan financing for clean energy improvements to commercial properties by utilizing a state or local assessment mechanism to provide security for repayment of the loans.~~

~~WHEREAS, section 16a-40g, as amended, of the Connecticut General Statutes (the "Act") established the C-PACE program in Connecticut.~~

~~WHEREAS, subsection (b)(1) of the Act directs the Green Bank to establish a commercial sustainable energy program, and authorized the Green Bank to make appropriations for and issue bonds, notes or other obligations to finance the program costs. A commercial sustainable energy program is a program that facilitates energy improvements to commercial or industrial property and utilizes municipal benefit assessments authorized by the Act as security for financing the energy improvements.~~

~~WHEREAS, to secure financing for the program, the Green Bank and the Municipality are authorized to enter into a written agreement, as approved by the Municipality's legislative body, pursuant to which the Municipality has agreed to assess, collect, remit and assign, benefit assessments to the Green Bank in return for energy improvements for benefited property owners within the Municipality and for costs reasonably incurred by the Municipality in performing such duties.~~

~~WHEREAS, this Agreement constitutes the written agreement authorized by the Act.~~

~~NOW THEREFORE, for and in consideration of the mutual covenants and agreements set forth herein and in order to effectuate the purposes of the Act, it is hereby agreed as follows:~~

Section 1 – Definitions.

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

property, provided such renovation, retrofit or installation described in subparagraph (C), (D) or (E) of this subdivision is permanently fixed to such qualifying commercial real property.

- (b) ~~“District heating and cooling system” means a local system consisting of a pipeline or network providing hot water, chilled water or steam from one or more sources to multiple buildings.~~
- (c) ~~“Qualifying commercial real property” means any commercial or industrial property, regardless of ownership, that meets the qualifications established for the commercial sustainable energy program.~~
- (d) ~~“Commercial or industrial property” means any real property other than a residential dwelling containing less than five dwelling units.~~
- (e) ~~“Benefitted property owner” means an owner of qualifying commercial real property who desires to install energy improvements and provides free and willing consent to the benefit assessment against the qualifying commercial real property.~~
- (f) ~~“Commercial sustainable energy program” means a program that facilitates energy improvements and utilizes the benefit assessments authorized by this Agreement as security for the financing of the energy improvements.~~
- (g) ~~“Benefit assessment” means the assessment authorized by the Act.~~

Section 2 – Obligations of the Green Bank:

- (a) ~~Program Requirements.~~ Pursuant to the Act, the Green Bank:

(1) ~~Shall develop program guidelines governing the terms and conditions under which state financing may be made available to the commercial sustainable energy program, including, in consultation with representatives from the banking industry, municipalities and property owners, developing the parameters for consent by existing mortgage holders and may serve as an aggregating entity for the purpose of securing state or private third party financing for energy improvements pursuant to the Act;~~

(2) ~~Shall receive and review applications submitted by benefitted property owners within the Municipality for financing of energy improvements, and approve or disapprove such applications in accordance with underwriting procedures and requirements established by the Green Bank;~~

(3) ~~Shall prepare and deliver to the Municipality an annual report which shall contain information related to each qualifying commercial real property within the Municipality, including:~~

- i. ~~A list of each qualifying commercial real property for which the benefitted property owner executed a financing agreement during the prior year;~~
- ii. ~~A list of each qualifying commercial real property where all obligations under the financing agreement have been satisfied or paid in full during the prior year, including the satisfaction date and a copy of the notice of satisfaction;~~
- iii. ~~The total benefit assessment payments made to the Green Bank in respect of all qualifying commercial real properties; and~~
- iv. ~~For each non satisfied (not paid in full) benefit assessment (including each benefit assessment approved in the prior year);~~

- A. ~~The date of the financing agreement;~~
- B. ~~The outstanding amount of the financing;~~
- C. ~~The total principal balance and accrued interest outstanding; and~~
- D. ~~The annual payment(s) due to the Green Bank (which shall include principal and accrued interest) associated with such benefit assessment (including the amount of accrued interest on the initial payment, if different).~~

~~(4) Shall establish the position of commercial sustainable energy program liaison within the Green Bank;~~

~~(5) Shall establish a loan loss reserve or other credit enhancement program for qualifying commercial real property;~~

~~(6) May use the services of one or more private, public or quasi-public third party administrators to administer, provide support or obtain financing for the commercial sustainable energy program; and~~

~~(7) Shall adopt standards to ensure that the energy cost savings of the energy improvements over the useful life of such improvements exceed the costs of such improvements.~~

~~(b) Project Requirements. If a benefitted property owner requests financing from the Green Bank for energy improvements under the Act, the Green Bank shall:~~

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

~~(2) Impose requirements and criteria to ensure that the proposed energy improvements are consistent with the purpose of the commercial sustainable energy program; and~~

~~(3) Require that the property owner obtain the consent of any existing mortgage holder of such property, prior to the execution of the financing agreement or the recording of any lien securing a benefit assessment for energy improvements for such property, to have a Benefit Assessment Lien levied on the property to finance such energy improvements pursuant to the Act.~~

~~(c) Financing Agreement for Project. The Green Bank may enter into a financing agreement with the property owner of qualifying commercial real property (the "Financing Agreement"). The Financing Agreement shall clearly state the estimated benefit assessment that will be levied against the qualifying commercial real property. The Green Bank shall disclose to the property owner the costs and risks associated with participating in the commercial sustainable energy program, including risks related to the failure of the property owner to pay the benefit assessment provided for in the Financing Agreement. The Green Bank shall disclose to the property owner the effective interest rate on the benefit assessment, including fees charged by the Green Bank to administer the commercial sustainable energy program, and the risks associated with variable interest rate financing, if applicable. The Green Bank shall notify the property owner that such owner may rescind any Financing Agreement entered into not later than three business days after such Financing Agreement is executed by the property owner and delivered to the Green Bank. The Financing Agreement shall provide for the consent of existing mortgage holders for the Benefit~~

~~Assessment Lien to be continued, recorded and released by the Municipality, as required by the Act and described in Section 3(e) herein.~~

~~(d) Determination of Estimated and Final Benefit Assessments and Payments.~~

~~(1) Upon execution of the Financing Agreement, the Green Bank shall determine the total benefit assessment amount, including fees charged by the Green Bank to administer the commercial sustainable energy program, and shall set a fixed or variable rate of interest for the repayment of the benefit assessment amount. Such interest rate, as may be supplemented with state or federal funding as may become available, shall be sufficient to pay the financing and administrative costs of the commercial sustainable energy program, including delinquencies. The Green Bank shall provide written notice of the total benefit assessment amount and interest rate to the Municipality.~~

~~(2) It is anticipated that the Green Bank will decide that the benefit assessment shall be payable in two equal payments respectively payable on July 1 and January 1 of each year so that they are due at the same time as the installments of the Municipality's real property taxes. If the Municipality changes its practices concerning the billing of annual real property taxes as to the number of installments and their due dates, the Green Bank will change its practices to the extent possible to correspond with the Municipality's practices.~~

~~**Section 3 – Obligations of the Municipality.**~~

~~(a) Levy of Benefit Assessment. Upon receiving written notice from the Green Bank of the benefit assessment as provided in Section 2(d)(1) herein, the Municipality shall promptly levy the benefit assessment against the qualifying commercial real property to be benefited by the energy improvements financed by the Green Bank and described in the Financing Agreement, and shall place a lien on the qualifying commercial real property to secure payment of the benefit assessment in the form of the attached Exhibit A (“Benefit Assessment Lien”). The Benefit Assessment Lien will have two attachments: (1) the legal description of the benefited property and (2) the Financing Agreement payment schedule provided by the Green Bank. As provided in the Act, the benefit assessments levied pursuant to this Agreement and the interest, fees and any penalties thereon shall constitute a lien against the qualifying commercial real property on which they are made until they are paid. The Green Bank will reimburse the Municipality the cost charged by the Town Clerk for recording the Benefit Assessment Lien. Such Benefit Assessment Lien shall be levied and collected in the same manner as the property taxes of the Municipality on real property, including, in the event of default or delinquency, with respect to any penalties, fees and remedies and lien priorities as provided by the Act.~~

~~(b) Continuation, Recording and Release of Lien. As provided in the Act, each Benefit Assessment Lien shall be continued, recorded and released in the manner provided for property tax liens, subject to the consent of existing mortgage holders, and shall take precedence over all other liens or encumbrances except a lien for taxes of the Municipality on real property, which lien for taxes shall have priority over such Benefit Assessment Lien. The Green Bank shall provide to the Municipality written notice of the consent of existing mortgage holders for the lien to be continued, recorded and released by the Municipality.~~

~~(c) — Assignment of Benefit Assessment Lien.~~

~~(1) — Upon the written request of the Green Bank, the Municipality shall assign, in the form of the attached Exhibit B, to the Green Bank any and all Benefit Assessment Liens filed by the Municipality's tax collector, as provided in this Agreement. The Green Bank may sell or assign, for consideration, any and all Benefit Assessment Liens received from the Municipality. The assignee or assignees of such Benefit Assessment Liens shall have and possess the same powers and rights at law or in equity as the Green Bank and the Municipality and its tax collector would have had if the Benefit Assessment Lien had not been assigned with regard to the precedence and priority of such lien, the accrual of interest and the fees and expenses of collection. The assignee shall have the same rights to enforce such Benefit Assessment Liens as any private party holding a lien on real property, including, but not limited to, foreclosure and a suit on the debt. Costs and reasonable attorneys' fees incurred by the assignee as a result of any foreclosure action or other legal proceeding brought pursuant to the assignment and directly related to the proceeding shall be taxed in any such proceeding against each person having title to any property subject to the proceedings. Such costs and fees may be collected by the assignee at any time after demand for payment has been made by the assignee.~~

~~(2) — The Municipality hereby acknowledges that the Green Bank may sell or assign any and all Benefit Assessment Liens received from the Municipality under Section 3(c) of this Agreement to a trustee for the benefit of the holders of the Green Bank's bonds, notes or other obligations issued to finance the costs of the commercial sustainable energy program, and that the holders of the Green Bank's bonds, notes or other obligations will rely on the Municipality to levy, collect and remit the benefit assessments to the Green Bank. Therefore, the Municipality unconditionally agrees that in the event the Municipality does not discharge its duties under this Agreement, the trustee shall have the right to enforce the Municipality's obligations under this Agreement by institution of legal action against the Municipality.~~

~~(d) — Amendment of the Benefit Assessment Lien. Pursuant to the Financing Agreement, the final amount of the benefit assessment may be adjusted after the levy of the Benefit Assessment Lien. Such an adjustment would likely be the result of a change in the energy improvement service contract amount during the construction period, a change in the amount of capitalized interest, or an amendment to the Financing Agreement. In the event that the final benefit assessment amount needs to be adjusted at the completion of the project, or any other time, the Green Bank will inform the Municipality of such change, provide the Municipality with an updated payment schedule and new lien amount, and the Municipality shall amend the Benefit Assessment Lien to reflect such adjustment. The Green Bank will reimburse the Municipality the cost charged by the Town Clerk for amending the Benefit Assessment Lien.~~

~~(e) — Billing and Collection; Payment to the Green Bank.~~

~~(1) — The Municipality shall bill the benefit assessments in the same manner and at the same time as it bills its real property taxes. The benefit assessment payments shall be a separate clearly defined line item or separate bill and shall be due on the same dates as the Municipality's real property taxes. The amount of the benefit assessment will be recorded on the Municipality's tax rolls in the same manner as any other benefit assessment, such that the public will have access to its existence and payment status. The penalties and interest on delinquent benefit assessments shall be charged in the same manner and rate as the Municipality charges for delinquent real property taxes. —~~

~~(2) — Payments of the benefit assessments collected by the Municipality shall be segregated from all other funds of the Municipality and deposited in a separate account for the benefit of the Green Bank and identifying the Green Bank as the beneficial owner. The Municipality disclaims any ownership interest or other interests in such account or the amount collected.~~

~~(3) — The Municipality shall pay all amounts collected with respect to the benefit assessments within any calendar month to the Green Bank or its assignee no later than thirty days after the month that the amounts are collected. The Municipality will provide collection reports to the Green Bank, and the Green Bank, at its own expense, shall have the right to audit the records relating to the benefit assessments upon reasonable notice at reasonable times. The Green Bank and Municipality agree to provide each other with such reasonable information as they may request and the Green Bank and the Municipality agree to provide such information in a computer format satisfactory to the other.~~

~~(f) — Collection of Delinquent Payments:~~

~~(1) — In the event that any benefited property owner fails to make a benefit assessment payment pursuant to the payment schedule of the Benefit Assessment Lien in any property tax billing cycle, the Municipality shall provide written notice to the Green Bank of such delinquency in a reasonably timely manner. After providing such notice to the Green Bank, the Municipality has no obligation to collect delinquent benefit assessment payments unless it enters into a separate agreement with the Green Bank described in the following subsection (2).~~

~~(2) — If the Green Bank makes a written request to the Municipality for its assistance in the collection of delinquent benefit assessments and related charges, the Municipality, in its sole discretion, and the Green Bank may enter into a separate agreement for those services, which agreement shall provide for compensation to be paid to the Municipality for its collection services. The agreement may provide for the Municipality to pursue the collection of any delinquent benefit assessments with the same diligence it employs in the collection of the Municipality's real property taxes, including the commencement of foreclosure proceedings to the extent provided by the then current statutes of the State of Connecticut, and to take such actions that are required to preserve the Benefit Assessment Lien securing the delinquent benefit assessments. The agreement may also provide that the Green Bank shall have the right to take over the enforcement of any delinquent benefit assessments upon written notice to the Municipality, and thereupon the Municipality will have no further responsibility to collect such amount.~~

~~(3) — The Municipality will provide written notice to the Green Bank of any sale or assignment of its real property taxes or any institution of a judicial foreclosure or other proceeding against any real property for delinquent real property taxes if such real property is subject to a lien securing a delinquent benefit assessment. Similarly, the Green Bank shall provide written notice to the Municipality of the institution of a judicial foreclosure or other proceeding against any qualified commercial real property for a delinquent benefit assessment.~~

~~(g) — Promotion of Program; Assistance for Green Bank Financing; Payment to Municipality:~~

~~(1) — The Municipality shall use good faith efforts to assist the Green Bank in local marketing efforts and outreach to the local business community to encourage participation in the commercial sustainable energy program, such as including commercial sustainable energy program information on the Municipality's website, distributing an informational letter from chief elected official to local businesses regarding the program, and conducting one or more business roundtable event(s).~~

~~(2) — The Municipality shall use good faith efforts to assist in gathering and providing information for the Green Bank to offer, sell and issue its bonds, notes or other obligations to provide funds for the commercial sustainable energy program.~~

~~(3) — The Green Bank agrees to pay the Municipality annually a fee of \$500 (the "Annual Fee") for its services hereunder. In the event such payment is not sufficient to cover the Municipality's out-of-pocket costs and expenses in discharging its duties hereunder, the Green Bank shall reimburse the Municipality for its actual reasonable costs and expenses associated with the collection and enforcement of the benefit assessments in excess of the Annual Fee. Such costs and expenses include reasonable costs incurred by the Municipality in conjunction with any and all proceedings to collect and enforce the benefit assessments and delinquent benefit assessments, including foreclosure proceedings.~~

Section 4 – Indemnification:

~~— The Green Bank agrees that it will protect, defend, indemnify and hold harmless the Municipality and its officers, agents and employees to the extent of available proceeds derived from the benefit assessments from and against all claims, demands, causes of action, damages, judgments, losses and expenses, including reasonable attorney's fees, arising out of or in connection with the actions of the Green Bank's officers, employees and agents under this Agreement. This provision shall survive termination of this Agreement.~~

Section 5 – Term:

~~— The term of this Agreement shall commence upon the date first written above. This Agreement shall be in full force and effect until all of the benefit assessments have been paid in full or deemed no longer outstanding. The Municipality may opt out of continuation in the program at any time on sixty (60) days advance notice to the Green Bank, provided that the provisions of this Agreement shall continue with regard to benefit assessments assessed prior to such termination date until those benefit assessments have been paid in full or are no longer outstanding.~~

Section 6 – Default:

~~— Each party shall give the other party written notice of any breach of any covenant or agreement under this Agreement and shall allow the defaulting party 30 days from the date of its receipt of such notice within which to cure any such default or, if it cannot be cured within the 30 days, to commence and thereafter diligently pursue to completion, using good faith efforts to effect such cure and to thereafter notify the other party of the actual cure of any such default. The parties shall have all other rights and remedies provided by law, including, but not limited to, specific performance, provided however, in no event shall either party have the right to terminate this Agreement prior to the expiration of the Term, except as provided in accordance with Section 7(e) of this Agreement.~~

Section 7 – Miscellaneous Provisions:

~~(a) — Assignment or Transfer. Except as provided in Section 3(e) hereof, a party may not assign or transfer its rights or obligations under this Agreement to another unit of local government, political subdivision or agency of the State of Connecticut or to a private party or entity without the prior written consent of the other party and, if required, the prior approval of the holders of the Green Bank's bonds, notes or other obligations. If approval of the assignment by the holders of the Green Bank's bonds, notes or other~~

~~obligations is required, such approval shall be obtained in accordance with the indenture or other documents entered into by the Green Bank in connection with the bonds, notes or other obligations.~~

- ~~(b) Amendment and Termination. After the Green Bank sells and issues its bonds, notes or other obligations to finance the costs of the commercial sustainable energy program, this Agreement may not be amended or terminated by the parties without the prior approval of the holders of the Green Bank's bonds, notes or other obligations, which approval shall be obtained in accordance with the indenture or other documents entered into by the Green Bank in connection with the bonds, notes or other obligations.~~
- ~~(c) Severability. If any clause, provision or section of this Agreement is held to be illegal or invalid by any court, the invalidity of the clause, provision or section will not affect any of the remaining clauses, provisions or sections, and this Agreement will be construed and enforced as if the illegal or invalid clause, provision or section has not been contained in it.~~
- ~~(d) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, and all of which together shall constitute but one and the same instrument.~~
- ~~(e) Notices. All notices, requests, consents and other communications shall be in writing and shall be delivered, mailed by first class mail, postage prepaid, or overnight delivery service, to the parties, as follows:~~

~~_____ If to the Municipality:~~

~~_____ [Address] _____~~

~~_____ Attention: First Selectman~~

~~_____ If to the Green Bank:~~

~~_____ Connecticut Green Bank~~

~~_____ 845 Brook Street~~

~~_____ Rocky Hill, Connecticut 06067~~

~~_____ Attention: President~~

- ~~(g) Amendment and Waivers. Except as otherwise set forth in this Agreement, any amendment to or waiver of any provision of this Agreement must be in writing and mutually agreed to by the Green Bank and the Municipality.~~
- ~~(h) Applicable Law and Venue. This Agreement and its provisions shall be governed by and construed in accordance with the laws of the State of Connecticut. In any action, in equity or law, with respect to the enforcement or interpretation of this Agreement, venue shall be in the State of Connecticut.~~
- ~~(i) Entire Agreement. This instrument constitutes the entire agreement between the parties and supersedes all previous discussions, understandings and agreements between the parties relating to the subject matter of this Agreement.~~
- ~~(j) Headings. The headings in this Agreement are solely for convenience, do not constitute a part of this Agreement and do not affect its meaning or construction.~~

~~IN WITNESS WHEREOF~~, the Municipality and the Green Bank have each caused this Agreement to be executed and delivered as of the date indicated above:

(SEAL) _____

ATTEST: _____

_____ [TOWN NAME]

_____ By: _____

_____ [Name, Title]

_____ **CONNECTICUT GREEN BANK**

_____ By: _____

_____ Bryan T. Garcia, President

EXHIBIT A
CERTIFICATE OF LEVY AND LIEN OF BENEFIT ASSESSMENT

The undersigned Tax Collector of the CITY/TOWN OF _____, Connecticut ("Municipality"), with an office at _____, Connecticut, for and on behalf of the Connecticut Green Bank (the "Green Bank"), formerly known as the Clean Energy Finance and Investment Authority, with an office at 845 Brook Street, Rocky Hill, Connecticut 06067, pursuant to the Commercial Property Assessed Clean Energy Program established under Connecticut General Statutes Section 16a-40g, as amended (the "Act"), and the Municipal Agreement between the Municipality and Green Bank dated _____, 20____, HEREBY LEVIES A BENEFIT ASSESSMENT AGAINST AND LIEN UPON certain real property commonly referred to as _____ and described more particularly in the attached Exhibit A (the "Property"), situated in the Municipality and owned on the date hereof in whole or in part by _____ (the "Property Owner"); said levy and lien shall secure the repayment of financing for energy improvements made or to be made to the Property pursuant to that certain Financing Agreement between Property Owner and Green Bank dated _____, 2015, as may be amended (the "Financing Agreement"). The amount and repayment of said levy and lien, as determined by Green Bank and provided to Municipality, are as follows: an installment payment plan is in effect for payment of the benefit assessment, and is based on the principal amount of the benefit assessment of \$ _____, with interest thereon at a fixed rate equal to _____% per annum, with equal installments of principal and interest due and payable pursuant to the Financing Agreement, all as set forth in the attached Exhibit B. In the event that any such installment shall remain unpaid for thirty days after the same shall become due and payable, interest and other charges shall be charged upon the unpaid installment(s) at the rate of 18% per annum, as provided by the Act and by law. At such time as the principal and interest payments of the benefit assessment have been satisfied and paid in full, a release of this Certificate shall be filed in the Land Records of the Municipality evidencing such release.

This Certificate constitutes a certificate of lien and is filed pursuant to the provisions of the Act to evidence a lien for the benefit assessment levied upon the Property for the special benefits conferred upon said Property by the renovation or retrofitting for energy improvements related thereto. Pursuant to the Act, this lien shall take precedence over all other liens or encumbrances except a lien for taxes of the Municipality on real property, which lien for taxes shall have priority over this lien. For the purposes of this lien, the Green Bank and any future successors, assigns or heirs of such lien shall be bound by and irrevocably subordinated to any environmental land use restriction recorded on the land records of the Municipality pursuant to Conn. Gen. Stat. § 22a-133o after this lien is filed on the land records of the Municipality.

The portion of this Certificate which constitutes a levy of benefit assessment and notice of installment payment of benefit assessments is filed pursuant to the provisions of the Act and the Connecticut General Statutes, as amended.

By order of the Tax Collector of the City/Town of _____.

Dated at _____, Connecticut this _____ day of _____, 20____.

Tax Collector

Received for Record: _____, 20____ at _____ A.M./P.M.

Recorded in the _____ Land Records at Volume _____, Page _____

City/Town Clerk

Appendix C: REQUEST FOR LENDER CONSENT

REQUEST FOR LENDER CONSENT AND NOTICE OF PROPOSED BENEFIT ASSESSMENT

Notice Date: _____

Lender Address:

Lender: _____

Street: _____

City/State/Zip Code: _____

ATTN: _____

Property/Loan Information: _____

Address: _____

APN: _____

Loan Number: _____

Why has the bank received this notice?

~~The property owner listed below owns the property located at the address above. You are the holder of a loan secured by the property.~~

~~{Building owner/address} wishes to install energy upgrades to the property using the Commercial Property Assessed Clean Energy (C-PACE) financing mechanism established by the State of Connecticut and seeks your consent to do so.~~

Background on C-PACE in Connecticut.

~~In 2012, Connecticut passed legislation that provides access for owners of commercial, industrial and multi-family housing property in the state to a new form of financing for energy efficiency and on-site renewable energy (EE/RE) upgrades to their buildings. C-PACE financing can allow building owners to increase the value of their buildings and meet important energy policy goals of the State and its municipalities. (See Appendix A for legislation)~~

~~The Connecticut Green Bank ("the Green Bank") is responsible for administering a statewide C-PACE program. With C-PACE, financing for EE/RE projects is repaid with a benefit assessment, a mechanism long used to finance improvements to real property that meet a public policy objective, such as sidewalks, parks, lighting districts, and water and sewer projects. Like other municipal assessments, C-PACE assessments must be current upon the sale of a property and remain with a property upon sale. As~~

with other municipal assessments, any assessments in arrears (but only those in arrears) have a lien status senior to mortgages upon the sale of a property.

Connecticut's C-PACE program has been designed to meet the needs and concerns of Connecticut's residents, property owners, and existing mortgage lenders. To qualify, the proposed project must meet the following basic criteria:

- The property is located in a municipality that has signed a legal agreement with the Green Bank regarding C-PACE. (see [Appendix B](#) for a copy of the legal agreement between the Green Bank and the municipality)
- The property is a commercial, industrial, or multi-family (5 or more units) property
- The proposed measures reduce energy consumption and/or increase the production of on-site renewable energy
- The proposed measures are permanently affixed to the property
- The property is current on all municipal property tax and assessment payments
- The proposed project results in energy savings in excess of the assessment (a savings-to-investment ratio greater than 1 as determined by the THE GREEN BANK and/or the Administrator of C-PACE.
- **The property owner receives consent of the current mortgage holder(s)**

Why should you provide consent?

1. ~~Measures financed through C-PACE should reduce building operating costs.~~ Through the Technical Standards the Green Bank has established to govern the C-PACE program, a proposed project must have a Savings to Investment Ratio (SIR) greater than one, meaning that projected lifetime savings from the energy measures must exceed the total investment, inclusive of financing costs over the full term of the C-PACE assessment, over the useful life of the measures. For example, if the total eligible project investment cost is \$1.5 million and the project's expected useful life is 15 years, then the energy savings must be greater than \$100,000 per year.
2. ~~C-PACE Assessments do not accelerate.~~ In the event the mortgage holder forecloses on the property for any reason, only the amount of the C-PACE assessment currently due and/or in arrears, a relatively small proportion of the C-PACE assessment, would come due. In the event of a property sale, C-PACE assessments transfer to the new property owner.
3. ~~Measures financed through C-PACE improve properties, often reducing maintenance and repair costs.~~ In addition, energy measures improve the efficiency, health, and comfort of a building, making it more attractive to tenants and future owners.

What should you know?

[Building owner/address] has indicated its intention to apply for C-PACE financing for the improvements outlined in ~~hereto attached Exhibit C~~ on the property listed above. The benefit assessment is to be levied on the property pursuant to an agreement between the property owner, the Green Bank, and the funding source for the C-PACE improvements. The related payment terms are proposed to consist of the following:

Total cost of improvements*:
Utility rebates/incentives:
Total C-PACE financing requested*:
Interest rate not to exceed:
Term of repayment period:
Total estimated annual installment*:
Payments per year:

**THE GREEN BANK may provide financing for up to 110% of the financing amount requested contingent upon the savings to investment ratio being greater than 1. As such, the above amounts are subject to minor deviation.*

Estimated Benefits of the Authorized Improvements:

Based on a recent audit by _____ which is detailed in hereto attached Exhibit C, the following cash flow savings—as a result of the installation of the Authorized Improvements and using the assumptions noted in the audit—are expected to accrue to the property:

Electric and Fuel Bill Savings: _____
Other Savings (specify): _____
TOTAL: _____

NOTE: The savings noted above represent estimated based on the assumptions contained in the audit attached as Exhibit C. Actual results are likely to be different and may be greater or less than estimated.

Purpose of this Notice. As required by the C-PACE enabling legislation (Section 16a-40g of Connecticut General Statutes, as amended), [Name of Property Owner] is sending this Notice of Proposed Benefit Assessment to Lender to (i) provide notice of the proposed participation of the property above in C-PACE financing; (ii) request confirmation from you (the current lender) that the levy of the Benefit Assessment pursuant to the Assessment Agreement will not trigger an event of default or the exercise of any remedies under the Loan documents; (iii) provide notice that the Contractual Assessment will be collected in installments on the property tax bill in the same manner as and subject to the same penalties, remedies and lien priorities as real property taxes and (iv) declare the [Name of Property Owner]'s agreement to pay on a timely basis both the existing obligations secured by the property (including the Loan) and the proposed Benefit Assessment.

Execution and Return of Consent. The Property Owner would appreciate you executing the attached Lender Consent to Proposed Benefit Assessment and returning it to the undersigned at your earliest convenience.

Very truly yours,

BY: (signature): _____

PROPERTY OWNER NAME: _____

MAILING ADDRESS (if different than Property address): _____

LENDER CONSENT TO BENEFIT ASSESSMENT

Date: _____

Property/Loan Information: _____

Address: _____

Owner: _____

Municipality: _____

APN: _____

Loan Number: _____

This Lender Consent to Benefit Assessment (this "Consent") is given by the undersigned entity (the "Lender") with respect to the above referenced loan (the "Loan") and the above referenced property (the "Property").

RECITALS

A. _____ Lender is in receipt of written notice (the "Notice") from the above referenced owner of the Property (the "Property Owner") that it intends to finance installation on the Property of certain energy efficiency and/or renewable energy improvements that will be permanently fixed to the Property (the "Authorized Improvements") by participating in the Commercial Property Assessed Clean Energy (C-PACE) financing program (the "Program"), sponsored by the Municipality.

B. _____ Lender understands that, as a result of an agreement between the Municipality and the Property Owner (the "Assessment Agreement"), the Benefit Assessment described in the Notice will be levied on the Property, and that the Benefit Assessment will be collected in installments on the property tax bill in the same manner as and subject to the same penalties, remedies and lien priorities as real property taxes.

CONSENT

The undersigned hereby represents that it is authorized to execute this Consent on behalf of the Lender. The Lender hereby confirms:

A. _____ Lender is in receipt of written notice (the "Notice") from the above referenced owner of the Property (the "Property Owner") that it intends to finance installation on the Property of certain energy efficiency and/or renewable energy improvements that will be permanently fixed to the Property by participating in the Commercial Property Assessed Clean Energy financing program sponsored by the Municipality.

B. _____ Lender understands that, as a result of an agreement between the Municipality and the Property Owner, the Benefit Assessment described in the Notice will be levied on the Property, and that the Benefit Assessment will be collected in installments on the property tax bill in the same manner as and subject to the same penalties, remedies and lien priorities as real property taxes.

C. The Lender agrees that the levy of the Benefit Assessment will not constitute an event of default or trigger the exercise of any remedies under the Loan documents.

The Lender hereby acknowledges that the Property Owner and the Municipality will rely on the representation and Consent of the Lender set forth in this Consent.

LENDER:	
	By: _____
	_____ <i>Authorized Representative</i>
	By: _____
	_____ <i>Name</i>
	By: _____
	_____ <i>Title</i>
	By: _____
	_____ <i>Date</i>

[attached separately]

[website link to current version]

Appendix D: ~~INITIAL APPLICATION FOR C-PACE~~



C-PACE Project Application

Please visit www.C-PACE.com for resources and use our online version of the C-PACE Project Application.

For fastest processing time, we highly encourage you to submit your application through our online system. If completing by hand is most convenient, please be sure to complete all required fields (denoted with *) and to contact the C-PACE team with any questions before submission.

For questions, please contact:

Alysse Lembo-Buzzelli
Associate, Commercial and Industrial Programs
alysse.buzzelli@ctgreenbank.com
P: 860.257.2176



Getting Started

Welcome to the Commercial Property Assessed Clean Energy (C-PACE) application. The C-PACE application is offered to building owners of Commercial and Industrial properties, and multifamily properties with five or more units. Please complete all required fields.

* Indicates a required field

How did you hear about C-PACE financing?*

- Contractor
- Municipality
- Utility Company
- Word of Mouth / Other C-PACE Clients
- LinkedIn / Other Social Media
- Web Search
- Banner Ad Displayed On Another Website
- Trade Publication
- Newspaper / Other Print Media
- Online Media
- Event
- Other _____

Who is submitting this application?

First, Last Name* _____

Email* _____

Please describe yourself.*

I am a:

- Building Owner
- Building Manager
- Municipality
- Investor/Lender
- Contractor/Auditor/Project Developer
- Other _____

Eligibility*

To proceed, please note you must meet all requirements. If your project does not meet all of the requirements below, please contact us and tell us more about it. You can learn more about C-PACE Eligibility Requirements in our program guidelines, available at www.C-PACE.com.

- Property requires financing for energy improvements.
- Property is not in mortgage default.
- Property is current on all property taxes and municipal assessments.
- Property is non-residential (multi-family properties of 5 or more units are eligible).
- Property is not in bankruptcy.

Financing*

Select the option below which best represents your current financing status:

- I am applying for C-PACE financing
- I have already secured C-PACE financing

If you have already secured C-PACE financing, your capital provider is: _____

Property Information

In this section, applicants will provide information about the property seeking C-PACE financing, including location, size, estimated value, current mortgage debt, and occupancy. Applicants with a multi-family building or apartments with more than 5 units must complete the "Multifamily" section on page 4 which includes information about the property's condition, affordability, financial structure, and utilities.

Who owns the property?*

Building Owner Corporate Identity*

Contact Full Name*

Email*

Phone*

Property Address*

Street Address Line 1*

Street Address Line 2 (optional)

City*

State: Connecticut Five Digit Zip Code*

Property Size

Square Feet*

Property Type*

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Office | <input type="checkbox"/> Hotel |
| <input type="checkbox"/> Municipal | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Non-Profit | <input type="checkbox"/> Warehouse |
| <input type="checkbox"/> Education | <input type="checkbox"/> Hospital/Lab |
| <input type="checkbox"/> Residential < 5 Units | <input type="checkbox"/> Retail |
| <input type="checkbox"/> Multi-Family/Apartment >5 Units | |

If you make this selection, you are required to complete additional information on page 4.

Do you have a mortgage on the property?*

- Yes
 No

If you select yes, you are required to provide additional information on the mortgage:

Mortgage Lender Name

Mortgage Closing Date

Principal Outstanding

Current Monthly Payment

Term of Mortgage

Amortization Schedule

Balloon Date (if applicable)

Interest Rate

- Fixed
 Variable

Mortgage Payments Current?

- Yes
 No

Multi-Family/Apartment > 5 Units

Please complete this section only if you selected "Multi-Family/Apartment > 5 Units" for "Property Type"

Total Number of Units in Complex* _____

Number of Rental Units* _____

Number of Owner-Occupied Units* _____

Number of Buildings in Complex* _____

Year Built* _____

Property Type*

- Rental Condo Co-op
- Congregate housing (apartments or group accommodations that provide supportive services for residents, including the elderly and disabled).

Property Condition* (select one)

- Poor Condition: Significant capital improvements needed, including emergency repairs.
- Good Condition: Systems generally work adequately; no immediate capital improvements needed or planned in the next 3 to 5 years.
- Excellent Condition: All systems work well; no major capital improvements needed or planned in the next 5 to 10 years; property could be described as new or "almost new" condition.

Affordability* (Check all that apply)

- Market Rate Housing
- Mixed Income Housing
- Privately Financed Affordable housing (serves low income tenants, but no public subsidies).
- Subsidized Affordable Housing (units are subsidized and rented to income-eligible tenants).
- Public Housing Authority – CHFA/State Financed
- Public Housing Authority – HUD Financed

Financial Structure*

- Privately Financed - Please indicate mortgage holder(s): _____
- Fannie Mae Financing
- Freddie Mac Financing
- FHA Insured Loans
- Other HUD Financing
- CT Housing Finance Authority (CHFA) Financing
- Section 8 Rental
- Low Income Housing (tax credit financing)
- No Debt on Property
- Other _____

Utility Information

What is the source of heating fuel?*

- Oil Gas Electric Other _____

Who pays the fuel bill?*

- Owner Tenant

Rough estimate of annual bill to the nearest dollar*

_____ \$ _____

Is electricity metered at the building or individual apartment level?*

- Building Individual Apartment

Who pays the electricity bill?*

- Owner Tenant

Rough estimate of annual bill to the nearest dollar*

_____ \$ _____

What is the source of hot water?*

- Oil Gas Electric Other _____

Who pays the water bill?*

- Owner Tenant

Rough estimate of annual bill to the nearest dollar*

_____ \$ _____

Project Information

In this section, applicants will provide information about the proposed energy project, including type, estimated cost, possible incentives, and contractor information. Boiler upgrades and gas conversion project applicants must complete the "Boiler Upgrade / Gas Conversion" section on page 6 which includes information about the existing and proposed boiler. Solar, Fuel Cell and storage project applicants must review and sign the "Documentation of Ability to Monetize Federal Tax Credits Associated with Clean Energy Installations" section on page 7.

What is the estimated cost of your project?*

\$ _____

What type of project do you plan on financing?*

- Energy efficiency upgrade
- Renewable energy system
- Both
- Boiler upgrade / gas conversion - (You are required to provide additional information in Step III. B. 3 below)
- Other

Have you contacted your utility for incentives, if applicable?*

- Yes No

Is this a solar, fuel cell or storage project?*

- Yes No

(If yes, you are required to provide additional information on page 7)

For renewable energy systems, has a feasibility study been done for the project?*

- Yes No

Date of feasibility study*

_____/_____/_____

For energy efficiency projects, have you conducted a recent energy audit? *

- No
- ASHRAE Level I
- ASHRAE Level II
- ASHRAE Level III
- Other _____

Date of the audit *

_____/_____/_____

Have you already identified a contractor to design and/or install your project? *

- Yes No

(If yes, you are required to provide additional information below)

Contractor Company _____

Contractor Full Name _____

Contractor Phone _____

Contractor Email _____

Describe the energy efficiency measures and/or renewable energy system in your proposed project. *

Boiler Upgrade / Gas Conversion

Fill out this section for 'Boiler Lite' applications only (e.g. boiler upgrades and gas conversions) if you selected "boiler upgrade / gas conversion" as the type of project you are financing.

Proposed Boiler

Boiler type _____

Manufacturer _____

Model number _____

Maximum input capacity / Btu/hr

Maximum output capacity / Btu/hr

Boiler fuel

Electric Oil Gas

Fuel Use (if available) / MMBtu/year

Efficiency

Combustion Thermal
 Fuel-to-water or Fuel-to-Steam

Estimated project cost
-\$ _____

Estimated fuel savings
-\$ _____

Estimated dollar savings
-\$ _____

Estimated utility incentive
-\$ _____

Last energy audit on the building

- None
- ASHRAE Level I
- ASHRAE Level II
- ASHRAE Level III
- Other _____

Date of the audit ____/____/____

Existing Boiler

Boiler type _____

Boiler fuel

Electric Oil Gas

Fuel use / MMBtu/year

Fuel Cost / \$/gallon or \$/CCF
-\$ _____

Efficiency:

- Combustion
- Thermal
- Fuel-to-water or Fuel-to-Steam

Step III. C. Renewable Energy

Documentation of Ability to Monetize Federal Tax Credits Associated with Clean Energy Installations

C-PACE applicants can count the value of all relevant federal tax credits (including the Investment Tax Credit and MACRS depreciation benefits) towards their projects' estimated savings in order to satisfy the C-PACE's statutory obligation that all C-PACE projects achieve a savings-to-investment ratio greater than 1.

However, all applicants seeking to have the value of such tax benefits credited towards their projects' estimated savings must demonstrate the ability to monetize those benefits within the timeframe allowed by federal law.

Please check either or both of the boxes below.*

- As of this date and to the best of my knowledge, my company will be able to fully monetize the value of the federal Investment Tax Credit.
- As of this date and to the best of my knowledge, my company will be able to fully monetize the value of federal MACRS depreciation benefits.

Name* _____

Title* _____

Signature* _____

Corporate Entity* _____

Date* _____/_____/_____

Street Address Line 1* _____

Street Address Line 2

City* _____

State: **Connecticut**

Five Digit Zip Code* _____

Freedom of Information Act

Please read our policy concerning the Connecticut Freedom of Information Act and acknowledge you have read this section.

FREEDOM OF INFORMATION ACT

The Connecticut Green Bank is a "public agency" for purposes of the Connecticut Freedom of Information Act ("FOIA"). Accordingly, this application and all information received by The Connecticut Green Bank regarding this application will be considered public record subject to disclosure under the FOIA, except for information falling within one of the exemptions in Conn. Gen. Stat. Sections § 1-210(b) and § 16-245n(d), which include "trade secrets" and "commercial or financial information given in confidence, not required by statute."

Therefore, Company is advised that it should specifically identify those particular sentences, paragraphs, pages, sections or exhibits that it claims to be confidential and exempt. Consultant should further provide a statement stating the basis for each claim of exemption. It will not be sufficient to state generally that the information is proprietary or confidential in nature and not, therefore, subject to release to third parties. A convincing explanation and rationale sufficient to justify each exemption consistent with General Statutes §1-210(b) and § 16-245n(d) must be provided. The explanation and rationale should be stated in terms of the prospective harm to the competitive position of Company (or such submitting Person) that would result if such information were released.

Company acknowledges that (1) The Connecticut Green Bank has no obligation to notify the Company of any FOIA request received by The Connecticut Green Bank; (2) The Connecticut Green Bank may disclose materials claimed by the Company to be exempt, if in its judgment, such materials do not appear to fall within a statutory exemption; (3) The Connecticut Green Bank may in its discretion notify Company of FOIA requests and/or of complaints made to the Freedom of Information Commission concerning items for which an exemption has been claimed, but The Connecticut Green Bank has no obligation to initiate, prosecute or defend any legal proceeding, or to seek to secure any protective order or other relief to prevent disclosure of any information pursuant to an FOIA request; (4) Company will have the burden of establishing the availability of any FOIA exemption in any such legal proceeding; and (5) in no event shall The Connecticut Green Bank or any of its officers, directors or employees have any liability for the disclosure of documents or information in The Connecticut Green Bank's possession where The Connecticut Green Bank, or such officer, director or employee, in good faith believes the disclosure to be required under the FOIA or other law.

I have read and accept the above disclosure regarding the Freedom of Information Act.*

Signature* _____

Submitting Your Application

Please carefully review each section of your application and ensure all the information is accurate. If you prefer to complete this application online, please visit www.C-PACE.com. Otherwise, please submit your application:

By Email to: c-pace@ctgreenbank.com

By fax to: 860-398-5510
Attn: C-PACE

By mail to: Connecticut Green Bank
Attn: C-PACE
845 Brook Street
Rocky Hill, CT 06067

For help with your application, please contact:

Alysse Lembo-Buzzelli
Associate, Commercial and Industrial Programs
alysse.buzzelli@ctgreenbank.com
P: 860.257.2176

A member of the C-PACE team will contact with you within two business days of receiving your application to confirm this property's eligibility for C-PACE financing.

If your property is eligible, the C-PACE Team will invite you to submit the necessary documentation to complete your application. Please see below for the list of necessary documentation.

Upon receipt and acceptance of all necessary supporting documentation, the C-PACE Team will provide you with a non-binding term sheet for C-PACE financing at this property.

Appendix E: TECHNICAL STANDARDS

- I. Overview
- II. Candidate Project Evaluation and Review Process
- III. Setting the Energy Use Baseline
- IV. Energy Audit & Renewable Energy Feasibility Requirements
- V. Eligible / Ineligible Measures
- VI. Commissioning and Performance Measurement & Verification of Energy Savings
- VII. Data Management, Program Information Management, Reporting and Analytics
- ~~VIII. Project Application Checklist~~
- ~~IX/VIII. Utility and Fuel Supplier Historical Usage and Project Data Information Release Form~~
- ~~X. CDMP Sample: Project Energy Saving Scenario~~

I - Overview

The methodology in these technical standards is designed to provide a flexible framework within which to qualify and manage the myriad eligible energy improvement projects applying to use the C-PACE financing structure.

~~For projects financed by the Green Bank, the information obtained from the responsible parties, including the application, technical documents, project implementation schedule, commissioning plan, and M&V plan will be entered into the web-based CDMP. The CDMP platform will facilitate uploading of key project data from responsible parties via excel spreadsheets and appending supporting documents in PDF file format. This data will also support the technical and financial underwriting process required to meet the reporting requirements of the multiple interdependent stakeholders, including but not limited to Green Bank management, mortgage holders, Capital Providers, building owners/managers and/or insurers.~~

~~For projects submitted to a qualified Capital Provider for C-PACE financing, the data along with all other supporting project documents may be entered into the CDMP or provided to the Green Bank in an alternative form; see the Standard Offer (Appendix H) for details.~~

~~Contractors, the Technical Administrator and Technical Reviewers should use these standards to develop and review projects for C-PACE qualification.~~

~~The Green Bank will periodically audit the project reviews conducted by the Technical Administrator and Technical Reviewers to ensure they conform to the C-PACE program guidelines.~~

ALL PROJECT APPLICATIONS REGARDLESS OF CAPITAL PROVIDER must include the information and abide by the standards described in these C-PACE Program Guidelines; ~~all project applications will be reviewed by the Technical Administrator, or a Reviewer approved by the Green Bank in its sole discretion.~~

The technical methodology incorporated into the review process relies upon three established industry protocols:

1. ASTM E2797-15, Building Energy Performance Assessment (BEPA) Standard directed at data collection and baseline calculations for the energy audit;
2. ASHRAE Level I, Level II and Level III Energy Audit Guidelines; and
3. International Performance Measurement and Verification Protocol (IPMVP) for measurement and verification of the energy savings.

II – Candidate Project Evaluation and Review Process

The purpose of technical review is for the Technical Administrator and/or approved Reviewer to confirm the SIR on the project and verify that it is greater than 1. SIR means the ratio of (x) estimated avoided energy costs plus project revenues, including all ancillary value streams such as environmental incentives and tax benefits, earned over the EUL of the ECMs Energy Improvements to (y) projected debt service due in respect of the C-PACE financing – including all principal, interest, and any fees over the term of the financing – as well as fixed or variable costs associated with the maintenance or performance of the ECMs Energy Improvements over their EUL.

Further:

- EUL for each ECM Energy Improvement is determined through the energy audit and approved by the Technical Administrator or Reviewer. Both costs and savings for each ECM Energy Improvement will be calculated over the EUL of that ECM Energy Improvement.
- The C-PACE financing term may not exceed the EUL of the installed ECMs Energy Improvements. For projects with multiple ECMs Energy Improvements, a weighted average EUL will be calculated.
- Regardless of a project's weighted average EUL, C-PACE financing terms may not exceed 25 years unless approved in writing by the Green Bank.

This determination is based on the applicant's input of building energy use and cost data collected according to the ASTM E2797-15 ("ASTM BEPA") standard protocol in conjunction with an energy audit.

If an energy audit (or equivalent) has not been conducted, the applicant will be advised to conduct an energy audit (refer to Section IV of this appendix). The audit, conducted by a qualified energy auditor, should establish a representative building energy use baseline, identify and recommend ECMs Energy Improvements, estimate the useful life of each ECM Energy Improvement, determine total project capital cost and the projected energy savings that can confidently be achieved, evaluate the project's key financial metrics, provide a commissioning plan, and an energy savings measurement and verification (M&V) plan. Applications must be prepared and submitted by an energy engineer or by a team including an energy engineer. An energy engineer is defined as a professional holding a Certified Energy Manager (CEM) or Certified Energy Auditor (CEA) accreditation, a Professional Engineer (PE) with demonstrated relevant energy experience, or a contractor with relevant demonstrated experience as determined by the Technical Administrator. The energy audit level (ASHRAE Level I, Level II or Level III, or equivalent) will be influenced by a number of factors, including but not limited to, the number and complexity of the ECMs Energy Improvements, and a project's anticipated total capital investment.

-III - Setting the Energy Use Baseline

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ASTM BEPA

The ASTM Building Energy Performance Assessment (BEPA) protocol established a standardized methodology for building energy use data collection, compilation and analysis. The methodology is intended to fill data collection and analysis gaps in the ASHRAE energy audit guidelines and establish a sound, representative building energy use baseline. The ASTM BEPA methodology standardizes a number of major variables associated with data collection and analysis. This overarching methodology dictates the data and history that should be collected at each site.

To meet ASTM E2797-15 requirements, the preferred length of time that baseline building energy consumption data should be collected is three years, assuming it is available, or back to the last major renovation if completed in less than three years, with a minimum of one year of data collection. A major renovation is defined in the standard as any change that either involves expansion (or reduction) of the building's gross floor area by 10% or more, or impacts total building energy use by more than 10%. Electricity data may be obtained online via the utility "green button" after the account owner has waived its right to access the data through signing of a release waiver (a copy of the release waiver is included in this section under Section IX of this Appendix).

For buildings where it is impossible or prohibitively difficult to obtain the required historical energy consumption data, the following methodologies may be utilized for establishing baseline building energy use.

1. Fully or partially vacant existing building whose use is not expected to change

If an existing building is partially vacant and the use is not expected to change (e.g., office space stays as office space, etc.), it may be possible to use the utility data from the occupied space and extrapolate energy consumption to the full space as if it was 100% occupied. A building energy use simulation model may then be used to estimate the energy use under the post-[ECM Energy Improvement](#) scenario and compare this to the baseline to project the energy savings.

If the existing building is currently vacant and has been vacant for some time, and there is no utility data available, then the existing space may be modeled (building energy use simulation model, such as eQUEST, EnergyPlus, or equivalent) with the existing equipment (e.g., HVAC, windows, etc.), but operating how it would be operating under the expected use (the number of people occupying the building, the hours of operation, etc.). This would establish the baseline energy use. The model can then be used to project energy use under the post-[ECM Energy Improvement](#) scenario and compare this to the baseline to project the energy savings.

2. Buildings undergoing repositioning or new use

If an existing building is undergoing repositioning or being developed into a new use (e.g., industrial space becoming office space such as might be found at a brownfields site where the existing building previously had industrial use but is being redeveloped into office space), a building energy use simulation model (e.g., eQUEST, EnergyPlus, or equivalent) can be used to project the baseline energy consumption associated with the new use, assuming for the baseline that the energy-using equipment meets the current CT energy code (2009 IECC with amendments). The building can then be modeled with high efficiency systems (above code). The difference (energy improvement) between the two scenarios would be viewed as the “energy savings” against which the cost of improvements would be weighed in the SIR calculation.

3. Buildings undergoing gut rehabilitation

If an energy baseline cannot be reasonably obtained using the methodology in subsection (2) above, the project should be submitted under the New Construction Pilot approval methodology.

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3.4 Multi-tenant buildings, such as retail, office residential, etc. where the tenants are sub-metered and pay their own electricity

In multi-tenant buildings where it is prohibitively difficult to obtain the electricity meter data of all tenants (e.g. ten or more meters), C-PACE applicants may use the building’s aggregate energy use, which may be supplied by the utilities via a signed waiver from the property owner. This would represent the building’s pre-~~ECM~~Energy Improvement baseline. The alternative is to collect whatever tenant energy use data is voluntarily offered and use this to model the building’s energy use. To use this option, a minimum of 10% of the tenants must contribute energy use data. Once the baseline is established, a calibrated building energy use simulation model can then be used to project energy use post-~~ECMs~~Energy Improvements. The difference (energy improvement) between the two scenarios would be the “energy savings.” Tenants may be willing to authorize the building owner to access their energy use because they would be getting the benefits of the energy improvements and be receiving lower energy bills.

The Green Bank has the ultimate responsibility and sole discretion to approve the appropriate energy use baseline for a particular project, depending upon the nature of the proposed project and supporting information.

IV - Energy Audit and Renewable Energy Feasibility Requirements

As a condition of financing, C-PACE legislation requires the energy audit or renewable energy feasibility analysis be conducted by a qualified individual.*

The principal objectives of the energy audit are to:



- Identify a representative baseline.
- Data collection must be consistent with ASTM E2797-15;
- Identify and recommend, in collaboration with the property owner/manager, C-PACE-eligible [ECMs/Energy Improvements](#)
- Identify the effective useful life of each [ECM/Energy Improvement](#) consistent with industry best practice;
- Estimate the total installed cost of each [ECM/Energy Improvement](#);
- Estimate the total project capital cost;
- Identify the uncertainty (+/-) associated with the methodology used to establish [ECM/Energy Improvement](#) cost;
- Estimate the energy savings that can confidently be achieved (energy savings should be determined by the difference between projected energy use after the [ECMs/Energy Improvements](#) are installed and the projected baseline energy use under similar conditions, e.g., average (normalized) weather, etc.);
- Identify the uncertainty (+/-) associated with the methodology used to estimate [ECM/Energy Improvement](#) energy savings;
- Identify an appropriate commissioning plan;
- Identify an appropriate M&V plan; and
- Determine the project's key financial metrics, including ROI, IRR, NPV, SIR, cash flow and payback time (the financial analysis performed should reflect any rebates or incentives).

* Energy audits must be prepared and submitted by an energy engineer or by a team including an energy engineer. An energy engineer is defined as a professional holding a Certified Energy Manager (CEM) or Certified Energy Auditor (CEA) accreditation, a Professional Engineer (PE) with demonstrated relevant energy experience, or a contractor with relevant demonstrated experience as determined by the Technical Administrator.

A feasibility study must be prepared for a renewable energy system application ~~(Appendix F)~~. The principal objectives of the renewable energy feasibility study are to:

- Describe the proposed renewable energy system;
- Identify and evaluate site/building suitability for the renewable energy system;
- Identify metering (number of boxes, location, etc.);
- Identify the utility electricity and/or fuel rate structure for the property;
- Collect historic electricity and/or fuel use and cost (in accordance with ASTM E2797-15);
- Assess system expected performance and requirements to maintain optimized operation;
- Compare system expected performance (electricity and/or heat production) against total energy (electricity and/or fuel) consumption of the building;
- Identify performance guarantees and effective useful life;
- Assess total project capital cost;
- Analyze building energy savings including assumptions on avoided future utility electricity/fuel costs including assumed electricity/fuel rate escalation;

- Identify an appropriate commissioning plan;
- Identify an appropriate M&V plan; and
- Determine the project's key financial metrics, including ROI, IRR, cash flow, NPV, life cycle savings, savings-to-investment ratio and payback time based on the effective useful life of the renewable energy system (the financial analysis performed should reflect any rebates or incentives, REC credits/sale, potential excess electricity sale back to the grid, etc.).

In estimating the total project cost eligible for C-PACE funding (including up-front energy audits or renewable energy feasibility studies, the design and installation of the energy improvements, and verification of the energy savings achieved), the energy auditor may also include the cost of a preventive maintenance contract for the energy improvements, up to but not exceeding a five (5) year contract.

Completed energy audit data is submitted to the Technical Administrator or Reviewer to validate that the scope of work meets the required technical standards, [ECMsEnergy Improvements](#) meet C-PACE program eligibility requirements, the recommended [ECMsEnergy Improvements](#) are technically and financially feasible, and all stakeholder underwriting data needs are satisfied.

ASHRAE Level I Energy Audit

An ASHRAE Level I energy audit consists of a:

- 1) Walk-through analysis to assess a building's energy cost,
- 2) Utility bill analysis to assess its efficiency (using ASTM BEPA Methodology to establish the building's baseline energy use), and
- 3) Brief on-site survey of the building.

The walk-through may be targeted at a specific building component that is intended to be replaced or upgraded or added (such as in the case of installing a solar energy system) or may include checking all major energy-using systems. Operational metrics of building equipment are typically limited to data collection of nameplates, but may be more detailed if that data are readily available. Level I energy analysis should at the minimum identify [ECMsEnergy Improvements](#) and the associated potential energy savings, the estimated cost of the [ECMsEnergy Improvements](#), and specify where further consideration and more rigorous investigation is warranted.

ASHRAE Level II Energy Audit

An ASHRAE Level II energy audit is a more detailed investigation and includes a more comprehensive building survey and energy analysis than a Level I audit. It also includes more detailed financial analysis. In addition to nameplate data collection, empirical data may also be acquired through various field measurements using handheld devices.

The Level II audit should at the minimum identify and provide the investment and cost savings analysis of all recommended [ECMs Energy Improvements](#) that meet the Connecticut Green Bank's and the owner's constraints and economic criteria, along with a discussion of any changes to operation and maintenance procedures. Detailed financial analysis includes ROI, IRR, NPV and payback period determination reflecting the C-PACE financing structure. Sufficient detail on projected energy savings is provided to justify project implementation.

ASHRAE Level III Energy Audit

The ASHRAE Level III energy audit (often referred to as an "investment grade audit") is generally applicable to projects that are capital intensive and demand more detailed field data gathering as well as more rigorous engineering analysis. The Level III energy audit provides even more comprehensive project investment and cost savings calculations to bring a higher level of confidence that may be required for major capital investment decisions. Data collection may involve field measurements acquired through data loggers and/or an existing energy management system.

V – Eligible / Ineligible Measures

Common Eligible Energy Conservation Measures

Pursuant to C-PACE legislation, the project, including all eligible measures, must achieve an SIR > 1. Non energy-saving measures directly related to installation of an [ECM Energy Improvement](#) may be determined as eligible and included in the financing in so far as the project's SIR remains greater than 1 and, per the Act, the "authority determines [these associated costs] will benefit the qualifying commercial real property." ~~For example, the benefited property owner's share of ancillary construction costs to extend the energy infrastructure as necessary to enable the clean energy or distributed energy improvement (e.g. a roof to support solar panels or the pipeline infrastructure as necessary to enable a natural gas conversion).~~ [A list of approved associated measures can be found later in this section.](#)

The measures proposed in the project must be permanently affixed to the property (i.e. the property owner cannot remove them in the event of a change of ownership), with the exception of district heating and cooling systems, as defined in the statute as "a local system consisting of a pipeline or network providing hot water, chilled water or steam from one or more sources to multiple buildings" (i.e., the pipeline and sources may be located outside of the property boundary of any given beneficiary of the system) and microgrids. Examples of permanently affixed improvements include, but are not limited to upgraded insulation, energy efficient HVAC equipment, solar photovoltaic (PV) rooftop systems, fuel cells, and natural gas piping installed underneath the property owner's land. In addition to the [ECM Energy Improvement](#) eligibility review, the Green Bank will also review projected improvements in energy

efficiency to ensure that the energy efficiencies are reasonable for the application and commercially acceptable.

The following list of predominant, long-standing, proven energy efficiency technologies is intended as a reference list for C-PACE applicants. If not included on this list, the Green Bank will review proposed ECM Energy Improvement(s) and accept them on a case-by-case basis. For measures not included on this list, The Green Bank reserves the right to require project review by the Technical Administrator.

- High efficiency lighting
- Heating, ventilation and air conditioning (HVAC) upgrades
- New automated building and HVAC controls
- Variable speed drives (VSDs) on motors fans and pumps
- High efficiency chillers
- High efficiency boilers and furnaces
- High efficiency hot water heating systems
- Combustion and burner upgrades
- Fuel switching
- Water conservation measures to the extent they save energy
- Heat recovery and steam traps
- Building enclosure/envelope improvements
- Building automation (energy management) systems
- Renewable energy systems (e.g., solar, fuel cells, geothermal)
- Combined heat and power systems (CHP)
- District thermal
- Electric vehicle charging equipment added to the building or its associated parking area
- Microgrids.

The following end use savings technologies are generally more applicable to industrial facilities:

- New automated process controls
- Heat recovery from process air and water
- ~~Cogeneration used for peak shaving~~
- ~~Process equipment upgrades~~
- ~~Process changes~~

Shown below are key aspects of some of the most commonly applied technologies listed above, with their typical simple payback range. These payback periods are only provided for informational purposes and should not be construed as a guarantee of performance or requirement for C-PACE funding eligibility.

Lighting (typical 2 to 3 year simple payback):

- Daylight controls and natural day lighting designed to reduce energy and improve visual comfort
- Upgrades for existing fluorescent fixtures including electronic ballasts, T8 lamps, and reflectors

- Upgrades to LED lighting fixtures
- Meeting rooms and other intermittently occupied spaces can garner significant energy savings with the use of timers and occupancy sensors
- Smaller impact opportunities including security lighting, stairwell lighting, exterior night-time security lighting and exit signs.

Motors (typical 3 to 5 year simple payback):

- High efficiency electric motor replacements usually pay back when a motor is running for long periods at high load, or at the end of motor life
- The cost premium over standard motors normally can be recovered in less than 2 years
- Motor sizing to the actual load profile to improve efficiency and control electrical power factor.

Variable Speed Drives (typical 3 to 5 year simple payback):

- Applied to motors, pumps and fans
- Matches motor use to variable operating load
- Can save up to 40 percent in power consumption
- Can be packaged with controls
- Extends motor life.

HVAC (typical 2 to 10 year simple payback)

- New packaged units can increase efficiency and indoor comfort
- Proper sizing of HVAC equipment is a major opportunity, since full-load operation is more efficient than part load operation - consider fan capacity reduction or staging of 2 smaller units rather than partial loading of one large unit
- Install VSDs on HVAC motors
- Balance air and water supply systems to remove trouble spots demanding inefficient system operation
 - Improve maintenance
 - Eliminate simultaneous heating and cooling
 - Install economizers and direct digital controls
- Variable air volume conversions versus constant air flow
- Ventilation reduction (demand control ventilation, etc.)
- Unoccupied shutdown or temperature setback/setup (controls).

Chillers (typical 5 to 15 year simple payback):

- New chiller models can be up to 30-40 percent more efficient than existing equipment.
- Upgrade lead chiller(s) (base load) to high efficiency
- Manage chiller and condenser settings to minimize compressor energy
- Optimize pumping energy for distribution of chilled water

- Optimize HVAC operation to:
 - Improve temperature/humidity control
 - Eliminate unnecessary cooling loads
- CFC reclamation program/inventory - chiller replacement may achieve both CFC management and energy efficiency objectives.

Boilers (typical 5 to 10 year simple payback):

- Replace steam with hot water boilers for hot water heating loads
- Use of high efficiency condensing boilers
- Improve maintenance
- Optimize operation/staging in multiple boiler plants
- Optimize boiler controls
- Tune or replace burners
- Add small “pony” boilers for low loads:
 - Reduced fuel consumption/energy costs
 - Reduced emissions
 - Reduced maintenance costs
 - Higher reliability.

Heat Recovery (typical 2 to 5 year simple payback):

- Heat recovery devices to capture waste heat from water, process heat and exhaust air to re-use it for preheating of building intake air
 - Boiler combustion air
 - Boiler feed-water
 - Inlet water for domestic hot water.

New Automated Building and HVAC Controls (typical 3 to 10 year simple payback):

- Old controls may still be pneumatic systems based on compressed air - new electronic controls are more precise and reliable, with greater capabilities.
- Automate lighting, chiller, boiler and HVAC operation:
 - Load shedding
 - Optimal start/stop/warm up
 - Ventilation control.
- Whole-building energy management systems may come with other advanced control technologies:
 - Alarm monitoring and report generation
 - Preventive maintenance scheduling
- Remote monitoring/metering capabilities may be attractive.

Building Shell and Fenestration (typical 3 to 10 year simple payback):

- Roof insulation, combined with reflective roof coatings in warm climates, reduces energy consumption
- Review building pressurization for proper ventilation:
 - Balance exhaust and intake air quantities
 - Add weather-stripping on doors and windows
 - Seal cracks and unnecessary openings
- Window films to reduce solar heat gain and/or heat loss
- Daylighting
- Replace windows with more energy efficient glazing.

Renewable Clean Energy Improvements for Commercial Property

The following are examples of renewable clean energy improvements as defined in Subsection (A) of Section 16-245N of the General Statutes.

- Solar power
- Solar thermal
- Wind Power
- Geothermal energy
- Fuel Cell
- Methane Gas from landfills
- Low emission advanced renewable energy conversion technologies
- Projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and associated infrastructure and any related storage, distribution, manufacturing technologies or facilities
- Sustainable Biomass Facility

Eligible Associated Measures

- Capital expenditures associated with an eligible measure (i.e. new roof with solar or gas line expansion required by a fuel conversion)
- Energy/water audit costs
- Renewable Energy Feasibility Study costs
- Engineering and design expenses, including energy modeling for new construction
- Construction and installation costs, including labor and equipment
- Commissioning costs
- Prepaid operation and maintenance expenses for a period of up to five years, including measurement and verification costs incurred
- Costs of an extended warranty covering the full finance term for equipment financed
- Any capital provider fees and /or required prepaid interest
- Program and permit fees

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- [Leadership in Energy and Environmental Design \(LEED\) certification and consulting fees](#)
- [Capital improvements made alongside energy improvements as part of LEED certification](#)
- [Other project-related expenses approved by the Green Bank](#)

Ineligible Measures

All C-PACE related improvements must be permanently affixed to the commercial property and part of a retrofit to existing infrastructure, with the exception of district heating and cooling systems. The following items will not be considered as efficiency measures under the C-PACE program:

- Appliances, e.g., refrigerators, dishwashers, etc.
- Plug load devices
- Vending machine controls
- Any package of measures that does not achieve an energy savings to investment ratio (SIR) greater than one
- Any measure that is easily removed or not permanently installed
- Any measure that does not result in improved energy efficiency or renewable energy generation

VI – C-PACE for New Construction Pilot

[Please reference the pilot program guidelines published by Green Bank on \[Date\], which may be found here: \[link\].](#)

VII – Commissioning and Performance Measurement & Verification of Energy Savings

In order to evaluate the energy savings effectiveness of projects after they have been installed, all project applications are required to include a Cx and M&V plan to ensure that the property owner is in a position to collect energy consumption and/or clean energy production data. The Cx plan is designed to: (1) verify equipment installation as specified and identify operation and maintenance requirements; and (2) verify system performance according to specifications. The M&V plan is designed to verify that the [ECMs/Energy Improvements](#) installed are achieving the projected energy savings. The plan identifies what must be measured and how to facilitate this analysis. [A report by a Qualified or Registered Contractor that confirms the measures were properly installed and that the project is operated as intended must be submitted to the Green Bank once project construction is complete.](#)

The Green Bank requires C-PACE applicants to develop an M&V plan consistent with guidance provided by the International Performance Measurement and Verification Protocol (IPMVP) **or propose an alternative methodology** as appropriate for the project size and [ECMs/Energy Improvements](#) installed.

The IPMVP guidance provides four options for determining energy savings. These include:

Option A. Retrofit Isolation: Key Parameter Measurement

Option B. Retrofit Isolation: All Parameter Measurement

Option C. Whole Facility

Option D. Calibrated Simulation.

Options A and B focus on the performance of specific [ECMs Energy Improvements](#) that can be measured in isolation from the rest of the building. In Option A, the key energy use parameter is measured, but other minor effects can be estimated. For example, Option A might include a lighting retrofit, where an electric meter can isolate and measure electricity use for the lighting, but where the relatively minor interactive effect of less cooling in summer and more heating in winter is estimated. Reduced lighting loads will reduce air conditioning energy consumption (a cooling bonus), but increase heating consumption (a heating penalty). In Option B, all parameters necessary to evaluate energy use are measured. This might, for example, be the case with installation of a variable speed drive and controls to a motor, with a power meter installed on the electrical supply to the motor.

Options C and D are used when energy use of the [ECMs Energy Improvements](#) installed is not easily measured in isolation from the rest of building operations, or there is little measured baseline energy data, among other reasons. The Option C approach assesses savings at the whole facility level. The measured and verified energy savings in the desired reporting period (e.g., 12 months after the [ECMs Energy Improvements](#) have been installed) is determined from the difference between the actual (measured) energy use in the reporting period and the projected energy use in this same reporting period assuming the [ECMs Energy Improvements](#) had not been installed. The analysis reflects changes in the independent variables impacting building energy use (such as weather, occupancy, operating hours, etc.) for each month in reporting period as compared to the baseline. Option C is commonly applied for whole building retrofits involving multiple [ECMs Energy Improvements](#) that may be interactive. Option D uses computer simulations and building modeling (e.g., U.S. DOE 2.2- based software such as eQuest or EnergyPro), and is usually applied when baseline year energy data are not available or considered reliable.

At minimum, an M&V plan should determine if and with what frequency energy consumption and/or clean energy production data will be collected for measurement purposes. An M&V plan should also determine the means by which data will be tracked and collected as well as what party is responsible for data collection (see Project Application Checklist). Property owners or contractors seeking to access energy consumption data may use the authorization form provided in Section IX of this chapter “Utility and Fuel Supplier Historical Usage and Project Data Information Release Form”.

The Green Bank may elect to facilitate M&V on projects submitted to the Green Bank for financing. Property owners and/or qualified [Capital Providers TPCP](#) may request M&V services from the Green Bank, see [Standard Offer Third-Party Capital Provider Term Sheet](#) (Appendix H). M&V activities may be financed as an eligible measure under the C-PACE program.

[VIII - Data Management, Program Information Management, Reporting and Analytics](#)

To ensure the success of the C-PACE program, data is uniformly collected on all C-PACE projects, regardless of Capital Provider. ~~Projects submitted to the Green Bank for financing will collect all project data in the CDMP. Qualified Capital Providers financing projects under the Standard Offer that are not using the CDMP C-PACE TPCP~~ will be required to submit data regarding project characteristics and project energy savings in a standard format to be determined by the Green Bank in its sole discretion. The Green Bank issues quarterly reports on the C-PACE Program that includes aggregated data across all closed and completed transactions. For more information, visit our Quarterly Dashboard [here](#).

~~VIII – Project Application Checklist~~

~~Before an application commences technical review, project applicants should complete the following checklist and submit to the Technical Administrator and/or approved Reviewer as an appendix to the full application.~~

- ~~Property description (type, gross SF, rentable SF, tenant(s), lease type (gross, triple net, etc.), age, date of last major renovation, electrical meters, vacancy, hours of operation)~~
- ~~ECM(s) identified with complete description, including how they will save energy~~
- ~~ECM degradation addressed~~
- ~~EUL for each ECM is identified~~
- ~~Baseline building energy use data collected consistent with ASTM E2797-15 standard (if not, provide explanation)~~
- ~~Energy audit provided (consistent with ASHRAE guidelines) N/A~~
 - ~~Level 1 conducted N/A~~
 - ~~Level 2 conducted N/A~~
 - ~~Level 3 conducted N/A~~
 - ~~Other _____~~
- ~~Renewable energy feasibility study provided N/A~~
- ~~Commissioning plan Provided~~
- ~~M&V plan Provided~~
 - ~~Utility bill-based analysis~~
 - ~~Meter-based analysis~~
 - ~~IPMVP-based analysis~~
 - ~~Other _____~~
- ~~Electricity cost escalation factor identified (consistent with ISO-NE 20-yr projection)~~
- ~~Fuel cost escalation factor identified (consistent with U.S. EIA projections)~~
- ~~Projected savings for each ECM is provided~~
 - ~~Energy savings determined by calculation (spreadsheet) N/A~~
 - ~~Energy savings determined by modeling N/A~~
 - ~~eQuest~~
 - ~~EnergyPro~~

- Trace 700
- Spreadsheet(s)
- Other _____
- Model assumptions identified
- Model defaults identified
- Model calibrated against actual baseline data N/A
- Model uncertainty identified N/A
- Uncertainty around projected energy savings identified
- Total project cost provided including breakdown by ECM
- Projected construction schedule
- Total amount being financed (C-PACE Investment, "I")
 - Total cost of project \$ _____
 - _____ % of total project cost to be financed
 - If <100%, how else is the project being financed? _____
 - _____
 - Utility incentive Yes (\$ _____) No N/A
 - Owner financing Yes (\$ _____) No N/A
 - Other financing Yes (\$ _____) No N/A
 - For Solar PV: Are ZREC sales being assumed?
 - Yes (Value \$ _____/yr) No N/A
 - For Solar PV: Has a ZREC been awarded? Yes No N/A
 - For Renewable Energy Systems: Is electricity being sold to the grid?
 - Yes (Value \$ _____/yr) No N/A
 - M&V cost included? Yes No N/A
 - Preventive maintenance plan (max. 5 years) included?
 - Yes No N/A
- SIR>1 Yes No (SIR must be > 1)

Qualifications of responsible party (parties) attached

Project Technical Contact:

Name _____

Company _____

Address _____

Phone _____

Email _____

Application submitted by (name) _____

Affiliation _____

Application submittal date _____

IX—Utility and Fuel Supplier Historical Usage and Project Data Information Release Form

CUSTOMER RELEASE OF UTILITY DATA FORM
Utility and Fuel Supplier Information

Customer Name: _____
Electric Utility: _____ Account #: _____
Gas Utility: _____ Account #: _____
Other Fuel Supplier: _____ <input type="checkbox"/> Oil <input type="checkbox"/> Propane Account #: _____
If necessary, attach additional account numbers to this form.

Utility and Fuel Supplier and Program Information Release

<u>Utility Customer Doing Business on the Property (“Company”)</u> (only necessary if different from C-PACE Borrower)	<u>C-PACE Borrower (“Borrower”)</u>
Company Name:	Borrower Name:
Company Address:	Borrower Address:

PROJECT INFORMATION RELEASE—As a participant in the Connecticut Property Assessed Clean Energy (C-PACE) program and pursuant to Section 3.1(g) of the Financing Agreement between the Connecticut Green Bank (“Green Bank”) and the Borrower dated _____, 2015 (the “Agreement”), I certify that I am a duly authorized representative of the Company/Borrower that is a customer of the above named utility and that I hereby authorize and give permission to the utilities and/or fuel suppliers named above to release to the Green Bank and to any of its program partners, for their confidential use in connection with recording and calculating energy savings resulting from clean energy measures made pursuant to the Agreement at the Utility Service Address identified below. This permission is given for the following Data:

- 1) _____ The monthly and interval usage, charges, and sales for fuels and/or utilities for the Release Period set forth below; and
- 2) _____ Any supporting project documentation pertaining to calculating energy savings for efficiency measures.

In addition to the use of this Data for the Project, the Data may also be anonymized or aggregated to be used for non-commercial research purposes.



~~**RELEASE PERIOD**—This authorization covers Data for the period starting with the completion of the project and ending on the date of the complete repayment of the benefit assessment pursuant to the Agreement.~~

~~I hereby release and hold harmless the Green Bank, any Green Bank program partners, the above named utilities and energy suppliers, and their affiliates and their respective directors, employees, officers and agents from any and all liabilities, damages, losses, penalties, claims, demands, suits and proceedings of any nature whatsoever associated with the dissemination and use of such account and program information and this authorization. An electronic copy of this authorization may be accepted with the same authority as the original.~~

~~**Customer Signature:** _____ **Date:** _____~~

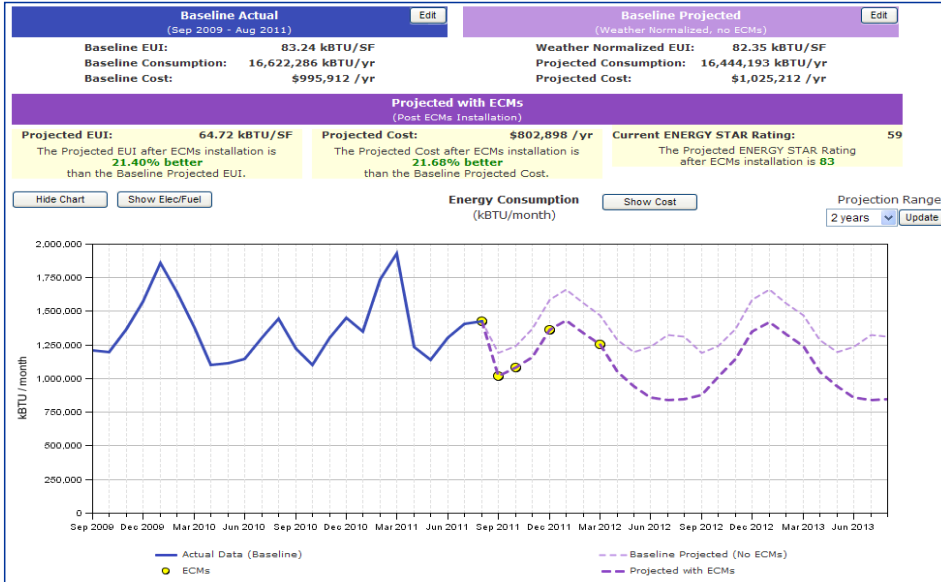
~~**Printed Name:** _____~~

~~**Email & Phone Number:** _____~~

~~**Mailing Address (if different):** _____~~

~~**Utility Service Address (if different):** _____~~

X-CDMP Sample: Project Energy Saving Scenario



Appendix ~~F: APPLYING FOR~~ C-PACE FINANCING FOR SOLAR PV SYSTEMS AND FUEL CELLS

- ~~I-1. Solar PV Feasibility Study Requirements/Recommendations~~
- ~~II-2. Commissioning and Performance Verification Guidelines for Solar PV Systems~~
- ~~III-3. C-PACE Solar Savings-to-Investment Ratio (SIR) Calculation Guidelines~~
- ~~IV-4. Third Party Ownership & C-PACE~~
- ~~5. Solar Lease II Installer Process~~
- ~~6. Fuel Cell Feasibility Study Requirements~~

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~~I~~Section 1 - Solar PV Feasibility Study Requirements⁴

~~Connecticut PACE legislation requires that C-PACE financing for installation of a renewable energy project be based upon a renewable energy feasibility analysis that assesses the energy cost savings over the project's useful life.~~ For installation of a solar PV project, the Green Bank recommends that the feasibility study at the minimum address the following components:

Site Suitability Assessment

A. *Ambient Conditions*

1. Site location (address, latitude, longitude, azimuth (degrees))
2. Monthly average temperature (high and low), rain, percent sun, sunrise and sunset, solar insolation (Wh/ft²), irradiance (W/ft²)
3. Irradiance data file used in projecting future performance (TMY2, SolarAnywhere, etc.)

B. *Building Conditions*

1. Location for solar energy system (include photographs)
 - Rooftop
 - Ground
 - Parking canopy
2. Solar energy system support/foundation
 - Rooftop
 - Roof dimensions (identifying usable PV panel space)
 - Roof materials of construction
 - Roof remaining useful life
 - Obstruction/shading analysis
 - Building structural adequacy to support installed solar system
 - Ground
 - Description and condition of area (paved surface vs. open ground)
 - Obstruction/shading analysis
 - Description of necessary work to support solar array rack(s)

⁴For guidelines on non-solar PV feasibility study requirements, contact the C-PACE team directly by emailing Nicholas Zuba at nicholas.zuba@ctgreenbank.com

- Parking canopy
 - Description and condition of parking area
 - Obstruction/shading analysis
 - Description of necessary work to support solar array rack(s)

C. *Building characteristics*

- Property address
- Property type (office, retail, hotel, multifamily, industrial, etc)
- Gross square feet

D. *Building historic energy use and cost*

- Description of electricity metering (number of boxes, location, etc.)
- Most recent utility electricity rate structure for property
- Historic electricity use and cost (in accordance with ASTM E2797-15)

PV System

E-L Solar module orientation and tilt

F-M PV cell specifications, including cell efficiency

G-N Module and array description, including module and array efficiency

H-O System size (kW) and projected performance - specify model used (e.g., PVSyst, SAM, PVCheck, RETScreen, PV Studio, etc.) including input parameters, assumptions (such as soiling, degradation, etc.)

I-P Inverter information (capacity, manufacturer, warranty, etc.) (the inverter must be warranted over the full financing term)

J-Q PV project site plan (including point of electrical connection)

K-R Distance from closest power line hook-up point (electrical run)

L-S Building code compliance and permit requirements

M-T Identification of Fire Marshall review requirements (e.g., system design compatibility with current fire suppression techniques, sufficient space around PV system location for fire fighters to move around safely - sufficient distance between array and roof edges, ventilation hatches, skylights, etc.)

N-U Solar vendor guaranteed performance, including product warranty, decrease of power output warranty

Q-V Guaranteed useful life

P-W Maintenance requirements (for maintaining peak efficiency)

Financial Analysis

Q-X System total capital cost

- R-Y. ZREC credits/sale. If ZREC contract not yet secured, include anticipated ZREC pricing (or range).
- S-Z. Potential excess electricity sale back to the grid (if applicable)
- T-AA. Annual cost of a maintenance contract with solar contractor, if provided
- U-BB. Cost for roof upgrade (if required)
- V-CC. Cost for building structural reinforcement (if required)
- W-DD. Energy savings analysis
- X-EE. ROI, payback, IRR, NPV and projected cash flow analysis

Commissioning and Measurement and Verification

- Y-FF. System commissioning plan (in particular, specify metering equipment and how the system will be monitored)
- Z-GG. Electricity production monitoring including specification of the type of Green Bank-approved monitoring system that will be used (listed on the Green Bank website):
<http://www.ctcleanenergy.com/YourHome/ResidentialSolarInvestmentProgram/FindanApprovedPerformanceDataProvider/tabid/607/Default.aspx>

#Section 2 - Commissioning and Performance Verification Guidelines for Solar PV Systems

~~The Green Bank requires all C-PACE applicants to incorporate in their projects a commissioning and electricity production M&V plan and be responsible for its execution. As such, Solar PV contractors are required to prepare a commissioning plan and electricity production M&V plan that at the minimum provides a description of the required commissioning activities to ensure the system has been installed as designed and is operating properly, and verify that the projected electricity production performance is achieved. The methodology presented below attempts to balance the competing goals of cost versus technical precision, particularly in view of the relatively small size of most solar PV projects and the fact that energy performance guarantees are typically not provided.~~

The commissioning plan and M&V plan for Solar PV systems should consist of four steps: (1) verification of equipment installation and O&M requirements; (2) verification/documentation of the utility interconnect; (3) verification of the system’s capability to perform according to its specifications; and (4) system performance tracking. The first three steps need to be addressed in the commissioning plan. The last step needs to be addressed in the M&V plan.

1-A. Verification of equipment installation and O&M requirements

- Verification that equipment installed is as specified in the proposal/purchase order (e.g., manufacturer, nameplate rating, numbers of modules, cells, etc.)
- Installation checklist
- Verification in writing and signed by the project developer that the installation is complete (preferably via an installation punch list), safe and has all required permits
- Documentation of “as built” condition (providing “as built” drawings, including array layout/one-line electrical diagram or schematic, and photographs)
- PE letters or stamped documentation (electrical, structural)

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- Documentation of O&M requirements (and responsibility)
- Documentation of warranty details

2-B. Verification/documentation of the utility interconnect

- Interconnect Agreement
- Compliance (letter) for ZREC metering requirements (optional)
- Utility Witness Test Results/Findings (letter)
- Net metering agreement
- Final Approval Letter

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3-C. Verification of system performance according to specifications

- Equipment spec sheets, including monitoring system information
- Commissioning data sheet
- PV array test report
- Miscellaneous system test reports

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4-D. Track system electricity production performance

- Track PV system electricity production using an approved Green Bank monitoring system (for eventual integration into the CDMP)
- Compare Solar PV performance results with projected PV model results.
- Determine energy savings per month (equivalent to electricity production and the applicable value of ZRECs)

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Section 3 - C-PACE Solar PV Savings-to-Investment Ratio (SIR) Calculation Guidelines⁵

The Green Bank recommends using the Solar SIR Calculator posted to the C-PACE website.

Determine "Savings" as follows:

1-A. Add:

- Avoided annual electricity costs, assuming a maximum of 3% annual escalation of utility electric prices (include both initial price basis and specific annual performance degradation of at least 0.5%)
- Annual demand charge reduction (if claimed, include the specific model demonstrating how this reduction will be achieved)
- Annual revenue from excess electricity sales back to the grid at the wholesale rate, if applicable (again, assuming no more than a 3% annual escalator)
- Annual revenue from sale of renewable energy credits (if necessary to achieve SIR > 1, proof of ZREC contract will be required prior to closing of C-PACE funding)
- Any other system-related project revenues

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⁵For non-solar PV Savings To Investment Ratio calculation guidelines, contact the C-PACE team directly by emailing Nicholas Zuba at nicholas.zuba@ctgreenbank.com

- If the property owner has the ability to monetize the federal Investment Tax Credit and/or MACRS depreciation benefits (as evidenced by previous years' federal tax returns), include the value of those tax savings for each year in which they will be applied. This should be noted in the form "Documentation of Ability to Monetize Federal Tax Credits Associated with Clean Energy Installations" at the end of the initial application ~~(Appendix D)~~

~~2.B.~~ Model annual cash flows from the system over the lifetime of the solar

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Determine "Investment" as follows:

~~1.~~ Calculate total projected debt service due in respect of the C-PACE financing – including all principal, interest, and any fees over the term of the financing – as well as fixed or variable costs associated with the maintenance or performance of the ~~ECMs~~ Energy Improvements over their EUL.

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- Up to five years of preventative maintenance costs necessary to maintain system operation at optimum performance can be capitalized into initial financing

SIR = Savings / Investment

KEY NOTES ON SIR CALCULATION GUIDELINES:

- Under C-PACE, the system owner (either the property owner or a third-party owner) is entitled to all tax benefits associated with the system. These tax benefits can be incorporated into the SIR calculation as savings if the property owner has demonstrated the ability to monetize those tax benefits.

~~W~~Section 4 - Third Party Ownership & C-PACE⁶

PA 12-2 does not require the legal owner of the building to own the equipment associated with a qualified energy upgrade; as the "benefitted property owner" as defined in the Act must only "[desire] to install energy improvements" and provide "free and willing consent to the benefit assessment authorized by the Act against the qualifying commercial real property." **As such, the Green Bank will permit a solar installation or other qualifying renewable energy system to be financed and repaid through C-PACE, while the system itself is owned by a third party provider under circumstances provided below.**

Owner Consent

The benefitted property owner must provide consent to the benefit assessment against the qualifying commercial real property. The Green Bank will recognize owner consent under the following two fact patterns:

⁶ The Power Purchase Agreement information has been used exclusively for solar thus far, though it is not specific to solar, and can apply to other PPA projects.

(1) incorporating the consent into the application from the clean energy services company, lessor, or Power Purchase Agreement (PPA) provider (together referred to as “PPA Provider”) to the Green Bank; or

(2) as a separate consent from the benefited property owner in favor of the Green Bank, the applicable municipality, and the applicable lender when the financing is made.

If a benefited property owner wishes to finance a solar PV system through C-PACE using a PPA structure, the final C-PACE documentation – whether the initial application was initiated by the property owner, or the PPA Provider – must incorporate the property owner’s consent that repayment of C-PACE financing will occur through a benefit assessment collected by the relevant municipality, to be remitted to the Green Bank and from there on to the applicable lender. This is in place of a traditional PPA structure under which a property owner would remit payment directly to the PPA Provider.

Permanently Affixed

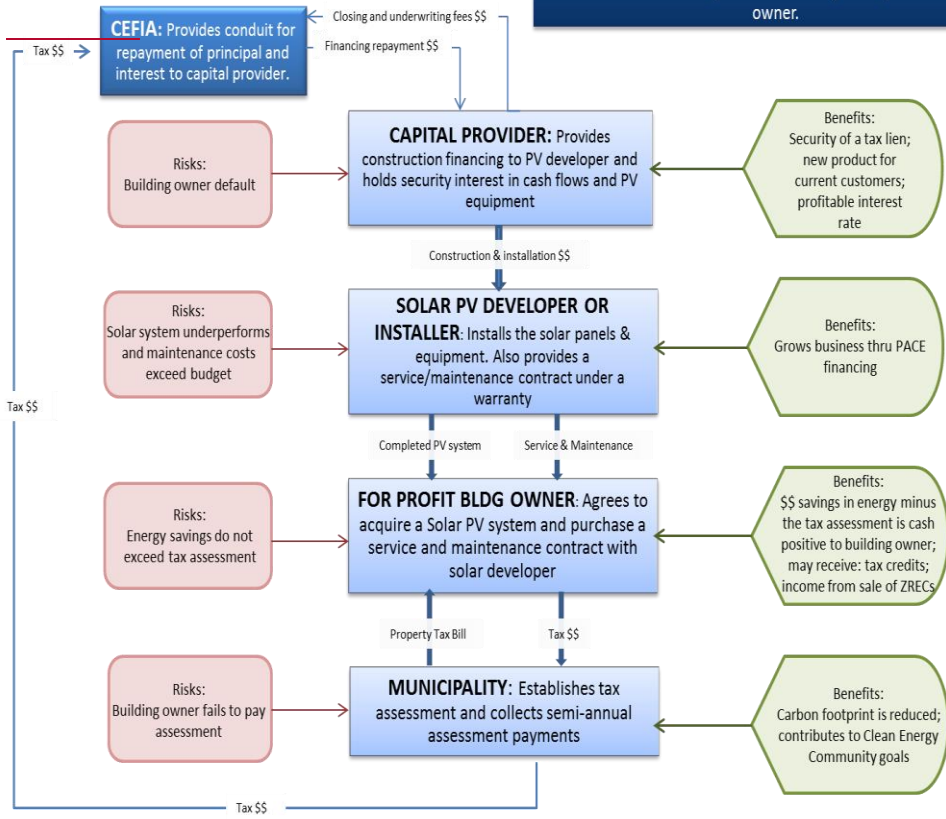
Since qualifying energy upgrades under C-PACE must be “permanently affixed” to the qualifying commercial property, the PPA must be of at least 15 years in length and contain language requiring the following:

- The PPA be assigned to a buyer or transferee of the property and not result in an automatic termination of the PPA if the property changes ownership or otherwise transfers; and
- The property owner has a right or option to acquire title to the solar PV system at the end of the PPA term.

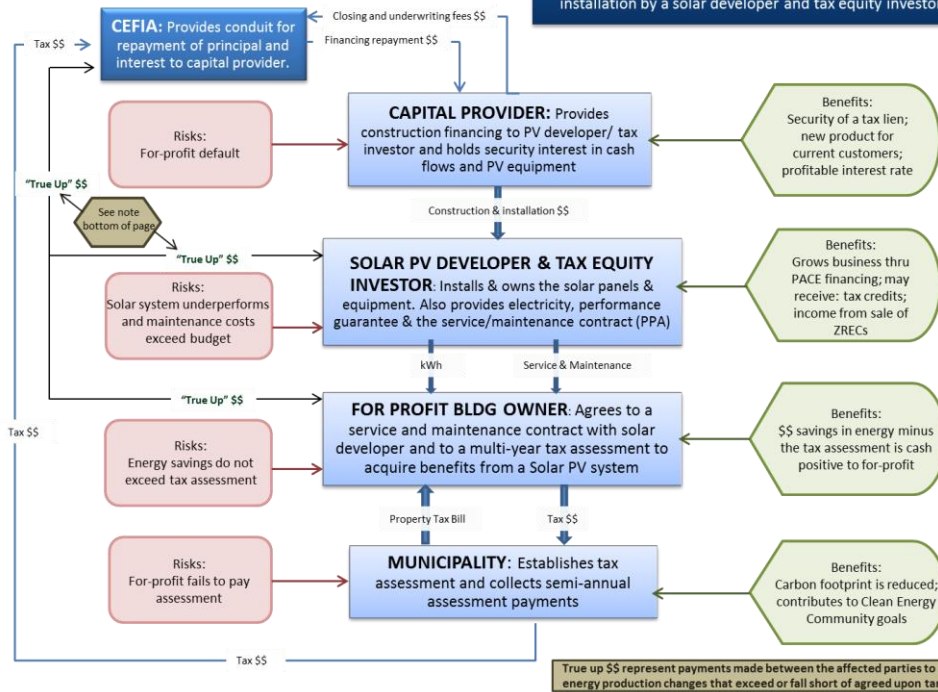
Transfer of Payment

Unlike a traditional PPA, financing a solar PV project via C-PACE will require the PPA to provide for fixed payments from the property owner to the relevant municipality through the C-PACE benefit assessment mechanism. Language in the PPA should therefore include provisions related to a regular “true-up” of these fixed payments with the variable power provided (on a dollar per kWh basis) to the property owner by the solar PV system. Thus, if fixed benefit assessments are to be made to the relevant municipality on a six-month basis, for example, the PPA Provider will be responsible for tracking actual power produced by the solar PV system over that time period. If the cost of the power supplied (as calculated by multiplying the amount of kWh produced by the per-kWh price of power agreed to in the PPA) is greater than the fixed payment made by the property owner to the municipality, then the property owner shall remit the difference to the PPA Provider. If the cost of power supplied is less than the fixed payment, then the PPA Provider shall remit the difference to the property owner. If necessary, the Green Bank can serve as a conduit for these “true up” payments. See models below for a visual representation of these flows of funds.

FOR PROFIT ENTITY (Purchased Solar Equipment): Cash flow, risks and benefits arising from the purchase of solar PV Equipment from a solar PV developer or installer by a "for profit" building owner.



FOR PROFIT (Solar installed and owned by others): Cash flow, risks and benefits to a for-profit entity arising from Solar PACE installation by a solar developer and tax equity investor (PPA).



V—Solar Lease II Installer Process

Installer Process Guidelines for Project Approvals Using the Green Bank's CT Solar Lease Fund under C-PACE

- I.— Before undertaking a commercial-scale project using CT Solar Lease (SL2) financing, an installer must become eligible to offer SL2 financing for both lease and PPA projects. Contractor eligibility requirements are online here:

<http://www.ctcleanenergy.com/ContractorPortal/CTSolarLeaseCommercialSolarPV/tabid/760/Default.aspx>

This eligibility process includes two steps:

- 1.— Submitting a complete response to the Contractor Eligibility RFQ; and
- 2.— Submitting a signed Contractor Agreement along with all relevant Exhibits.

Eligibility documents should be submitted to the Green Bank's Finance Team. Renew Financial (f/k/a AFC First) will review installer submissions for completeness, request missing documentation, and confirm installer eligibility directly.

- II.— Then, on a project-by-project basis, the approval / closing / funding process will work as follows (with installer responsibilities in **bold**):

- 1.— **Installer requests indicative pricing from the Green Bank Finance Team, based on the following project criteria:**
 - a.— **System size (kW STC)**
 - b.— **Expected first-year generation (kWh)**
 - c.— **ZREC amount (awarded or estimated)**
 - d.— **EPC price**
 - e.— **Commercial or not-for-profit / municipal customer**
- 2.— The Green Bank Finance Team quotes indicative price
- 3.— **Installer reviews form of lease or PPA document with customer, along with indicative pricing**
- 4.— **Customer (with support from installer) submits completed C-PACE application (online at www.cpace.com), including all supporting documentation listed in "Step 3 Building Financials" section (e.g., property financials, appraisal, etc. etc.)**
- 5.— The Green Bank C-PACE team prescreens the property to confirm its eligibility for C-PACE financing under SL2
- 6.— **Once likelihood of property eligibility established, installer submits project details:**
 - a.— **Signed Lease or PPA Work Order (Exhibit A to the Contractor Agreement), directly to the Green Bank Finance Team via e-mail**

- b. **Solar Feasibility Study (as described in Exhibit H Section I), directly to the Green Bank Finance Team via e-mail**
- c. **Project overview, via PowerClerk⁷**

7. The Green Bank Finance Team completes financial underwriting on basis of C-PACE criteria
 - a. No external review by Sustainable Real Estate Solutions (SRS) or use of C-PACE Data Management Platform (CDMP) required, except when including other Energy Conservation Measures⁸
 - b. No internal Green Bank Deployment Committee or Board of Directors approval required
 - c. Mortgage lender consent must be obtained at this time
8. Once underwriting and project review completed, the Green Bank leasing subsidiary (CT Solar Lease 2 LLC) signs lease or PPA agreement directly with customer
 - a. Lease or PPA will incorporate key elements of standard C-PACE Financing Agreement, including all documentation relating to Benefit Assessment process
9. **Simultaneous to customer closing, the Green Bank development subsidiary (CEFIA Holdings, LLC) signs EPC contract with installer**
 - a. **EPC contract can be based on standard installer contract, including appropriate milestone payments**
10. **Either customer or installer, as appropriate, assigns ZREC contract over to the Green Bank leasing subsidiary (CT Solar Lease 2 LLC)**
11. The Green Bank Legal Team submits Benefit Assessment Lien to municipality, including [semiannual] customer payment schedule based on lease or PPA pricing
 - a. For PPAs, “true up” provision ensures that the customer neither overpays or underpays for the clean energy generated by the solar PV system

⁷ Use the RSIP program choice, but prefill the system owner page with the “CT Solar Lease” option, and then select “commercial” under the Utility Sector drop down on the customer site info page (unless the project is on a multi-family property, in which case please select the “residential” sector and “multi-family” subsector)

⁸ All projects, whether single-measure solar or multi-measure, will get loaded into the CDMP. However, for single-measure solar projects, the Green Bank or SRS staff will simply transfer relevant data from PowerClerk upon project approval

VI—Fuel Cell Feasibility Study Requirements

Connecticut PACE legislation requires that C-PACE financing for installation of a renewable energy project be based upon a renewable energy feasibility analysis that assesses the energy cost savings over the project's useful life. Fuel cells are grouped in the renewable energy category.

For installation of a fuel cell (such as may be part of a CHP project), the Green Bank recommends that the feasibility study at the minimum address the following components:

I. Building Site Suitability Assessment

A. Building Characteristics

1. Location (address)
2. Building owner (name, contact)
3. Property type (office, retail, hotel, multifamily, industrial, etc.)
4. Number of building operating hours per day, week, month, year
5. Date of last major building renovation
6. Occupancy (preferably over the last three years, but over the last year as a minimum)
7. Gross square feet
8. Rentable square feet

B. Building Conditions

1. Location for fuel cell system
 - Roof top
 - Ground
 - Building Interior
 - Adequacy of accessibility
2. Fuel cell system support/foundation
 - Roof top
 - ☐ Roof materials of construction
 - ☐ Roof condition (remaining useful life)
 - ☐ Structural adequacy to support installed fuel cell system
 - Ground
 - ☐ Description and condition of area (paved surface vs. open ground)
 - ☐ Description of any necessary work to support fuel cell assembly
 - Building Interior
 - ☐ Description and condition of area of installation (including ventilation system and safety protection (fire, CO) system)
 - ☐ Description of any necessary work to support fuel cell system

- Description of major energy-consuming equipment (electric and thermal)
- Efficiency of existing heating system, i.e., boilers
- Description of electricity metering (number of boxes, location, etc.)
- Description of major heating load requirements
- Most recent utility electricity rate structure for property
- Most recent fuel (natural gas or other) rate structure for property
- Historic monthly electricity use and cost (in accordance with ASTM E2797-15)
 - Use data
 - Peak demand data
 - 15 minute (or hourly) interval data for a year, if available
- Historic monthly fuel use, i.e., natural gas or other, and cost (in accordance with ASTM E2797-15)

3. Building historic energy use and cost

II. Fuel-Cell System

- Fuel cell type—phosphoric acid, molten carbonate, proton exchange membrane, solid oxide, other
- System description (vendor, size, number of cells, etc.)
 - Estimated useful life
- Basis for system kW size selection
- Description of heat recovery system (i.e., for CHP), if applicable
 - Use of heat—space heating, DHW, pool heating, etc.
 - Estimated useful life of heat exchangers
- Noise level (dBA)
- Electric and total CHP efficiency, amount of energy displaced (electricity and gas)
- Schematic of system
- Controls and monitoring
- Necessary site modifications
- Air emissions (fuel cells exempt in CT from air permitting)
- Inverter information (capacity, efficiency, useful life, etc.)
- Distance from closest power line hook-up point (electrical run)
- Building code compliance and permit requirements
- Fuel cell vendor guaranteed performance, including product warranty
- Maintenance requirements
 - Routine maintenance requirements, e.g., air and fuel filters, reformer igniter or spark plug, etc.
 - Anticipated time before major overhaul for:
 - Shift catalyst replacement
 - Reformer catalyst replacement
 - Fuel cell stack replacement

III. Financial Analysis

- System total cost breakdown
 - Capital cost of the equipment
 - Installation costs (including engineering, construction, commissioning, related-site modification work (e.g., building roof and structural modifications, or ground foundation work), contingency, etc.)
- Total cost in \$/kW
- Available utility rebates/incentives
- Will the investment tax credit be used?
- Will accelerated depreciation be used?
- REC credits/sale
- Excess electricity sale back to the grid—covered under net metering (if applicable)
- Cost of a full maintenance contract (including both routine maintenance and major overhauls such as restacking) over the financing term or estimated useful life of the system if greater than the financing term
- Building monthly energy savings analysis including assumptions on avoided future utility electricity costs, any rate escalations (specifically discussing demand charge reduction and electricity cost savings basis)
- ROI, payback, IRR, NPV and projected cash flow analysis

IV. Commissioning and Monitoring

- System commissioning (Cx) plan (in particular, specify metering equipment and how the system will be monitored)
- Electricity production monitoring plan (electricity meter specification)
- If heat is also being recovered, plan to monitor heat being recovered
- Energy savings measurement and verification (M&V) plan

Appendix

APPENDIX F: THIRD-PARTY CAPITAL PROVIDER TERM SHEET

[attached separately]

[website link to current version]

APPENDIX G: C-PACE QUALIFIED CAPITAL PROVIDERS APPLICATION SUBMISSION & REVIEW PROCESS

Standard Offer Capital Providers

~~Greenworks Lending, LLC~~

~~Clean Fund Commercial PACE Capital, Inc.~~

Qualified Capital Providers

~~Ameresco, Inc.~~

~~Banc of America Public Capital Corp.~~

~~Bostonia Partners LLC~~

~~Citigroup Inc.~~

~~Counterpointe Energy Solutions LLC~~

~~Darien Rowayton Bank~~

~~Deutsche Bank~~

~~First Viridian Financial, LLC~~

~~Hannon Armstrong Sustainable Infrastructure Capital, Inc.~~

~~Healthy Planet Partners, LLC~~

~~Inland Green Capital LLC~~

~~Kawa Capital Management~~

~~Macquarie Group Limited~~

~~Nexos Resource Partners, LLC~~

~~PACE Connecticut~~

~~Peoples United Financial, Inc.~~

~~Renew Energy Partners LLC~~

~~Structured Finance Associates~~

~~Urban Atlantic~~

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Appendix H: STANDARD OFFER AND ADMINISTRATIVE AGREEMENT

Connecticut Green Bank – [Capital Provider] Summary of Terms and Conditions for Origination, Funding and Administration of C-PACE Transactions

~~The Connecticut Green Bank (the “Program Administrator” or “Green Bank”) hereby presents this term sheet, which summarizes the primary terms and conditions for the Program Administrator and [Capital Provider] (the “Capital Provider”), regarding originating, funding and administration C-PACE transactions for qualifying commercial, industrial, not for profit and multifamily properties within the State of Connecticut (the “Term Sheet”).~~

~~This Term Sheet is intended as an outline of the key material terms of the originating, funding and administration relationship between the Program Administrator and the Capital Provider. Any agreement between the parties and/or commitment by the Program Administrator and the Capital Provider shall be effective only upon the execution of a model Benefit Assessment and Lien Assignment and Administration Agreement setting forth the terms of such agreement, in substantially the form attached hereto as Appendix B.~~

~~The transactions contemplated by this Term Sheet are subject to all necessary Program Administrator approvals, as directed by the Program Administrator’s bylaws, and Sections 16-245n and 16a-40g of the Connecticut General Statutes.~~

PROCESS FLOW AND OUTLINE FOR TRANSACTIONS CONTEMPLATED BY THIS TERM SHEET

~~As described in more detail below, the outline of the originating, funding and administration relationship between the Program Administrator, Borrower and the Capital Provider, is as follows:~~

- ~~1. Capital Provider or Borrower may submit a completed C-PACE Application and all associated documents described in Capital Provider’s or Borrower’s Obligations for any Eligible Project, as such terms are defined below.~~
- ~~2. Program Administrator shall review such documents and, in its sole discretion, provide Program Administrator Approval of the Eligible Project (thereby becoming an “Approved Project”).~~
- ~~3. Capital Provider may then enter into a Financing Agreement with Borrower (thereby becoming a “Closed Project”).~~
- ~~4. Capital Provider shall enter into an Administration Agreement with the Program Administrator for such Closed Project, with a Credit Enhancement if applicable.~~
- ~~5. Program Administrator would facilitate the filing, and assignment to Capital Provider of Benefit Assessment.~~
- ~~6. Program Administrator will work with the Municipality to collect any payments received pursuant the Benefit Assessment and remit such payments to Capital Provider.~~

TRANSACTION PARTIES

Program Administrator:	Connecticut Green Bank, a quasi-public agency of the State of Connecticut and statewide administrator of the Commercial Property Assessed Clean Energy Program ("C-PACE") authorized by Section 16a-40g of the Connecticut General Statutes (the "Act").
Capital Provider:	The Capital Provider will provide, has secured or plans to secure the ability to fund transactions as described in this Term Sheet. If applicable, this capital will be provided from the following sources: [Name, terms of commitments and amount of Capital Source(s). Please include a letter of intent]
Trustee:	[If applicable, Name]
Program Administrator's Technical Advisor:	Any designee as determined from time to time by the Program Administrator.
Program Administrator's Services:	Cortland Capital Market Services LLC, or any designee as determined from time to time by the Program Administrator.
Borrower:	The real property owner of an Eligible Project.
Municipality:	Any Connecticut municipality in which an Eligible Project is located and which municipality has entered into a legal agreement with the Program Administrator in order to participate in the C-PACE program.

PROJECT ORIGINATION, ELIGIBILITY AND APPROVAL

C-PACE Application:	C-PACE program application published by the Program Administrator, as may be later amended, found on www.cpace.com . To be completed for each Eligible Project by a Borrower or Capital Provider.
Program Guidelines:	C-PACE program guidelines published by the Program Administrator, as may be amended from time to time, pursuant to the Act and as found on www.cpace.com .
Eligibility Criteria:	The Eligibility Criteria may be modified from time to time by the Program Administrator to reflect any changes in market conditions but at all times must meet the minimum eligibility criteria in the Act.
Eligible Project:	Qualifying improvements, as described in the Act, which conform to Eligibility Criteria and conform to the Program Guidelines.

Underwriting Guidelines: Underwriting Guidelines as they appear in the Program Guidelines, as updated from time to time on www.c-pace.com, attached hereto as Appendix A. The Underwriting Guidelines only apply if Capital Provider seeks to access the Credit Enhancement.

Capital Provider's or Borrower's Obligations: Borrower or Capital Provider (if authorized by Borrower to do so) must provide the following documents to the Program Administrator for each Eligible Project seeking Program Administrator Approval:

1. Recent (within sixty days) title search of the real property on which Eligible Project would be located.
2. If applicable, a mortgage holder consent form signed by the Borrower and any mortgage holder(s) of any mortgage(s) on the property on which the Eligible Project is located. The mortgage holder consent shall be materially consistent with the form of Appendix D, such consent must be for not less than the financing amount of the Eligible Project for which Borrower is seeking Program Administrator Approval.
3. If applicable, copies of filed releases for any mortgages that appear on the title search but have since been released. Any releases which cannot be obtained must be addressed through a title affidavit acceptable to Program Administrator in its sole discretion.
4. A completed energy audit or feasibility study of the Eligible Project as described in the Program Guidelines.
5. Any documentation reasonably required by Program Administrator which demonstrates that the Eligible Project meets the SIR Requirement (as described below).
6. A disclosure of risk form signed by the Borrower summarizing the risks to Borrower for C-PACE financing in the form of Appendix C, as may be modified from time to time by Program Administrator in its sole discretion.
7. Current assessor property card describing the property on which the Eligible Project is located and any additional documentation reasonably required by Program Administrator to confirm that the Eligible Project is located on a qualifying property pursuant to the Act and the Program Guidelines.

SIR Requirement: Pursuant to the Act, the energy cost savings associated with any Eligible Project's energy improvements over the useful life of such improvements must exceed the costs of such improvements (i.e., a saving to investment ratio "SIR" greater than one). For each Eligible Project the Borrower or Capital Provider must meet this SIR requirement in one of the following ways:

1. Submit energy audit and/or feasibility study and requisite supporting documentation to the Program Administrator's Technical Advisor via the C-PACE Data Management Platform (CDMP). The CDMP is a project development software application that helps Borrowers, Capital Providers, and their contractors develop projects in accordance with the C-PACE Program Guidelines and SIR requirement.
2. Submit the C-PACE Technical Application Form (Appendix E) in its entirety with the audit and/or feasibility study and requisite supporting documentation appended. C-PACE Technical Applications must be prepared and submitted by an "energy engineer". Per the C-PACE Program Guidelines, an energy engineer is defined as a professional holding a Certified Energy Manager or Certified Energy Auditor accreditation, a Professional Engineer with demonstrated relevant energy experience, or a contractor with relevant demonstrated experience as

determined by the Program Administrator in its sole discretion.

3. ~~Propose a process or project development platform through which an audit and/or feasibility study and requisite supporting documentation that demonstrates an SIR > 1 may be provided to the Program Administrator in a standard format. Proposals must be consistent with the C-PACE Program Guidelines.~~

Program Administrator's Obligations:

Program Administrator will continue to administer the C-PACE program as described in the Act and the Program Guidelines. Such responsibilities include:

1. ~~Reviewing documents provided pursuant to Capital Provider's or Borrower's Obligations and, in Program Administrator's sole discretion, providing Program Administrator Approval.~~
2. ~~Entering into legal agreements with any Connecticut municipality whose legislative body passes a resolution to participate in the C-PACE program.~~
3. ~~Coordinating with municipalities in order to ensure that Benefit Assessment liens and assignments of such liens are filed in a timely manner.~~
4. ~~Working with municipalities and the Program Administrator's Servicer in collecting repayment of Benefit Assessments and remitting such payments to Capital Provider.~~

Program Administrator Approval:

~~Once Capital Provider or Borrower has submitted all necessary documents described under Capital Provider's or Borrower's Obligations for each Eligible Project, and submitted any additional documents which may be reasonably requested by Program Administrator, Program Administrator will review such documentation and confirm that it meets the requirement of the Act, Eligibility Criteria, Program Guidelines, SIR Requirement, Underwriting Guidelines (if applicable), this Term Sheet, and any documentation thereunder. Upon completion of such review, Program Administrator, in its sole discretion, will provide a signed approval to Borrower, which shall not be unreasonably withheld, for each Eligible Project in a reasonable time (thereby becoming an "Approved Project").~~

BENEFIT ASSESSMENT FUNDING

Financing Agreement:

~~Once an Eligible Project has become an Approved Project, Capital Provider and Borrower may enter into a financing agreement for the Approved Project (thereby becoming a "Closed Project"). Such financing agreement must contain terms and documentation consistent with this Term Sheet, the Administration Agreement, the Act and must include a standard rider setting forth the Program Administrator's role and responsibilities in administering the C-PACE Program. The form of such financing agreement must be approved by Program Administrator in its reasonable discretion. Such financing agreement shall be secured by a Benefit Assessment as described below.~~

Administration Agreement:

~~The C-PACE Benefit Assessment and Lien Assignment and Administration Agreement in the form of Appendix B. Capital Provider and Program Administrator must enter into this agreement for every Closed Project.~~

Benefit Assessment:

~~A benefit assessment which constitutes a valid and enforceable lien which takes precedence over all other liens or encumbrances except municipal property tax liens, as authorized by the Act. The benefit assessment is subject to the consent of~~

~~existing mortgage holders and does not accelerate upon sale or transfer of the property.~~

~~Each benefit assessment will be equal to the principal amount of the benefit assessment for each Approved Project with interest thereon at the contracted rate plus any additional fees and expenses pursuant to the Financing Agreement with equal installments of principal and interest required to fully amortize the assessment over the Benefit Assessment term.~~

Benefit Assessment Filing Process:

~~Pursuant to the Administration Agreement for a Closed Project, the Program Administrator, upon receiving notice from the Capital Provider, will work with the municipality to file a Benefit Assessment on the property and assign the Benefit Assessment to the Capital Provider. Any costs to Program Administrator associated with filing the Benefit Assessment shall be paid by Capital Provider as described in the Administration Agreement.~~

~~Any amendments to the Benefit Assessment payment schedule which may need to be filed pursuant to the Financing Agreement and Administration Agreement must be provided to Program Administrator no less than 60 days before the real property tax billing cycle in which a payment is due pursuant to such Benefit Assessment.~~

Collection Method:

~~The Program Administrator's Servicer will function as the master collection agent for the Benefit Assessment cash flows by collecting all Benefit Assessment payments from each municipal tax collector for deposit with the Trustee for disbursement to the Capital Provider, or the Capital Provider's designee(s) pursuant to the Administration Agreement.~~

Credit Enhancement:

~~If requested by Capital Provider and Conditions of Credit Enhancement are met, Program Administrator may, in its sole discretion, participate in 10% of Capital Provider's final Benefit Assessment portfolio for Closed Projects closed between January 2015 through June 2016 (inclusive).~~

~~Total Program Administrator participation is not to exceed one million dollars (\$1,000,000) per Capital Provider, unless otherwise agreed to by Program Administrator and Capital Provider.~~

~~Such Credit Enhancement will be in the form of either (i) subordinated capital participation or (ii) a loan loss reserve with administration and commitment fees, at Program Administrator's sole discretion, and will be documented, if applicable, in the Administration Agreement.~~

~~The availability of such funds or undertaking if not utilized will expire on June 30, 2016 and is subject to the Conditions of Administrator's Credit Enhancement and Funding Termination Provisions.~~

~~The Credit Enhancement will not be available during the construction period of the Closed Project.~~

Conditions of Credit Enhancement:

~~The following conditions will be met before Program Administrator provides a Credit Enhancement:~~

- ~~1. The construction of the Closed Project is complete and verified by Program Administrator.~~
- ~~2. The Benefit Assessment has been filed on the property.~~
- ~~3. Capital Provider must provide an appraisal conducted within the last two years for each Closed Project property. At Program Administrator's discretion, the Municipality assessor's card may be acceptable to determine property value.~~
- ~~4. Diligence materials representing and warranting that the project's Loan to Value ratio, including the Benefit Assessment, does not exceed 80%. Such material must include, if applicable, certified true and correct current statements of any outstanding mortgage debt obligations.~~
- ~~5. Capital Provider must represent and warrant that each Closed Project meets the Underwriting Guidelines and provide an outline of the financial underwriting supporting such conclusion. Exceptions to the Underwriting Guidelines may be approved by the Program Administrator in its sole discretion.~~
- ~~6. Any additional documents required by the Program Administrator in its reasonable discretion.~~

PROGRAM ADMINISTRATOR COSTS

Program Administrator Costs: Program Administrator's costs under this Term Sheet, shall be as follows:

- ~~1. \$200 per Closed Project for the filing and servicing of Benefit Assessment to be paid by Capital Provider pursuant to the mutual execution of the Administration Agreement.~~
- ~~2. \$25/month for billing and collection of the Benefit Assessment over the Benefit Assessment term to be paid by Capital Provider from the Benefit Assessment proceeds, as described in the Administration Agreement.~~
- ~~3. For evaluation of the SIR Requirement, to be paid by Capital Provider or Borrower upon submission of energy audit/feasibility study and supporting documentation:

 - ~~a. If utilizing the CDMP, the lesser of 1.00% of the C-PACE Finance Amount (less Capital Provider's fees) or \$5,000, but no less than \$1,500.~~
 - ~~b. If utilizing the C-PACE Technical Application (Appendix E), the lesser of 1.25% of the C-PACE Finance Amount (less Capital Provider's fees) or \$7,500, but no less than \$1,500.~~
 - ~~c. If proposing a separate process, this fee will be negotiated with the Connecticut Green Bank.~~~~
- ~~4. Access to the Credit Enhancement, if applicable, will carry an application fee of \$5,000 per Closed Project, to be paid by the Capital Provider.~~

~~Program Administrator's costs described in this section are not exclusive and Program Administrator reserves the right to charge Capital Provider for additional costs and expenses associated with the administration of the C-PACE Program pursuant to the Act and the Program Guidelines.~~

CAPITAL PROVIDER'S FUNDING PROGRAM

Capital Provider's Funding: The Capital Provider will provide, or cause to be provided, 100% of the Benefit Assessment including any fees upon the closing date of each

~~Financing Agreement and drawdown by the Borrower, subject to the Conditions of Capital Provider's Funding and Funding Termination Provisions.~~

Conditions of Capital Provider's Funding:

~~The following conditions will be met before Capital Provider provides any Capital Provider Funding:~~

- ~~1. Verification that Capital Provider or Borrower received Program Administrator Approval for the Eligible Project.~~
- ~~2. A Financing Agreement has been signed by the Borrower and notarized.~~
- ~~3. At Capital Provider's discretion, confirmation that the Benefit Assessment lien has been filed on the property and assigned to Capital Provider.~~
- ~~4. If Capital Provider is using the Credit Enhancement, proof of Capital Provider's funding or commitment for funding from a third party.~~
- ~~5. Signed service agreement or construction contract between Borrower and energy service provider.~~

Capital Provider's Rate:

~~Interest rates for the Capital Provider's Funding will be determined by the Capital Provider~~

Term:

~~Term of the Benefit Assessment will not exceed 20 years, or the weighted average useful life of any Approved Project, whichever is less.~~

Closing Fees:

~~The Capital Provider is able to charge closing fees at their discretion to the Borrower.~~

Prepayment:

~~Capital Provider may charge a prepayment penalty at its discretion.~~

~~If the Credit Enhancement is used, Program Administrator will be paid, for its exposure reduced, pari passu with Capital Provider in the event of a prepayment.~~

Collections, Repayment and Amortization Schedule:

~~Payments due pursuant to the Benefit Assessment shall be due in accordance with the payment schedule attached to the Benefit Assessment, such payment schedule shall match the property tax billing cycle of the Municipality.~~

~~The Program Administrator's municipal agreements give municipalities 30 days from the end of the month in which tax payments are received for the municipalities to remit assessment payments to the Program Administrator's Servicer.~~

~~Payments from the Program Administrator's Servicer (subject to receipt from the Municipality) will be received by Trustee or Capital Provider no later than 20 business days after receipt of any such payments.~~

Distribution:

~~If the Program Administrator participates in Capital Provider's Benefit Assessment portfolio for Closed Projects, then on any payment date, using available collections from the tax collector as remitted by Program Administrator's Servicer to the Capital Provider (or if applicable, the Trustee), the Capital Provider (or if applicable, Trustee) shall disburse such funds for each Benefit Assessment as follows:~~

- ~~1. To the Capital Provider, the relevant share of interest collected in connection with~~

~~such Benefit Assessment.~~

- ~~2. To the Capital Provider, the relevant share of principal collected.~~
- ~~3. To the Program Administrator, if applicable, the relevant share of interest collected in connection with such Assessment.~~
- ~~4. To the Program Administrator, if applicable, the relevant share of principal collected in connection with such Assessment.~~

Exclusivity:

~~For any Borrower of any Eligible Project for which the Capital Provider submits a C-PACE Application, the Program Administrator shall not enter into a C-PACE funding or finance agreement with such Borrower for a period of six months (measured from the date of a complete submission of all documents outlined in Capital Provider's or Borrower's Obligations). This section does not apply if (1) the same Borrower requests Program Administrator funding or financing for a materially different Eligible Project, or (2) the Capital Provider fails to submit all necessary documents pursuant to Capital Provider's or Borrower's Obligations for an Eligible Project within a commercially reasonable time.~~

Funding Termination Events:

~~The occurrence of any of the following:~~

- ~~1. A final judgment by a court of competent jurisdiction that the Assessments are not valid and enforceable under Connecticut law, or any unstayed injunctive relief, the effect of which would be to prevent servicing or collection of any Benefit Assessments.~~
- ~~2. The dissolution of the Capital Provider by insolvency, bankruptcy, failure to maintain applicable licenses, etc.~~
- ~~3. A respective breach of any covenant by the Program Administrator or Capital Provider (subject to applicable cure).~~
- ~~4. Any final judicial or legislative determination that the Benefit Assessments are not a valid and enforceable lien, subject to the consent of existing mortgage holders, which take precedence over all other liens or encumbrances except for taxes of the municipality on real property.~~
- ~~5. Force majeure or similar change of circumstance which make the ability or likelihood of continued funding infeasible.~~
- ~~6. A material adverse change in (a) the business, properties, operations, prospects or condition (financial or otherwise) of the Program Administrator or the Capital Provider, taken as a whole, or (b) the ability of the Program Administrator to perform, or to enforce, any obligations.~~
- ~~7. Program Administrator or Capital Provider may give notice of termination at any time prior to an execution of a Financing Agreement for a particular Eligible Project, if, in the sole determination of the Program Administrator (given in writing by and through a duly authorized officer) or the Capital Providers, the negotiation of such Financing Agreement cannot be accomplished in good faith. In the event such notice is provided, any obligation to fund or to use the funding addressed herein shall terminate, and each party shall be responsible for its own costs incurred prior to termination.~~

~~Upon the occurrence of Funding Program Termination Event, the Capital Provider and the Program Administrator shall have the right, but not the~~

~~obligation to cease all future funding. The Capital Provider and the Program Administrator shall continue to be bound by their respective obligations with respect to the Closed Projects with executed Financing Agreements.~~

Representations:

~~The Program Administrator shall provide representations to the Capital Provider that shall include but are not limited to:~~

- ~~1. Each Benefit Assessment is a legal, valid and binding obligation and enforceable in accordance with provisions of Connecticut law.~~
- ~~2. No Eligibility Criteria have been waived, altered or modified in any respect, except as approved by the Program Administrator and the Capital Provider.~~

~~The Capital Provider shall represent that any Eligible Projects will be submitted to the Program Administrator in good faith and with a willingness to fund, subject to Eligibility Criteria, Program Guidelines, Administration Agreement, Underwriting Guidelines (if applicable) and this Term Sheet.~~

Covenants:

~~Key covenants of the Program Administrator and the Capital Provider include, but are not limited to:~~

- ~~1. Continuation as a legal entity.~~
- ~~2. Compliance with applicable laws.~~
- ~~3. Compliance with the terms of all transaction documents.~~
- ~~4. Compliance with reporting requirements.~~
- ~~5. Provision of all reasonably necessary assistance for the Program Administrator's Technical Advisor and Program Administrator's Servicer to perform its functions in a prudent manner.~~
- ~~6. Use of all reasonable means to resolve disputes with the property owner, contractors, vendors, or public officials in favor of full and timely payment to the Capital Provider and Program Administrator.~~

**Account Remediation/
Dispute Resolution:**

The Capital Provider will have the right to participate in any formal or informal dispute or disagreement involving any private party or public official, including the Town Clerks, Tax Collector or Property Assessors (or the functionally equivalent official) in the Municipality in order to represent the interests of the Capital Provider, in any matter associated with the Benefit Assessments, the prompt and proper posting and collection of same and the timely and accurate disbursement of such revenues, including the filing or participation as an intervener or amicus in any administrative, injunctive, or court proceeding Capital Provider deems necessary to protect its interests or otherwise compel the collection and delivery of any revenue pledged to support the repayment of any obligations of the Program Administrator.

Documentation:

This Term Sheet is subject to mutually agreeable final documentation, including but not limited to:

1. Satisfactory legal opinions if requested by the Program Administrator.
2. Completion of due diligence.
3. Satisfactory legal documentation, including the Administration Agreement.

**Enabling Statute and State
Contracting Provisions:**

The Parties are subject to the requirements outlined in Sections 16-245n and 16a-40g of the Connecticut General Statutes and Capital Provider and Capital Providers will be responsible for complying with applicable state contracting requirements. The transaction contemplated by this Term Sheet is subject to all necessary Program Administrator approvals, including approval of its board of directors.

CONNECTICUT GREEN BANK

Signature _____

Name: Bryan Garcia

Title: President and CEO

Date: _____

[attached separately]

[website link to current version]

APPENDIX H: DISCLOSURE OF RISK FORM

[attached separately]

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APPENDIX I: THIRD-PARTY CAPITAL PROVIDER ~~(OR BORROWER)~~

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Signature _____

Name:

Title:

Appendix A

Connecticut Green Bank's Underwriting Guidelines

Connecticut Green Bank's financial underwriting requirements for projects financed or supported with The Connecticut Green Bank capital are as follows:

1. There must be no unresolved payment issues concerning debts to or guaranteed by the Connecticut Green Bank or any other third parties. For the purpose of these standards, "material" means the greater of (a) 10% of the proposed C-PACE financing or (b) \$50,000.
2. Total debt, including the C-PACE assessment, does not exceed 80% of the property's value. This can utilize or may require an as-complete appraisal, which can be wrapped into the overall C-PACE assessment amount.
3. Absent special circumstances, including but not limited to a property unencumbered by a mortgage or other compelling economic or financial conditions, the Benefit Assessment must not exceed 35% of the value of the property, after giving consideration to the value increment that may be afforded by the enhancements to the property being financed. In the Green Bank's sole discretion, the C-PACE assessment may exceed 35% of the property's value if at least three of the following eight conditions are met:

i. Cash flow conditions

1. A long term revenue contract with investment grade counterparty is in place
2. The savings to investment ratio of the project is greater than or equal to 1.25x
3. The debt service coverage ratio of the project is greater than or equal to 1.75x

ii. Asset conditions

1. The total liabilities to tangible net worth ratio of the project is less than or equal to 1.5x
2. The building has been owner-occupied for 10 years or more

iii. Project conditions

1. The owner provides an equity contribution greater than or equal to 15% of total project costs

~~2. There is a savings or production guarantee; third-party performance insurance, or agreement with a national ESCO in place~~

~~3. The term of the C-PACE assessment is 10 years or less~~

~~4. Applicant financial performance should meet the following criteria, as applicable:~~

- ~~a. Positive operating profit and net income in each of last 2 fiscal years~~
- ~~b. Positive cash from operations in each of last 2 fiscal years~~
- ~~c. EBITDA/debt service (including the proposed C-PACE assessment after considering savings that are expected to result from the financing) of at least 1.25x for last fiscal year~~
- ~~d. Current ratio of at least 1.25:1.00~~
- ~~e. Total Liabilities / Tangible Net Worth not in excess of 2.00:1.00 (single or special purpose entities holding only real estate investments should generally be limited to 4.00:1.00)~~
- ~~f. Interim statements disclose no material adverse change in financial condition~~

~~5. Boiler Lite and Solar Lite projects may undergo an accelerated underwriting process if they meet the following criteria:~~

- ~~a. Lien to Value \leq 20%~~
- ~~b. Total Project Size \leq \$300,000~~
- ~~c. SIR \geq 1.0~~
- ~~d. Current on mortgage and taxes~~

~~Most recent two years of financials show no adverse condition (at finance team's discretion)~~

~~In conducting its financial underwriting of potential C-PACE projects, the Connecticut Green Bank will consider the property's financial strength in a holistic and comprehensive fashion. For properties where a given underwriting criterion is not met, the Connecticut Green Bank may still approve the property for C-PACE financing if the property shows sufficient strength with regard other required metrics.~~

~~All C-PACE applicants must fill out a financial application, which can be found in the Initial Application (Appendix D to the Program Guidelines).~~

Appendix B

FORM OF C-PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT AND ADMINISTRATION AGREEMENT

THIS C-PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT AND ADMINISTRATION AGREEMENT (“**Agreement**”) is made as of the ____ day of _____, 2015, by and between the Connecticut Green Bank (“**Green Bank**”) and _____ (“**Capital Provider**”).

BACKGROUND

1. The State of Connecticut has authorized a property assessed clean energy program for commercial or industrial properties (the “**Program**”) in Section 16a-40g of the Connecticut General Statutes, as amended (the “**Act**”).

2. Pursuant to the Act, Green Bank has established the Program, approved appropriations to provide financing under the Program and entered into an agreement with the municipalities in which qualifying properties are located to provide for the filing of benefit assessments and benefit assessment liens (as hereinafter provided) against the qualifying properties on the land records of the municipalities to secure the repayment of the benefit assessments.

3. _____ (the “**Borrower**”) owns real property located in the State of Connecticut known as [Address] and more particularly described in the hereto attached Appendix E (the “**Property**”). In accordance with the requirements of the Program, Borrower proposes to renovate or retrofit the Property to increase energy efficiency or to install a renewable energy system to service the Property, which renovation, retrofit or installations will be fixed to such Property (the “**Project**”) and has applied to Green Bank and the Capital Provider for financing the Project through a financing agreement and benefit assessment (the “**Financing Agreement**”) to be secured by a benefit assessment lien (the “**Benefit Assessment**”).

4. Green Bank has entered into an agreement with the [City/Town of Name] (the “**Municipality**”), where the Property is located, to file a benefit assessment lien against the Property upon completion of the Project, or at an earlier date, in accordance with the Act, and has agreed to cooperate with the Capital Provider in order for the Capital Provider to provide financing under the Benefit Assessment to the Borrower on the terms and conditions set forth in the Financing Documents, as hereinafter defined.

5. Capital Provider has entered into a Financing Agreement with the Borrower (collectively, the “**Financing Documents**”) pursuant to which Capital Provider will advance funds for the Projects for the benefit of the Borrowers pursuant to the Financing Agreement.

6. Borrower and Capital Provider has obtained consent from all existing mortgage holder(s) and, to the extent that any Property is encumbered indirectly by a mezzanine loan secured

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by a mortgage, from such mezzanine lenders, to the Benefit Assessment in accordance with the Act.

~~7. Capital Provider desires Green Bank to file a Benefit Assessments against the Property, assign to the Capital Provider such Benefit Assessment and the related lien, and collect and receive for the benefit of Capital Provider the sums payable under the Financing Documents, the Benefit Assessments and the related lien and to remit the sums collected and received pursuant to the Financing Documents, the Benefit Assessments and the related lien to the Capital Provider as provided for herein.~~

NOW, THEREFORE, the parties do hereby agree as follows:

~~1. **Assignment of Benefit Assessment and Benefit Assessment Lien.**~~

~~(a) Within three (3) Business Days after the execution of this Agreement, the delivery of the documents described in Section 4 hereof and approval of the Project by Green Bank, Green Bank will provide notice to the Municipality and the Municipality will levy the Benefit Assessment and file a lien on the Property in an amount sufficient to pay the estimated costs of the Project, Financing Documents, and any associated costs (including financing costs) Green Bank determines will benefit the Property (the "**Benefit Assessment Lien**"). The Benefit Assessment Lien shall include a schedule of payments due and payable pursuant to the Benefit Assessment, the Financing Documents and the real property tax billing cycle of the Municipality. A copy of a Benefit Assessment Lien is attached hereto materially in the form of Appendix A. The Municipality shall assign to Green Bank all powers and rights under the Benefit Assessment Lien by filing an Assignment of Benefit Assessment Lien, attached hereto materially in the form of Appendix B, on the land records of the Municipality. The Green Bank will assign to Capital Provider all powers and rights under the Benefit Assessment Lien by filing an Assignment of Benefit Assessment Lien, attached hereto materially in the form of Appendix C, on the land records of the Municipality. The Capital Provider may amend the Benefit Assessment Lien to adjust the payment schedule of the Benefit Assessment in accordance with the terms of the Benefit Assessment, Benefit Assessment Lien and Financing Documents. In such event, the Capital Provider shall provide to the Green Bank an executed Confirmation and Amendment of Benefit Assessment Lien and Payment Schedule, attached hereto materially in the form of Appendix D, which shall include the payment schedule of the Benefit Assessment consistent with the terms of the Benefit Assessment, Benefit Assessment Lien and Financing Documents. The Green Bank shall promptly file such Confirmation and Amendment of Benefit Assessment Lien and Payment Schedule on the land records of the Municipality. Any such Confirmation and Amendment of Benefit Assessment Lien and Payment Schedule must be provided to Green Bank no less than sixty (60) days before the real property tax billing cycle in which the next payment is due pursuant to such Confirmation and Amendment of Benefit Assessment Lien and Payment Schedule. Green Bank shall provide to Capital Provider filed copies of the Benefit Assessment Lien and any Confirmation and Amendment of Benefit Assessment Lien and Payment Schedule, promptly after receiving such recorded filings from the Municipality.~~

~~(b) The Capital Provider shall have and possess the same powers and rights at law or in equity as Green Bank and the Municipality and its tax collector would have had if the Benefit~~

~~Assessment Lien had not been assigned with regard to the precedence and priority of such Benefit Assessment Lien, the accrual of interest and the fees and expenses of collection. The Capital Provider shall have the same rights to enforce such Benefit Assessment Lien as any private party holding a lien on real property, including, but not limited to, foreclosure and a suit on the debt. Costs and reasonable attorneys' fees incurred by the Capital Provider as a result of any foreclosure action or other legal proceeding and directly related to the proceeding shall be taxed in any such proceeding against each person having title to any property subject to the proceedings. Such costs and fees may be collected by the Capital Provider at any time after demand for payment has been properly made by the Capital Provider.~~

~~**2. Green Bank's Warranties and Representations; Disclaimer.**~~

~~(a) Warranties and Representations. Green Bank hereby warrants and represents that:~~

~~(i) Green Bank is a body politic and corporate, constituting a public instrumentality and political subdivision of the State of Connecticut; and has full power and authority to enter into this Agreement and to carry out the terms and conditions contained herein;~~

~~(ii) no approval of, or consent from, any governmental authority is required for the execution, delivery or performance by Green Bank of this Agreement; and~~

~~(iii) the execution, delivery and performance by Green Bank of this Agreement and the transactions contemplated hereby (A) do not contravene any provisions of law applicable to Green Bank, and (B) do not conflict and are not inconsistent with, and will not result (with or without the giving of notice or passage of time or both) in the breach of or constitute a default or require any consent under any credit agreement, indenture, mortgage, purchase agreement, deed of trust, security agreement, lease, guarantee or other instrument to which Green Bank is a party, by which Green Bank may be bound, to which Green Bank or its property may be subject, the Act or Green Bank's bylaws.~~

~~(iv) this Agreement, the Benefit Assessment, the Benefit Assessment Lien, and the Green Bank's role hereunder comply with the Act. In the event of a conflict between this Agreement and the Act, the Act shall govern.~~

~~(b) Disclaimer. Except as set forth in this Section 2 or expressly provided in the Financing Documents: (i) Green Bank has not heretofore made, nor does it make by this Agreement, any representations or warranties with respect to the Properties, including any warranty of title or any environmental matters, and (ii) Green Bank makes no representation or warranty in connection with, and assumes no responsibility with respect to, the solvency, financial condition or statements of the Borrower, or with respect to the performance or observance by the Borrower of their obligations under the Financing Documents, after the date of execution of this Agreement.~~

~~**3. Capital Provider's Warranties and Representations.**~~

~~With respect to this Agreement, Capital Provider hereby warrants and represents that effective on the date on which Capital Provider executes this Agreement:~~

~~(a) (i) Capital Provider (A) is an entity (corporation, limited liability company, partnership) duly incorporated or organized, validly existing and in good standing under the laws of its state of incorporation or organization, and (B) has full power, and all licenses necessary, to own its properties to carry on its business as now being conducted and has full power to enter into this Agreement and to carry out the terms and conditions contained herein; and (ii) the execution of this Agreement on its behalf and its participation in the transaction specified herein and therein is in its ordinary course of business and within the scope of its existing corporate authority;~~

~~(b) there is no action, suit or proceeding pending against Capital Provider before or by any court, administrative agency or other governmental authority which brings into question the validity of, or might in any way impair, the execution, delivery or performance by Capital Provider of this Agreement;~~

~~(c) no approval of, or consent from, any governmental authority is required for the execution, delivery or performance by Capital Provider of this Agreement;~~

~~(d) the execution, delivery and performance by Capital Provider of this Agreement and the performance by Capital Provider hereunder and the transactions contemplated hereby, (i) do not contravene any provisions of law applicable to Capital Provider, and (ii) do not conflict and are not inconsistent with, and will not result (with or without the giving of notice or passage of time or both) in the breach of or constitute a default or require any consent under any credit agreement, indenture, mortgage, purchase agreement, deed of trust, security agreement, lease, guarantee or other instrument to which Capital Provider is a party, by which Capital Provider may be bound, to which Capital Provider or its property may be subject, or Capital Provider's charter or bylaws;~~

~~(e) this Agreement constitutes the legal, valid and binding obligation of Capital Provider, enforceable against Capital Provider in accordance with its terms, except as limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally, and by applicable laws (including any applicable common law and equity) and judicial decisions which may affect the remedies provided herein;~~

~~(f) Capital Provider has independently and without reliance upon Green Bank conducted its own credit evaluation of the Borrower, reviewed such information as it has deemed adequate and appropriate and made its own analysis of the Financing Documents;~~

~~(g) Capital Provider has not relied upon any investigation or analysis conducted by, advice or communication from, nor any warranty or representation by, Green Bank or any agent or employee of Green Bank, express or implied, concerning the financial condition of the Borrower, or the tax or economic benefits of an investment in the Financing Documents;~~

~~(h) Capital Provider has had (or acknowledges by its execution of this Agreement, that Capital Provider will prior thereto have had) access to all financial and other information that it~~

~~deems necessary to evaluate the merits and risks of an investment in the Financing Documents including the opportunity to ask questions, receive answers and obtain additional information from Green Bank and the Borrower necessary to verify the accuracy of information provided;~~

~~(i) Capital Provider acknowledges that Green Bank takes no responsibility for any financial information regarding the Borrower furnished to Capital Provider by Green Bank, and it or its authorized representatives acting on its behalf have such knowledge and experience in business and financial matters necessary to evaluate the merits and risks of an investment in the Financing Documents;~~

~~(j) Capital Provider is experienced in making investments in energy upgrade projects similar to the Project and Financing Documents and that it is financially able to undertake the risks involved in such an investment; and~~

~~(k) Capital Provider acknowledges that the Financing Documents as well as any other documents signed by the Borrower and required by Green Bank in connection with this Agreement were executed by a duly authorized signatory of the Borrower.~~

~~4. Delivery of Documents:~~

~~(a) As a condition to Green Bank's performance of its obligations with respect to this Agreement, all of the conditions precedent enumerated below must be satisfied (in Green Bank's reasonable discretion):~~

~~(i) Capital Provider shall have delivered to Green Bank all of the following, in form and substance reasonably satisfactory to Green Bank: (A) certified true and correct photocopies of the duly executed Financing Documents which directly relate to the Property and (B) an original of this Agreement duly executed by Capital Provider;~~

~~(b) As a condition to Capital Provider's performance of its obligations with respect to this Agreement, all of the conditions precedent enumerated below must be satisfied (in Capital Provider's reasonable discretion):~~

~~(i) Green Bank shall have delivered to Capital Provider all of the following, in form and substance reasonably satisfactory to Capital Provider: (A) certified true and correct photocopies of the Benefit Assessment Lien and assignment of such lien to Capital Provider which directly relate to the Property and (B) an original of this Agreement duly executed by Green Bank; and~~

~~(c) All of Capital Provider's, Green Bank's and Borrower's respective representations and warranties provided herein or in any of the Financing Documents shall be true and correct on the date of the execution of this Agreement.~~

~~5. Covenant:~~

~~No Action.~~ Green Bank and Capital Provider shall not, without the prior written consent of the other, take any action which impairs the rights of the other party (or its assignee or successor) with respect to the Financing Documents in and to which such covenanting party has no right, title or interest. Under no circumstances may Capital Provider file Uniform Commercial Code financing statements against Green Bank in connection with any of the transactions contemplated hereunder.

~~Future Environmental Land Use Restriction(s).~~ Capital Provider or any future assignee of the Benefit Assessment Lien or the Transaction Documents shall be bound by and irrevocably subordinated to any environmental land use restriction recorded against the Property on the land records of the Municipality pursuant to Conn. Gen. Stat. § 22a-133e.

~~6. Tax and Indemnities~~

~~(a) Charges.~~ Capital Provider shall pay any and all sales or use taxes or similar taxes, if any, that may be imposed by any federal, state or local government authority on any remittances made by Green Bank to the Capital Provider pursuant to this Agreement.

~~(b) Taxes.~~ With respect to this Agreement, Capital Provider shall be solely responsible for, and shall indemnify, protect, defend, save and keep harmless, Green Bank and each of its affiliates, and their respective officers, directors, employees and agents (each an "Green Bank Indemnitee") from and against any and all federal, state and local taxes, in each such case, to the extent any of the same are attributable to or otherwise assessed with respect to the period subsequent to the effective date of this Agreement, together with any assessments, penalties, fines additions to tax or interest related thereto, which at any time or from time to time may be imposed on, or asserted against, the Property (or any part thereof or any interest therein) or any Green Bank Indemnitee, by any federal, state, local or foreign government or taxing authority in connection with or relating to the Financing Documents or any of the transactions contemplated hereby and thereby.

~~(c) Notice of Claims.~~ Each of Green Bank and Capital Provider agrees to notify the other party promptly after becoming aware of any taxes or claims, whether pending or threatened that is the subject of indemnification pursuant to this Section 6; provided, however, that the failure by either such party to so notify the indemnifying party will not in any manner affect such indemnifying party's obligations under this Section 6, except to the extent, if any, the indemnifying party shall have been materially and adversely prejudiced by such failure.

~~7. Duties and Limitations.~~

~~The following provision shall apply except to the extent otherwise provided in the Financing Documents:~~

~~(a) Green Bank's and Capital Provider's Duties.~~ It is the intent and purpose of the parties that Green Bank or the Municipality shall bill for, collect and receive for the benefit of Capital Provider the sums payable under the Financing Documents and the Benefit Assessment and Benefit Assessment Lien, but shall otherwise act at the written direction of Capital Provider with respect to

~~all consents, waivers, rights and remedies available to the Capital Provider under such Financing Documents and Benefit Assessment. Unless Green Bank indicates in writing to Capital Provider, Capital Provider shall be responsible for all other servicing duties pursuant to the Financing Documents, such as, if applicable, obtaining insurance renewals and financial statements from the Borrower and arranging for Property inspections. Green Bank shall promptly deliver to Capital Provider all notices, demands and similar items received by it relating to the Financing Documents.~~

- ~~(i) In the event: (x) of an Event of Default under and as defined in the Financing Documents or an event which with the giving of notice or passage of time or both would constitute an Event of Default thereunder (any such event, an "Event of Default"); (y) Green Bank breaches any of its material obligations hereunder; or (z) upon thirty (30) days prior written notice from Green Bank or Capital Provider, and upon written notice by Capital Provider to Green Bank in the case of (x) or (y), Capital Provider may (and in the case of (z), shall) take over the billing and collection duties of Green Bank and, in such event, Capital Provider shall have the sole right, on behalf of Green Bank, to exercise any and all remedies available to it in connection with the billing and collection duties pursuant to this Agreement which are the subject of the Event of Default or notice. If Capital Provider takes over such billing and collection duties pursuant to this Agreement then the Green Bank shall have no obligations to bill or collect pursuant to this Agreement. In such event, the Capital Provider, in its sole capacity, shall continue such billing and collection for the term of the Financing Documents, however all payments made pursuant to the Financing Documents shall continue to be made to the Municipality's tax collector. Capital Provider shall (1) promptly notify the Green Bank in writing of any agreement(s) with the Borrower for payment of any delinquent amounts pursuant to the Financing Documents and the Benefit Assessment, (2) promptly notify the Borrower in writing that all payments made pursuant to the Financing Documents, or any subsequent agreements for payment of any delinquent amounts, must be made to the Municipality's tax collector, and (3) promptly notify the Green Bank in writing of any judicial proceeding(s) to enforce the Financing Documents and Benefit Assessment, including, but not limited to, foreclosure and a suit on the debt.~~
- ~~(ii) In an Event of Default the Green Bank shall have no obligation to bill or collect from the Borrower; however Green Bank shall continue to work with the Municipality to send standard benefit assessment bills and delinquency notices to the Borrower. In an Event of Default, the Capital Provider may request, and Green Bank in its sole discretion may accept, Green Bank to pursue billing and collection of delinquent payments from the Borrower. If Green Bank agrees to provide billing and collection services to Capital Provider after an Event of Default has occurred then Capital Provider shall reimburse Green Bank for all costs, fees and expenses associated with such billing and collection services.~~
- ~~(iii) If either party has actual knowledge of an Event of Default, it shall promptly~~

notify the other party thereof.

~~(b) — **Payments.** All monies received by Green Bank on the Financing Documents shall be held by Green Bank, or its designee, for the benefit of the Capital Provider for the purpose for which they were paid, but need not be segregated in any manner from any other monies of Green Bank and may be deposited by Green Bank, or its designee, in any general account maintained by Green Bank or, its designee, (the “**Collection Account**”). Green Bank, or its designee, shall pay all moneys from Collection Account due from the Borrower under the Financing Documents within five (5) Business Days of receipt of such good funds in the Collection Account (each such date, a “**Payment Date**”), provided that Green Bank, or its designee, has collected payment in good funds from the Borrower or the Municipality, such as a received wire or cleared check. Notwithstanding the forgoing, if the applicable Payment Date is not a Business Day, then the Payment Date shall be deemed to be the next Business Day. As used herein, “Business Day” shall be deemed to mean any day other than a Saturday, Sunday or holiday in which Green Bank or Capital Providers are closed in Connecticut. Green Bank, or its designee, shall make such monies available to Capital Provider by wire transfer of such monies to Capital Provider at such account as Capital Provider may specify in writing from time to time. If Green Bank, or its designee, fails to make such payment (or any part thereof) to Capital Provider within five (5) Business Days of such Payment Date, Green Bank shall pay Capital Provider one percent (1%) interest per month on, and in addition to, the amount of such payment (or any part thereof) but not exceeding the lawful maximum, if any.~~

~~(c) — **Limitations of Liability.** Green Bank undertakes to perform such duties and only such duties as are specifically set forth herein and no implied covenants or obligations shall be read into this Agreement against Green Bank. In performing its obligations hereunder, Green Bank shall use the same level of care as it uses for transactions in which it holds the entire interest for its own account, but shall not be liable to Capital Provider for any action taken or omitted to be taken by it hereunder or pursuant hereto, except for Green Bank’s failure to make sums available to Capital Provider as required under this Agreement or Green Bank’s gross negligence or willful misconduct. The duties of Green Bank shall be mechanical and administrative in nature and Green Bank shall not have by reason of this Agreement a fiduciary relationship with Capital Provider. Green Bank shall not be required to take any action if Green Bank shall have been advised by counsel that such action is contrary to law, the provisions of this Agreement or the provisions of the Financing Documents. As to any matters not expressly provided for by this Agreement, Green Bank shall not be required to exercise any discretion or take any action and in case of any question concerning its rights and duties hereunder, Green Bank may request written instructions from Capital Provider and refrain from taking action until it receives written instructions from Capital Provider. Green Bank shall be fully protected and have no liability to any person for acting or refraining from acting hereunder in accordance with the written instructions of Capital Provider. Green Bank shall, in the absence of knowledge to the contrary, be entitled to rely on any written instructions believed in good faith to be genuine and correct and to have been signed by an officer of Capital Provider.~~

~~**8. — Titling.**~~

~~(a) — **Holder of Benefit Assessment.** The Property described in the Financing Documents shall demonstrate that Municipality is the original holder of the Benefit Assessment that is~~

contractually obligated to immediately assign such Benefit Assessment to Green Bank. Upon the assignment described in Section 1 hereof, Green Bank shall assign all of its interest in the Benefit Assessment and the Benefit Assessment Lien to the Capital Provider or its designee, such that the Capital Provider, or its designee, shall become the holder of the Benefit Assessment and Benefit Assessment Lien upon the Property. Green Bank shall be responsible for promptly recording the assignment of the Benefit Assessment Lien in the applicable land records, with the costs of recording to be paid by Capital Provider.

~~(b) Appointment and Authorization. Green Bank shall take any actions reasonably requested in writing by Capital Provider relating to the Capital Provider being named as the holder of the Benefit Assessment and Benefit Assessment Lien relating to the Property.~~

9. Green Bank's Costs.

~~(a) Upon the execution of this Agreement Capital Provider shall pay Green Bank \$200 for Green Bank's duties and services provided pursuant to this Agreement, including but not limited to the filing and assignment, to Capital Provider, of the Benefit Assessment Lien. Any costs associated with filing any Confirmation and Amendment of Benefit Assessment Lien and Payment Schedule shall be paid by the Capital Provider. Additionally, the Capital Provider shall pay Green Bank \$25 per month for Green Bank's duties and services provided pursuant to this Agreement, including but not limited to the collection of funds pursuant to such Benefit Assessment Lien, this monthly fee shall be collected by the Green Bank from the funds deposited in the Collection Account pursuant to the Benefit Assessment and Benefit Assessment Lien, before such funds are remitted to the Capital Provider pursuant to Section 7 of this Agreement. Any additional expenses incurred by Green Bank in connection with its performance of its duties obligations under this Agreement shall be borne by Capital Provider and Capital Provider shall reimburse Green Bank for any such out of pocket costs and expenses incurred by Green Bank.~~

~~(b) No provisions of this Agreement shall require Green Bank (i) to expend or risk its own funds except as necessary in the ordinary course of business as the statewide administrator of the Program or to perform its obligations under this Agreement or (ii) to otherwise incur any financial liability in the performance of any of its duties hereunder. Any expenses incurred by Green Bank in connection with any actions with respect to the Financing Documents to which Capital Provider has requested shall be borne by Capital Provider and Capital Provider shall reimburse Green Bank for any such out of pocket costs and expenses incurred by Green Bank.~~

10. Indemnity.

~~(a) Capital Provider agrees to indemnify and hold harmless Green Bank and any of its directors, officers, employees or agents, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgment, suits, costs, expenses, taxes or disbursements of any kind or nature whatever (including attorneys' fees) which may be imposed on, incurred by or asserted against any of them in any way relating to or arising out of any action taken or omitted by either or any of them pursuant to a breach by Capital Provider of this Agreement, to the extent not reimbursed by the Borrower, provided that Capital Provider shall not be liable to Green Bank for any portion of such liabilities, obligations, losses, damages, penalties, actions, judgment, suits,~~

~~costs, expenses or disbursements resulting from the gross negligence of willful misconduct of Green Bank or any of its directors, officers, employees or agents; and~~

~~(b) — Green Bank shall indemnify and hold harmless Capital Provider, its successors and assigns, and all of its directors, officers, employees or agents, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgment, suits, costs, expenses or disbursements of any kind or nature whatever (including attorneys' fees) which may be imposed on, incurred by or asserted against any of them in any way arising out of or resulting from a breach by Green Bank of this Agreement or the gross negligence of willful misconduct of Green Bank or any of its directors, officers, employees or agents.~~

~~**11. — Miscellaneous:**~~

~~(a) — Assignment. Except as provided in this Agreement, neither party may assign or delegate its respective rights or obligations hereunder without the prior written consent of the other party which consent shall not be unreasonably withheld, provided that Capital Provider may assign this Agreement upon notice to Green Bank. Subject to the foregoing, this Agreement inures to the benefit of, and is binding upon, the successors and permitted assigns of the parties hereto.~~

~~(b) — Notices. All notices and other communications hereunder shall be in writing, personally delivered or sent by facsimile or certified mail, return receipt requested, addressed to the other party at its respective address stated below the signature of such party or at such other address as such party shall from time to time designate in writing to the other party; and shall be effective from the date of receipt.~~

~~(c) — GOVERNING LAW. THIS AGREEMENT AND EACH SPECIFICATION AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER AND THEREUNDER SHALL IN ALL RESPECTS BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF CONNECTICUT (WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES OF SUCH STATE), INCLUDING ALL MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE.~~

~~(d) — Entire Agreement. This Agreement and the Assignment and the Notice constitutes the entire agreement between the parties with respect to the subject matter hereof and shall not be amended or altered in any manner except by a document in writing executed by both parties.~~

~~(e) — Titles. Section titles are for convenience of reference only and shall not be of any legal effect.~~

~~(f) — Further Assurances. The parties further covenant and agree to do, execute and deliver, or cause to be done, executed and delivered, and covenant and agree to use their respective reasonable best efforts to cause their successors and assigns to do, execute and deliver, or cause to be done, executed and delivered, all such further acts, transfers and assurances, for implementing the intention of the parties under this Agreement, as the parties and their successors and assigns reasonably shall request.~~

~~(g) — Not an Extension of Credit. This Agreement constitutes an assignment of future Benefit Assessments and their related Benefit Assessment Liens and shall in no way be construed as an extension of credit by Capital Provider to Green Bank. In the event of an insolvency of Green Bank, Green Bank shall not claim any such Benefit Assessment or its related Benefit Assessment Lien as an asset of its estate, the parties hereto acknowledging that their intent is to treat assignment as a transfer of Green Bank's right, title and interest in and to any such Benefit Assessment and its related Benefit Assessment Lien as they relate to the Property.~~

~~(h) — Transaction Expenses. Each of Green Bank and Capital Provider shall bear and be responsible for its own costs and expenses incurred in connection with the negotiation, preparation, execution and delivery of this Agreement and any other agreements, documents, certificates and instruments relating hereto, and it shall not have any right of reimbursement or indemnity for such costs and expenses as against the other party.~~

~~(i) — Counterparts. With respect to each of this Agreement, the Notice and any of the other documents to be delivered pursuant to this Agreement, each such agreement may be executed in any number of counterparts, all of which when taken together shall constitute one agreement binding on all parties, notwithstanding that all parties are not signatories to the same counterpart.~~

~~(j) — Survival. The respective representations and warranties of Green Bank and Capital Provider contained in this Agreement shall survive the termination of this Agreement.~~

~~(k) — Recitals. Both parties agree that all of the recitals are hereby incorporated herein and are acknowledged as being true and correct.~~

~~(l) — Waiver of Jury Trial. GREEN BANK AND CAPITAL PROVIDER HEREBY UNCONDITIONALLY WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF, DIRECTLY OR INDIRECTLY, THIS AGREEMENT, ANY OF THE FINANCING DOCUMENTS, ANY DEALINGS BETWEEN GREEN BANK AND CAPITAL PROVIDER RELATING TO THE SUBJECT MATTER HEREOF OR THEREOF, AND/OR THE RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN GREEN BANK AND CAPITAL PROVIDER. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT (INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS). THIS WAIVER IS IRREVOCABLE, MEANING THAT IT MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING, AND THE WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT, ANY SPECIFICATION OR THE FINANCING DOCUMENTS. IN THE EVENT OF LITIGATION, THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.~~

~~**12. — State Contracting Obligations.**~~

~~Capital Provider understands and agrees that Green Bank will comply with Conn. Gen. Stat. Sections 4a-60 and 4a-60a. Capital Provider agrees to comply for the period of performance~~

~~with the state contracting obligations in this Section 12. For purposes of this Section 12, Contractor and Capital Provider shall have the same meaning and Contract and Agreement shall have the same meaning.~~

~~Conn. Gen. Stat. § 4a-60(a):~~

~~“Every contract to which the state or any political subdivision of the state other than a municipality is a party shall contain the following provisions:~~

~~—(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to insure that applicants with job related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;~~

~~—(2) The contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action equal opportunity employer" in accordance with regulations adopted by the commission;~~

~~—(3) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;~~

~~—(4) The contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e and 46a-68f; and~~

~~—(5) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this section and section 46a-56.”~~

Conn. Gen. Stat. § 4a-60a(a):

~~“Every contract to which the state or any political subdivision of the state other than a municipality is a party shall contain the following provisions:~~

~~— (1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the state of Connecticut, and that employees are treated when employed without regard to their sexual orientation;~~

~~— (2) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;~~

~~— (3) The contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said commission pursuant to section 46a-56; and~~

~~— (4) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor which relate to the provisions of this section and section 46a-56.”~~

~~Nondiscrimination Certification. Capital Provider represents and warrants that, prior to entering into this Agreement, Capital Provider has provided Green Bank with documentation evidencing Capital Provider's support of the nondiscrimination agreements and warranties of the statutory nondiscrimination sections, above. A form of the Nondiscrimination Certification to be signed by the Capital Provider is attached.~~

~~Occupational Safety and Health Act Compliance. Capital Provider certifies it (1) has not been cited for three or more willful or serious violations of any occupational safety and health act or of any standard, order or regulation promulgated pursuant to such act, during the three-year period preceding the date of the Agreement, provided such violations were cited in accordance with the provisions of any state occupational safety and health act or the Occupational Safety and Health Act of 1970, and not abated within the time fixed by the citation and such citation has not been set aside following appeal to the appropriate agency or court having jurisdiction or (2) which has not received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the date of the Agreement.~~

~~13. — **Limitation on Recourse.**~~

~~All liabilities and obligations of (i) Green Bank under this Agreement are subject and limited to the funding available under Connecticut law and (ii) Capital Provider under this Agreement are limited to its assets and no officer, director, employee, partner, investor or shareholder shall have any personal liability for such liabilities or obligations.~~

~~14. — **Freedom of Information Act.**~~

~~Green Bank is a “public agency” for purposes of the Connecticut Freedom of Information Act (“FOIA”). This Agreement and information received pursuant to this Agreement will be considered public records and will be subject to disclosure under the FOIA, except for information falling within one of the exemptions in Conn. Gen. Stat. Sections § 1-210(b) and § 16-245n(d).~~

~~Because only the particular information falling within one of these exemptions can be withheld by Green Bank pursuant to an FOIA request, Capital Provider should specifically and in writing identify to Green Bank the information that Capital Provider claims to be exempt. Capital Provider should further provide a statement stating the basis for each claim of exemption. It will not be sufficient to state generally that the information is proprietary or confidential in nature and not, therefore, subject to release to third parties. A convincing explanation and rationale sufficient to justify each exemption consistent with General Statutes § 1-210(b) and § 16-245n(d) must be provided.~~

~~Capital Provider acknowledges that (1) Green Bank has no obligation to notify Capital Provider of any FOIA request it receives, (2) Green Bank may disclose materials claimed by Capital Provider to be exempt if in its judgment such materials do not appear to fall within a statutory exemption, (3) Green Bank may in its discretion notify Capital Provider of FOIA requests and/or of complaints made to the Freedom of Information Commission concerning items for which an exemption has been claimed, but Green Bank has no obligation to initiate, prosecute, or defend any legal proceeding, or to seek to secure any protective order or other relief to prevent disclosure of any information pursuant to an FOIA request, (4) Capital Provider will have the burden of establishing the availability of any FOIA exemption in any such legal proceeding, and (5) in no event shall Green Bank or any of its officers, directors, or employees have any liability for the disclosure of documents or information in Green Bank’s possession where Green Bank, or such officer, director, or employee, in good faith believes the disclosure to be required under the FOIA or other law.~~

[Remainder of page intentionally left blank, signature page follows.]

~~IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written.~~

CONNECTICUT GREEN BANK _____ [NAME]

By: _____ By: _____

Name: _____ Name: _____

Title: _____ Title: _____



STATE OF CONNECTICUT
NONDISCRIMINATION CERTIFICATION — Affidavit
By Entity
For Contracts Valued at \$50,000 or More

Documentation in the form of an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson, member, or other corporate officer duly authorized to adopt corporate, company, or partnership policy that certifies the contractor complies with the nondiscrimination agreements and warranties under Connecticut General Statutes §§ 4a-60(a)(1) and 4a-60a(a)(1), as amended

INSTRUCTIONS:

For use by an entity (corporation, limited liability company, or partnership) when entering into any contract type with the State of Connecticut valued at \$50,000 or more for any year of the contract. Complete all sections of the form. Sign form in the presence of a Commissioner of Superior Court or Notary Public. Submit to the awarding State agency prior to contract execution.

AFFIDAVIT:

I, the undersigned, am over the age of eighteen (18) and understand and appreciate the obligations of an oath. I am _____ of _____, an entity

 Signatory's Title Name of Entity
 duly formed and existing under the laws of _____.

 Name of State or Commonwealth

I certify that I am authorized to execute and deliver this affidavit on behalf of _____ and that _____

 Name of Entity Name of Entity

has a policy in place that complies with the nondiscrimination agreements and warranties of Connecticut General Statutes §§ 4a-60(a)(1) and 4a-60a(a)(1), as amended.

 Authorized Signatory

 Printed Name

Sworn and subscribed to before me on this _____ day of _____, 20_____.

Commissioner of the Superior Court/ Commission Expiration Date
Notary Public



APPENDIX A OF C PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT AND ADMINISTRATION AGREEMENT

FORM OF CERTIFICATE OF LEVY AND LIEN OF BENEFIT ASSESSMENT

The undersigned Tax Collector of the _____, Connecticut ("Municipality"), with an office at _____, Connecticut, for and on behalf of the Connecticut Green Bank (the "Green Bank"), formerly known as the Clean Energy Finance and Investment Authority, with an office at 845 Brook Street, Rocky Hill, Connecticut 06067, pursuant to the Commercial Property Assessed Clean Energy Program established under Connecticut General Statutes Section 16a-40g, as amended (the "Act"), and the Municipal Agreement between the Municipality and Green Bank dated _____, HEREBY LEVIES A BENEFIT ASSESSMENT AGAINST AND LIEN UPON certain real property commonly referred to as _____ and described more particularly in the attached Exhibit A (the "Property"), situated in the Municipality and owned on the date hereof in whole or in part by _____ (the "Property Owner"), said levy and lien shall secure the repayment of financing for energy improvements made or to be made to the Property pursuant to that certain Financing Agreement between Property Owner and Greenworks Lending, LLC dated _____, as may be amended (the "Financing Agreement"). This levy and lien are subject to the terms and conditions of the Financing Agreement and are made in accordance with the Financing Agreement. Upon the transfer or conveyance of the Property, each subsequent owner of the Property, by accepting title to the Property, assumes and agrees to perform all of the obligations and covenants set forth herein and in the Financing Agreement and each other document referenced therein, including, but not limited to, making the installment payments described below, from and after the date such owner acquires title to the Property. The amount and repayment of said levy and lien, as determined by Green Bank and provided to Municipality, are as follows: an installment payment plan is in effect for payment of the benefit assessment, and is based on the principal amount of the benefit assessment of \$ _____, with interest thereon at a fixed rate equal to _____% per annum, plus any capitalized interest or any additional fees and expenses pursuant to the Financing Agreement, with equal installments of principal and interest due and payable pursuant to the Financing Agreement, all as set forth in the attached Exhibit B. [Pursuant to the Financing Agreement, the final installment payment plan and maturity date of the levy and lien shall be provided to the Municipality by the Green Bank and filed on the Land Records of the Municipality.] In the event that any such installment shall remain unpaid for thirty days after the same shall become due and payable, interest and other charges shall be charged upon the unpaid installment(s) at the rate of 18% per annum, as provided by the Act and by law. At such time as the principal and interest payments of the benefit assessment have been satisfied and paid in full, a release of this Certificate shall be filed in the Land Records of the Municipality evidencing such release.

This Certificate constitutes a certificate of lien and is filed pursuant to the provisions of the Act to evidence a lien for the benefit assessment levied upon the Property for the special benefits conferred upon said Property by the renovation or retrofitting for energy improvements related thereto. Pursuant to the Act, this lien shall take precedence over all other liens or encumbrances except a lien for taxes of the Municipality on real property, which lien for taxes shall have priority over this lien. For the purposes of this lien, the Green Bank and any future successors, assigns or heirs of such lien shall be bound by and irrevocably subordinated to any environmental land use restriction recorded on the land records of the Municipality pursuant to Conn. Gen. Stat. § 22a-133a after this lien is filed on the land records of the Municipality.

The portion of this Certificate which constitutes a levy of benefit assessment and notice of installment payment of benefit assessments is filed pursuant to the provisions of the Act and the Connecticut General Statutes, as amended. This Certificate and the levy and lien set forth herein shall run with the land and shall be binding upon Property Owner and its heirs, executors, administrators, successors and assigns.

By order of the Tax Collector of the City/Town of _____

Dated at _____, Connecticut this _____ day of _____, 2014.

Tax Collector

Received for Record: _____, 2014 at _____ A.M./P.M.

Recorded in the _____ Land Records at Volume _____, Page _____

City/Town Clerk



EXHIBIT A OF APPENDIX A OF C-PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT AND ADMINISTRATION AGREEMENT

DESCRIPTION OF PROPERTY

[Insert legal description of Property]

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EXHIBIT B OF APPENDIX A OF C-PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT
AND ADMINISTRATION AGREEMENT
BENEFIT ASSESSMENT PAYMENT SCHEDULE

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APPENDIX B OF C PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT AND ADMINISTRATION AGREEMENT

FORM OF ASSIGNMENT OF BENEFIT ASSESSMENT LIEN

KNOW ALL PERSONS BY THESE PRESENTS, that the CITY/TOWN OF _____, a Connecticut municipal corporation (hereinafter referred to as "Assignor"), acting herein by _____, its Tax Collector, duly authorized pursuant to a Municipal Agreement dated _____, 20____, between the Assignor and the Connecticut Green Bank (hereinafter referred to as "Assignee"), in consideration of One Dollar (\$1.00) and other valuable consideration paid to Assignor by the Assignee, the receipt of which is hereby acknowledged, hereby quit claims, grants, bargains, sells, conveys, assigns, transfers and sets over unto Assignee, without warranty covenants and without recourse, all of its right, title and interest in and to that certain benefit assessment lien and the debts secured thereby together with such interest, fees, and expenses of collection as may be provided by law, filed by the _____ Tax Collector on the _____ Land Records, on property owned on the date hereof in whole or in part by _____ and as described on **Exhibit A**, and also commonly referred to as _____, attached hereto and made a part hereof (the "Lien"), to have and to hold the same unto the said Assignee, its successor and assigns forever.

This Assignment is made, given and executed pursuant to the authority granted to Assignor as a municipality by Connecticut General Statutes Section 16a-40g, as amended.

By execution of this Assignment, the Assignor assigns to Assignee, and the Assignee assumes, all of the rights at law or in equity, obligations powers and duties as the Assignor and the Assignor's Tax Collector would have with respect to the Lien, if the Lien had not been assigned with regard to precedence and priority of such lien, the accrual of interest, charges, fees and expenses of collection, pursuant to Connecticut General Statutes Section 16a-40g, as amended.

This Assignment by the Assignor is absolute and irrevocable and Assignor shall retain no interest, reversionary or otherwise, in the Lien.

IN WITNESS WHEREOF, we have hereunto set our hands and seal this _____ of _____, 20____.

Assignor

By _____
Tax Collector

STATE OF CONNECTICUT) _____ ss.: _____
)
COUNTY OF _____)

On this the _____ day of _____, 20____, before me _____, the undersigned officer, personally appeared _____, Tax Collector, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that he/she executed the same for the purposes therein contained and that he/she acknowledged the same to be his/her free act and deed, before me, in his/her capacity as said Tax Collector.

Commissioner of the Superior Court

V.091514 _____

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EXHIBIT A OF APPENDIX B OF C-PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT
AND ADMINISTRATION AGREEMENT

DESCRIPTION OF PROPERTY

[Insert legal description of Property]

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**EXHIBIT A OF APPENDIX C OF C-PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT
AND ADMINISTRATION AGREEMENT**

DESCRIPTION OF PROPERTY

[Insert legal description of Property]

**APPENDIX D OF C-SPACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT AND
ADMINISTRATION AGREEMENT**

**FORM OF CONFIRMATION AND AMENDMENT OF BENEFIT ASSESSMENT LIEN
AND PAYMENT SCHEDULE**

_____ (the "Capital Provider") and _____ (the "Borrower") are parties to that certain Financing Agreement dated as of _____, 2015, as may be amended (the "Financing Agreement").

Pursuant to the Financing Agreement, the Borrower has renovated or retrofitted the property located at _____, Connecticut (the "Property"), in accordance with the requirements of the Program for which Capital Provider has provided the financing for through the Benefit Assessment Advance in the amount of \$ _____, which Benefit Assessment Advance has been converted into a Benefit Assessment against the Property; and

The Borrower is obligated to make benefit assessment payments required by that certain Certificate of Levy and Lien of Benefit Assessment (the "Benefit Assessment Lien") dated _____, 2015 and filed by the _____, Connecticut (the "Municipality") and recorded in the Land Records of the Municipality in Volume ____ at Page ____; which Benefit Assessment Lien was assigned by the Municipality to Green Bank pursuant to that certain Assignment of Benefit Assessment Lien dated _____, 2015 and recorded in the Land Records of Municipality in Volume ____ at Page ____; which Benefit Assessment Lien was assigned by Green Bank to Capital Provider pursuant to that certain Assignment of Benefit Assessment Lien dated _____, 2015 and recorded in the Land Records of Municipality in Volume ____ at Page ____.

Pursuant to the Financing Agreement, the Benefit Assessment Lien shall be repaid in accordance with the installment payment plan attached hereto as Schedule 1 (the "Payment Schedule"). The Payment Schedule is based on the principal amount of the Benefit Assessment of \$ _____, including any capitalized interest or any additional fees and expenses pursuant to the Financing Agreement, with interest thereon at the rate set forth in the Financing Agreement and with equal installments of principal and interest coming due as set forth in the Payment Schedule.

Except as amended and modified hereby, the Financing Agreement and the Benefit Assessment Lien shall continue unmodified and in full force and effect and each is hereby ratified and confirmed.
Dated this ____ day of _____, 2015.

[CAPITAL PROVIDER]

WITNESSES:

_____ By: _____
Print Name: _____ Name:
_____ Title:

Print Name:

STATE OF CONNECTICUT _____)
_____) ss. _____, 2015
COUNTY OF _____)

_____ Personally appeared _____, the _____ of _____, a _____, signer and sealer of the foregoing instrument and acknowledged the same to be his/her free act and deed and the free act and deed of said body politic and corporate, before me.

Commissioner of the Superior Court

Notary Public

My Commission Expires: _____



**APPENDIX E OF C-PACE BENEFIT ASSESSMENT AND LIEN ASSIGNMENT AND
ADMINISTRATION AGREEMENT**

[Insert legal description of Property]

Appendix C

Disclosure of Risk Form

~~This Disclosure of Borrower Risks is made pursuant to Connecticut General Statutes Section 16a-40g and the program established thereunder (the "C-PACE Program"). As a Borrower participating in the C-PACE Program, you should consider carefully the risks associated with accepting C-PACE financing and the Benefit Assessment on your property. These risks include, but are not limited to, the following:~~

~~[Insert Capital Provider] ("Capital Provider") and Connecticut Green Bank ("Green Bank") do not guarantee energy savings. The energy conservation measures proposed to be installed may not perform to specification. They may break down or underperform due to technical malfunction or improper installation. Project success often depends on third parties who are capable of installing and managing projects and structuring contracts that provide appropriate protection against these construction and operational risks. Green Bank recommends Borrowers have their installation and servicing contracts reviewed by competent legal counsel and engineering consultants prior to execution. Green Bank does neither: (1) endorse the workmanship of any Contractor; nor (2) guarantees, warranties, or in any way represents or assumes liability for any work proposed or carried out by a Contractor. Additionally, the Green Bank is not responsible for assuring the design, engineering, and construction of the project is proper or complies with any particular laws, regulations, codes, licensing, certification and permit requirements, or industry standards. The Green Bank does not make any representations of any kind regarding the results to be achieved by the project or the adequacy or safety of such measures.~~

~~Completed projects often require ongoing maintenance to ensure energy savings and equipment performance is sustained. Such maintenance could be complex, costly, and/or be beyond the capabilities of "in-house" staff, requiring external expertise or specialized services over the life of the energy conservation or renewable energy measures.~~

~~Please review any warranties carefully. While the warranties provided by third parties and, in some cases, their subcontractors, typically limit any direct harm that results from relying on their products and services, there can be no assurance that a supplier or subcontractor will be willing or able to fulfill its contractual obligations and make necessary repairs or replace equipment.~~

~~Please seek any necessary outside legal counsel or engineering support to review contracts. Capital Provider and Green Bank recommend that all Borrowers have their installation and servicing contracts reviewed by competent legal counsel and engineering consultants prior to execution.~~

~~Fluctuations in energy prices may increase or decrease the savings associated with your project. Your Project's estimated savings are based on assumptions about the future price of electricity and fuels. To the extent that future energy prices are lower than those assumed to occur, your future savings will be less than projected.~~

Changes in property occupancy may increase or decrease the savings associated with your project. Your project's estimated savings are based on assumptions about the future occupancy and uses of your Property. To the extent that occupancy decreases, or Property uses shift in a manner not currently contemplated such that less energy will be used than expected, your future savings will be less than projected.

Green Bank is not your lender. Green Bank's role in this transaction is to administer the C-PACE Program and meet all of Green Bank's statutory obligations. If the proposed C-PACE Project is approved, by both the Green Bank and Capital Provider, then Capital Provider will finance the Project.

C-PACE financing is fixed rate financing. Although you will be able to prepay the remaining principal of your Benefit Assessment Advance at any time subject to any applicable prepayment penalties as may be contained in the Financing Agreement, you will not be able to refinance through the Capital Provider or Green Bank to achieve a lower rate.

C-PACE assessments are secured by and attached to the property. At resale, the potential purchaser of your Property will be responsible for continuing to pay the Benefit Assessment. Once the Project is financed a benefit assessment lien will be levied on the Property. Failure to pay your C-PACE benefit assessment in a timely manner may lead Capital Provider, or any assignee, to foreclose on the Property.

The success of your project may depend in part on various U.S. Federal or State of Connecticut policies and incentives that support or enhance project economic feasibility. Such policies may include governmental initiatives, laws and regulations designed to reduce energy usage, encourage the use of clean energy or encourage the investment in and the use of sustainable infrastructure. Incentives provided by the U.S. federal government may include tax credits, tax deductions, bonus depreciation as well as federal grants and loan guarantees. Incentives provided by the State of Connecticut may include renewable portfolio standards, which specify the portion of the power utilized by local utilities that must be derived from clean energy sources such as renewable energy, renewable energy credits, tariffs, tax incentives and other cash and non-cash payments. In addition, the U.S. government and the State of Connecticut provide regulatory, tax and other incentives to encourage the development and growth of sustainable infrastructure.

You may be depending on these policies and incentives to help defray the costs associated with, and to finance, your project. Government regulations also impact the terms of third-party financing provided to support these projects. If any of these government policies, incentives or regulations are adversely amended, delayed, eliminated, reduced or not extended beyond their current expiration dates, the economics of your project may be harmed.

Green Bank is a public instrumentality and political subdivision of the State of Connecticut established under Public Act No. 11-80 (and codified in Section 16-245n of the Connecticut General Statutes). Although we do not expect the Legislature to make any changes that would impact our ability to perform our role in accordance with existing statutory authority, there can be no

assurance that any changes in statute will not have a material adverse effect to our ability to perform our responsibilities as presently provided in statute.

Green Bank must comply with the Connecticut Freedom of Information Act ("FOIA"). Green Bank is a public agency for purposes of FOIA. Any material submitted to the Green Bank, either directly by Borrower or indirectly through Capital Provider, will be considered a public record and will be subject to disclosure under FOIA. Under Connecticut General Statute §1-210(b) and §16-245n(d), FOIA includes exemptions for trade secret and commercial or financial information given in confidence. Only the particular information falling within a statutory exemption can be withheld by the Green Bank. In no event shall the Green Bank or any of its officers, directors or employees have any liability for the disclosure of documents or information in the Green Bank's possession where the Green Bank, or such officer, director or employee in good faith believes the disclosure to be required under FOIA or other law.

Green Bank Indemnification. Borrower hereby acknowledges that in consideration for your participation in the C-PACE Program, Borrower does hereby disclaim, releases and forever discharges the Green Bank, and its officers, board, and employees jointly and severally from any and all actions, causes of actions, claims and demands for, upon, or by reason of any damage, loss, or injury, which hereafter may be sustained by Borrower for participating in the C-PACE Program.

Green Bank may not be able finance this project for six months. Pursuant to an agreement between the Green Bank and Capital Provider, the Green Bank may not, for a period of six months, be able to finance your current project in an event that you do not close on financing with Capital Provider. This restriction does not apply to materially different eligible projects or other eligible capital providers.

The Borrower hereby acknowledges and agrees to the above described C-PACE transaction risks and associated provisions of this Disclosure of Risk Form by and through its duly authorized undersigned representative.

Borrower: _____

By: _____

Its: _____

Appendix D
Lender Consent Form

**REQUEST FOR LENDER CONSENT
AND NOTICE OF PROPOSED BENEFIT ASSESSMENT**

Notice Date: _____

Lender Address:

Lender: _____

Street: _____

City/State/Zip Code: _____

ATTN: _____

Property/Loan Information: _____

Address: _____

APN: _____

Loan Number: _____

Why has the bank received this notice?

The property owner listed below owns the property located at the address above. You are the holder of a loan secured by the property.

[Building owner/address] wishes to install energy upgrades to the property using the Commercial Property Assessed Clean Energy (C-PACE) financing mechanism established by the State of Connecticut and seeks your consent to do so.

Background on C-PACE in Connecticut:

In 2012, Connecticut passed legislation that provides access for owners of commercial, industrial and multi-family housing property in the state to a new form of financing for energy efficiency and on-site renewable energy (EE/RE) upgrades to their buildings. C-PACE financing can allow building owners to increase the value of their buildings and meet important energy policy goals of the State and its municipalities. (See Exhibit A for legislation)

The Connecticut Green Bank ("the Green Bank") is responsible for administering a statewide C-PACE program. With C-PACE, financing for EE/RE projects is repaid with a benefit assessment, a mechanism long used to finance improvements to real property that meet a public policy objective, such as sidewalks, parks, lighting districts, and water and sewer projects. Like other municipal assessments, C-PACE assessments must be current upon the sale of a property and remain with a property upon sale. As with other municipal assessments, any assessments in arrears (but only those in arrears) have a lien status senior to mortgages upon the sale of a property.

Connecticut's C-PACE program has been designed to meet the needs and concerns of Connecticut's residents, property owners, and existing mortgage lenders. To qualify, the proposed project must meet the following basic criteria:

- The property is located in a municipality that has signed a legal agreement with the Green Bank regarding C-PACE. (see [Exhibit B](#) for a copy of the legal agreement between the Green Bank and the municipality)
- The property is a commercial, industrial, or multi-family (5 or more units) property
- The proposed measures reduce energy consumption and/or increase the production of on-site renewable energy
- The proposed measures are permanently affixed to the property
- The property is current on all municipal property tax and assessment payments
- The proposed project results in energy savings in excess of the assessment (a savings to investment ratio greater than 1 as determined by the GREEN BANK and/or the Administrator of C-PACE.
- **The property owner receives consent of the current mortgage holder(s)**

Why should you provide consent?

4. Measures financed through C-PACE should reduce building operating costs. Through the Technical Standards the Green Bank has established to govern the C-PACE program, a proposed project must have a Savings to Investment Ratio (SIR) greater than one, meaning that projected lifetime savings from the energy measures must exceed the total investment, inclusive of financing costs over the full term of the C-PACE assessment, over the useful life of the measures. For example, if the total eligible project investment cost is \$1.5 million and the project's expected useful life is 15 years, then the energy savings must be greater than \$100,000 per year.
5. C-PACE Assessments do not accelerate. In the event the mortgage holder forecloses on the property for any reason, only the amount of the C-PACE assessment currently due and/or in arrears, a relatively small proportion of the C-PACE assessment, would come due. In the event of a property sale, C-PACE assessments transfer to the new property owner.
6. Measures financed through C-PACE improve properties, often reducing maintenance and repair costs. In addition, energy measures improve the efficiency, health, and comfort of a building, making it more attractive to tenants and future owners.

What should you know?

[Building owner/address] has indicated its intention to apply for C-PACE financing for the improvements outlined in Exhibit C on the property listed above. The benefit assessment is to be levied on the property pursuant to an agreement between the property owner, the Green Bank, and the funding source for the C-PACE improvements. The related payment terms are proposed to consist of the following:

Total cost of improvements*:

Utility rebates/incentives:

Total C-PACE financing requested*:

Interest rate not to exceed:

Term of repayment period:

Total estimated annual installment*:

Payments per year:

**THE GREEN BANK may provide financing for up to 110% of the financing amount requested contingent upon the savings-to-investment ratio being greater than 1. As such, the above amounts are subject to minor deviation.*

Estimated Benefits of the Authorized Improvements:

Based on a recent audit by _____ which is detailed in Exhibit C, the following cash flow savings—as a result of the installation of the Authorized Improvements and using the assumptions noted in the audit—are expected to accrue to the property:

Electric and Fuel Bill Savings: _____

Other Savings (specify): _____

TOTAL: _____

NOTE: The savings noted above represent estimated based on the assumptions contained in the audit attached as Exhibit C. Actual results are likely to be different and may be greater or less than estimated.

Purpose of this Notice. As required by the C-PACE enabling legislation (Section 16a-40g of Connecticut General Statutes, as amended), [Name of Property Owner] is sending this Notice of Proposed Benefit Assessment to Lender to (i) provide notice of the proposed participation of the property above in C-PACE financing; (ii) request confirmation from you (the current lender) that the levy of the Benefit Assessment pursuant to the Assessment Agreement will not trigger an event of default or the exercise of any remedies under the Loan documents, (iii) provide notice that the Contractual Assessment will be collected in installments on the property tax bill in the same manner as and subject to the same

penalties, remedies and lien priorities as real property taxes and (iv) declare the [Name of Property Owner]'s agreement to pay on a timely basis both the existing obligations secured by the property (including the Loan) and the proposed Benefit Assessment.

Execution and Return of Consent. The Property Owner would appreciate you executing the attached Lender Consent to Proposed Benefit Assessment and returning it to the undersigned at your earliest convenience.

Very truly yours,

BY: (signature): _____

PROPERTY OWNER NAME: _____

MAILING ADDRESS (if different than Property address): _____

LENDER CONSENT TO BENEFIT ASSESSMENT

Date: _____
Property/Loan Information: _____
Address: _____
Owner: _____
Municipality: _____
APN: _____
Loan Number: _____

This Lender Consent to Benefit Assessment (this "Consent") is given by the undersigned entity (the "Lender") with respect to the above referenced loan (the "Loan") and the above referenced property (the "Property").

RECITALS

A. _____ Lender is in receipt of written notice (the "Notice") from the above referenced owner of the Property (the "Property Owner") that it intends to finance installation on the Property of certain energy efficiency and/or renewable energy improvements that will be permanently fixed to the Property (the "Authorized Improvements") by participating in the Commercial Property Assessed Clean Energy (C-PACE) financing program (the "Program"), sponsored by the Municipality.

B. _____ Lender understands that, as a result of an agreement between the Municipality and the Property Owner (the "Assessment Agreement"), the Benefit Assessment described in the Notice will be levied on the Property, and that the Benefit Assessment will be collected in installments on the property tax bill in the same manner as and subject to the same penalties, remedies and lien priorities as real property taxes.

CONSENT

The undersigned hereby represents that it is authorized to execute this Consent on behalf of the Lender. The Lender hereby confirms:

A. _____ Lender is in receipt of written notice (the "Notice") from the above referenced owner of the Property (the "Property Owner") that it intends to finance installation on the Property of certain energy efficiency and/or renewable energy improvements that will be permanently fixed to the Property by participating in the Commercial Property Assessed Clean Energy financing a program sponsored by the Municipality.

B. _____ Lender understands that, as a result of an agreement between the Municipality and the Property Owner, the Benefit Assessment described in the Notice will be levied on the Property, and that the Benefit Assessment will be collected in installments on the property tax bill in the same manner as and subject to the same penalties, remedies and lien priorities as real property taxes.

C. _____ The Lender agrees that the levy of the Benefit Assessment will not constitute an event of default or trigger the exercise of any remedies under the Loan documents. The Lender hereby acknowledges that the Property Owner and the Municipality will rely on the representation and Consent of the Lender set forth in this Consent.



LENDER:	
	By: _____ _____ <i>Authorized Representative</i>
	By: _____ _____ <i>Name</i>
	By: _____ _____ <i>Title</i>
	By: _____ _____ <i>Date</i>



EXHIBIT A OF LENDER CONSENT FORM

Connecticut General Statutes § 16a-40g. Commercial sustainable energy program.

(a) As used in this section:

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

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

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

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

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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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



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

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

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

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



EXHIBIT B OF LENDER CONSENT FORM

**COMMERCIAL PROPERTY ASSESSED
CLEAN ENERGY ("C-PACE") AGREEMENT**

~~THIS AGREEMENT~~ is made and entered into as of the ____ day of _____, 2014, by and between ~~[TOWN NAME CAPS], CONNECTICUT~~, a municipal corporation organized and existing under the laws of the State of Connecticut (the "Municipality"), and the ~~CONNECTICUT GREEN BANK~~, a quasi-public agency of the State of Connecticut, having its business address at 845 Brook Street, Rocky Hill, Connecticut 06067 (the "Green Bank").

RECITALS

~~WHEREAS~~, Commercial Property Assessed Clean Energy ("C-PACE") is a program to facilitate loan financing for clean energy improvements to commercial properties by utilizing a state or local assessment mechanism to provide security for repayment of the loans.

~~WHEREAS~~, section 16a-40g, as amended, of the Connecticut General Statutes (the "Act") established the C-PACE program in Connecticut.

~~WHEREAS~~, subsection (b)(1) of the Act directs the Green Bank to establish a commercial sustainable energy program, and authorized the Green Bank to make appropriations for and issue bonds, notes or other obligations to finance the program costs. A commercial sustainable energy program is a program that facilitates energy improvements to commercial or industrial property and utilizes municipal benefit assessments authorized by the Act as security for financing the energy improvements.

~~WHEREAS~~, to secure financing for the program, the Green Bank and the Municipality are authorized to enter into a written agreement, as approved by the Municipality's legislative body, pursuant to which the Municipality has agreed to assess, collect, remit and assign, benefit assessments to the Green Bank in return for energy improvements for benefited property owners within the Municipality and for costs reasonably incurred by the Municipality in performing such duties.

~~WHEREAS~~, this Agreement constitutes the written agreement authorized by the Act.

~~NOW THEREFORE~~, for and in consideration of the mutual covenants and agreements set forth herein and in order to effectuate the purposes of the Act, it is hereby agreed as follows:

Section 1 - Definitions:

(a) "Energy improvements" means (A) participation in a district heating and cooling system by qualifying commercial real property, (B) participation in a microgrid, as defined in section 16-243y, including any related infrastructure for such microgrid, by qualifying commercial real property, provided such microgrid and any related infrastructure incorporate clean energy, as defined in section 16-245n, as amended by this act, (C) any renovation or retrofitting of qualifying commercial real property to reduce energy consumption,



~~(D) installation of a renewable energy system to service qualifying commercial real property, or (E) installation of a solar thermal or geothermal system to service qualifying commercial real property, provided such renovation, retrofit or installation described in subparagraph (C), (D) or (E) of this subdivision is permanently fixed to such qualifying commercial real property.~~

- ~~(b) "District heating and cooling system" means a local system consisting of a pipeline or network providing hot water, chilled water or steam from one or more sources to multiple buildings.~~
- ~~(c) "Qualifying commercial real property" means any commercial or industrial property, regardless of ownership, that meets the qualifications established for the commercial sustainable energy program.~~
- ~~(d) "Commercial or industrial property" means any real property other than a residential dwelling containing less than five dwelling units.~~
- ~~(e) "Benefited property owner" means an owner of qualifying commercial real property who desires to install energy improvements and provides free and willing consent to the benefit assessment against the qualifying commercial real property.~~
- ~~(f) "Commercial sustainable energy program" means a program that facilitates energy improvements and utilizes the benefit assessments authorized by this Agreement as security for the financing of the energy improvements.~~
- ~~(g) "Benefit assessment" means the assessment authorized by the Act.~~

Section 2—Obligations of the Green Bank:

~~(a) Program Requirements. Pursuant to the Act, the Green Bank:~~

~~(1) Shall develop program guidelines governing the terms and conditions under which state financing may be made available to the commercial sustainable energy program, including, in consultation with representatives from the banking industry, municipalities and property owners, developing the parameters for consent by existing mortgage holders and may serve as an aggregating entity for the purpose of securing state or private third party financing for energy improvements pursuant to the Act;~~

~~(2) Shall receive and review applications submitted by benefitted property owners within the Municipality for financing of energy improvements, and approve or disapprove such applications in accordance with underwriting procedures and requirements established by the Green Bank;~~

~~(3) Shall prepare and deliver to the Municipality an annual report which shall contain information related to each qualifying commercial real property within the Municipality, including:~~

- ~~v. A list of each qualifying commercial real property for which the benefitted property owner executed a financing agreement during the prior year;~~
- ~~vi. A list of each qualifying commercial real property where all obligations under the financing agreement have been satisfied or paid in full during the prior year, including the satisfaction date and a copy of the notice of satisfaction;~~
- ~~vii. The total benefit assessment payments made to the Green Bank in respect of all qualifying commercial real properties; and~~
- ~~viii. For each non satisfied (not paid in full) benefit assessment (including each benefit assessment approved in the prior year):
 - ~~E. The date of the financing agreement;~~
 - ~~F. The outstanding amount of the financing;~~~~

- ~~G. The total principal balance and accrued interest outstanding; and~~
- ~~H. The annual payment(s) due to the Green Bank (which shall include principal and accrued interest) associated with such benefit assessment (including the amount of accrued interest on the initial payment, if different).~~

~~(4) Shall establish the position of commercial sustainable energy program liaison within the Green Bank;~~

~~(5) Shall establish a loan loss reserve or other credit enhancement program for qualifying commercial real property;~~

~~(6) May use the services of one or more private, public or quasi public third party administrators to administer, provide support or obtain financing for the commercial sustainable energy program; and~~

~~(7) Shall adopt standards to ensure that the energy cost savings of the energy improvements over the useful life of such improvements exceed the costs of such improvements.~~

~~(b) **Project Requirements.** If a benefitted property owner requests financing from the Green Bank for energy improvements under the Act, the Green Bank shall:~~

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

~~(2) Impose requirements and criteria to ensure that the proposed energy improvements are consistent with the purpose of the commercial sustainable energy program; and~~

~~(3) Require that the property owner obtain the consent of any existing mortgage holder of such property, prior to the execution of the financing agreement or the recording of any lien securing a benefit assessment for energy improvements for such property, to have a Benefit Assessment Lien levied on the property to finance such energy improvements pursuant to the Act.~~

~~(c) **Financing Agreement for Project.** The Green Bank may enter into a financing agreement with the property owner of qualifying commercial real property (the "Financing Agreement"). The Financing Agreement shall clearly state the estimated benefit assessment that will be levied against the qualifying commercial real property. The Green Bank shall disclose to the property owner the costs and risks associated with participating in the commercial sustainable energy program, including risks related to the failure of the property owner to pay the benefit assessment provided for in the Financing Agreement. The Green Bank shall disclose to the property owner the effective interest rate on the benefit assessment, including fees charged by the Green Bank to administer the commercial sustainable energy program, and the risks associated with variable interest rate financing, if applicable. The Green Bank shall notify the property owner that such owner may rescind any Financing Agreement entered into not later than three business days after such Financing Agreement is executed by the property owner and delivered to the Green Bank. The Financing Agreement shall provide for the consent of existing mortgage holders for the Benefit Assessment Lien to be continued, recorded and released by the Municipality, as required by the Act and described in Section 3(e) herein.~~

~~(d) **Determination of Estimated and Final Benefit Assessments and Payments.**~~

~~(1) Upon execution of the Financing Agreement, the Green Bank shall determine the total benefit assessment amount, including fees charged by the Green Bank to administer the commercial~~



sustainable energy program, and shall set a fixed or variable rate of interest for the repayment of the benefit assessment amount. Such interest rate, as may be supplemented with state or federal funding as may become available, shall be sufficient to pay the financing and administrative costs of the commercial sustainable energy program, including delinquencies. The Green Bank shall provide written notice of the total benefit assessment amount and interest rate to the Municipality.

(2) — It is anticipated that the Green Bank will decide that the benefit assessment shall be payable in two equal payments respectively payable on July 1 and January 1 of each year so that they are due at the same time as the installments of the Municipality's real property taxes. If the Municipality changes its practices concerning the billing of annual real property taxes as to the number of installments and their due dates, the Green Bank will change its practices to the extent possible to correspond with the Municipality's practices.

Section 3 – Obligations of the Municipality. —

(a) — Levy of Benefit Assessment. Upon receiving written notice from the Green Bank of the benefit assessment as provided in Section 2(d)(1) herein, the Municipality shall promptly levy the benefit assessment against the qualifying commercial real property to be benefited by the energy improvements financed by the Green Bank and described in the Financing Agreement, and shall place a lien on the qualifying commercial real property to secure payment of the benefit assessment in the form of the attached Exhibit A (“Benefit Assessment Lien”). The Benefit Assessment Lien will have two attachments: (1) the legal description of the benefited property and (2) the Financing Agreement payment schedule provided by the Green Bank. As provided in the Act, the benefit assessments levied pursuant to this Agreement and the interest, fees and any penalties thereon shall constitute a lien against the qualifying commercial real property on which they are made until they are paid. The Green Bank will reimburse the Municipality the cost charged by the Town Clerk for recording the Benefit Assessment Lien. Such Benefit Assessment Lien shall be levied and collected in the same manner as the property taxes of the Municipality on real property, including, in the event of default or delinquency, with respect to any penalties, fees and remedies and lien priorities as provided by the Act.

(b) — Continuation, Recording and Release of Lien. As provided in the Act, each Benefit Assessment Lien shall be continued, recorded and released in the manner provided for property tax liens, subject to the consent of existing mortgage holders, and shall take precedence over all other liens or encumbrances except a lien for taxes of the Municipality on real property, which lien for taxes shall have priority over such Benefit Assessment Lien. The Green Bank shall provide to the Municipality written notice of the consent of existing mortgage holders for the lien to be continued, recorded and released by the Municipality.

(c) — Assignment of Benefit Assessment Lien.

(1) — Upon the written request of the Green Bank, the Municipality shall assign, in the form of the attached Exhibit B, to the Green Bank any and all Benefit Assessment Liens filed by the Municipality's tax collector, as provided in this Agreement. The Green Bank may sell or assign, for consideration, any and all Benefit Assessment Liens received from the Municipality. The assignee or assignees of such Benefit Assessment Liens shall have and possess the same powers and rights at law or in equity as the Green Bank and the Municipality and its tax collector would have had if the Benefit Assessment Lien had not been assigned with regard to the precedence and priority of such lien, the accrual of interest and the fees and

~~expenses of collection. The assignee shall have the same rights to enforce such Benefit Assessment Liens as any private party holding a lien on real property, including, but not limited to, foreclosure and a suit on the debt. Costs and reasonable attorneys' fees incurred by the assignee as a result of any foreclosure action or other legal proceeding brought pursuant to the assignment and directly related to the proceeding shall be taxed in any such proceeding against each person having title to any property subject to the proceedings. Such costs and fees may be collected by the assignee at any time after demand for payment has been made by the assignee.~~

~~(2) — The Municipality hereby acknowledges that the Green Bank may sell or assign any and all Benefit Assessment Liens received from the Municipality under Section 3(c) of this Agreement to a trustee for the benefit of the holders of the Green Bank's bonds, notes or other obligations issued to finance the costs of the commercial sustainable energy program, and that the holders of the Green Bank's bonds, notes or other obligations will rely on the Municipality to levy, collect and remit the benefit assessments to the Green Bank. Therefore, the Municipality unconditionally agrees that in the event the Municipality does not discharge its duties under this Agreement, the trustee shall have the right to enforce the Municipality's obligations under this Agreement by institution of legal action against the Municipality.~~

~~(d) — Amendment of the Benefit Assessment Lien. Pursuant to the Financing Agreement, the final amount of the benefit assessment may be adjusted after the levy of the Benefit Assessment Lien. Such an adjustment would likely be the result of a change in the energy improvement service contract amount during the construction period, a change in the amount of capitalized interest, or an amendment to the Financing Agreement. In the event that the final benefit assessment amount needs to be adjusted at the completion of the project, or any other time, the Green Bank will inform the Municipality of such change, provide the Municipality with an updated payment schedule and new lien amount, and the Municipality shall amend the Benefit Assessment Lien to reflect such adjustment. The Green Bank will reimburse the Municipality the cost charged by the Town Clerk for amending the Benefit Assessment Lien.~~

~~(e) — Billing and Collection; Payment to the Green Bank:~~

~~(1) — The Municipality shall bill the benefit assessments in the same manner and at the same time as it bills its real property taxes. The benefit assessment payments shall be a separate clearly defined line item or separate bill and shall be due on the same dates as the Municipality's real property taxes. The amount of the benefit assessment will be recorded on the Municipality's tax rolls in the same manner as any other benefit assessment, such that the public will have access to its existence and payment status. The penalties and interest on delinquent benefit assessments shall be charged in the same manner and rate as the Municipality charges for delinquent real property taxes.~~

~~(2) — Payments of the benefit assessments collected by the Municipality shall be segregated from all other funds of the Municipality and deposited in a separate account for the benefit of the Green Bank and identifying the Green Bank as the beneficial owner. The Municipality disclaims any ownership interest or other interests in such account or the amount collected.~~

~~(3) — The Municipality shall pay all amounts collected with respect to the benefit assessments within any calendar month to the Green Bank or its assignee no later than thirty days after the month that the amounts are collected. The Municipality will provide collection reports to the Green Bank, and the~~

~~Green Bank, at its own expense, shall have the right to audit the records relating to the benefit assessments upon reasonable notice at reasonable times. The Green Bank and Municipality agree to provide each other with such reasonable information as they may request and the Green Bank and the Municipality agree to provide such information in a computer format satisfactory to the other.~~

~~(f) Collection of Delinquent Payments:~~

~~(1) In the event that any benefited property owner fails to make a benefit assessment payment pursuant to the payment schedule of the Benefit Assessment Lien in any property tax billing cycle, the Municipality shall provide written notice to the Green Bank of such delinquency in a reasonably timely manner. After providing such notice to the Green Bank, the Municipality has no obligation to collect delinquent benefit assessment payments unless it enters into a separate agreement with the Green Bank described in the following subsection (2).~~

~~(2) If the Green Bank makes a written request to the Municipality for its assistance in the collection of delinquent benefit assessments and related charges, the Municipality, in its sole discretion, and the Green Bank may enter into a separate agreement for those services, which agreement shall provide for compensation to be paid to the Municipality for its collection services. The agreement may provide for the Municipality to pursue the collection of any delinquent benefit assessments with the same diligence it employs in the collection of the Municipality's real property taxes, including the commencement of foreclosure proceedings to the extent provided by the then current statutes of the State of Connecticut, and to take such actions that are required to preserve the Benefit Assessment Lien securing the delinquent benefit assessments. The agreement may also provide that the Green Bank shall have the right to take over the enforcement of any delinquent benefit assessments upon written notice to the Municipality, and thereupon the Municipality will have no further responsibility to collect such amount.~~

~~(3) The Municipality will provide written notice to the Green Bank of any sale or assignment of its real property taxes or any institution of a judicial foreclosure or other proceeding against any real property for delinquent real property taxes if such real property is subject to a lien securing a delinquent benefit assessment. Similarly, the Green Bank shall provide written notice to the Municipality of the institution of a judicial foreclosure or other proceeding against any qualified commercial real property for a delinquent benefit assessment.~~

~~(g) Promotion of Program; Assistance for Green Bank Financing; Payment to Municipality:~~

~~(1) The Municipality shall use good faith efforts to assist the Green Bank in local marketing efforts and outreach to the local business community to encourage participation in the commercial sustainable energy program, such as including commercial sustainable energy program information on the Municipality's website, distributing an informational letter from chief elected official to local businesses regarding the program, and conducting one or more business roundtable event(s).~~

~~(2) The Municipality shall use good faith efforts to assist in gathering and providing information for the Green Bank to offer, sell and issue its bonds, notes or other obligations to provide funds for the commercial sustainable energy program.~~

~~(3) The Green Bank agrees to pay the Municipality annually a fee of \$500 (the "Annual Fee") for its services hereunder. In the event such payment is not sufficient to cover the Municipality's out-of-pocket costs and expenses in discharging its duties hereunder, the Green Bank shall reimburse the Municipality for its actual reasonable costs and expenses associated with the collection and enforcement of the benefit assessments in excess of the Annual Fee. Such costs and expenses include reasonable costs incurred by the Municipality in conjunction with any and all proceedings to collect and enforce the benefit assessments and delinquent benefit assessments, including foreclosure proceedings.~~

Section 4 – Indemnification.

~~The Green Bank agrees that it will protect, defend, indemnify and hold harmless the Municipality and its officers, agents and employees to the extent of available proceeds derived from the benefit assessments from and against all claims, demands, causes of action, damages, judgments, losses and expenses, including reasonable attorney's fees, arising out of or in connection with the actions of the Green Bank's officers, employees and agents under this Agreement. This provision shall survive termination of this Agreement.~~

Section 5 – Term.

~~The term of this Agreement shall commence upon the date first written above. This Agreement shall be in full force and effect until all of the benefit assessments have been paid in full or deemed no longer outstanding. The Municipality may opt out of continuation in the program at any time on sixty (60) days advance notice to the Green Bank, provided that the provisions of this Agreement shall continue with regard to benefit assessments assessed prior to such termination date until those benefit assessments have been paid in full or are no longer outstanding.~~

Section 6 – Default.

~~Each party shall give the other party written notice of any breach of any covenant or agreement under this Agreement and shall allow the defaulting party 30 days from the date of its receipt of such notice within which to cure any such default or, if it cannot be cured within the 30 days, to commence and thereafter diligently pursue to completion, using good faith efforts to effect such cure and to thereafter notify the other party of the actual cure of any such default. The parties shall have all other rights and remedies provided by law, including, but not limited to, specific performance, provided however, in no event shall either party have the right to terminate this Agreement prior to the expiration of the Term, except as provided in accordance with Section 7(e) of this Agreement.~~

Section 7 – Miscellaneous Provisions.

~~(a) Assignment or Transfer. Except as provided in Section 3(e) hereof, a party may not assign or transfer its rights or obligations under this Agreement to another unit of local government, political subdivision or agency of the State of Connecticut or to a private party or entity without the prior written consent of the~~

~~other party and, if required, the prior approval of the holders of the Green Bank's bonds, notes or other obligations. If approval of the assignment by the holders of the Green Bank's bonds, notes or other obligations is required, such approval shall be obtained in accordance with the indenture or other documents entered into by the Green Bank in connection with the bonds, notes or other obligations.~~

- ~~(b) Amendment and Termination. After the Green Bank sells and issues its bonds, notes or other obligations to finance the costs of the commercial sustainable energy program, this Agreement may not be amended or terminated by the parties without the prior approval of the holders of the Green Bank's bonds, notes or other obligations, which approval shall be obtained in accordance with the indenture or other documents entered into by the Green Bank in connection with the bonds, notes or other obligations.~~
- ~~(c) Severability. If any clause, provision or section of this Agreement is held to be illegal or invalid by any court, the invalidity of the clause, provision or section will not affect any of the remaining clauses, provisions or sections, and this Agreement will be construed and enforced as if the illegal or invalid clause, provision or section has not been contained in it.~~
- ~~(d) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, and all of which together shall constitute but one and the same instrument.~~
- ~~(e) Notices. All notices, requests, consents and other communications shall be in writing and shall be delivered, mailed by first class mail, postage prepaid, or overnight delivery service, to the parties, as follows:~~

~~_____ If to the Municipality:
_____ INSERT TOWN NAME
_____ INSERT STREET ADDRESS
_____ CITY, STATE, ZIP CODE
_____ Attention:~~

~~_____ If to the Green Bank:
_____ Connecticut Green Bank
_____ 845 Brook Street
_____ Rocky Hill, Connecticut 06067
_____ Attention: President~~

- ~~(g) Amendment and Waivers. Except as otherwise set forth in this Agreement, any amendment to or waiver of any provision of this Agreement must be in writing and mutually agreed to by the Green Bank and the Municipality.~~
- ~~(h) Applicable Law and Venue. This Agreement and its provisions shall be governed by and construed in accordance with the laws of the State of Connecticut. In any action, in equity or law, with respect to the enforcement or interpretation of this Agreement, venue shall be in the State of Connecticut.~~
- ~~(i) Entire Agreement. This instrument constitutes the entire agreement between the parties and supersedes all previous discussions, understandings and agreements between the parties relating to the subject matter of this Agreement.~~



~~(j) Headings. The headings in this Agreement are solely for convenience, do not constitute a part of this Agreement and do not affect its meaning or construction.~~

~~IN WITNESS WHEREOF, the Municipality and the Green Bank have each caused this Agreement to be executed and delivered as of the date indicated above:~~

~~(SEAL) _____~~

~~ATTEST: _____~~

~~_____ **INSERT TOWN NAME**~~

~~_____ By: _____~~

~~Its: _____~~

~~_____~~

~~_____ **CONNECTICUT GREEN BANK**~~

~~_____ By: _____~~

~~Bryan T. Garcia, President~~



Appendix E

C-PACE Technical Application Form

The purpose of the C-PACE Technical Application Form is to summarize the C-PACE Program's technical standards and the requirements therein for Borrowers and/or Capital Providers submitting Eligible Projects for Green Bank approval. The Connecticut Green Bank adopted Technical Standards for the C-PACE program, which can be found online at http://www.cpace.com/assets/pdf/Program_Guidelines.pdf. All projects financed with C-PACE must demonstrate a "Savings-to-Investment" ratio (SIR) of greater than 1 using analytical methods in accordance with the technical standards for C-PACE.

Eligible projects will complete this form and submit the requested attachments. The sections of this application form are:

- I. Project technical submitter & qualifications
- II. Project summary
- III. Energy Use Baseline
- IV. Audit/Feasibility study
- V. Commissioning and Measurement & Verification plan

In its Technical Standards, the Green Bank utilizes nationally accepted, "best-practice" methodologies to collect and analyze information on building energy use and savings. These should be adhered to where possible:

- Baseline data collection and development
 - ASTM E2797-11, Building Energy Performance Assessment (BEPA)
- Audit/Feasibility Study
 - ASHRAE Level I, Level II and Level III Energy Audit Guidelines for targeted or whole building energy efficiency retrofits
- Measurement and Verification M&V and Commissioning Plan
 - International Performance Measurement and Verification Protocol (IPMVP)

The Connecticut Green Bank has the sole discretion to determine an Eligible Project has demonstrated a positive SIR in conformance with the C-PACE Program Guidelines.



I. Project Technical Submitter and Qualifications

Applications must be prepared and submitted by an energy engineer or by a team including an energy engineer. An energy engineer is defined as a professional holding a Certified Energy Manager or Certified Energy Auditor accreditation, a Professional Engineer with demonstrated relevant energy experience, or a contractor with relevant demonstrated experience as determined by the C-PACE Technical Administrator. Other certifications or relevant experience will be evaluated by the Connecticut Green Bank at its sole discretion.

Name _____

Company _____

Address _____

Phone _____

Email _____

C-PACE Registered Contractor

Yes

No

License/Certification Name: _____

License/Certification Number:

Certified Energy Manager _____

Certified Energy Auditor _____

Professional Engineer _____

Other _____



II. Project Summary

Address				
Type of Building				
Total Project Cost				
Proposed Assessment*				
Term (years)				
Annual Interest Rate				
Proposed Energy Measures				
Savings-to-Investment Ratio				
Clean Energy Installed (kW)				
Baseline Energy Use	Electricity (kWh/year)	Actual		Normalized
	Electricity (MMBtu/year)			
	Fuel (MMBtu/year)			
	Total (MMBtu/year)			
Estimated Post-ECM Energy Use	Electricity (kWh/year)			
	Electricity (MMBtu/year)			
	Fuel (MMBtu/year)			
Proposed Energy Saved and/or Produced		Renewable	Energy Efficiency	Total
	Over Term (MMBtu) **			
	Over EUL (MMBtu) ***			
Estimated Cost Savings	Over Term (\$)			
	Over EUL (\$)			

* Proposed assessment is the total C-PACE financing amount

** Energy savings 'over term' is the total energy saved over the C-PACE benefit assessment term.

*** Energy savings 'over EUL' is the total energy saved over the weighted-average effective useful life of all the financed energy improvements.



III. Energy Use Baseline

The ~~ASTM Building Energy Performance Assessment (BEPA)~~ protocol established a standardized methodology for building energy use data collection, compilation and analysis. The methodology is intended to fill data collection and analysis gaps in the ASHRAE energy audit guidelines and establish a sound, representative building energy use baseline. Please complete the following checklist to confirm the baseline was prepared in accordance with the ASTM BEPA Standard:

- ~~Baseline time period identified where no “major renovation” has been performed (must be a minimum of one year, but preferably three years)~~
- ~~Baseline type identified:~~
 - ~~Conventional (energy use data is available for baseline period)~~
 - ~~Minimum 12 months utility bills used for all meters and energy accounts impacted to the proposed energy improvements~~
 - ~~Non-conventional (energy use data is not or only partially available)~~
 - ~~Fully or partially vacant existing building whose use is not expected to change (e.g., office space remains as office space)~~
 - ~~Existing buildings undergoing repositioning or new use (e.g., former industrial space being converted to office space)~~
 - ~~Existing multi-tenant building where tenants are sub-metered~~
- ~~(If applicable) Building energy use simulation model used (should be eQUEST, EnergyPlus, or equivalent. Baseline for energy using equipment must meet the current CT energy code (2009 IECC with amendments)).~~
- ~~Major independent variables impacting building energy use identified (e.g., Heating Degree-Days, Cooling Degree Days, occupancy rate, operating hours, other)~~

The following documents are attached under III. Energy Use Baseline:

- ~~Description of property including:~~
 - ~~Gross, leasable and vacant square footage~~
 - ~~Occupancy type (e.g. owner occupied, single tenant, multi tenant)~~
 - ~~Number of utility meters servicing the property and their ID numbers~~
 - ~~Date of last major renovation~~
 - ~~Fuel type (e.g. oil, natural gas, propane, etc)~~
- ~~(If applicable) copies of utility bills for baseline period and the most recent bill~~
- ~~(If applicable) copy of building energy use simulation model~~
- ~~Building energy use equation (using regression analysis) for energy use in the baseline time period as a function of the independent variables and R² for building energy use equations~~
- ~~Projection of the energy use baseline each month under average (normalized) weather conditions over the proposed finance term~~



IV. Energy Audit / Feasibility Study

Energy Audit Checklist Energy Efficiency Measures:

ASHRAE Level I, Level II and Level III Energy Audit Guidelines describe how the audit should establish a representative baseline, identify and recommend ECMs, estimate the useful life of each ECM, determine total capital cost and the expected energy savings of each ECM that can confidently be achieved and identify the uncertainty associated with the methodology used to establish ECM costs and savings.

Energy audit provided (consistent with ASHRAE guidelines) N/A

Level 1 conducted N/A

Level 2 conducted N/A

Level 3 conducted N/A

Other (describe):

ECM(s) are eligible under the C-PACE program

EUL for each ECM is identified

Estimated savings for each ECM is identified

Project cost for each ECM is identified

Non-utility bill savings are broken out and identified

Non-equipment related (but financed) costs are broken out and identified

SIR > 1

The following documents are attached under IV. Energy Audit/Feasibility Study:

List of recommended ECMs including:

cost for each ECM and indication of estimated (e.g. quote) or fixed (e.g. contract) cost

cost-weighted and savings-weighted EUL for each ECM as well as the average for the project.

utility incentives used for each ECM (if applicable)

non-energy saving costs financed (e.g. audit, M&V, appraisal, etc)

List of all assumptions used in the energy savings calculations including:

average weather conditions

building occupancy profile

building operating schedule

building envelope construction (walls, roof, etc)

building energy management system operation/control strategy



- temperature set points
- ECM interactive effects
- utility rate escalators (ISO New England 20 year projected electricity cost escalation (3% typical; if other than 3%, provide reference) *
- equipment degradation rates
- non-utility bill related energy savings (these should be broken-out and clearly identified)
- uncertainty around energy savings and/or project costs

List of existing major building mechanical systems utilizing energy and energy use of major building mechanical systems in baseline period

Photographs of equipment to be replaced

Copy of energy savings analysis and description of method: _____

Modeling _____

eQuest _____

EnergyPre _____

Trace 700 _____

Other _____

Calculation/Spreadsheet (please send digital copy) _____

Vendor software _____

Copy of default data used in the energy savings calculations (e.g., use of TMY weather conditions, occupant density, plug-load energy consumption, ventilation rates, etc.)

SIR Calculation (demonstrating that the SIR >1) *

Total Project Cost

Total CEEF Incentives (estimated or actual)

Total amount of C-PACE financing

If <100% project cost, note how remaining project costs are funded

Financing term (maximum is 20 years and cannot exceed weighted-average EUL of all ECMs)

Interest Rate

Total savings (energy and related) over finance term



Feasibility Study Checklist for Renewable & Energy Generation Measures:

For a clean energy generation project, the feasibility study should describe the proposed renewable energy system; identify and evaluate site suitability; assess system expected performance and requirements to maintain optimized operation; compare system expected performance against total energy demand of the building; identify performance guarantees and effective useful life; analyze energy savings including assumptions on avoided future utility electricity costs including assumed rate escalations, equipment degradation, rebates or incentives, REC credits/sale, potential excess electricity sale back to the grid, etc.

- ~~Solar PV and/or CHP Feasibility Study provided according to C-PACE Program Guidelines, Appendix G, Section I: "Solar PV Feasibility Study requirements" and/or "VII Fuel Cell Feasibility Study Requirements"~~
 - ~~Yes~~ ~~No (explain)~~ _____

- ~~ECM(s) are eligible under the C-PACE program~~
- ~~EUL for each ECM is identified~~
- ~~Estimated savings for each ECM is identified~~
- ~~Project cost for each ECM is identified~~
- ~~Non-utility bill savings are broken out and identified~~
- ~~Non-equipment related (but financed) costs are broken out and identified~~
- ~~SIR >1~~

The following documents are attached under IV. Energy Audit/Feasibility Study:

- ~~List of ECMs including:
 - ~~cost for each ECM and indication of estimated (e.g. quote) or fixed (e.g. contract) cost~~
 - ~~cost-weighted and savings-weighted EUL for each ECM as well as the average for the project.~~
 - ~~non-energy saving costs financed (e.g. equipment warranty, etc)~~
 - ~~ECM component replacement costs financed (e.g. inverters/restacking)~~~~
- ~~List of all assumptions used in the energy savings calculations including:
 - ~~(for solar) de-rate factor used (default de-rate factor is 0.77)~~
 - ~~(for solar) area where solar radiation data was collected~~
 - ~~average weather conditions~~
 - ~~building occupancy profile~~
 - ~~building operating schedule~~
 - ~~utility rate escalators (ISO New England 20-year projected electricity cost escalation (3% typical; if other than 3%, provide reference).*~~
 - ~~equipment degradation rates~~~~



- non-utility bill related energy savings (these should be broken out and clearly identified)

~~For Solar Systems~~

- Description of PV system type
 - Roof Mounted
 - Ground Mounted
 - Parking Canopy
 - Nameplate Capacity (kW)
 - Annual Estimated Production (kWh/year)
 - Copy of shading study
 - (If roof mounted), profession opinion on roof remaining useful life and professional structural engineer opinion on structure's capability of supporting Solar PV system (under wind conditions, snow load, etc.)
 - Copy of model used to project system output (electricity production)
 - PV Watts
 - PowerCLerk/Solar Anywhere
 - RETScreen
 - SAM
 - Other: _____
 - Comparison of projected solar electricity production (kWh) by month at average (normalized) weather conditions versus normalized building electricity consumption by month
 - SIR Calculation (demonstrating that the SIR > 1) *
 - Total Project Cost
 - Total CEEF Incentives (estimated or actual)
 - Total amount of C-PACE financing
 - If <100%, note how remaining project costs are funded
 - Financing term (maximum is 20 years and cannot exceed weighted-average EUL of all ECMs)
 - Interest Rate
 - Total savings (energy and related) over finance term
- *For solar projects, see C-PACE Program Guidelines, Appendix G, Section IV: "C-PACE Solar PV Savings-to-Investment Ratio (SIR) Calculation Guidelines".*



V. Commissioning and Measurement & Verification

The Connecticut Green Bank requires C-PACE applicants to base their M&V plan on the International Performance Measurement and Verification Protocol (IPMVP) or an alternative protocol defined by the project energy consultant (as appropriate for the project size and ECMs installed). M&V plans should address what will the actual electricity production data collected in the reporting period under actual weather conditions be compared to in order to assess performance.

- Commissioning plan Provided
- M&V plan Provided
 - IPMVP used as basis
 - Option A. Retrofit Isolation: Key Parameter Measurement
 - Option B. Retrofit Isolation: All Parameter Measurement
 - Option C. Whole Facility
 - Option D. Calibrated Simulation.
 - Calculations used as basis (with metering)
 - Calculations used as basis (without metering)
 - Other: _____

[attached separately]

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APPENDIX J: TECHNICAL REVIEWER APPROVAL PROCESS

[attached separately]

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Memo

To: Connecticut Green Bank Board of Directors

From: Bryan Garcia (President and CEO), Bert Hunter (EVP and CIO), and Brian Farnen (General Counsel and CLO)

CC: George Bellas (VP of Finance and Administration), and Kerry O'Neill (VP of Residential Programs), Mackey Dykes (VP of CI&I and Officer), Benjamin Healey (Director, Clean Energy Finance) and Eric Shrago (Director of Operations)

Date: March 29, 2017

Re: Nonprofit Business Plan and Steps to Establish

Background

The Board of Directors adopted a Sustainability Plan for the Connecticut Green Bank (Green Bank) on December 15, 2017. The plan recognized that by putting the Green Bank on a pathway to self-sufficiency and sustainability, the organization would have to adjust its model from using limited public funds to attract and leverage private investments, towards seeking investment opportunities in its core business that maximizes financial returns in its pursuit of its own profitability at the expense of markets that aren't yet profitable (e.g., single-family and multifamily affordable housing).

One of the pillars of the adopted plan is to establish an independent non-profit affiliated entity (the Nonprofit) that would achieve operating leverage and attract mission-oriented supporters for a set of products serving underserved market segments¹. If left at the Green Bank, these products would be a drag on the timeline to sustainability and/or would be starved for resources – both investment resources and operating support – at the very juncture when they need the next level of investment.

The table below outlines the products that would be administered by or housed in the Nonprofit and the rationale for each, given the new strategy for the core investment business of the Green Bank.

¹ The [December 2017 Board memo](#) (p. 81-91) details the development of the concept of a nonprofit entity, beginning with direction the Board gave to staff in January 2017 to research the potential for an independent entity. A market scan was conducted with Forsyth Street Advisors and a recommended approach was subsequently developed. The memo places the nonprofit in the broader context of the Green Bank's new strategy in response to budget sweeps. This work was supported by a \$50,000 grant from the Hampshire Foundation.

Challenge Being Addressed in Nonprofit	Multifamily Products	Commercial Solar Fund	Solar for All / PosiGen	Smart-E Loan Program
More investment needed, but doesn't match Green Bank's target return profile	X			X
Greater scale needed to attract necessary private investment	X	X	X	
Mission-oriented investors reluctant to invest at Green Bank given budget sweeps	X		X	
More operating support needed at critical juncture, but Green Bank resources limited	X	X		X
Greater scale needed for sustainability	X			X

For these reasons, it was proposed that the activities in these program areas take place in the Nonprofit that would help the Green Bank not only continue to deliver impact in these important market segments by attracting more private capital (i.e., foundation Program Related Investments, commercial bank funding that satisfies Community Reinvestment Act obligations, tax equity for solar, etc.), but also reducing the operating expenses of the Green Bank given a more efficient structure in the Nonprofit.

The Nonprofit would house this collection of products incubated by the Green Bank and ready for the next level of scale – including the Multifamily suite of products, a next generation scalable commercial solar lease program, support for the Solar for All partnership with PosiGen, and the Smart-E loan – and would run these products in Connecticut on behalf of the Green Bank via a series of professional services agreements (PSAs). The Green Bank would maintain ownership of all programs and would grant a license to the Nonprofit to operate the programs in Connecticut and beyond. Certain staff would become employees of the Nonprofit, allowing the Green Bank to reap immediate operating savings on staff expenses involved in these programs, due to a significantly lower overhead rate in the Nonprofit.

After the adoption of the Green Bank's new strategy and direction in December, the Board directed staff to come back by the end of Q1 2018 to present a business plan, budget and staff transition plan for the Nonprofit. These are laid out below.

A detailed Business Plan for the Nonprofit is provided in Appendix I. Below are summaries of key areas of interest to the Board of Directors including structure and governance, the relationship between the Green Bank and the Nonprofit, state Code of Ethics considerations, GASB and potential component unit considerations, the Nonprofit's pro forma financials, and the timeline to establish the Nonprofit.

Structure and Governance

In order to achieve desired levels of scale and attract pools of mission-driven support, the new entity will need to be an independent 501(c)(3) organization. An independent 501(c)(3) structure is recommended because the charitable mission of the proposed organization qualifies it for the benefits of a nonprofit organization. Namely, the Nonprofit will be eligible to qualify for federal exemption from federal income taxation as a 501(c)(3) organization. Once exempt from this tax,

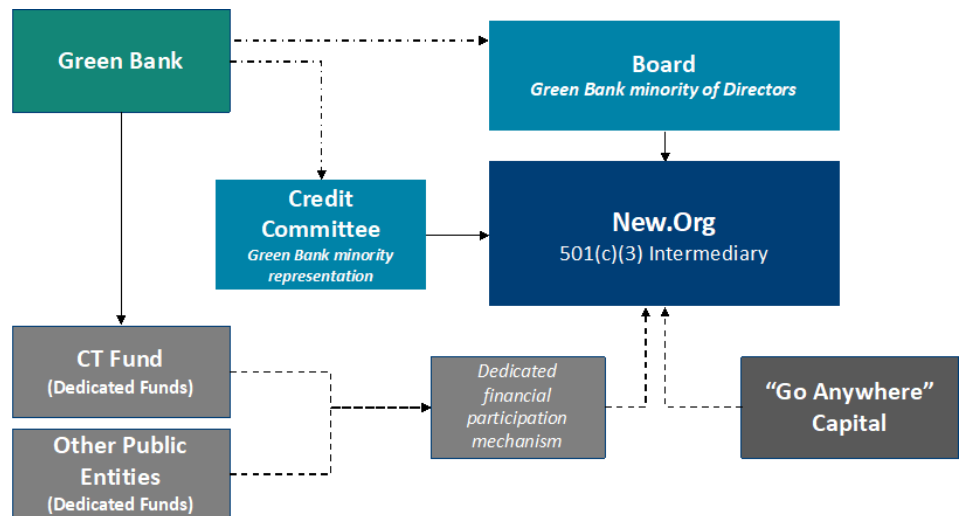
the Nonprofit will be exempt from similar state income taxes. The other main benefit is that a 501(c)(3) structure opens up eligibility for public and private grants and donations. Nonprofit organizations are allowed to solicit charitable donations from the public. Many foundations and government agencies limit their grants to public charities. And as the success of the proposed Nonprofit requires additional funding beyond Green Bank and State support, foundations have already expressed their desire for an independent organization that is remote from legislative purview that could put their donations at risk if the Nonprofit was *not* independent².

The Nonprofit will be a non-member Connecticut non-stock corporation with a self-perpetuating board. The Nonprofit would have its own mission that would be complementary to the Green Bank’s clean energy mission, as well as those of mission-driven supporters. The Nonprofit would have its own Board of Directors which would be legally in control of the entity. The Nonprofit would also have a Credit Committee that would make decisions on discretionary approvals within investment policies agreed upon by the Board and under the requirements of creditor agreements.

The independence of the organization from Green Bank is critical to achieving supporter confidence in the accountability of the organization to its mission and to supporters, separate from the Green Bank mission and obligations.

That said, it will be necessary to continue to ensure that the Nonprofit is operating to help fulfill the Green Bank’s mission in Connecticut. To this end, Green Bank would be represented as a minority of the Nonprofit’s

Board of Directors. The Green Bank may have minority representation on the Credit Committee and/or other Board Committees. The Green Bank will have clear requirements and terms over how any funds it invests in the Nonprofit will be utilized through various investment and service agreements to ensure that any funds provided by the Green Bank are used in Connecticut in accordance with Green Bank investment conditions.



Care must be taken in the formation and first year’s operations of the Nonprofit, given it is arising out of a quasi-public agency. This requires that several state Code of Ethics conditions and requirements are met. These are discussed below.

Board Structure and Make-up

At the inception of the Nonprofit, the Board will be comprised of 2 representatives from the Green Bank, 2 executive staff of the Nonprofit that have transitioned employment from the Green Bank to the

² From an accounting perspective, the term “independent” means the Nonprofit would *not* be included as a component in the Green Bank’s financial statements.

Nonprofit, and 1 independent or investor representative (either individuals with notable experience in the mission investment space or to be drawn from the anchor investors in the Nonprofit).

Principles of Governance

As stated above, the Nonprofit will be a non-member Connecticut nonstock corporation with a self-perpetuating board. A non-stock and non-member structure is recommended because it is free of ownership requirements. If an owner was required, that individual or entity would control the Nonprofit. Under a non-stock and non-member structure, ultimate control of the organization rests with the Board and ultimate benefit is retained for the charitable purposes of the Nonprofit's mission as set forth in organizational documents and in its 501(c)(3) application. Although a supermajority of the Nonprofit may amend or modify the Nonprofit governance and mission through the proposed Bylaws, the funding streams from the Green Bank and the foundations through program related investments will for all intent and purpose restrict the Nonprofit Board from materially modifying the Nonprofit's core mission and purpose. The Bylaws and Articles of Incorporation being developed by outside counsel are typical for a 501(c)(3) charitable organization. Note that Green Bank will not approve of these governance documents as the Nonprofit will be an independent organization.

Charitable Mission

The mission of the Nonprofit is to preserve and protect the environment and to promote environmental conservation, while lessening the burdens of government imposed upon the Green bank.

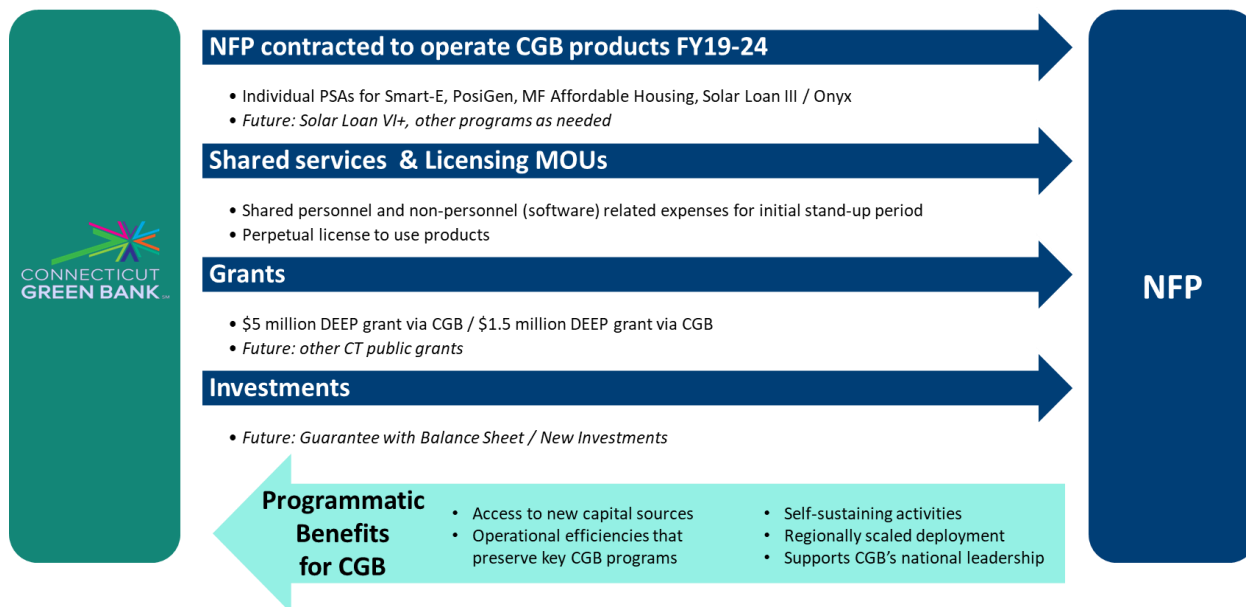
Consistent with this mission, the Nonprofit will complement the activities of the Green Bank (1) by furthering the statutorily-prescribed essential public and government functions of the Green Bank, and (2) by protecting, preserving and promoting the environment as a tax-exempt charitable organization described in Section 501(c)(3) of the Internal Revenue Code.

More specifically, the Nonprofit will, among other charitable initiatives, (1) further the purposes of the Green Bank as described in section 16-245n(d)(1)(B) of the Connecticut General Statutes, (2) promote the environment through clean energy and sustainability measures, and (3) focus on underserved market segments including LMI communities and unconventional credits. Lessening the burdens of government and promoting the environment with an emphasis on LMI communities and unconventional credits are appropriate purposes for tax-exempt 501(c)(3) charitable organizations.

From a timing point of view, the Nonprofit could be incorporated as a Connecticut nonstock corporation within a week or two of approval of its establishment by the Green Bank. An application to the Internal Revenue Service for recognition of the Nonprofit as a tax-exempt 501(c)(3) charitable organization could be prepared and submitted to the IRS within four weeks after the incorporation of the Nonprofit.

The Nonprofit's Relationship to the Green Bank

The new Nonprofit and Green Bank would have a close and aligned working relationship and mission, despite the Nonprofit's independence from Green Bank. The relationship would be guided by the key elements outlined below.



Green Bank Performance-Based Grant Investment in Nonprofit

The Green Bank will be making a \$6.5 million performance-based grant investment comprised of 2 grants from the Connecticut Department of Energy and Environmental Protection (DEEP): the previously authorized \$1.5 million EnergizeCT Health and Safety Revolving Loan Fund and a proposed tentative \$5 million grant made to the Green Bank with the express purpose of being regranted to the Nonprofit for investment in LMI activities. While the grant investment will be established as a dedicated CT Fund to ensure Green Bank funds are applied to eligible activities and restricted to Connecticut, this support provides an initial capital base to both attract a set of other philanthropic co-investors and to leverage this combined capital base with other layers of capital (senior and subordinate) to fund the capital investments to be made by the Nonprofit. **Staff will bring this grant investment back to the Board for approval in June.**

Ability to Influence Activities of the Nonprofit Through the Green Bank Services Agreements

The Green Bank and the Nonprofit would negotiate a series of multi-year product-specific professional service agreements (PSA) between the two entities, as well as a memorandum of understanding (MOU) for shared services, given the overlap and close relationships between the product sets and focus areas. The proposed PSAs and MOU with the Nonprofit will need to allow the Nonprofit to run the scaled products on the Green Bank's behalf and will outline any performance targets or milestones, and will also determine how the Green Bank continues to support these products. This approach allows Green Bank to ensure ongoing programmatic goals and deployment targets are met in the products being administered by the Nonprofit, while freeing up additional funding resources that were previously dedicated to projects now housed within the Nonprofit. In addition, the relationship increases operating leverage for Green Bank, reducing costs associated with personnel overhead that can now be transferred over to the Nonprofit and spreading ongoing product investments needed (e.g. for technology platform, asset management) over a regional operation ultimately.

The program-specific PSAs with the Nonprofit will outline how the Nonprofit will support the Green Bank in the Connecticut market for the implementation and administration of those products. Each of these agreements will include a description of the activities the Nonprofit will perform for the Green Bank and vice versa, staff allocations, budget, any technology needs or

other resources from the Green Bank, and performance-based targets and milestones. There will be an agreement for each of the following:

Product or Program Area	Nonprofit Role
Multifamily Suite of Products	Outsourced program administration
Residential 1-4 Low-Income Programs	PosiGen partnership and investment / asset management support Support for other low-income initiatives such as CT Green and Healthy Homes Project and DOE's Clean Energy Low Income Communities Accelerator
Smart-E Loan Program	Outsourced program administration
Commercial Solar Fund	Administrative support for the existing Green Bank Commercial Solar fund Outsourced program administration for a new fund being raised in the Nonprofit

There will be seven Green Bank staff involved in these product and program areas that will transition to the Nonprofit at the beginning of the new fiscal year, and one additional staff transitioning at the beginning of FY20. **Staff will bring a request back to the Board at the April 27, 2018 meeting to approve these staff transitions, consistent with the ethics requirements set forth below.**

Additionally, the Green Bank will enter into an MOU with the Nonprofit for services the Green Bank will be providing to the Nonprofit (and vice versa) and licensing of intellectual property related to specific products and programs. The Board of Directors of the Nonprofit will make sure that the terms of any contracts or agreements with the Green Bank are fair to the Nonprofit and consistent with the rules applicable to tax-exempt 501(c)(3) organizations. Transition services covered include accounting, financial, marketing, legal, and operational functions and services. The licensing will include use in Connecticut and outside of Connecticut and cover all product specific intellectual property, marketing assets, market data, and terms of use.

The current estimate of the value of these product-specific agreements is approximately \$10 million over the next 6 years allocated across the products as follows:

- Multifamily – \$5,900,000
- Residential 1-4 Low-Income – \$900,000
- Smart-E Loan – \$2,100,000
- Commercial Solar – \$1,100,000

Staff will refine the budget for these agreements as part of the FY19 planning process and **will bring these agreements back to the Board for approval in June.**

Future Green Bank Investments in Nonprofit

The Green Bank may elect to participate in investing activities at the Nonprofit at any future point, to the extent that a) discretionary capital is available to invest, b) any investments meet the return criteria of the Green Bank (e.g. targeting a 5% return over a 10-year term at the portfolio level), and c) any investments meet the strategic priorities of the Green Bank. As an example, the Green Bank may wish to participate in the new commercial solar fund being raised by the Nonprofit.

Requirements with Forming an NGO out of a Quasi-Public State Agency

The formation of the Nonprofit would represent the exercise of express powers of the Green Bank set forth in subdivision (ix) of Section 16-245n(d)1(D), which reflects a legislative determination that the public purposes of the Green Bank can be furthered through its involvement in the formation, ownership, management or operation of other business entities that may present an opportunity to leverage Green Bank resources through participation in clean energy enterprises and activities with other public and private participants.

The Green Bank is aware (see Appendix II) that the proposed formation of the Nonprofit, the anticipated contracts between the Green Bank and the Nonprofit, and the transition of current Green Bank employees to the Nonprofit may raise issues under the Code of Ethics for Public Officials, including

- (i) the involvement of such employees while in state service in the creation of an outside employment opportunity (see Advisory Opinion No. 1997-1);
- (ii) the possible application of the one-year “jobs ban” (Section 1-84b(f)) if the transitioning employees were to be personally and substantially involved while still in state service in the award by the Green Bank of contracts to the Nonprofit; and
- (iii) the applicability to the administration of the continued Green Bank programs by former Green Bank employees of the one-year prohibition on contact with such employees’ former agency (Section 1-84b(b)).

The Green Bank has received an informal staff opinion from the Connecticut Office of State Ethics (OSE) that it is possible to proceed with the Nonprofit as envisioned and consistent with the conditions of the DEEP \$5 million grant without violating applicable provisions of the Code of Ethics for Public Officials. The Green Bank has filed a petition for a formal Advisory Opinion on the same issues addressed informally by OSE staff and expects the Advisory Opinion to be approved and issued by the Citizen’s Ethics Advisory Board in April 2018.

The main findings and mitigates from the Ethic’s Opinion are set forth below.

Transitioning Employees Not Misusing their Official Position by Creating an Outside Employment Opportunity

The informal Ethic’s opinion concludes that the Nonprofit does not violate the prohibition on a state or quasi-public employee creating an outside employment opportunity for their own benefit because it represents a management and board-directed strategic initiative, not the creation of a private employment opportunity by the individual Green Bank employees. Since the transitioning employees have operational responsibility for the programs that will move to the Nonprofit and are therefore familiar with how those programs work, they will provide staff level technical suggestions for terms and conditions to be incorporated in the contract(s) between the Green Bank and the Nonprofit. That technical input will be provided to members of the Green Bank senior management, and it will be those members of senior management (who will remain at the Green Bank), not any of the transitioning employees, who will conduct any contract negotiations with representatives of the Nonprofit. Those same members of senior management, and not the transitioning employees, will be responsible for the contract award process at the Green Bank, consisting of a recommendation to the Green Bank Board that the proposed contracts be authorized and approved. And in order to avoid even an appearance of misuse of official position, it is proposed (consistent with other Advisory Opinions dealing with comparable

situations) that the total value of compensation (salary and benefits) for each of the transitioning employees be no greater during the first year than it was at the Green Bank. Thereafter, compensation would be subject to an overall standard of reasonableness consistent with IRS rules for tax-exempt organizations and would be subject to reporting on Form 990.

Jobs Ban Not Triggered but Employees Must Transition Before Contract(s) Execution

On the “jobs ban”, the informal opinion concludes that it is triggered by any substantive involvement in the process of contract development by the transitioning employees, even if they are not determining or approving the contract terms. But the opinion does confirm that the “jobs ban” could still be avoided if the transitioning employees leave the Green Bank before the contracts between the Green Bank and the Nonprofit are executed. As the transitioning employees will be involved in the contract development process because they are subject matter experts and essential for preparation of the various scopes of works for the continued Green Bank programs, the transitioning employees must leave the Green Bank before the contracts are executed between the Green Bank and the Nonprofit.

One-Year Limitation on Types of Interaction

Under Section 1-84b(b) of the Code of Ethics, there is a prohibition for the first year after leaving the Green Bank, from any representation of the interests of the Nonprofit back before the Green Bank by any of the transitioning employees. To remain compliant with a recognized exception from Section 1-84b(b) of the Code of Ethics, during at least the first year, contact between the transitioning employees and those still at the Green Bank will be limited to matters of management and administration of the continued Green Bank programs pursuant to the contracts entered into by the Green Bank and the Nonprofit. The transitioning employees will not seek amendments to those contracts, solicit further assistance or grants from the Green Bank on behalf of the Nonprofit, or seek other discretionary action by the Green Bank for the benefit of the Nonprofit.

Potential Component Unit GASB Considerations

The Green Bank worked with its audit firm to identify any considerations in the establishment and governance of the Nonprofit or contracting between the Green Bank and the Nonprofit that might cause the Green Bank to report the Nonprofit as a component unit on its audited financial statements. The approach being taken is consistent with the findings of that analysis. Some of the critical factors enabling the Green Bank to not report the Nonprofit as a component unit include: Green Bank having minority representation on the Nonprofit Board and any committees responsible for the financial operating budget, Green Bank not being responsible for any Nonprofit financial deficits or required to assume any Nonprofit debt, and Green Bank not holding an equity interest in the Nonprofit. See Appendix III for a letter from Blum Shapiro, the Green Bank’s auditors, addressing this issue.

Financials

The Nonprofit will have two business lines: an investment business and the Smart-E business line which is a fee-for-service offering. The Smart-E business line is intended to be breakeven – supported by program administration fees, or ultimately contractor origination fees at scale.

Projected Revenue and Operations Budget Overview

The Nonprofit will have the origination, underwriting, and capital management capabilities of a high-quality specialty finance intermediary. This requires an initial annual budget of [REDACTED], scaling up to [REDACTED] by the end of the fourth year. Most of the costs of the Nonprofit are anticipated to be in personnel,

Operating Expenses (Figures in '000s)	FY19	FY20	FY21	FY22
Total Personnel	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other Than Personnel	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total Operating Expenses	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

A detailed breakdown of operating expenses is provided in the appendix of the business plan, including a breakdown of expenses related to the investment and the Smart-E business line.

The organization's projected staffing plan is shown below.

Staff Category	FY19 Start of Year	FY19 Year End	FY20 Year End	FY21 Year End	FY22 Year End
Leadership	2	2	2	2	2
Multifamily Programs	1	1	2	2	2
Commercial Solar	0	1	2	2	2
Project & Corporate Finance	2	2	2	2	2
Marketing, Admin & Support	0	1.5	3	3	3
Smart-E CT	3	3	3	3	3
Smart-E Expansion	-	0.5	3	4	5
Total	8	11	17	18	19

Staffing levels can scale with the pace of the organization's activity. The personnel benefits rate is estimated at 40%, significantly lower than the 78% currently applicable at the Green Bank.

Other overhead costs include operational expenses related to the business development and marketing, origination and administration of the products, as well as back office support.

The Nonprofit will be self-sustaining, as the operations budget outlined above can be supported by the revenue anticipated from the contemplated business model. Revenue is expected to come from several sources:

- Net interest income from investments across all non-Smart-E business lines.
- The contract with the Green Bank to administer Green Bank programs, running through year six of operations.
- Startup grants in years one, two, and three.
- Additional contracts with public/quasi-public entities to administer the Smart-E fee-for-service program.
- Fees from commercial solar development.

A breakdown of the sources of revenue and related operating expenses is shown below.³

³ NOTE: Some of the revenue and expense terms used here are more commonly found in for-profit accounting rather than nonprofit accounting. The purpose here is to convey a concept of revenues vs expenses which in a nonprofit yields a change in "net assets" rather than a change in "retained earnings".

Pro Forma Sources of Revenue and Expenses (Figures in '000s)

	FY19	FY20	FY21	FY22
Revenue				
Net Interest Income	████	████	████	████
Green Bank Contract	████	████	████	████
Operating Grants	████	████	████	████
Smart-E Contracts	████	████	████	████
Solar Development Fees	████	████	████	████
Total Revenue	████	████	████	████
Less: Op Ex	████	████	████	████
Operating Income	████	████	████	████
Less: Provision for Loan Loss	████	████	████	████
Net Income	████	████	████	████

The table below shows the growth of the Nonprofit's balance sheet.

Pro Forma Balance Sheet (Figures in '000s)

	FY19 Year End	FY20 Year End	FY21 Year End	FY22 Year End
Assets				
Cash / Cash Equivalents	████	████	████	████
Loans				
Single Family	████	████	████	████
Multifamily	████	████	████	████
Commercial Solar PPAs	████	████	████	████
Total Investment Assets	████	████	████	████
Total Assets	████	████	████	████
Liabilities				
Senior Debt Capital	████	████	████	████
Subordinate Debt Capital	████	████	████	████
Total Liabilities	████	████	████	████
Net Assets				
Equity-Equivalent PRIs	████	████	████	████
Grants	████	████	████	████
Retained Earnings	████	████	████	████
Total Net Assets	████	████	████	████
Liabilities + Net Assets	████	████	████	████

Financial Sensitivity of Model

A breakeven analysis conducted of two scenarios for the end of year three (see below) for the investment business shows that the Nonprofit can only be self-sustaining within a reasonable timeframe if it has a regional scale. This is due to the higher origination volume available operating regionally, and a more favorable cost of senior capital available for scaled regional deployment. Further, the regional deployment scenario is more robust — it is able to withstand higher senior capital interest rates, and is able to weather more adverse loan loss scenarios.

The Smart-E business line is not included in the sensitivity analysis, since this fee-for-service business is designed to be break-even (e.g., program administration fees supplement contractor origination fees to cover all program expenses until volume on the platform scales enough for contractor origination fees to cover all program expenses without additional support).

Break-Even Values for Cost of Capital and Loan Loss Rates FY 2021 Year End (Year 3)		Net Interest Revenue Alone Covers OpEx for Investment Business
SCENARIO 1 (Regional expansion) Full projected commercial solar, single-family project finance and term lending origination Senior Debt Capital @ [REDACTED] Loan Loss @ [REDACTED]	Loan Loss Rate (@ [REDACTED] Capital) Senior Capital Rate (@ [REDACTED] Loan Loss)	[REDACTED] [REDACTED]
SCENARIO 2 (Connecticut Only) 40% of commercial solar origination 50% of projected single-family project finance origination 28% of term lending origination Senior Debt Capital @ [REDACTED] Loan Loss @ [REDACTED]	Loan Loss Rate (@ [REDACTED] Capital) Senior Capital Rate (@ [REDACTED] Loan Loss)	[REDACTED] [REDACTED]

This shows that for Scenario 1 (the base case) to achieve breakeven, the annual loan loss rates must be no greater than [REDACTED] assuming senior capital is held constant at [REDACTED] and the cost of senior capital must be no greater than [REDACTED] assuming annual loan loss rates are held constant at [REDACTED]. For Scenario 2, there is no loss rate that achieves breakeven assuming the cost of senior capital is [REDACTED] and cost of senior capital must be no greater than [REDACTED] assuming annual loss rates are held constant at [REDACTED]. A full sensitivity analysis is provided in the appendix of the business plan.

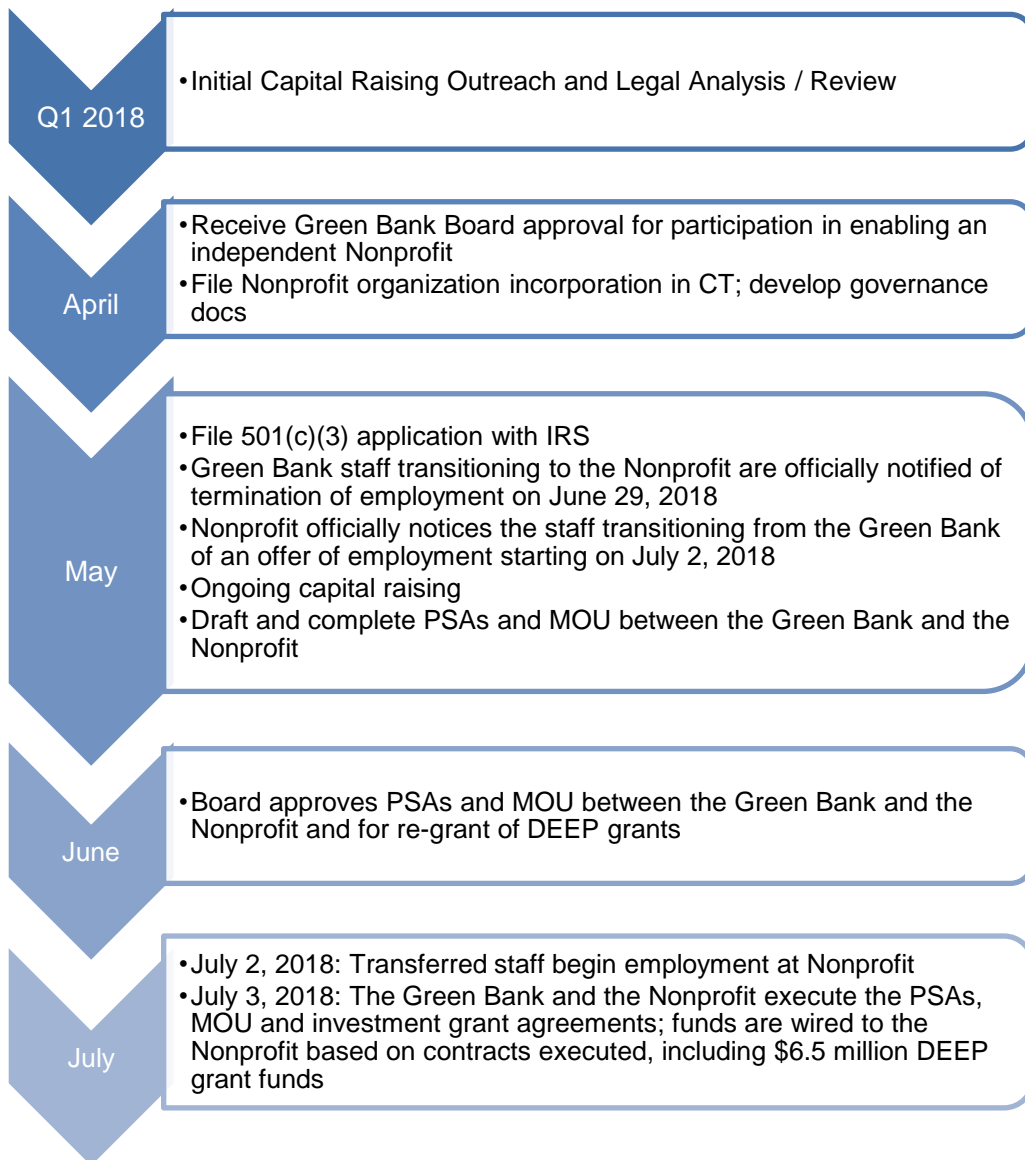
Timeline

The Green Bank would establish the Nonprofit in April, following approval from its Board, and have it operational on July 1, 2018. At that time, the Green Bank will seed the Nonprofit with a grant for ongoing support for investment associated with LMI activities solely in the Connecticut

market (through the Connecticut Department of Energy and Environmental Protection grants). In addition, the Green Bank and the Nonprofit will enter into a series of product-specific long-term PSAs that will provide six years of operational support for the Nonprofit staff and non-staff expenses to serve core programmatic goals in the Connecticut market. The Nonprofit will continue to raise additional external capital to expand and operate at its planned Connecticut and regional scale.

The Green Bank's goal is to close on funds shortly after the Nonprofit is fully formed and operational in Q3, 2018 with an initial deployment of investments from mid-Q3 to late Q1 2019.

Initially, the Nonprofit will be focused on operationalizing the relationship with the Green Bank and its activities in the Connecticut market. Expansion to other markets would occur once Connecticut operations are stabilized and capital and grant support for activities outside Connecticut are secured.



Conclusion

The recommendation being brought forth for your review is to approve the establishment of an independent mission-aligned Nonprofit in accordance with the business plan attached and summarized in this memo.

Resolution

Resolved, that the Board of Directors of the Connecticut Green Bank (Green Bank) authorize the President of the Green Bank and any other duly authorized officer of the Green Bank to participate in the formation of an independent non-profit non-stock corporation to further the purposes of the Green Bank, including by achieving operating leverage and attracting mission-oriented investors for a set of products serving underserved market segments.



*Business Plan for Creation of a
Mission-Aligned Nonprofit and Affiliated Entity for
Regional Clean Energy Deployment
in Underserved Market Segments*

March 2018

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This project is made possible with support from the Hampshire Foundation in the form of a \$50,000 grant, part of which is being used to fund exploration into opportunities that exist outside of Connecticut to further their goal of replicating successful Green Bank/low-to-moderate financing models more broadly.

This document was produced with the assistance of Forsyth Street Advisors, through the firm's engagement via the Green Bank's LMI/CDFI Research Agenda PSA.

Any legal, entity governance, or capital strategies outlined in this paper are subject to legal analysis vis-à-vis the Connecticut Green Bank Enabling Statute and Connecticut Code of Ethics, among others.

I. INTRODUCTION: THE CONNECTICUT GREEN BANK IS A CLEAR SUCCESS STORY

Founded in 2011 as the first green bank in the United States, the Connecticut Green Bank (Green Bank) was established to develop programs that will leverage private sector capital to create long-term, sustainable financing for energy efficiency and clean energy to support residential, commercial industrial and institutional sector implementation of energy efficient and clean energy measures. This report provides a business plan for expanding the Green Bank's efforts to increase the scale of sustainably financing clean energy investment, with an emphasis on underserved market segments including low-to-moderate income ("LMI") communities and unconventional credits. This will be achieved through creation of an independent affiliated Nonprofit lender (the "Nonprofit") able to surmount the barriers to effectively meeting the needs of underserved market segments.

The Green Bank Model Effectively Promotes Adoption of Clean Energy

Green Bank programs such as C-PACE, Solar for All with PosiGen, Smart-E Loan, Green Bank Solar PPA, and Multifamily have continued to grow and represent a significant portion of the organization's transactions. Over the past five years, the Green Bank has catalyzed the investment of nearly \$1.2 billion in investment into Connecticut's clean energy economy. In recognition of this pathbreaking work, the Green Bank won the 2017 Innovations in American Government Award by the Harvard University Ash Center for Democratic Governance & Innovation.

A Unique Track Record of Promoting "Inclusive Prosperity" Within the Climate Mission. As the Green Bank has evolved, an increased focus has been on supporting affordable and healthy buildings in LMI communities by reducing their energy burden and addressing health and safety issues. The Green Bank finances clean energy projects that yield significant savings on energy costs and reductions in greenhouse gas emissions across all sectors — for residents, commercial and industrial businesses large and small, for nonprofits, and institutions including state and local governments. This mission is framed in the goal of promoting inclusive prosperity — ensuring that everyone has access to the financial and ecological benefits of clean energy. The Green Bank works hard to ensure that no matter what census tract someone lives or works in, whether they are poor or affluent, whether the community is urban or suburban or rural, everyone is included in the benefits of a clean energy economy — as well as healthier and environmentally just communities. Further, clean energy projects bring jobs and opportunity — opportunity for growth for businesses, opportunity for economic stability and prosperity for families and communities.

The Green Bank's product suite at the intersection of community development, clean energy, and climate impacts — the Multifamily, Commercial Solar financing (with a focus on nonprofit and public purpose buildings), Solar for All, Smart-E Loan and flexible project finance programs — directly speaks to inclusive prosperity. These products focus on serving low- and moderate-income communities but have a broad enough mandate and structure to serve other clean energy and/or green projects hosted by "unconventional" credits — a segment that remains challenging for traditional lenders to finance. Through these programs, the Green Bank has deployed \$350 million within underserved communities and underinvested market segments since 2013, with an average of over \$65 million in the last two fiscal years.

The Green Bank's Success is Translatable Elsewhere. The Green Bank has achieved this success through its ecosystem approach of matching capital supply with project demand leveraging channel and program partners already working on the ground in all types of communities — from medium and small cities to suburban, exurban and rural settings. Having solved many of the project structuring and transaction size challenges that thwart other institutions from meeting the needs of underserved market segments, the Green Bank product suite is ready to be further expanded within its home market and applied to other geographies.

II. MARKET CONTEXT

The Current Green Bank Model Still Faces Barriers for Underserved Market Segments

Despite the success outlined above, the Green Bank faces barriers to achieving a greater level of activity, caused by a combination of operational, capital, and structural limitations. These limitations combine to prevent the Green Bank from effectively addressing underserved segments of the market at scale:

- **Operational Inefficiencies.** Personnel overhead (currently 78%) required by Green Bank in-house staff limits the expansion of staff-intensive products, especially those that require substantial in-house origination or management of origination / asset management platforms.
- **Quasi-Governmental Structure.** The quasi-governmental status of the Green Bank causes its structure, products, and investments to be influenced by state public policy and budget considerations that reduce flexibility and market responsiveness. The recent budget “sweeps” by the Connecticut Legislature resulted in a loss of approximately 55% of the Green Bank’s revenue in FY18 and FY19. These cuts are emblematic of the long-term risks to sustaining the Green Bank’s investing activities across all market segments in the face of the state’s fiscal crisis.
- **Limited Scale.** Underserved segments of the clean energy market — especially affordable multifamily housing, unsubsidized low- and moderate-income residential, small and medium enterprises, and community facilities — require a specialized market channel and origination approach that is difficult to provide at scale within the Green Bank.
- **Missed Opportunities.** A combination of operational, capital and structure limitations prevent the Green Bank from effectively addressing underserved segments of the market at scale, resulting in lost opportunities. Expanding the pool of capital available for these activities could enable capturing this additional deal flow.

Market Scan Identified Significant Gaps

The market scan conducted by Forsyth Street identified significant gaps in segments of the broader clean energy market:

- **Missing Link Between Capital and Demand-Generation.** Currently, no single entity plays an effective proactive demand-generation and capital provider role, limiting the scale in underserved segments of the market. For instance, there are entities that focus on generating demand for clean energy projects in LMI housing, but they require outside sources of capital to execute projects — sources that are attracted only to demand of sufficient scale and with counterparties that understand specific underwriting criteria as well as nuanced constraints of such capital sources.
- **Capital Sources Are Limited for Key Market Segments.** Certain segments of the market — especially projects below utility scale and those with unconventional credits — do not have access to appropriately-priced or structured capital for clean energy. Furthermore, the capital available for clean energy projects in LMI cannot cover the broader needs of buildings, such as health or safety or other capital needs, which must be concurrently addressed in order to move clean energy projects forward.

The Green Bank has an Ongoing Commitment to Serve its Market and Beyond

The proven successes of the Green Bank in Connecticut show that this model can be applied in other municipalities and regions looking to increase economic activity, lessen the energy burden on their residents, and advance clean energy adoption within LMI communities. The current lack of federal leadership on clean energy and climate policies, especially concerning the green bank movement and investment in clean energy deployment within LMI communities, demands bottom-up solutions and urgent action. The Green Bank has the expertise and the capability to expand its model to these underserved markets and advance its own efforts within Connecticut.

Leveraging and Extending the Success of the Green Bank Model. As a leader of the green bank movement, the Connecticut Green Bank can expand its success and provide solutions for underserved segments of the market to green banks in other municipalities and states. By creating a mechanism for sharing experiences, best practices, and financing capabilities in challenged segments of the clean energy market through the creation of the Nonprofit, the Nonprofit will help to address the Green Bank's strategic commitment to lead a movement to create larger impact across the Northeast and beyond. By serving as a partner to current and future green banks, the Nonprofit can supplement product delivery capabilities of these emerging green banks by offering a channel for product delivery and origination with an already successful track record.

Meeting the Needs of Existing Green Bank Service Providers. Because the Green Bank is constrained to activity within Connecticut, existing contractors and service providers are not able to utilize the Green Bank as a channel outside of Connecticut. Through the creation of a regional Nonprofit able to serve communities and organizations both within and outside of Connecticut, the Green Bank's current contractors and service providers would be able to broaden their services and meet the needs of their target markets and regional customer bases through their existing Green Bank relationships. Additionally, many of these partners are located within Connecticut — by helping local companies grow their market within the region advances the economic development of the state.

III. THE NONPROFIT'S OBJECTIVES

Rationale for Creating an Affiliated Nonprofit

As the Green Bank has proven its model and expanded the scale of its activities, it is experiencing increasing challenges to operational scale and efficiency which only can be overcome by expanding product reach across multiple market segments and broadening the focus of the Green Bank. An affiliated Nonprofit could be the appropriate vehicle to expand successful financing approaches and programs incubated in the Green Bank and address the barriers to scale outlined above and achieve requisite higher operational efficiencies.

The Nonprofit Would Address Current Barriers Faced by the Green Bank. An affiliated nonprofit lender could overcome the barriers the Green Bank faces in addressing the needs of underserved market segments at scale by bringing new efficiencies, capital, and an increased scale of operations for current Green Bank products focused on underserved market segments. The Nonprofit will seek to address the following limitations in the current Green Bank model:

- **Help the Green Bank Focus on its Core Investing Business.** Given the current budget environment within Connecticut, and despite the Green Bank's proven successes, the Green Bank recognizes the need to adjust its strategy and implement a plan to manage the more limited resources available for its investments in the current state fiscal environment. With a substantial portion of public resources currently being surrendered to Connecticut's general fund and as a precaution against the uncertainties of future ratepayer support, the Green Bank is working to become self-sustainable in 4-7 years by cutting its operating expenses and generating a stream of recurring revenue by investing its current public capital at higher rates of return. For instance, the Multifamily and Smart-E Loan programs do not consistently meet this new higher return criteria and without scale are on a longer path to sustainability requiring greater scale, both of which can be achieved in the Nonprofit while preserving much needed capital for investment within the Green Bank.
- **Operating Leverage.** The Nonprofit would be able to operate with reduced overhead — enabling greater efficiencies for products requiring personnel-intensive origination (e.g. Commercial Solar, Smart-E Loan and Multifamily programs). Overhead rates at roughly half of what is paid by the Green Bank is estimated to save as much as \$335,000 annually across the programs that will be housed at the Nonprofit at current staffing levels.
- **Leveraging the Success of the Green Bank Model While Promoting Greater Efficiency Within the Green Bank.** The current Green Bank strategy and state budget environment limits the designated Green Bank programs' capacity to continue to grow at a critical juncture when they are ready for the next level of scale, especially given competing demands for limited Green Bank resources. A Nonprofit would afford these programs (and future initiatives) the freedom and flexibility to continue to grow, without limiting their access to sufficient capital and resources, in doing so, allows the Green Bank to keep these key products in the Connecticut market.
- **Access to New Capital Providers.** The Nonprofit would have flexibility to pursue and structure capital sources from Community Reinvestment Act (CRA) motivated institutions and other mission-motivated investors. These investors, while attracted by its demonstrated success, have proven to be reluctant to engage with the Green Bank given the state budget environment and the resulting sweeps.
- **Regional Scale.** The Nonprofit will be able to operate throughout the Northeast and beyond and will have access to additional pools of capital not available to the Green Bank. By serving a larger market, the Nonprofit would be able raise and deploy capital more efficiently than an entity limited to Connecticut only (while true of all products, this is immediately beneficial for the raise of the next

Commercial Solar fund where investors are requiring a greater scale). While Connecticut remains the primary market for the Nonprofit's products, the Green Bank benefits from increased capital and operational efficiencies as a result of this regional scale. Certain products and programs intended to be operated out of the Nonprofit are not able to reach their full potential in the Connecticut market alone.

- **Graduation Path to Self-Sustaining, Mission-Aligned Entity.** Products can have the option to “graduate” from the Green Bank to the Nonprofit in order to grow in a self-sustaining entity removed from public budgetary pressures and lack of access to sufficient capital. In turn, this enables more efficient deployment of capital for the Green Bank.

The Nonprofit Expands the Ability of the Green Bank to Replicate its Success in Additional Underserved Markets. The Green Bank will allow for its successful model of serving LMI communities and unconventional credits to be replicated to regions beyond the State's borders through the Nonprofit. In addition, a mission-aligned Nonprofit working in coordination with the Green Bank would attract new forms of capital to impact the Green Bank's mission, addressing and expanding upon the multiple concepts and ideas that are currently part of the Green Bank's model. The Green Bank would be able to achieve operating leverage and source a lower cost of capital across its broader capital stack, all while deploying additional capital to promote energy efficiency and renewable resources and creating greater social impact throughout the region.

The Nonprofit Will Serve Various Underinvested Communities

In order to create a greater impact, the Nonprofit will seek to serve underinvested communities in Connecticut and beyond. The experience of the Green Bank and others who have analyzed credit performance is that there are other more effective predictors of poor repayment performance other than levels of income – such as job stability and degrees of indebtedness. Also, the Green Bank recognizes the benefits in credit underwriting of new cash flow freed up by significant energy savings. Communities with unconventional credits, disaggregated projects and individuals with lower credit scores require a skilled intermediary that can scale and are often ignored or passed over by contractors and lenders looking to serve “safer,” traditional and more affluent communities and neighborhoods where they are capable of generating a return. An intermediary such as the Nonprofit can act within this lending and co-developer capacity, and will be able to help move projects towards scale and execution.

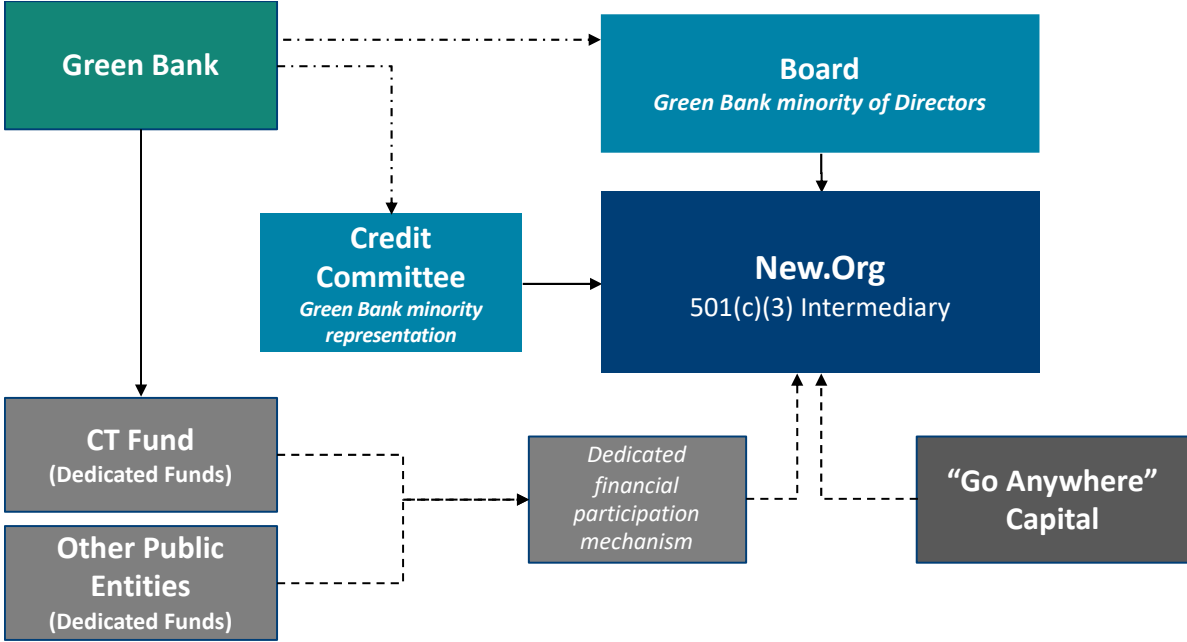
IV. STRUCTURE & GOVERNANCE

A. Independence from the Green Bank Through the Creation of a New 501(c)(3)

In order to achieve desired levels of scale, as well as access pools of capital outside the State of Connecticut, the new entity will need to be an independent, but affiliated 501(c)(3) nonprofit organization¹. The Nonprofit would have its own mission that would be complementary to the Green Bank’s clean energy mission, as well as those of mission-driven investors.

The Nonprofit would have its own Board of Directors (self-perpetuating) which would be legally in control of the entity. The Nonprofit would also have a Credit Committee (as a subcommittee of the Board) that would make decisions on discretionary approvals within investment policies agreed upon by the Board and under the requirements of creditor agreements.

The independence of the Nonprofit from the Green Bank is critical to achieving investor confidence in the accountability of the organization to its mission and to investors, separate from the Green Bank mission and obligations. That said, it will be necessary to continue to ensure that the Nonprofit is operating to help fulfill the Green Bank’s mission in Connecticut. To this end, the



Green Bank would be represented as a minority of the Nonprofit’s Board of Directors. The Green Bank may have minority representation on the Credit Committee and / or other Board Committees. Any funds invested by the Green Bank in the Nonprofit-controlled activities will be subject to the investment agreement and will flow through the Green Bank-controlled “CT Fund” entity. Care must be taken in the formation and first year’s operations of the Nonprofit, given it is arising out of a quasi-public agency. This requires that several state Code of Ethics conditions and requirements are met. These are discussed below.

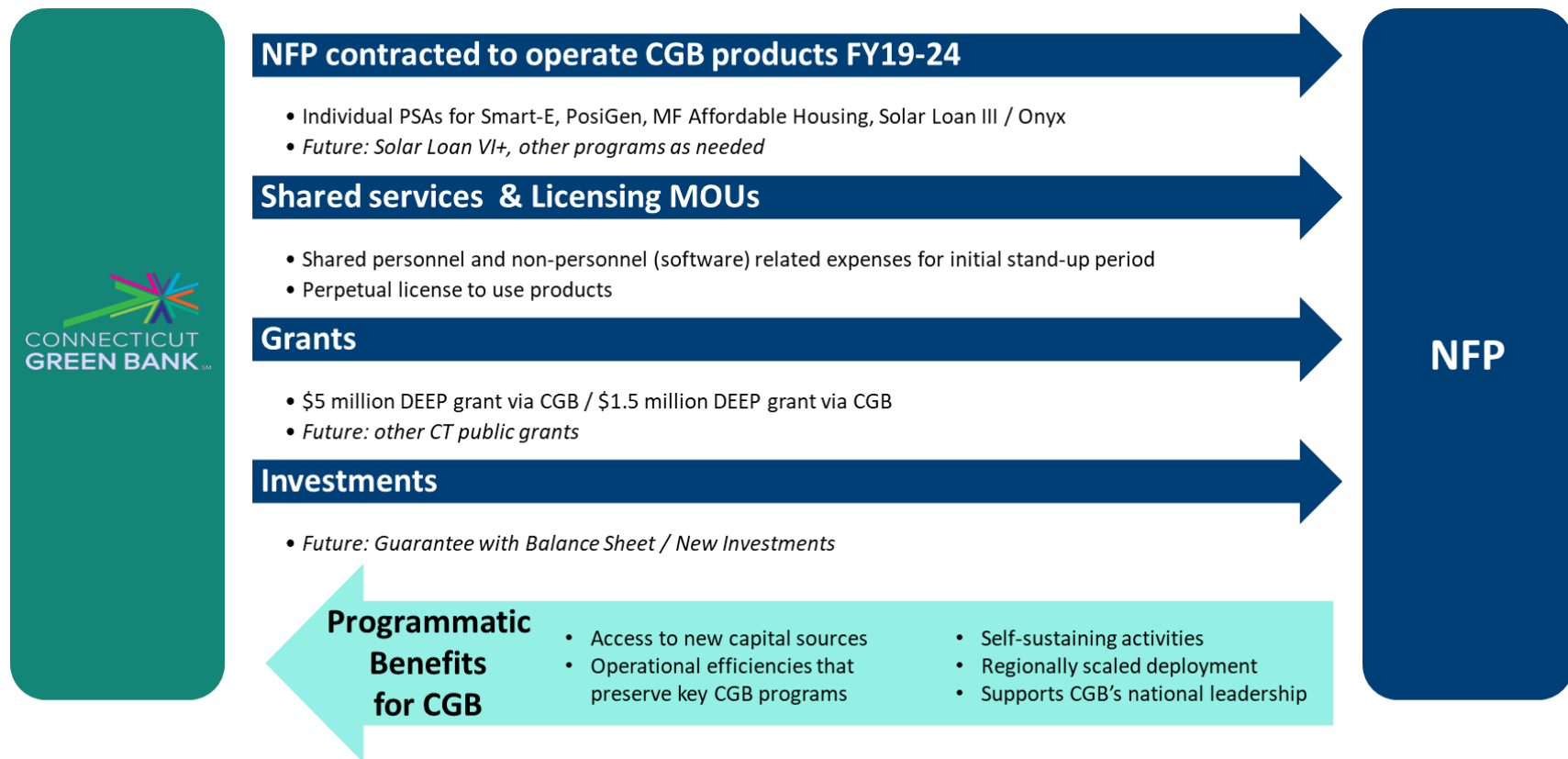
¹ Information in this section is subject to legal analysis vis-à-vis Green Bank Enabling Statute, Connecticut Code of Ethics, and Internal Revenue Code, among others.

Board Structure and Make-up

At the inception of the Nonprofit, the Board will be comprised of 2 representatives from the Green Bank, 2 executive staff of the Nonprofit that have transitioned employment from the Green Bank to the Nonprofit, and 1 investor representative (to be drawn from the anchor investors in the Nonprofit). The Nonprofit and its initial Board will engage in a strategic exercise to determine the appropriate composition and make-up of the Board after an initial start-up period. Considerations such as the requirements of representation by additional significant investors, both public and private, will be balanced with strategic appointments that round out critical Board capabilities related to risk management and oversight, operations, and market entry and development.

The Nonprofit’s Relationship to the Green Bank

While the new Nonprofit would be independent of the Green Bank, it would have a close working relationship and aligned mission. The relationship would be controlled by the key elements outlined below.



The Green Bank Will Provide \$16 Million in Support Over Six Years. Through a combination of a \$6.5 million performance-based grant and a proposed \$10 million multi-year services agreement from the Green Bank, the Nonprofit expects to start with a base of \$16 million in resources in the form of capital and revenue through June 2024. The grant investment is comprised of two grants from the Connecticut Department of Energy and Environmental Protection (DEEP): the \$1.5 million EnergizeCT Health and Safety Revolving Loan Fund and a proposed \$5 million grant made to the Green Bank with the express purpose of being regranted to the Nonprofit for investment in LMI activities. These grant investments will be established as a dedicated fund to ensure Green Bank funds are applied to eligible activities within Connecticut (additional details below in Capitalization). Despite that restriction this support provides an initial capital base to both attract a set of other philanthropic or public-sector co-investors and to leverage other layers of capital (senior and subordinate) for investment activities to be made by the Nonprofit. Additionally, the services agreements described below provide a repeatable revenue stream needed to secure the foundation of a sustainable business as the Nonprofit scales up and grows its other revenue sources.

The Green Bank and the Nonprofit Will Negotiate Services Agreements. The Green Bank and the Nonprofit plan to establish a series of multi-year product-specific service agreements between the two entities, as well as a memorandum of understanding (MOU) for shared services, given the overlap and close relationships between the product sets and focus areas. The proposed service agreements and MOU with the Nonprofit will need to allow the Nonprofit to run the scaled products on the Green Bank's behalf, outline any performance targets or milestones, and also determine how the Green Bank continues to support these products. This approach allows the Green Bank to ensure on-going programmatic goals and deployment targets are met in the contracted products, while freeing up additional funding resources that were previously dedicated to those programs. In addition, the relationship increases operating leverage for the Green Bank by reducing costs associated with personnel overhead and spreading the costs of on-going product infrastructure and support needed (e.g. for technology platforms, asset management, etc.) over a regional operation.

The program-specific services agreements will outline how the Nonprofit will support the Green Bank in the Connecticut market for the implementation and administration of those products. Each of these agreements will include a description of the activities the Nonprofit will perform for the Green Bank and vice versa, staff allocations, budget, any technology needs or other resources from the Green Bank, and performance-based targets and milestones. There will be an agreement for each of the following:

- Commercial Solar Fund;
- Multifamily Lending;
- Residential Low-Income Programs – covering PosiGen and other low-income initiatives; and
- Smart-E Loan Program.

The MOU will cover services the Green Bank will be providing to the Nonprofit (and vice versa) and licensing of intellectual property related to specific products and programs. Transition services covered include accounting, loan servicing, marketing services, IT, telecommunications, and office space. The licensing will include use in Connecticut and outside of Connecticut and cover all product specific intellectual property, marketing assets, market data, and terms of use.

In addition to these services agreements, the Nonprofit will secure grants from various foundations to cover the initial operations cost of expanding its offerings beyond Connecticut.

Option for Future Green Bank Investments. The Green Bank may decide to invest in Nonprofit products or investing activities at a future date, to the extent that the investment meets the Green Bank's targeted return profile and strategic priorities, and to the extent that the Green Bank has available capital. For example, the Green Bank may decide to invest in a new regional Commercial Solar fund or to provide a balance sheet guarantee as it relates to Connecticut projects.

Establishing the Green Bank Relationship. The formal and legal establishment of the Nonprofit involves processes with varying levels of complexity. The strategic decision to form the Nonprofit and the initial grant from and service agreements with the Green Bank is a critical step that demonstrates foundational support for the Nonprofit's establishment and will help other funders to commit. The Green Bank will also need to similarly approve its involvement in the Nonprofit's governance structure, and any legal structure required for the Green Bank to convey Connecticut-designated funds for the Nonprofit's use. The mechanisms for future investments by the Green Bank or balance sheet guarantees issued by the Green Bank for use of the Nonprofit will be determined at that time.

B. Ethics Law Compliance

Requirements for Forming an NGO out of a Quasi-Public State Agency

The formation of the Nonprofit would represent the exercise of express powers of the Green Bank set forth in subdivision (ix) of Section 16-245n(d)1(D), which reflects a legislative determination that the public purposes of the Green Bank can be furthered through its involvement in the formation, ownership, management or operation of other business entities that may present an opportunity to leverage Green Bank resources through participation in clean energy enterprises and activities with other public and private participants.

The Green Bank is aware that the proposed formation of the Nonprofit, the anticipated contracts between the Green Bank and the Nonprofit, and the transition of current Green Bank employees to the Nonprofit may raise issues under the Code of Ethics for Public Officials, including

- (i) the involvement of such employees while in state service in the creation of an outside employment opportunity (see Advisory Opinion No. 1997-1);
- (ii) the possible application of the one-year "jobs ban" (Section 1-84b(f)) if the transitioning employees were to be personally and substantially involved while still in state service in the award by the Green Bank of contracts to the Nonprofit; and
- (iii) the applicability to the administration of the continued Green Bank programs by former Green Bank employees of the one-year prohibition on contact with such employees' former agency (Section 1-84b(b)).

The Green Bank has received an informal staff opinion from the Connecticut Office of State Ethics (OSE) that it is possible to proceed with the Nonprofit as envisioned and consistent with the conditions of the DEEP \$5 million grant without violating applicable provisions of the Code of Ethics

for Public Officials. The Green Bank has filed a petition for a formal Advisory Opinion on the same issues addressed informally by OSE staff and expects the Advisory Opinion to be approved and issued by the Citizen's Ethics Advisory Board in April 2018.

The main findings and mitigates from the Ethic's Opinion are set forth below.

Transitioning Employees Not Creating an "Outside Employment Opportunity"

The informal Ethics Opinion concludes that the Nonprofit does not violate the prohibition on a state or quasi-public employee creating an outside employment opportunity for their own benefit because it represents a management and board-directed strategic initiative, not the creation of a private employment opportunity by the individual Green Bank employees. Since the transitioning employees have operational responsibility for the programs that will move to the Nonprofit and are therefore familiar with how those programs work, they will provide staff level technical suggestions for terms and conditions to be incorporated in the contract(s) between the Green Bank and the Nonprofit. That technical input will be provided to members of the Green Bank senior management, and it will be those members of senior management (who will remain at the Green Bank), not any of the transitioning employees, who will conduct any contract negotiations with representatives of the Nonprofit. Those same members of senior management, and not the transitioning employees, will be responsible for the contract award process at the Green Bank, consisting of a recommendation to the Green Bank Board that the proposed contracts be authorized and approved. And in order to avoid even an appearance of misuse of official position, it is proposed (consistent with other Advisory Opinions dealing with comparable situations) that the total value of compensation (salary and benefits) for each of the transitioning employees be no greater during the first year than it was at the Green Bank. Thereafter, compensation would be subject to an overall standard of reasonableness consistent with IRS rules for tax-exempt organizations and would be subject to reporting on Form 990.

Jobs Ban Not Triggered but Employees Must Transition Before Contract(s) Execution

On the "jobs ban", the informal opinion concludes that it is triggered by any substantive involvement in the process of contract development by the transitioning employees, even if they are not determining or approving the contract terms. But the opinion does confirm that the "jobs ban" could still be avoided if the transitioning employees leave the Green Bank before the contracts between the Green Bank and the Nonprofit are executed. As the transitioning employees will be involved in the contract development process because they are subject matter experts and essential for preparation of the various scopes of works for the continued Green Bank programs, the transitioning employees must leave the Green Bank before the contracts are executed between the Green Bank and the Nonprofit.

One-Year Limitation on Types of Interaction

Under Section 1-84b(b) of the Code of Ethics, there is a prohibition for the first year after leaving the Green Bank, any representation of the interests of the Nonprofit back before the Green Bank by any of the transitioning employees. To remain compliant with a recognized exception from Section 1-84b(b) of the Code of Ethics, during at least the first year, contact between the transitioning employees and those still at the Green Bank will be limited to matters of management and administration of the continued Green Bank programs pursuant to the contracts entered into by the Green Bank and the Nonprofit. The transitioning employees will not seek amendments to those contracts, solicit further assistance or grants from the Green Bank on behalf of the Nonprofit, or seek other discretionary action by the Green Bank for the benefit of the Nonprofit.

C. Potential Component Unit GASB Considerations

The Green Bank worked with its audit firm to identify any considerations in the establishment and governance of the Nonprofit or contracting between the Green Bank and the Nonprofit that might cause the Green Bank to report the Nonprofit as a component unit on its audited financial statements. The approach being taken is consistent with the findings of that analysis. Some of the critical factors enabling the Green Bank to not report the Nonprofit as a component unit include: the Green Bank having minority control of the Nonprofit Board and any committees responsible for the financial operating budget, the Green Bank not being responsible for any Nonprofit financial deficits or required to assume any Nonprofit debt, and the Green Bank not holding an equity interest in the Nonprofit.

D. Other Public Entities' Funding

It is anticipated that the Nonprofit will have the opportunity to work in states or municipalities that have discretionary funds to invest, and that they would view an investment in the Nonprofit (at either a product or at a fund level) as aligned with their public purpose and goals. For instance, a green bank in another region may want to invest funds in the Nonprofit to go towards affordable multifamily housing retrofits, or as part of a regional commercial solar fund. The Nonprofit will need to be able to segment the funds of any public entities that come with them a geographic constraint and/or a certain purpose. This will be handled in a manner similar to the segregation of Green Bank funds, and similarly public entities would have dominion over these funds through a negotiated investment agreement.

E. Establishing Charitable Mission

The mission of the Nonprofit is to preserve and protect the environment and to promote environmental conservation, while lessening the burdens of government imposed upon the Green Bank.

Consistent with this mission, the Nonprofit will complement the activities of the Green Bank (1) by furthering the statutorily-prescribed essential public and government functions of the Green Bank, and (2) by protecting, preserving and promoting the environment as a tax-exempt charitable organization described in Section 501(c)(3) of the Internal Revenue Code.

More specifically, the Nonprofit will, among other charitable initiatives, (1) further the purposes of the Green Bank as described in section 16-245n(d)(1)(B) of the Connecticut General Statutes, (2) promote the environment through clean energy and sustainability measures, and (3) focus on underserved market segments including LMI communities and unconventional credits. Lessening the burdens of government and promoting the environment with an emphasis on LMI communities and unconventional credits are appropriate purposes for tax-exempt 501(c)(3) charitable organizations.

From a timing point of view, the Nonprofit could be incorporated as a Connecticut nonstock corporation within a week or two of after the approval of its establishment by the Green Bank. An application to the Internal Revenue Service for recognition of the Nonprofit as a tax-exempt 501(c)(3) charitable organization could be prepared and submitted to the IRS within four weeks after the incorporation of the Nonprofit.

V. THE NONPROFIT'S PRODUCTS AND PIPELINE

A. Product Expansion to the Nonprofit

The product set provided by the Nonprofit will be comprised of licensed Green Bank products that have proven their success within the current Connecticut market and are ready to operate at market scale. The proprietary aspects of these products and programs, while still belonging to and marketed within Connecticut as Green Bank products, will be offered in Connecticut and elsewhere under an exclusive perpetual license from the Green Bank to the Nonprofit. These products and programs are all ready for the next level of investment and scale that can be provided by the capital sources the Nonprofit can attract, and have the opportunity and the ability to work beyond Connecticut. The Green Bank products mentioned below are working and producing meaningful volume, and potentially demonstrate an approach to deploying capital and product development that would be native to the Nonprofit. Some, like Commercial Solar or Low-Income Multifamily Energy (LIME) and pre-development loans could be ready to be deployed fairly soon after closing on initial capital, while others (such as Smart-E) would require additional time and involvement of a public-sector sponsor and public credit enhancement funds to launch the program in a geographic scope outside of Connecticut.

Product and Service Overview

The products for the Nonprofit listed below represent a set of approaches to financing clean energy projects for underserved market segments that would be able to provide a range of financial and mission returns to the Nonprofit and its investors². Each is based on a set of strategies that have been successfully deployed by the Green Bank, but require varying levels of operational support. Third party commercial solar and multifamily lending would require significant sales infrastructure or partner channels to scale and would require additional planning and investment to achieve a larger scale for back-end operations. Both single-family project and flexible project finance have more modest requirements for support, and would either be provided by a partner, or, in the case of flexible project financings, could be provided in-house. The Smart-E Loan program requires a program sponsor in any market it expands to and would require additional planning and investment to achieve the scale needed. It is important to note that unlike the other products, the Smart-E Loan program is a fee for service model. Additional product details are provided as an Appendix.

Because of the Nonprofit's ability to expand into new markets, the Nonprofit will strategically identify specific markets and communities where its products can develop a sufficient channel and can create the most impact. The Nonprofit will seek to expand its product set and operate in markets where its financing is either aligned with (and additional to) existing market transaction structures or serves to create that alignment through existing channels and partners in need of capital. The Nonprofit will also leverage current Green Bank partners with developed origination strategies looking to expand their customer base to regions outside Connecticut.

² In the context of the Nonprofit, the term "investors" refers to classes of capital providers, such as foundations, that often make "program-related investments, (or "PRIs") which are funds made available to nonprofit organizations on terms that will accept below market returns in exchange for certain defined outcomes that address one or more of the foundation's missions or desired impacts.

B. Pipeline Development and Origination Strategy

REDACTED

REDACTED

REDACTED

VI. OPERATIONS PLAN

REDACTED

VII. REVENUE PLAN

REDACTED

VIII. CAPITALIZATION



REDACTED

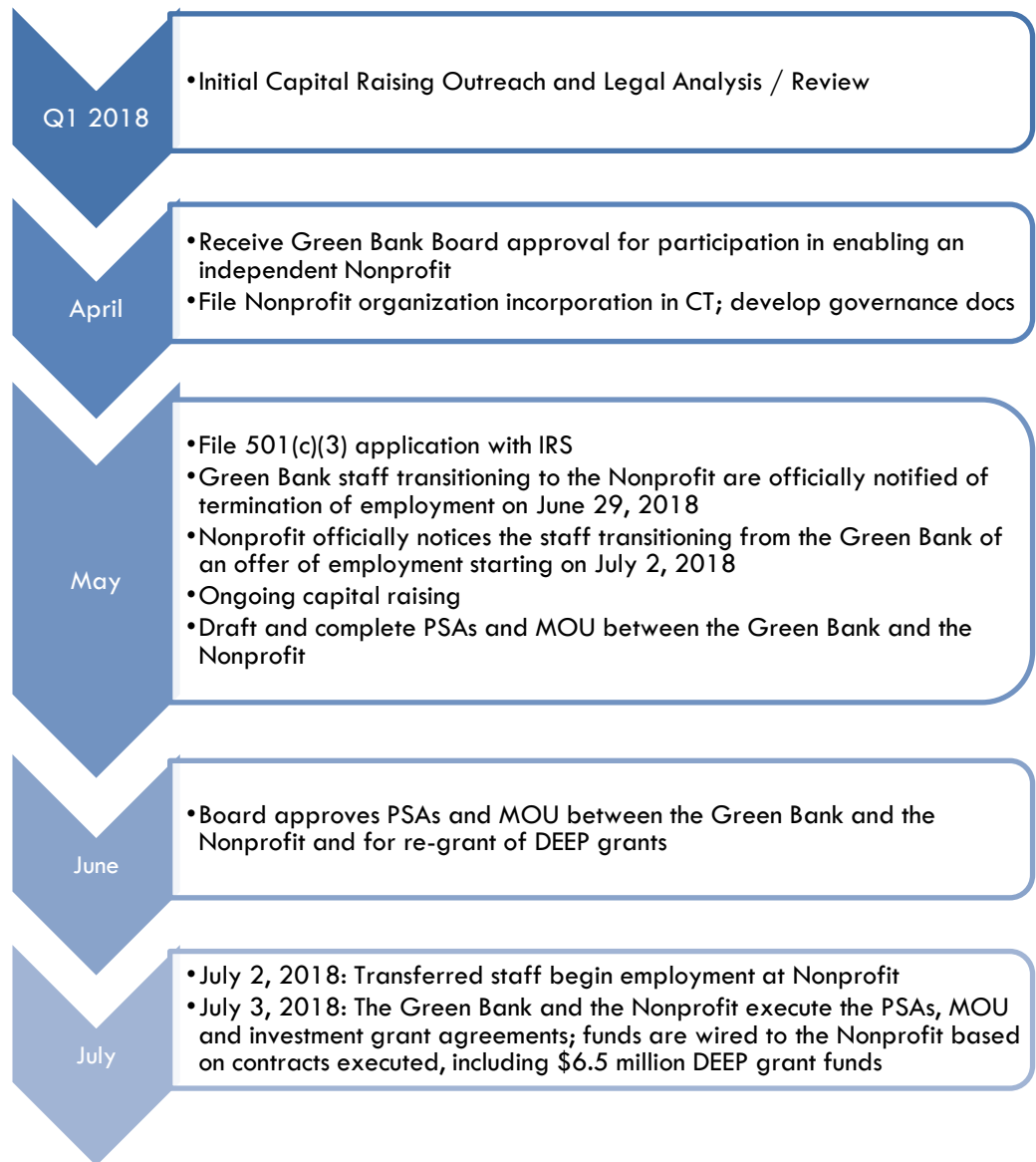
IX. TIMELINE FOR IMPLEMENTATION

This report has outlined a business plan for the creation of the Green Bank's affiliated Nonprofit. This Nonprofit is capable of bringing certain existing Green Bank products to market-scale levels, while allowing the Nonprofit to pursue new markets for these products, as well as raise capital, outside the boundaries of Connecticut.

The Green Bank intends to establish the Nonprofit in the second quarter of this year, and have it operational on July 1, 2018 (the start of the Green Bank's fiscal year). At that time, the Green Bank will seed the Nonprofit with a grant for ongoing support for investment associated with LMI activities solely in the Connecticut market (through the Connecticut Department of Energy and Environmental Protection). In addition, the Green Bank and the Nonprofit will enter into a series of product-specific long-term professional services agreements ("PSAs") that will provide six years of operational support for the Nonprofit staff and non-staff expenses to serve core programmatic goals in the Connecticut market. The Nonprofit will continue to raise additional external capital to expand and operate at its planned regional scale.

The Green Bank's goal is to close on funds shortly after the Nonprofit is fully formed and operational in Q3, 2018 with an initial deployment of investments from mid-Q3 to late Q1 2019.

Initially, the Nonprofit will be focused on operationalizing the relationship with the Green Bank and its activities in the Connecticut market. Expansion to other markets would occur once Connecticut operations are stabilized and capital and grant support for activities outside Connecticut are secured.



APPENDIX I – PRODUCT DETAILS

REDACTED

APPENDIX II – OPERATIONS BUDGET DETAIL

REDACTED

APPENDIX III – DATA TABLES FOR FINANCIAL SCENARIOS

REDACTED



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COUNSELORS AT LAW

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HAND DELIVERED

March 12, 2018

Citizen's Ethics Advisory Board
18-20 Trinity Street
Hartford, CT 06106-1660

Re: Petition for an Advisory Opinion by the Connecticut Green Bank

Ladies and Gentlemen:

This firm represents the Connecticut Green Bank ("CGB"), a Connecticut quasi-public agency subject to Chapter 10 of the Connecticut General Statutes, and this letter requests an Advisory Opinion of the Citizen's Ethics Advisory Board pursuant to Section 1-92-38 of the Regulations of Connecticut State Agencies.

The matters which are the subject of this request have been the subject of prior communications with legal staff of the Office of State Ethics, including an informal staff opinion dated February 16, 2018, and subsequent communications, varying slightly the facts assumed in that informal opinion. A final statement of assumed facts and related legal analysis, consistent with such prior communications, is attached as Schedule A.

As explained and described more fully in Schedule A, the Connecticut legislature has significantly curtailed the funds available to CGB, which as a consequence has determined that it is necessary to contract its activities and focus on a more limited number of the highest value projects and programs that are best suited for continued operation by a quasi-public entity. Rather than discontinuing other important CGB clean energy programs for lack of funds within CGB, it is proposed that a tax-exempt 501(c)(3) organization (a non-governmental organization, or "NGO") be formed which can seek and accept grants and contributions from public and private sources so that such other programs can be continued outside of CGB. It is further proposed that seven (7) current employees of CGB, who are currently responsible for the operation of the CGB programs that will be continued by the NGO, leave state service at CGB and be hired by the NGO. It is the transition in

employment of those CGB employees that gives rise to the questions that CGB asks be addressed in the requested Advisory Opinion.

Specifically, those questions are the following:

1. Since the formation of the NGO is a strategic initiative conceived, directed and controlled by members of senior management of CGB (who will remain at CGB), and not any of the transitioning employees, and is subject to CGB board approval, and based on the other assumed facts set forth in Schedule A, does the Citizen's Ethics Advisory Board agree with our conclusion that the situation addressed in Advisory Opinion No. 1997-1 can be distinguished, so that any staff level technical involvement of the transitioning employees in such NGO initiative, and their subsequent acceptance of employment by the NGO, will not be considered a misuse of their official position at CGB for personal financial gain in violation of General Statutes §1-84(c)?

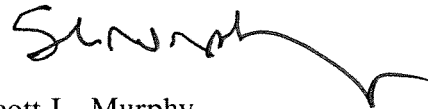
2. Based on the assumed facts set forth in Schedule A, including the assumption that any contracts between CGB and the NGO will be executed only after the transitioning employees have left state service at CGB, does the Citizen's Ethics Advisory Board agree with our conclusion that the "jobs ban" under General Statutes §1-84b(f) will not be triggered, and that the transitioning employees may therefore accept employment with the NGO immediately after leaving state service with CGB?

3. Also based on the assumed facts set forth in Schedule A, including that the transitioning employees will not be personally involved in the negotiation or award of the contracts between CGB and the NGO, does the Citizen's Ethics Advisory Board agree with our conclusion that the recognized exception from General Statutes §1-84b(b) will be available, and that the transitioning employees may therefore have contact with CGB as their former agency during the first year after their departure from state service, so long as that contact is limited to the performance of technical duties related to the implementation and administration of the contracts between CGB and the NGO, and not any matters of dispute between CGB and the NGO or matters requiring any discretionary action by CGB?

Citizen's Ethics Advisory Board
March 12, 2018
Page 3

Thank you for your prompt consideration of this Advisory Opinion request. We would be happy to provide any further information you may require.

Very truly yours,

A handwritten signature in black ink, appearing to read "S. Murphy", with a long, sweeping horizontal stroke extending to the right.

Scott L. Murphy

SLM:tab

cc: B. O'Dowd, Office of State Ethics
P. Lewandowski, Office of State Ethics
B. Farnen, Connecticut Green Bank
6425073v1

SCHEDULE A
To Advisory Opinion Request of the Connecticut Green Bank
Dated March 12, 2018

NGO Initiative

- The Connecticut Green Bank (“CGB”) is a quasi-public agency created by General Statutes §16-245n of the General Statutes for the purpose of stimulating the demand for clean energy and the development of clean energy sources, and supporting clean energy investment, financing and expenditures.
- The legislature has significantly curtailed the funding available to CGB, which as a consequence has determined that it is necessary to contract its activities and focus on a more limited number of the highest value projects and programs that are best suited for continued operation by a quasi-governmental entity.
- Rather than discontinuing other important CGB clean energy programs for lack of funding within CGB, it is proposed that a tax-exempt 501(c)(3) organization be formed which can seek and accept grants and contributions from public and private sources so that such other programs can be continued outside of CGB. The programs CGB hopes to continue through such a 501(c)(3) organization are referred to as the “continued CGB programs”.
- Such a 501(c)(3) organization would be formed as a Connecticut non-stock corporation without members and be governed by a self-perpetuating board of directors, subject to certain board member qualification requirements to insure relevant experience and expertise, and the possibility that CGB may have certain limited minority board member designation or approval rights which do not result in the loss of the organization’s status as an independent non-governmental entity (“NGO”). As an NGO, the organization would be able to expand its exempt activities without geographic limits and thereby generate economies of scale and broaden the base for public and private support, increasing the likelihood for sustained operation of the continued CGB programs as well as creating the potential for expanded clean energy activities with public benefits both in and outside of Connecticut.
- The formation of the NGO would represent the exercise of express powers of CGB set forth in subdivision (ix) of General Statutes §16-245n(d)1(D), which reflects a legislative determination that the public purposes of the CGB can be furthered through its involvement in the formation, ownership, management or operation of other business entities that may present an opportunity to leverage CGB resources through participation in clean energy enterprises and activities with other public and private participants.

- The principal initial funding for the NGO would be a grant from the Connecticut Department of Energy and Environmental Protection (“DEEP”) (expected to be a one-time grant of approximately \$5 million) which would be conditioned on, among other things
 - the formation of the NGO and its agreement to seek to qualify as a 501(c)(3);
 - the submission to DEEP and CGB of an acceptable business plan for the continued CGB programs, including fundraising plans;
 - the transition from CGB to the NGO of seven (7) current CGB employees (out of total current CGB workforce of fifty-one (51) employees) with the necessary experience and expertise to manage the continued CGB programs; and
 - satisfactory agreements between and among DEEP, CGB and the NGO relating to the use of proceeds of the DEEP grant, the administration by the NGO of the continued CGB programs, and the provision by CGB of space and “back-office” administrative support to the NGO until it is able to become operationally self-sufficient.

Code of Ethics Issues

- CGB is aware that the proposed formation of the NGO, the anticipated contracts between CGB and the NGO, and the transition of current CGB employees to the NGO may raise issues under the Code of Ethics for Public Officials, including (i) the involvement of such employees while in state service in the creation of an outside employment opportunity (see Advisory Opinion No. 1997-1); (ii) the possible application of the one-year “jobs ban” (General Statutes §1-84b(f)) if the transitioning employees were to be personally and substantially involved while still in state service in the award by CGB of contracts to the NGO; and (iii) the applicability to the administration of the continued CGB programs by former CGB employees of the one-year prohibition on contact with such employees’ former agency (General Statutes §1-84b(b)).
- CGB believes that it should be possible to proceed with the NGO as envisioned above and consistent with the conditions of the DEEP grant without violating applicable provisions of the Code of Ethics for Public Officials, subject to and based on the following:

Advisory Opinion No. 1997-1 involved the creation by a state employee in the course of state service of a private employment opportunity later filled by that state employee. This was viewed by the former State Ethics Commission not as a “revolving door” issue but

instead as the misuse of official position for personal financial gain under General Statutes §1-84(c). CGB believes that the planned transition of CGB employees can be clearly distinguished. In this case, the transitioning employees are not the decision-makers creating an outside employment opportunity for themselves. Rather, they are staff willing to help implement an institutional strategic initiative conceived, directed and controlled by CGB senior management and subject to CGB board approval, which is designed to serve an identified public purpose -- the continuation of CGB programs that might otherwise have to be discontinued. It will not, therefore, be a situation where the transitioning employees are misusing their official position for personal financial gain. Their involvement is in fact necessary in order to satisfy the conditions of the DEEP grant and support the continued CGB programs at the NGO. The impetus will therefore be the CGB board's pursuit of the public interest, not their creation of a private benefit. In further support of that conclusion, and in order to avoid even an appearance of misuse of official position, it is proposed (consistent with other Advisory Opinions dealing with comparable situations) that the total value of compensation (salary and benefits) for each of the transitioning employees be no greater during the first year than it was at CGB. Thereafter, compensation would be subject to an overall standard of reasonableness consistent with IRS rules for tax-exempt organizations and would be subject to public reporting on Form 990.

General Statutes §1-84b(f) - The proposed NGO initiative also does not present the concern that underlies the one-year "jobs ban" -- which is that a state employee not use his official position to curry favor with a future private employer. Here, as already noted, the transitioning employees are not the decision-makers, and there will be no independent decision at the NGO to hire them that could be seen as influenced by any official action they take at CGB. Rather, their transition will implement what will be a board-approved strategic plan, and satisfy a condition of the DEEP grant. Since the transitioning employees have operational responsibility for the programs that will move to the NGO and are therefore familiar with how those programs work, they will provide staff level technical suggestions for terms and conditions to be incorporated in the contracts between CGB and the NGO. That technical input will be provided to members of CGB senior management, and it will be those members of senior management (who will remain at CGB), not any of the transitioning employees, who will conduct any contract negotiations with representatives of the NGO. Those same members of senior management, and not the transitioning employees, will be responsible for the contract award process at CGB, consisting of a presentation and recommendation to the CGB board that the proposed contracts be authorized and approved.

The jobs at the NGO will therefore be an integral part of the overall strategic initiative, not the result of any self-serving official action by the transitioning employees relating to those contracts or otherwise. Furthermore, as noted above, there will be no increase in the compensation of the transitioning employees in the first year, and therefore no personal financial benefit associated with the change in employment.

Since the informal staff opinion dated February 16, 2018 concludes that General Statutes §1-84b(f) may nevertheless be technically applicable because of the staff level involvement of the transitioning employees in contract development, it is proposed (and may be assumed) that the contracts between CGB and the NGO will not be executed until after the transitioning employees have left state service. (The CGB board may authorize and approve the contracts just prior to the departure of the transitioning employees, since it is unreasonable to expect the NGO to hire them until there is a decision by CGB to contract out the work they will perform.)

General Statutes §1-84b(b). A final Code of Ethics concern arises under General Statutes §1-84b(b), which would prohibit, for the first year after leaving CGB, any representation of the interests of the NGO back before CGB by any of the transitioning employees. It is of course anticipated that the transitioning employees will have ongoing contact with CGB since they will be managing the continued CGB programs under a contract between CGB and the NGO. In the early going, the transitioning employees may in fact be co-located with CGB employees in shared space made available to the NGO by CGB until such time as the NGO can become operationally self-sufficient. While General Statutes §1-84b(b) may appear to be implicated, it has been recognized by the Citizen's Ethics Advisory Board that the purpose of General Statutes §1-84b(b) is "the prevention of the use of prior contacts, influence or other insider's advantage gained during state service to obtain improper benefit in subsequent compensated dealings with one's former agency" and therefore should apply only when some discretionary action by the former agency is sought, such as a contract or grant award. As described above, the transitioning employee will not be personally involved in the negotiation or award of the contracts at issue, which is consistent with the qualification to the availability of the exception to General Statutes §1-84b(b) noted in the informal staff opinion dated February 16, 2018. And also consistent with that exception, during at least the first year, contact between the transitioning employees and those still at CGB would be limited to technical matters related to the implementation and administration of the continued CGB programs pursuant to the contracts

entered into by CGB and the NGO. The transitioning employees would not seek amendments to those contracts, solicit further assistance or grants from CGB on behalf of the NGO, seek other discretionary action by CGB for the benefit of the NGO, or be involved in any dispute between CGB and the NGO.

BlumShapiro

Accounting | Tax | Business Consulting

George Bellas, Vice President of Finance and Administration
Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067

Dear Mr. Bellas,

We are pleased to assist you in the analysis of the Connecticut Green Bank's initiative of the establishment of a mission-aligned independent not-for-profit (the NFP). The purpose of our analysis was to evaluate the financial reporting requirements of Connecticut Green Bank (CGB) relative to the NFP to determine if the NFP would be required to be presented as a component unit of the CGB in its audited financial statements.

Significant Information

The following is a summary of the significant facts, circumstances and attributes conveyed to us by CGB relative to the future relationship and interaction between the NFP and CGB. These facts, circumstances and attributes were the foundation of our analysis and our conclusions set forth in this correspondence are dependent upon the accuracy of that information furnished by CGB.

- The NFP will have separate corporate powers that will distinguish it as being a legally separate entity and thus legal separate from CGB.
- CGB will not appoint a voting majority of the NFP governing body.
- CGB employees and/or Board Members will not hold a voting majority of the NFP Board of Directors.
- CGB will not have the ability to approve, recommend and/or modify the financial operating budget of the NFP.
- CGB will not be legally entitled to or will not otherwise be able to access the organizations resources.
- CGB will not be legally obligated or otherwise assume the obligation to finance deficits of, or provide financial support to the NFP.
- CGB will not be obligated in any manner for the debt of the NFP.
- CGB will not hold an equity interest in the NFP.
- The NFP will be a non-stock, non-member Not-for-Profit with a self-perpetuating Board of Directors.
- The management of CGB does not believe the exclusion of the NFP as a component in CGB financial statements would render the financial statements misleading.

Analysis Criteria

We evaluated the proposed NFP as a potential component unit (PCU) of the financial reporting entity which in this case is CGB. A component unit is a legally separate organization for which the primary government is financially accountable or closely related. A component unit may be a governmental organization (except for a primary government), a nonprofit corporation, or a for-profit corporation.

We evaluated the PCU for consideration of inclusion in the financial reporting entity under *GASBS No. 14, The Financial Reporting Entity*, as amended by *GASBS No. 39, Determining Whether Certain Organizations Are Component Units*, *GASBS No. 61, The Financial Reporting Entity: Omnibus*, and *GASBS No. 80, Blending Requirements for Certain Component Units*. The evaluation criteria under the identified GASB Statements generally falls under three categories:

1. Legally Separate Organization
 - a. Will the NFP be a legally separate entity with separate corporate powers?
2. Financial Accountability / Financial Benefit or Burden
 - a. CGB would be financially accountable if it appoints a voting majority of the NFP's governing body *and* (1) it is able to impose its will on that organization *or* (2) there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the CGB.
 - b. CGB would be financially accountable if the NFP is fiscally dependent on *and* there is a potential for the NFP to provide specific financial benefits to, or impose specific financial burdens on, CGB regardless of whether the organization has (1) a separately elected governing board, (2) a governing board appointed by a higher level of government, or (3) a jointly appointed board.
3. Inclusion based on the conclusion that exclusion would render the reporting entity's financial statements misleading.
 - a. The analysis under this criterion is both objective and subjective.

Objective criteria

- Will CGB own a majority equity interest in the NFP?
- Will CGB have a fiduciary responsibility for the NFP?
- Is the NFP's board substantially the same as CGB's board?
- Does the NFP provide services entirely, or almost entirely, to CGB or otherwise exclusively, or almost exclusively benefit CGB?

Subjective criteria

- In management's professional judgment, should this NFP be included in the reporting entity because, due to its close relation to, or financial integration with, CGB, its exclusion would render the financial statements misleading?
- Should the NFP be included in the reporting entity because of the nature and significance of its relationship with the CGB?

Conclusions

Legally Separate Organization

Per the information provided by management, the NFP will have separate corporate powers that will distinguish it as being legally separate from CGB. Based on that, the criteria of PCU being legally separate will be met.

Financial Accountability / Financial Benefit or Burden

Per the information provided by management, CGB will not appoint or hold a voting majority of the NFP's governing body. Additionally, CGB will not have the ability to approve, recommend and/or modify the financial operating budget of the NFP and thus would not be able to impose its will on the NFP. Finally, no financial benefit or burden relationship will exist since the following conditions will be in existence:

- CGB will not be legally entitled to or will not otherwise be able to access the organizations resources.
- CGB will not be legally obligated or otherwise assume the obligation to finance deficits of or provide financial support to the NFP.
- CGB will not be obligated in any manner for the debt of the NFP.

Based on the attributes that would be in place, CGB will not be financially accountable to the NFP and no financial benefit or burden will exist between the two entities.

Inclusion based on the conclusion that exclusion would render the reporting entity's financial statements misleading

Per the information provided by management, CGB will not own a majority equity interest in the NFP which is supported by the fact that the NFP will be organized as a non-stock, non-member Not-for-Profit. Additionally, CGB will not have a fiduciary responsibility for the NFP. The NFP board will not be substantially the same as the board of CGB and finally, the NFP will not provide services entirely, or almost entirely, to CGB or otherwise exclusively, or almost exclusively benefit CGB. In fact, it is the plan that the NFP will raise funding from non-state sources to enable expansion of the NFP programs into areas outside the State of Connecticut.

Connecticut Green Bank
Page Four

Based on these facts and circumstances, it does not appear that the financial statements of CGB would be rendered misleading if the NFP were not presented in the statements as a Component Unit.

Overall Conclusion

The financial statements of the Connecticut Green Bank would not be required to present the planned NFP entity as a component unit of CGB.

The overall conclusion is based on the facts, circumstances and attributes outlined above. If those items were to be modified or changed, the conclusions that we have discussed above would be subject to re-evaluation and possible change.

We appreciate this opportunity to serve you and would be pleased to discuss this matter further if you desire.

Sincerely,

A handwritten signature in blue ink that reads "Ronald W. Nossek". The signature is written in a cursive, flowing style.

Ronald W. Nossek, Partner
Blum, Shapiro & Company, P.C.



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Memo

To: Connecticut Green Bank Board of Directors

From: Kerry O'Neill, Vice President, Residential Programs; Madeline Priest, Manager, Residential Programs

Cc: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; George Bellas, VP Finance and Administration; Eric Shrago, Director of Operations

Date: March 27, 2018

Re: Strategic Selection of Green and Healthy Homes Initiative for Phase II of the Connecticut Green and Healthy Homes Project

Background

The State of Connecticut has the opportunity to transform the state's approach to energy, health, and housing service delivery by adopting a model that fully integrates previously uncoordinated housing, health, and energy programs. The Connecticut Green Bank (Green Bank), in partnership with the Department of Public Health (DPH), engaged the nonprofit Green & Healthy Homes Initiative (GHHI) in June of 2017 to explore bringing their pioneering model to our state in what was conceived as a three-phased project called the Connecticut Green and Healthy Homes Project (the Project). GHHI's model platform uses a whole house strategy (health, safety and energy efficiency) to advance policies and investments in the field of health care, housing stability, clean energy and education. GHHI's empirically-driven model efficiently delivers results and is rapidly scaling nationally while influencing federal and state agency standards.

Reducing Energy, Medical and Maintenance Costs while Improving Housing Stability:
Families in poverty often lack the resources, support systems and connections needed to ensure safe and stable housing. Low-income families face higher energy burdens and are often unable to afford or access simple measures for reducing energy costs or addressing health hazards in their home. Poor housing conditions can also have adverse mental health impacts and contribute to neighborhood-wide instability. By linking homes to integrated housing programs, families can reduce their energy consumption, address home-based environmental hazards and related asthma episodes, eliminate lead hazards and reduce the risk of household injury. These improvements spur local economic development by increasing property values and stabilizing neighborhoods as families obtain the immediate benefit of lower energy costs, lower health care costs and more affordably maintainable units.

GHHI works to improve unhealthy and inefficient housing to combat the negative effects and costs of chronic health issues such as asthma, lead-based paint poisoning, and trip and falls, as

well as high energy related costs resulting from poorly weatherized housing. GHHI effectively delivers comprehensive housing intervention services to low-income families by brokering strategic partnerships to align, braid, and coordinate resources representing multiple governmental, private sector, and philanthropic housing investments. GHHI sites nationally have consistently shown the numerous beneficial cross-sector results from using the integrated GHHI model such as reductions in chronic school absenteeism, medical costs, missed work days, and utility costs.

In Phase I of the Project, the Green Bank, DPH and GHHI recruited several additional state agencies and the utilities to become formal project partners. The full list of partners and their roles includes:

- **Connecticut Green Bank:** Core convener, funder and partner in feasibility research and pilot planning.
- **Department of Public Health:** Core convener and partner in feasibility research and pilot planning.
- **Green & Healthy Homes Initiative:** Primary researcher, convener and national policy and practice expert.
- **Department of Social Services:** Partner in feasibility research and pilot planning.
- **Department of Energy & Environmental Protection:** Partner in feasibility research and pilot planning.
- **Department of Housing:** Partner in feasibility research and pilot planning.
- **Department of Children and Families:** Partner in feasibility research and pilot planning.
- **Office of Early Childhood:** Partner in feasibility research and pilot planning.
- **Office of Chief State's Attorney:** Partner in feasibility research and pilot planning.
- **United Illuminating:** Partner in feasibility research and pilot planning.
- **Eversource:** Partner in feasibility research and pilot planning.

The level of engagement and buy-in from state agencies is strong, up to the Commissioner level, and demonstrates the critical nature of this project and its potential in the state.

Overview of Phase I: Convenings and Pre-Feasibility Research

In June 2017, the Green Bank and its project partners kicked off Phase I of Connecticut's Green and Healthy Homes project. During this phase, GHHI evaluated the efficacy of comprehensive weatherization, energy efficiency and health-based housing interventions in the state that could produce long term energy, health and safety benefits for Connecticut residents. Also during this phase various convenings were held including a stakeholder convening with the partners and over 20 organizations from the health, housing and energy sector held last October, and a funders roundtable with the agencies and philanthropy and representatives from health systems in February. The funders roundtable was a critical first step in identifying foundations to fund Phase II and beyond (see Appendix I for Project Overview for Funders).

The Phase I pre-feasibility research included the identification and assessment of the key opportunities and barriers to the implementation of an integrated health and energy services delivery model in Connecticut and the likelihood of the project's eventual success as well as:

- Research supporting the effects of comprehensive, integrated health, energy and housing interventions compliant with applicable state and local laws including but not limited to: asthma trigger reduction, household injury prevention, lead poisoning

prevention, energy efficiency measures and other home-based environmental health hazard remediation interventions.

- A preliminary analysis of the potential for return on investment, in the form of health care costs savings and energy cost burden reductions as a result of an integrated service delivery model in Connecticut. This is contained in the Needs Justification Statement that was published.
- Opportunities for scaling an integrated health and energy services delivery program model beyond the initial pilot project phase.
- Opportunities for aligning this approach with existing state or local policy priorities, and identifying policies that could be initial barriers to the advancement or coordination of this approach.
- Preliminary research into Connecticut's capacity to implement a statewide program where public and private insurers or other capital investment models could provide funds for activities associated with preventive health education, environmental hazard reduction and energy retrofits in homes. Selected activities would deliver measurable cost-savings to the health care system and/or the investors, using synchronized intervention implementation and data collection mechanisms.

As part of this Phase I initiative, DPH worked with the Department of Social Services to negotiate access through a Memorandum of Understanding to anonymized Medicaid data at the claims level for the Project. DPH then worked with GHHI to establish an agreement under which GHHI has access to the data for the detailed economic analysis to be done in Phase II. This was done in an extraordinarily short period of time (months as opposed to 1-2 years, if ever, in other jurisdictions) given the sensitive nature of the data and all the applicable privacy laws and considerations.

The Phase I Project Pre-Feasibility Research is in draft review and will be published by the end of April. This research and project development conducted by GHHI has formed the basis for the proposed Phase II Pilot Project Design and Implementation Strategy, which will establish a Connecticut Green & Healthy Homes statewide, integrated health, energy and housing services delivery model.

The cost of Phase I was \$74,000 and was paid for by the Green Bank, \$49,000 of which came from federal Department of Energy Solar Energy Technologies Office grant funds and \$25,000 of which came from the Green Bank.

Overview of Phase II: Pilot Project Design and Implementation Strategy

Phase II will include project design for the development and implementation of pilots for the Connecticut Green & Healthy Homes Project that demonstrates the integrated health, energy and housing services, incorporating Medicaid and other innovative financing mechanisms.

GHHI will provide the following technical assistance services as part of Phase II – Pilot Project Design and Implementation Strategy (see Appendix 2 for full proposal):

- A. **Project Design** – investigation of sustainable funding via Medicaid and policy steps needed access this funding stream; investigation of other reimbursement avenues such as hospital community benefit investments, pay for success, and federal funding opportunities; and development of a project design report to communicate broadly to project partners and stakeholders.

- B. **Medicaid Data Analysis and Report** – preparation of medical cost savings and aggregate state return on investment projections associated with home interventions leading to reductions in the treatment of asthma and injuries related to trips and falls; preparation of a report detailing the findings of the Medicaid data analysis and the costs, cost savings, and potential return on investment of project model home interventions.
- C. **Project Work Plan** – manage the development of the detailed project design and work plan in collaboration with the partners with input from key stakeholders; detail the proposed integrated service delivery model, processes and costs including integration of housing and energy programs; develop a data and evaluation plan; identify any workforce development and training areas; and assist in the selection of project sites for Phase III.
- D. **Stakeholder Convenings, Philanthropic Engagement and Project Management** – work with project partners to hold additional convenings including for community stakeholders, state philanthropies working with the Connecticut Council for Philanthropy, hospital and health systems around Community Needs Assessments and hospital community benefits, and workforce development with community health workers, efficiency and health and safety contractors; and provide overall project management for the partners for Phase II.

The cost to engage GHHI as the technical assistance provider for Phase II is \$200,000 broken down into these categories to be executed over a six-month period culminating in Fall, 2018:

A.	Project Design	-	\$35,000
B.	Project Medicaid Data Analysis and Report	-	\$50,000
C.	Project Work Plan	-	\$70,000
D.	Project Convenings, Philanthropic Engagement and Project Management	-	<u>\$45,000</u>
Total		-	\$200,000

While the Green Bank would engage GHHI again on behalf of the Project partners, the Green Bank would not be responsible for funding Phase II. Instead, the partners are securing foundation and other grant funding to cover the full cost of GHHI’s engagement. The intention is to use no Green Bank ratepayer funding for this engagement.

At the conclusion of Phase II, the partners will proceed to Phase III – Pilot Implementation.

Strategic Selection

Due to the nature of the Connecticut Green and Healthy Homes Project, the number of agencies and organizations involved, and the fact that GHHI is the key technical assistance provider on the project bringing their nationally recognized model to the state, Green Bank staff believes that the award of Phase II technical assistant consultant to GHHI fits well within the requirements for a Strategic Selection from the Green Bank Operating Procedures Section XII:

- **Uniqueness:**
 - o GHHI is demonstrably the nation’s leader in integrated approaches to addressing issues in health, safety, housing, and energy. The GHHI approach offers a mature

intervention model with proven return on investment (ROI) for both public and private investors.

- **Strategic Importance:**

- This Project supports the Green Bank's fourth organizational goal, which is to "support affordable and healthy buildings in low-to-moderate income and distressed communities across the state." This initiative to research and identify sustainable funding sources from the health sector for health and safety repairs and remediation which are preventing energy upgrades from being made is discussed in the residential sector chapter of the Comprehensive Plan – Fiscal Years 2017 and 2018¹.

- **Urgency and Timelines:**

- Participating state agencies will need to make any budget requests for FY19 related to the pilot implementation phase of the project in the next two months.
- There is currently an MOU between Department of Social Service and Department of Public Health (DPH), as well as an agreement between DPH and GHHI t on data sharing for Medicaid data. It would take significant time to secure another provider to have access to this sensitive data, holding up the overall project timeline at a critical point of momentum and where state agencies are with planning for the next budget cycle.
- Acting now allows the program to build off of funding while it exists, and the momentum of current partnerships in place.

- **Special Capabilities:**

- GHHI has also demonstrated how to deliver an increase in housing affordability, a better skilled workforce, improved government efficiency, and neighborhood stabilization. With strong support from HUD, DOE, CDC, EPA, the Council on Foundations, and over thirty local and national foundations, GHHI has created a national movement to improve the integrated delivery of housing interventions. GHHI is actively working with 31 designated or onboarding GHHI sites with over 30 additional next generation jurisdictions seeking GHHI assistance and designation. In partnership with HUD, more than 597,000 green & healthy homes interventions have been completed in homes since 2010 using an integrated intervention model where housing interventions are combined with health and energy interventions. GHHI has pioneered the model of unlocking funding from the health sector and has worked with states to obtain necessary waivers from the Center for Medicaid Services. They have also pioneered using pay for success and social impact bonds for healthy housing interventions that lead to better asthma health outcomes, lower energy burdens, and savings in public health expenditures.

Conclusion

Given the unique approach to this research conducted by GHHI and the model they bring, and the Green Bank's interest in assisting low to moderate income residents make energy improvements to their homes, staff believe that approving a partnership with GHHI will further the Green Bank's mission to support affordable and healthy buildings in low-to-moderate

¹ [Comprehensive Plan – Fiscal Years 2017 and 2018](#), pages 64 -67.

income and distressed communities across the state. The cost to engage GHHI as the technical assistance provider for Phase II is \$200,000, which will be covered in its entirety by grant funding. If grant funding is not secured, the project will not move forward – the intention is for no Green Bank ratepayer funding to be used for Phase II. Accordingly, staff recommends that the Board approve this transaction per the resolutions attached.

Resolutions

WHEREAS, the Connecticut Green Bank (“Green Bank”) actively seeks to support the goal of supporting affordable and healthy buildings in low-to-moderate income and distressed communities across the state, as articulated in an organizational goal in its Comprehensive Plan.

WHEREAS, the Connecticut Green and Healthy Homes Project involves the following state agencies and organizations that are aligned in their common goals related to health, housing and energy: Connecticut Green Bank, Department of Public Health, Green & Healthy Homes Initiative, Department of Social Services, Department of Energy & Environmental Protection, Department of Housing, Department of Children and Families, Office of Early Childhood, Office of Chief State’s Attorney, United Illuminating, and Eversource.

WHEREAS, Green and Healthy Homes Initiative (GHHI) has proposed a scope of work for research and project design for Phase II of the Project for \$200,000 to support the Green Bank’s efforts to accelerate energy efficiency and clean energy generation across Connecticut; and

WHEREAS, Project partners are securing foundation and other grant funding in addition to Department of Energy Solar Energy Technologies Office grant funds to cover the full cost of GHHI’s engagement.

WHEREAS, the proposed scope of work as a strategic selection and award pursuant to Green Bank Operating Procedures Section XII pursuant to the rationale in the memorandum to the Board of Directors dated March 27, 2018 setting forth GHHI’s unique opportunity and approach to developing an integrated model to address health, housing, and energy needs in the Connecticut Green and Healthy Homes Project;

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 accept the GHHI proposal, and in so doing obligate the Green Bank in a total amount not to exceed \$200,000 with terms and conditions consistent with the memorandum submitted to the Board of Directors dated March 27, 2017, 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 March 27, 2018; and

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

Submitted by: Kerry O’Neill, Vice President, Residential Programs



Connecticut Green & Healthy Homes

Overview

Connecticut Green & Healthy Homes is a collective effort, supported by partners in government, energy, health and housing, to plan and implement statewide, comprehensive health, housing and energy interventions to reduce asthma, injury risks, lead exposure, and energy burdens, and result in long term public sector savings.

Green & Healthy Homes Interventions At-a-Glance

The Connecticut Green & Healthy Homes project seeks to research the feasibility of implementing evidence-based housing interventions to address hazards related to asthma, injury, and lead poisoning, as well as improve energy efficiency and reduce energy burdens. The model proposed in this project implements an integrated, whole-house intervention that produces sustainable green, healthy, and safe homes, and has a proven impact on health outcomes, energy usage and related costs.

Overview of Potential Model for Home Health, Safety and Energy Intervention



1 Intake and enrollment



2 Initial Home Visit



3 Health and safety education and home repairs



4 Evaluation of outcomes





Connecticut Green & Healthy Homes Partners and Roles

- **Connecticut Green Bank:** Core convener, funder and partner in feasibility research and pilot planning.
- **Department of Public Health:** Core convener and partner in feasibility research and pilot planning.
- **Green & Healthy Homes Initiative:** Primary researcher, convener and national policy and practice expert.
- **Department of Social Services:** Partner in feasibility research and pilot planning.
- **Department of Energy & Environmental Protection:** Partner in feasibility research and pilot planning.
- **Department of Housing:** Partner in feasibility research and pilot planning.
- **Department of Children and Families:** Partner in feasibility research and pilot planning.
- **Office of Early Childhood:** Partner in feasibility research and pilot planning.
- **Office of Chief State's Attorney:** Partner in feasibility research and pilot planning.
- **United Illuminating:** Partner in feasibility research and pilot planning.
- **Eversource:** Partner in feasibility research and pilot planning.

Progress and Unique Potential in Connecticut

Connecticut is a national leader in residential energy-efficiency services. Leaders in the state's public health, housing and energy sectors recognize the impact of housing quality on health, energy burden, financial stability and quality of life for Connecticut's families and communities.

Connecticut Green & Healthy Homes Project has convened over 30 organizations, including 7 State Agencies, to share insights and explore Connecticut's shared vision for a statewide housing, health and energy services model. Two phases of feasibility research are complete – a Needs Justification and an Asset and Gap Analysis. An Economic Feasibility Analysis is in progress, to estimate the potential for this intervention to produce healthcare cost savings in Connecticut, and develop a model for cross-sector investment. Connecticut Green Bank has funded the initial phases of this work, but sustained support is needed to continue advancing to the pilot phase and beyond.

Connecticut can achieve greater energy affordability and health benefits by leveraging and expanding existing resources to implement a comprehensive, integrated housing assessment and intervention model as well as infusing sustainable new private and public funding sources such as Medicaid. The integrated model being considered in Connecticut coordinates interventions that lower energy costs and increase financial stability for rate-payers, and lower healthcare costs and societal costs related to lead exposure, household injury and asthma - including costs related to special education, criminal justice, care for seniors and lost productivity.

Importantly, these interventions may produce benefits for individuals and families that transcend improved health or lower utility bills, including mental health and wellbeing, improved school attendance and better educational outcomes for children, and better work attendance and career advancement for adults, improved property values that lead to wealth retention and asset-building, and foreclosure and eviction prevention.

Strategic, leveraged investments from philanthropic, private, and public funders can ensure the success and impact of this model. We are seeking short-term support to complete the final feasibility analysis work and advance to pilot design and implementation, as well as long-term, sustainable support to help make Connecticut a leader in providing healthy, safe, energy-efficient and affordable housing to residents as a platform for improving lives.

Questions? Contact us.

Kerry O'Neill
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Connecticut Green Bank
State of Connecticut Green & Healthy Homes Project
GHHI Technical Assistance Contract Scope of Services –
Phase II - Project Design and Implementation Strategy

I. Green & Healthy Homes Connecticut Project Design and Implementation Strategy for Connecticut Green & Healthy Homes Project Pilot

With Connecticut Green Bank funding, GHHI will oversee the Project Design for the development and implementation of a Connecticut Green & Healthy Homes Project pilot, a multi-site, multi-year pilot that works with existing providers to implement the integrated health, energy and housing services delivery model and which incorporates Medicaid and other innovative financing mechanisms. GHHI will provide the following technical assistance services as part of Phase II – Project Design and Implementation Strategy:

A. Project Design

1. Investigation of Sustainable Funding Via Medicaid

Conduct research including the identification and assessment of the key opportunities and barriers to the implementation of an integrated health and energy services delivery model in Connecticut and the likelihood of the project’s eventual success. Conduct research on and provide guidance to Connecticut Green Bank and project partners on:

- a. The possibility and likelihood of Medicaid reimbursement for an initial project pilot, including health and energy efficiency home improvements, and the opportunities for a longer-term model;
 - i. Payment mechanism feasibility through various payment mechanisms which may utilize public funds from Connecticut’s HUSKY program (including an assessment of the feasibility of reimbursement for these proposed interventions through the State Medicaid administration structure). Payment mechanism feasibility for other sources, which may require federal approval for matching dollars in their use for a pilot or full program operations;
 - ii. The technical and economic feasibility of the agreed upon prescriptive interventions including but not limited to: asthma trigger reduction, household injury prevention, energy efficiency measures and other home-based environmental health hazard remediation interventions having the desired benefits in terms of reductions in asthma episodes, asthma related doctor visits, hospitalizations and emergency room visits, reductions in household injuries and other illnesses, reductions in medical and energy costs, long term value created as a result of increased earning potential, and/or other positive outcomes;

- iii. Operational feasibility of scaling an integrated health and energy services delivery program model to a statewide model;
 - iv. Socio-political feasibility of any potential roadblocks in the ecosystem of stakeholders including local, regional, or federal resistance to the methodology or end goals of the project.
- b. Opportunity to utilize CHIP health services state plan amendment or other innovative investment of public healthcare dollars as part of the Project pilot.
 - c. Project linkage and possible integration with Connecticut State Medicaid, Medicaid reform programs in the state and other health care initiatives.
 - d. Other medical reimbursement resources from the health care sector and their possible applicability – i.e.-Hospital Community Benefit Investments, Readmission Reduction Programs, etc.
 - e. Conduct research to identify and assess other possible funding mechanisms and project resources for preventive health-based housing interventions to reduce home-based environmental health hazards - such as Pay For Success, Social Impact Bonds, Title V funding, Aging in Place Initiatives and other federal funding opportunities for health innovation that could be incorporated into the project design model.
 - f. Identify possible opportunities to leverage Connecticut Green Bank’s innovative approach to growing private capital investment in clean energy projects, to support and advance an integrated health and energy service delivery platform.
 - g. An assessment of current GHHI sites in Connecticut and elsewhere, as a basis for informing the development of a statewide delivery model.
 - h. Research to further assess Connecticut’s capacity to implement a statewide program under which public and private insurers or other innovative capital investment model could provide funds for activities associated with preventive health education and environmental hazard and energy inefficiency reductions in the home, to deliver measurable cost-savings to the health care system and/or the investors, using synchronized intervention implementation and data collection mechanisms.
 - i. Conduct additional research as needed on existing health, safety, housing, and energy efficiency programs in Connecticut and make recommendations for inclusion of the programs in a project pilot based upon their available funding; services offered; geographic target areas; client eligibility requirements, compatibility of client enrollment and referral processes as it pertains to

coordinating energy, health, and housing programs; contractor accreditation and certification requirements; and contractor and inspector training capacity among other key factors.

- j. Conduct additional research as needed on the data collected by health, safety, housing, and energy efficiency programs intended to identify opportunities to create consistency in data collected to support an integrated health, energy, and housing delivery model.
 - k. Research, in cooperation with Connecticut Green Bank and project partners, additional funding resources that could be leveraged and integrated with a project pilot and longer term.
 - l. Identify and include any consultants to add to the robust analysis of the opportunities for this approach in the context of the project and Connecticut Green Bank's work as necessary and agreed upon by the parties.
2. Prepare Project Design Report
Prepare Project Design Outline Report, including an executive summary, project model outline, narrative, charts, data tables, maps, diagrams, and other collateral communicating the determination of feasibility, medical and energy cost savings projections, research analysis, financing options and opportunities, key issues to be addressed (including workforce capacity and development, potential investor communication, and community input on Project design, implementation and evaluation), key community stakeholder roles and full documentation of GHHI's justification of its determination by the above listed categories.

B. Project Medicaid Data Analysis and Report

1. Project Medicaid Data Analysis and Report
GHHI will conduct research on and provide guidance to Connecticut Green Bank and project partners on:
 - a. Collect medical cost data and energy and housing intervention cost data provided by State of Connecticut agencies;
 - b. Prepare medical cost savings projections based on Medicaid data, and aggregate return on investment calculations for the State of Connecticut for in-home asthma resident education and combined energy efficiency and asthma trigger reduction housing assessments and interventions;
 - c. Prepare medical cost savings projections and aggregate return on investment calculations for State of Connecticut for household injury prevention and other healthy homes housing assessments and interventions to reduce home-based environmental health hazards;

- d. The economic feasibility of the intervention operation on a per unit basis and at scale based on projections of medical and energy cost-savings derived from medical cost data and housing and energy intervention cost estimates provided by the state agencies, utilities and other partners;
- e. Prepare a Project Medicaid Data Analysis and Report that details the Connecticut Medicaid data research and analysis findings, calculations and determination of costs, feasibility, cost savings projections, potential return on investment from project model interventions, and key considerations and potential issues to be addressed.

2. Additional Research

Additional research as requested by Connecticut Green Bank and project partners, and agreed upon by the parties.

C. **Project Work Plan**

1. Manage the Connecticut Green & Healthy Homes Project Design and Work Plan Development

GHHI will draft a Project Design and Work Plan collaboratively with Connecticut Green Bank, Department of Social Services Connecticut Medicaid Office, and Connecticut Department of Public Health, and in consultation with Connecticut Departments of Energy and Environmental Protection, Housing, Children and Families, Offices of Early Childhood and the State's Attorney, the utility companies, and other key agencies and stakeholders in the State through a series of working sessions. The Project Design will outline the components that will be developed to implement a model program at selected Connecticut Green & Healthy Homes Project pilot Sites under which weatherization services are integrated with health education and environmental hazard and asthma trigger reduction, designed to benefit the person with asthma and other health conditions to deliver measurable cost-savings to the health care system and improve energy efficiency, using synchronized intervention implementation and data collection mechanisms.

The Project Design will include a Work Plan and Evaluation Plan for the State of Connecticut Project pilot will be designed to test that hypothesis, which if substantiated by Project pilot data and evaluation, would incentivize the State to implement a statewide program that funds the proposed evidence-based resident education, environmental assessment and healthy homes housing interventions in coordination with publicly-funded energy efficiency programs as part of a sustainable intervention strategy, and is sustainably funded using a mix of philanthropic, private and public investment. The detailed Work Plan will describe the project mission, strategy, goals/objectives, action items, roles and responsibilities, assignment, model, timeline, budget and projected health and energy returns on investments.

2. Proposed Service Delivery Model, Processes and Costs

GHHI will lead the effort to refine and document the proposed intervention delivery process and related costs of the health care, energy and housing service providers to prepare for new client intake/referral processes and increases in production services to meet the Project pilot demands, specific client eligibility requirements and the energy and healthy homes intervention measures. A report will be produced that includes service delivery process maps (current and future estimate) that highlight data collection nodes, an inventory and budget of additional resources required to accommodate any increased unit production as a result of the Project pilot, and an inventory of any new partners needed to execute the pilot effectively. GHHI will develop a Connecticut Green & Healthy Homes model for the Project pilot Implementation Phase. The Project pilot model will be described in the Work Plan and will be specific to the State of Connecticut and the proposed Project pilot sites (if selected in advance) and will serve as the framework for the full statewide model program implementation. The Project Design outline and the detailed Work Plan will include the following components:

- Client referral and intake: GHHI will lead the effort to design how low-to-moderate income households, including Medicaid patients, will be referred to the Project pilot's service providers and how in-home resident education and case management services will be efficiently coordinated with utility-run energy-efficiency programs and other housing intervention services. GHHI will also work with the medical and case management resources of the various healthcare entities on the design and utilization of various healthy homes educational materials and more coordinated medical case management strategies for the pilot and the future statewide model. Include project linkage and possible integration with Connecticut State Medicaid and other wrap around services where appropriate such as Aging in Place, mental health services and homelessness prevention services among other programs and services where appropriate.
- Property owner and resident (occupant) education
- Comprehensive housing environmental assessment and energy audit (including the possible utilization of the Connecticut DPH developed Healthy Homes Checklist to assess environmental hazards in the home)
- Comprehensive Scope of Work
- Housing intervention strategies and integrated models; including strategies for various types of housing (i.e.-single family, multi-family, rental, owner occupied) and the utilization of Connecticut resource braiding tools
- Post intervention inspections, quality control mechanisms and the securing of all necessary permits and inspections as required by law
- Payment schedules and processes

- Data platforms and sharing mechanisms, pre- and post-data collection methodologies, planned data analysis and evaluation
- Connecticut Green & Healthy Homes Project pilot Outcome Broker (s) position description and roles
- Identifying or designing the required training, certification and accreditation of project personnel

The Project Design will include linkage and possible integration with Connecticut Medicaid, and other health care and energy-related programs and funding where appropriate, plan for workforce development and philanthropic and other potential investor resources, and community input related to Project design, implementation, evaluation and other activities.

3. Connecticut Green & Healthy Homes Project Economic and Financial Models
GHHI will develop an economic model for the Project pilot and conduct a briefing to Connecticut Green Bank, project partners and other key stakeholders to communicate the model and proposed processes. GHHI will provide projections of pilot costs, cost savings, and return on investment for the comprehensive, integrated pilot and statewide models. GHHI will also research and conduct critical analysis of potential innovative funding mechanisms from the energy, health and housing sectors and provide recommendations to the Connecticut Green Bank and project partners on what funding sources are viable in Connecticut and should be further developed or explored. Funding sources to be researched for possible integration with energy and housing intervention programs include: Medicaid investment, via hospital community benefits, value-based purchasing or another mechanism, private and philanthropic capital investment, Pay For Success, Social Impact Bonds, hospital community benefits, and leveraging of other federal funding opportunities for health innovation that could be incorporated into the project design model, etc.
4. Integration of Housing and Energy Programs
GHHI will assist in assessing the capacity of proposed housing intervention programs, including Connecticut's existing energy efficiency programs, to be integrated as part of the Project pilot and will develop a Project pilot design and Work Plan that reflects available capacity for in-home resident education, environmental assessment-energy audit, housing interventions, other leverage resources and client (patient) applicant pool. The Work Plan will provide a detailed description of the systems flow process for the Project from initial client referral to final clearance inspection and evaluation.
5. Inventory of Potential Leverage Partners and Resources
GHHI will assist with the development of an updated inventory of potential public and private leverage funding resources and partners in energy, health and housing that could be included in the Project pilot and incorporate those resources into the Project Design and Work Plan. Partners may include government, community-based organizations,

philanthropies and others who may provide in-kind services or direct leverage support with activities including workforce development and training, housing assessment and intervention, in-home resident education, philanthropic outreach, project administration and evaluation, etc.

6. Data and Evaluation Plan

GHHI will assemble an advisory panel of research leaders to customize the Project pilot Evaluation Plan for the project. A set of recommendations will be produced that details proposed key indicators, evaluation and data collection methodologies, data sets and partners currently engaged, prospective evaluation partners, a data collection and evaluation gap analysis, and an assessment of the level of effort required to customize the evaluation model for the specific Project pilot and to produce consistent, reliable data tracking for the Project pilot agency participants. Dashboard project data indicators will include: resident health status, home based hazards, unit production, health and safety outcomes, energy outcomes, workforce development measures, interventions and costs, program cost efficiencies and Connecticut Green & Healthy Homes standard indicators.

Other data and evaluation indicators may be developed to study the effect of the green and health housing intervention measures short and long-term impact on juvenile delinquency and area crime rates as pertains reductions in lead poisoned children as well as the reduction in general substandard housing resident populations. Data indicators will also measure the impact of the interventions on all occupants in the household and not exclusively on the child, senior or other point of referral entry into the program. As requested by Connecticut Green Bank, Connecticut Department of Housing, Connecticut Department of Public Health, and Connecticut Medicaid Office, propose other indicators for data collection and analysis by the project. GHHI may contract services from an actuarial firm or other consultant depending upon the required services necessary and funding available to support this deliverable.

7. Workforce Development and Training

GHHI will identify or design the required training, certification and accreditation of project personnel, including community health workers and health and safety contractors (among others) to perform key functions such as: in-home resident education, medical case management, environmental assessment-energy audit and housing interventions. GHHI will work with Connecticut Green Bank and the project partners to engage key stakeholders in workforce development and career advancement planning, both to ensure Connecticut's capacity to provide the proposed evidence-based housing intervention related services statewide, and to explore the potential of a statewide model to improve access to skilled career opportunities for Connecticut's residents including residents of low income communities.

8. Produce Materials to Inform Stakeholders

GHHI will provide example work products (e.g., sample flow charts, forms, assessment, education and intervention tools, reporting templates) from national best practices so that all parties understand the steps associated with the Project pilot Implementation Phase

and can begin the process of customizing Project forms and materials as appropriate to each of the proposed pilot jurisdiction's particular processes and needs prior to the Project pilot Implementation commencement. GHHI will deliver working meetings with Connecticut Green Bank and key weatherization, housing and health stakeholders to develop and present the timeline, example work products and templates in preparation for the subsequent Project pilot Implementation Phase.

9. Create State of Connecticut Green & Healthy Homes Integrated Housing Standard
Develop a State of Connecticut health, energy and housing standard for units that are receiving comprehensive housing assessments and housing interventions through the Connecticut Green & Healthy Homes Project model. Will include consideration of adoption of standards into various housing codes and/or property maintenance codes.
10. Connecticut Green & Healthy Homes Project Pilot Site Selection
GHHI will assist with the identification of potential Pilot Project cities in the state of Connecticut for the Phase III Project Pilot Implementation Phase as requested by Connecticut Green Bank and its Project partners.
11. Additional Project Design Work
Additional project design work as requested by Connecticut Green Bank and agreed upon by the parties.

D. Stakeholder Convenings, Philanthropic Engagement and Project Management

1. Project Convenings and Philanthropic Engagement
As requested by Connecticut Green Bank, GHHI will meet with and consult with stakeholders from Connecticut Department of Public Health, Connecticut Department of Social Services HUSKY Program, relevant health agencies, and weatherization, utility-run energy efficiency programs and other housing intervention providers in discussions about the Project Design and the future statewide model implementation. GHHI will work with city, county and/or state procurement and legal officials to review regulatory, statutory and programmatic requirements related to the implementation of the Project pilot in the State of Connecticut. GHHI will assist Connecticut Green Bank in conducting additional convenings with energy, health and housing partners to explore new cross sector partnerships and innovative funding opportunities.
 - a. GHHI will work with Connecticut Green Bank and other project partners to convene key community stakeholders, and develop a plan for eliciting and including key stakeholder and community input into the Project design, implementation, evaluation, investment and other activities.
 - b. GHHI will work with the Connecticut Green Bank, Connecticut Council for Philanthropy, project partners and other key stakeholders to effectively communicate the goals of Project Design, Work Plan and implementation to the philanthropic community, in order to educate these stakeholders on the potentially

transformative impact of the proposed models, and to increase philanthropic investment and support of this work.

- c. GHHI will work with Connecticut Green Bank and other project partners to explore other private sector investment and support for the Project.
- d. GHHI will work with Connecticut Green Bank and other project partners to convene partners and develop a plan for eliciting and incorporating feedback on workforce development to increase the capacity of housing-related health and energy providers, including community health workers, health and safety contractors and others.
- e. GHHI will work with the Connecticut Green Bank and other project partners to convene health systems and hospitals to elicit and incorporate feedback on Community Needs Assessments and Hospital Community Benefits investment in housing and health.
- f. GHHI will work with Connecticut Green Bank and key partners to organize and conduct a stakeholders meeting to review the Project findings and Project Design elements to stakeholders.

2. Phase II Project Management

GHHI, in consultation with Connecticut Green Bank and other key project partners, will manage all phases of the project to ensure that deliverables, work products and project objectives are achieved within the designated timeframes and within the project budget.

II. Project Design and Work Plan Project Deliverables and Timelines

The following project deliverables and timeline is based upon a 180-day project implementation period, culminating in the Fall, 2018.

A. Project Administration

1. Bi monthly Project Check-In Calls with Green Bank (every two weeks)
2. Monthly progress updates. (due the 10th of each month)
3. Other reports as requested by the Green Bank Project Manager. (as directed by Green Bank)

B. Project Medicaid Data Analysis and Report

1. Obtain access, in partnership with Connecticut Department of Public Health and Connecticut Department of Social Services to an extract of Connecticut HUSKY Program Medicaid/CHIP data which allows for the analysis of high-utilizer

asthma, unintentional injury and elevated blood lead patients. (within 15 days of contract execution)

2. Construct and complete analysis of Connecticut HUSKY program data, to determine healthcare utilization rates, apply evidence-based treatment effects associated with proposed Project interventions on a Connecticut-specific population, and project potential cost savings, value-created and Return on Investment for the state of Connecticut as a result of implementation of the proposed model. (within 60 days of contract execution)
3. Draft and submit a report detailing analysis findings, and making recommendations for inclusion/targeting of high utilizer Medicaid populations in the proposed intervention, based upon the economic analysis. (within 90 days of contract execution)

C. Project Convenings and Reporting

1. Plan and implement a Workforce Development Convening, which gathers key stakeholders to discuss and plan the development of workforce capacity in the Community Health Worker, Health and Safety Contractor, and/or other sectors, to meet the implementation needs of a broad statewide model for housing, health and energy services. (within 90 days of contract execution)
2. Plan and implement a Health System/Hospital Convening, which gathers key stakeholders to discuss partner needs and goals related to Community Needs Assessments, setting priorities for Hospital Community Benefit investments, and partnerships to improve housing conditions. (within 90 days of contract execution)
3. Plan and implement one or more meetings to engage Connecticut's philanthropic community in the Project, and educate key stakeholders in this sector regarding the Project's potential for transformative impact. (within 150 days of contract execution)
4. Complete Final Work Plan and implement a broad stakeholder convening to share and elicit feedback regarding the findings of the Pre-Feasibility, Project Design and Work Plan Reports. (within 180 days of contract execution)

D. Project Work Plans

1. Draft a Project Pilot Work Plan, incorporating feedback from Convenings and other meetings with key stakeholders, that makes recommendations related to participant referral/recruitment and targeting, intervention, evaluation, pilot siting and other considerations. (within 120 days of execution)

2. Draft and submit a workforce development activities work plan, incorporating findings from Workforce Development Convening. (within 60 days of the Convening)
3. Draft and submit a philanthropic education/engagement plan. (within 30 days of contract execution)
4. Draft and submit a health system/health partner engagement activities plan, incorporating findings from the Health System/Hospital Convening. (within 60 days of the Convening)

III. Budget - Phase II Project Design Research and Work Plan Cost: \$200,000

A. Project Design	-	\$35,000
B. Project Medicaid Data Analysis and Report	-	\$50,000
C. Project Work Plan	-	\$70,000
D. Project Convenings, Philanthropic Engagement and Project Management	-	<u>\$45,000</u>
Total	-	\$200,000

IV. Project Staffing Plan

GHHI is prepared and has the capacity to start work immediately upon contract award to successfully meet the objectives and deliverables outlined for the Phase II Scope of Services. GHHI’s Project Management Team for this grant will be led by Ruth Ann Norton, President and CEO (Project Director), Catherine Klinger, Technical Assistance and Social Innovation Specialist (Project Manager), Wes Stewart, Vice President for Technical Assistance and Legal Services , and Michael McKnight, Vice President for Policy and Innovation. Ms. Norton will be actively engaged in partnership development, training, leadership and project execution as well as responsibility for overall project design and for ongoing project management to achieve all grant deliverables. Catherine Klinger will be responsible for the day to day execution of all aspects of the project. Key GHHI project staff for the project include:

RUTH ANN NORTON

President & CEO

Ruth Ann Norton serves as President & CEO of the Green & Healthy Homes Initiative (GHHI), a national nonprofit founded in 1986 dedicated to the elimination of childhood lead poisoning and the creation of healthy, safe and energy efficient housing for America’s children. A dedicated advocate for healthy housing, she broadened the mission of the organization, formerly the Coalition to End Childhood Lead Poisoning, by designing a groundbreaking national program built on a framework of cross-sector collaboration to efficiently deliver green, healthy and safe homes in communities throughout the United States. One of the nation’s leading experts on healthy housing, Ms. Norton led efforts to reduce childhood lead poisoning by 98% in the

state of Maryland. She also developed and implemented one of the nation's first healthy homes programs to address the multiple environmental health and safety hazards in low- and very low-income housing for pregnant women. In addition, Ms. Norton has authored 30 pieces of healthy housing legislation and has served as manager, senior advisor or as the principal or co-principal for numerous federally funded grant programs to combat unhealthy housing. Ms. Norton serves as senior advisor to government and philanthropy and has directly raised more than \$325 million from the public and private sector to advance healthy housing.

In partnership with the Council on Foundations, the U.S. Department of Housing and Urban Development, the U.S. Centers for Disease Control and Prevention, the U.S. Department of Energy and the U.S. Conference of Mayors, Ms. Norton designed the national Green & Healthy Homes Initiative to cost effectively integrate energy efficiency and weatherization investments with lead hazard control and health and safety efforts. GHHI currently operates in over 30 U.S. cities. In 2014, Ms. Norton led GHHI's entry into the Social Impact Bond/Pay for Success field to advance health-based housing and demonstrate the outcomes of evidence-based practices to change Medicaid policies and enhance broad health care and other private sector financing support. She also provides a leading voice to articulate the significant health and social benefits of energy efficient investments through her senior advisory role with Energy Efficiency for All, her support and guidance in the development of NEWHAB, and her role as a Board member for Groundswell.

Ms. Norton served as a federally appointed liaison to the CDC's Advisory Committee on Childhood Lead Poisoning Prevention and served as an expert panel member for HUD's Healthy Homes Guidance Manual. She serves on the Executive Committee of the Maryland Asthma Control Council. Formerly she served on the Maryland Medicaid Advisory Committee, the Sustainability Commission of Baltimore as well as the Maryland Lead Poisoning Prevention Commission. She serves on the steering committee for Network Energy Water and Health in Affordable Housing and is a Healthy Homes Technical Advisor for the National Environmental Health Association. Ms. Norton was awarded the prestigious Robert Wood Johnson Foundation Community Health Leader (2005) and a Weinberg Foundation Fellow (2003) and was named as one of Maryland's Top 100 Women by The Daily Record. In 2016, she received the Tony Woods Award from the Building Performance Industry.

GHHI's President serves as an advisor to the U.S. Department of Housing and Urban Development, U.S. Conference of Mayors, the National Grade Level Reading Campaign, the Bloomberg School of Public Health at Johns Hopkins, National League of Cities, the Council on Foundations, Maryland Department of Health, New York State, and the State of Rhode Island among many other organizations and foundations. Ms. Norton, a Robert Wood Johnson Foundation Community Health Leader (2005) and a Weinberg Foundation Fellow (2003), also has served as the Chair of the Built Environment for the Sustainability Commission of Baltimore and was named as one of Maryland's Top 100 Women by The Daily Record.

G. WESLEY STEWART, Esq.

Vice President of Technical Assistance and Legal Services

Wes Stewart is the senior advisor for Standards & Practices at the GHHI. In his role, Mr. Stewart oversees and provides consultation on the GHHI integrated health, energy and housing intervention model, GHHI site development and technical program management in 30 jurisdictions across the nation. He also serves as the regulatory affairs expert and chief training provider on the implementation of multiple federal grant programs associated with GHHI. He has also provided technical assistance to other lead hazard reduction, Healthy Homes, and weatherization/energy efficiency programs in Arizona, Delaware, Florida, Georgia, Maine, Maryland, Michigan, Missouri, Mississippi, Nebraska, New York, Ohio, Pennsylvania, Rhode Island, Texas, Utah, Virginia, Wisconsin, and Washington, DC among others. He has also worked on the NYSERDA energy and health integration feasibility research project in New York State as well as other project and site work with other GHHI cities and states.

During his more than 20 years with GHHI, Mr. Stewart has provided trainings extensively throughout the United States on healthy homes, the integration of health, energy and housing, the Maryland Reduction of Lead Risk in Housing Law, federal Title X, the EPA Renovation, Repair, and Painting Rule, Lead and Healthy Homes program design, and GHHI. Mr. Stewart has served as Program Manager for GHHI on six HUD funded Lead Elimination Action Program (LEAP) and Healthy Homes Grant Programs, its weatherization and energy efficiency programs, and its housing, family advocacy and legal services programs. Prior to joining GHHI in 1996, he was an attorney in private practice in Baltimore, Maryland.

MICHAEL MCKNIGHT

Vice President of Policy and Innovation

Michael McKnight heads policy analysis, advocacy and social innovation and leads GHHI's cohort of twenty asthma Pay for Success and innovative health care financing projects. He also delivers trainings and provides technical assistance on healthy policy and integrating healthy homes services with clinical care. In this role, he has overseen data analysis, cost benefit analysis, construction of financial models, delivery of technical assistance, and analysis utilizing actuarial models. Mr. McKnight also has extensive experience reviewing policies that impact payment models and reimbursement of environmental services in healthcare, including providing information for state and federal public health policy makers. He has been project manager of the \$1.1 million Cooperative Agreement from the Corporation for National and Community Service's Social Innovation Fund to provide technical assistance to asthma projects in five states. He also has been project manager for a \$1.83 million grant from the Robert Wood Johnson Foundation to implement innovative financing models for comprehensive asthma programs, and a \$1.77 million cooperative agreement from the Social Innovation fund to advancing Pay for Success financing models for projects that address social determinants of health. He holds a degree in biomedical engineering from Harvard University.

CATHERINE KLINGER

Technical Assistance and Social Innovation Specialist

Catherine Klinger joined GHHI as a Technical Assistance Specialist and currently works on the NYSERDA energy and health integration feasibility research project in New York State as well as other project and site work with other GHHI cities and states. Ms. Klinger has 10 years of experience in work on cross sector collaborations between health and energy and has been

involved in a number of innovative projects in that sphere. She is a former program manager of the Philadelphia Lead and Healthy Homes programs at the City of Philadelphia Department of Health. She also served as the site lead for the development of the GHHI Philadelphia site and played a key role in the integration of lead and healthy homes interventions with leverage-funded weatherization and energy efficiency interventions. She is an Adjunct Instructor at University of Pennsylvania Center for Public Health Initiatives and Thomas Jefferson University, and was formerly the Lead Poisoning Prevention Programs Manager at the Partnership for Maternal and Child Health of Northern New Jersey. Ms. Klinger has a Masters of Public Health from Drexel University and a Bachelor of Science degree from St. Joseph's University.

ANDREW OLSON

Social Innovation Specialist

Andrew Olson provides technical assistance on identifying healthcare savings to PFS project stakeholders and works with the healthcare data team to provide capacity to organizations around the country who are exploring the feasibility of Pay for Success (PFS) and other innovative models to solve social problems. Mr. Olson's work in social innovation focuses on the strategy, data analysis, organizational design and financial engineering of social innovation programs. He joined GHHI from the Advisory Board Company, where he led a product portfolio working at the intersection of healthcare and technology. Prior, he established a socially oriented consulting firm with the George Washington University School of Business that focused on economic development leadership and was advised by former and current partners from Booz Allen Hamilton as well as McKinsey and Company. Andrew holds four academic degrees and two certifications including credentials in philosophy, psychology, political science, foreign policy, international affairs, international economic relations, business intelligence, finance and business management.

WILL KLEIN

Social Innovation Specialist

Will Klein works with GHHI partner organizations in cities across the U.S. to help them access innovative health care funding to pay for housing and health projects that address the underlying triggers of asthma, and remediate hazards that cause lead poisoning, and household injury. Previously, Mr. Klein worked for Solar Mosaic, where he ran online marketing to help drive the first \$10 million ever crowd-invested in community solar projects and then served as the company's business analyst in its transition to becoming the largest residential solar lender in the country, originating over \$1 billion annually. Additionally, he spent an AmeriCorps service year helping local governments and non-profits take advantage of Pacific Gas & Electric's energy-efficiency programs. Mr. Klein holds a BA in Nature and Culture from the University of California, Davis and a MEM from the Yale School of Forestry and Environmental Studies, where he focused his studies at the intersections of affordable housing, public health, and the environment.

JAMAL LEWIS

Technical Assistance Specialist

Jamal Lewis has served as an Environmental Health and Policy Fellow at GHHI since 2016, where he is involved in policy, research, drafting and program analysis. At GHHI, Mr. Lewis works with research teams, local partnering agencies and national initiatives, including Energy Efficiency For All, to support projects that integrate housing, energy, and health resources to improve outcomes. Currently pursuing his Master of Public Health Degree at Columbia University, he is dedicated to improving the health and well-being of vulnerable populations through fostering a healthier environment and implementing systems change. Mr. Lewis has an undergraduate degree from the University of Pennsylvania.

VICTOR ARTHUR, CPA

Controller

Victor Arthur joined GHHI in January 2015 as its Controller. In this role, he oversees GHHI's administrative, financial, accounting, and risk management operations including financial reporting. He is a Certified Public Accountant (CPA) and a Certified QuickBooks ProAdvisor with more than 10 years of progressive finance and corporate accounting experience. As a seasoned finance and accounting professional with an entrepreneurial mind, Mr. Arthur has been instrumental in helping businesses to develop strong financial reporting systems with emphasis on value add and innovative processes. Previously, he worked as accounting supervisor for Laureate Education and as a senior accountant for Bravo Health. Mr. Arthur is currently working towards a PhD in management with a specialization in finance. He holds MBA and MS degrees from the University of Maryland.

Organizational Experience

The Green & Healthy Homes Initiative is led by its President and CEO, Ruth Ann Norton who has served in this role since 1993. Ms. Norton, an economist by training is a well-known and effective advocate and leader in the field of green and healthy housing. She is credited as having helped to bring national focus to the health and societal benefits of energy efficiency investments and in fostering integrated housing intervention models. The organization employs 49 professionals, working in offices across the United States (District of Columbia, Maryland, Maine, Mississippi, Rhode Island and California).

Launched in 1986 as Parents Against Lead, and known for two decades as the Coalition to End Childhood Lead Poisoning, the Green & Healthy Homes Initiative utilizes a holistic approach to housing rehabilitation that aligns and coordinates resources to deliver healthier housing and healthier communities. Known for its innovation and common-sense approach, GHHI was launched to more effectively and efficiently integrate housing interventions to improve health, energy, economic and social outcomes and build new avenues for funding what works -- at scale. GHHI is currently working in over 35 cities, counties and states as well as with over 20 health care systems in the US on innovative health care financing projects. For over thirty years, GHHI has played a strong leadership role in the reduction of childhood lead poisoning, the advancement of healthier housing and changing standards for federal agencies and building new avenues for funding -- including significant changes in funding for the integrated standard of healthy, safe and energy efficient homes. GHHI has successfully helped in the adoption of lead and healthy homes policies and best practices that have been adopted into law and is leading the



national effort to have Medicaid invest in healthier, safer and more energy efficient homes that have proven to improve health. GHHI has strongly influenced HUD and other federal agencies to integrate energy efficiency and healthy housing interventions with other housing rehabilitation programs. The adoption of the GHHI comprehensive, integrated approach for HUD funded programs resulted in 597,000 green & healthy homes units that were produced between FY2010 and FY2016.

GHHI has a demonstrated track record as a national convener of key stakeholders to advance new standards and innovations in the green and healthy homes field. GHHI has worked since 2009 to increase the integration of the fields of housing, health and energy at the federal, state and local level. The GHHI model is designed to cut across silos and work on a collaborative platform for collective impact, by building capacity at the local level and providing recommendations from the field to influence national stakeholders, work and investments. GHHI builds capacity through establishing local leadership, shared data, holistic interventions and effective partnerships. At the national level, GHHI seeks out strategic NGO and federal partners that can advance the policy objectives or cross sector systems change.

GHHI partners with a diverse array of partners and has received a number of awards for its partnership and leadership work including: National Partnership and Achievements Awards from HUD's Office of Lead Hazard Control and Healthy Homes, the EPA's National Environmental Leadership in Asthma Management Award, Building Performance Institute and the Advocacy Award from the American Academy of Pediatrics, Maryland Chapter for its working in developing and coordinating impactful programs and partnerships. GHHI has twice been awarded the prestigious "Standards of Excellence" by the Maryland Association of Nonprofit Organizations for its management, financial policies and operations. GHHI is an active and supportive member of partnerships and coalitions that work collectively to advance change in the energy, housing and environmental health sectors such as: National Housing Conference, Green Affordable Housing Coalition, the Childhood Asthma Leadership Coalition, the National Safe and Healthy Housing Coalition, Energy Efficiency For All, and NEWHAB among others.

GHHI works with federal partners at HUD, DOE, EPA, and CDC as well as numerous other partners to advance its systems change agenda including; US Conference of Mayors, National League of Cities, Council on Foundations, Urban Institute, Johns Hopkins Bloomberg School of Public Health, Harvard School of Public Health, Columbia University Mailman School of Public Health, National Environmental Health Association (NEHA), Federal Interagency Healthy Homes Work Group, American Lung Association, APHA, Building Performance Institute (BPI), National Community Action Foundation, National Center for Healthy Housing, NASCSP, WegoWise, Habitat for Humanity, NeighborWorks America, Rebuilding Together, Enterprise Green Communities, National Academy of Public Administration, Annie E. Casey Foundation, and W.K. Kellogg Foundation. The Funders Network for Smart Growth and Livable Communities, Grade Level Reading Campaign, National League of Cities and Third Sector Capital Partners as well as more than 28 local and national foundations.

GHHI has long been recognized as an accountable, action-oriented and innovative organization. With broad and diverse partnerships, GHHI has a clear mission, effective programs and a strong

history of successful advocacy. GHHI also has a proven track record in helping cities and states transform often dysfunctional housing intervention models into efficient and impactful GHHI programs. Key highlights of the organization's recent work include:

- * Fostered the production of 597,000 green and healthy homes units in the United States since 2010 in partnership with HUD;
- * Conducting 20 Pay For Success and Innovative Healthcare Financing Projects across the country, to prove out the innovative GHHI asthma intervention model and secure private sector funding support to address a public health resource gap.
- * Expansion of GHHI model to 30 sites in the US;
- * Helped coordinate the National Lead Summit in December 2016 in Washington, DC of 250 lead stakeholders as well as releasing GHHI's Strategic Plan to End Childhood Lead Poisoning - A Blueprint for Action of key actions needed to more aggressively set the nation on a defined path to eliminate childhood lead poisoning;
- * Jointly developed the Healthy Homes Evaluator Micro-Credential in partnership with the Building Performance Institute (BPI) to cross train and accredit thousands of energy auditors to be able to perform environmental assessment for home-based environmental health hazards and develop comprehensive green and healthy homes scopes of work;
- * To foster the adoption of the GHHI integrated model, designed green and healthy policy priorities that have been adopted across HUD programs and included within all HUD competitive funding opportunities. Applicants who adopt the GHHI influenced policy priorities will benefit from bonus points which will provide a competitive advantage;
- * Initiated meetings with State Medicaid Offices in Maryland, Michigan, New York, Rhode Island, Utah and Texas among others to advocate for in-home health education and health-based housing assessments and interventions to be covered medical costs for Medicaid recipients that is helping lead the field;
- * The State of Maryland Department of Housing and Community Development recently adopted GHHI's Comprehensive Assessment Form for use by their grantees and contractors completing DHCD weatherization programs;
- * GHHI has emerged as a driver of policy innovation and a stronger national thought leader through its research and publishing of papers on the intersection of health, energy and housing and on innovative funding streams to finance those interventions. In August 2016, GHHI released its peer reviewed "Understanding the Multiple Benefits of Energy Efficient Investments" at the American Council for an Energy-Efficient Economy" (ACEEE) summer study conference. GHHI's contributions to the field include among others the following other key recent publications and concept papers: *Pay For Success for Lead Poisoning Prevention Concept Paper; Non-Energy Benefits, the Clean Power Plan, and Policy Implications for Multifamily Housing; and Determining the Feasibility of Pay for Success projects: An Objective Algorithmic Approach to Analysis, and Weatherization and Its Impact on Occupant Health Outcomes;*

Achieving Health and Social Equity through Housing: Understanding the Impact of Non Energy Benefits in the United States

* Successfully assisted four GHHI jurisdictions design and successfully apply for funding through HUD's Office of Lead Hazard Control and Healthy Homes in June 2016 and June 2017, bringing \$27.4M in new lead hazard reduction and Healthy Homes grant funding to the State Housing agencies of Maine and Rhode Island, Salt Lake County, Utah, City of Pittsburgh/Allegheny County, Pennsylvania and Cities of Jackson, Mississippi, Kenosha/Racine, Wisconsin, Lewiston-Auburn, Maine, Providence, Rhode Island, and Richmond, Virginia.

National Green & Healthy Homes Technical Assistance Expertise

The Green & Healthy Homes Initiative® is a national 501(c)(3) non-profit organization that creates, implements, and promotes programs and policies to eradicate childhood lead poisoning and create green and healthy homes. GHHI's work at the local and national level encompasses the design, development and implementation of effective healthy homes, lead poisoning prevention and green & healthy homes programs; innovative media, outreach, education, and advocacy strategies; public policy and legislative initiatives; legal and family advocacy services; lead safe housing relocation initiatives; energy efficiency, weatherization, green and sustainable initiatives; and national technical assistance. GHHI has shown a unique acumen for leveraging its stellar direct service programs into concrete policy change at the local, state and federal level – directly contributing to the prevention of childhood lead poisoning, asthma and injury – while creating an increasing stock of affordable, energy efficient, and sustainable healthy homes. GHHI's current technical assistance work is focused on the continued development and implementation of GHHI's national Green & Healthy Homes Initiative strategy that is utilizing an integrated, single stream assessment and intervention model to comprehensively combine healthy homes, lead hazard reduction, weatherization, and energy efficiency in sites around the country.

The American Recovery and Reinvestment Act (ARRA) presented an historic opportunity on a national scale to leverage dollars targeted for weatherization and energy efficiency with existing programs providing in-home lead hazard reduction and Healthy Homes interventions. GHHI seized upon this opportunity which has resulted in systemic changes to the design, financing and implementation of housing interventions strategies at both the federal and local level. GHHI's national Green & Healthy Homes Initiative is designed to streamline programs that address health, safety, lead hazard reduction, energy efficiency, and weatherization into an integrated, comprehensive "whole house" approach to better serve low-to-moderate income populations at the local level. With strong support and endorsement from the U.S. Department of Housing and Urban Development, Centers for Disease Control and Prevention, Department of Energy, the Council on Foundations, and over twenty-seven local and national foundations, the Green & Healthy Homes Initiative has created a national movement to improve the integrated delivery of housing interventions that create healthier, more stable and cost-effective housing.

GHHI was selected in 2009 by HUD, CDC, the Council on Foundations, and the White House Office of Recovery Implementation to lead both the local and the national efforts to transition



from the traditional fragmented program approach to an innovative Green & Healthy Homes Initiative model. In 2010, HUD and CDC awarded GHHI a \$1.4 million contract to provide technical assistance to twelve cities and two Indian tribes to develop the initial Green & Healthy Homes Programs. GHHI project sites were initially developed in the cities of Atlanta, Baltimore, Chicago, Cleveland, Cowlitz Indian Tribe, Denver, Detroit, Flint, New Haven, Oakland, Philadelphia, Providence, San Antonio, and Spirit Lake Indian Tribe. Since that time, additional GHHI designated sites have been added in Albany, Austin, Buffalo, Dubuque, Greater Syracuse, Jackson, Lansing, Lewiston-Auburn, Marin County, Memphis-Shelby County, Pittsburgh, Salt Lake County, Schenectady and Troy.

GHHI is currently providing technical assistance under contract with NYSEERDA to conduct feasibility research and project design for an integrated, New York State specific energy, health and housing model. GHHI is conducting research on the feasibility of Medicaid reimbursement and other innovative funding mechanisms in the State of New York for healthy homes interventions in properties receiving weatherization and energy efficiency interventions. In collaboration with NYSEERDA, New York Department of Health and New York State Homes and Community Renewal, GHHI will create a project design for how Medicaid funded healthy homes housing interventions (to reduce asthma episodes, lead poisoning, and household injuries) can be integrated with NYSEERDA and HCR funded weatherization and energy efficiency interventions and other housing intervention programs to produce comprehensive interventions where home-based environmental health hazards are remediated and energy loss is addressed.

GHHI has a proven record of working with federal, state, local, and private entities on the development of lead poisoning prevention and Healthy Homes model programs and initiatives in a manner that brings together differing perspectives, builds consensus, develops innovative programs, and results in policy successes and dynamic strategic plans that produce results in improving health outcomes for low income children and other target populations. GHHI has served as a consultant and technical advisor for numerous cities, counties, and States in their development of innovative Healthy Homes and Lead Poisoning Prevention Model programs and strategic plans. In addition to its HUD/CDC funded Green & Healthy Homes Initiative technical assistance contract work, GHHI has also been contracted to provide technical assistance on lead poisoning prevention programs and Healthy Homes strategic program development with among others: States of Delaware and Maine, Counties of Baltimore, Maryland, Salt Lake, Utah, and Genesee, Michigan, and the Cities of Annapolis, Buffalo, Lewiston, Newark, Racine and St. Louis among others. GHHI was hired by Salt Lake County, Utah in 2012 to develop Green & Healthy Homes program models that will focus on lead poisoning prevention, asthma trigger reduction and household injury prevention while leveraging other housing and energy resources. GHHI was hired by The Community Foundation of Greater Buffalo in 2010 to work with City and County health and housing agencies as well as private partners to develop a comprehensive Greater Buffalo Green & Healthy Homes Strategic Plan. GHHI developed a Green & Healthy Homes Strategic Action Plan that created the framework for the City and County to implement comprehensive assessment and intervention strategies that reduce asthma episodes, childhood lead poisoning, and household injuries while also reducing energy consumption costs through energy efficiency and weatherization interventions.

Based upon its groundbreaking lead poisoning prevention work in Maryland, GHHI has helped to replicate similar results in St. Louis, through its design of the Lead Safe St. Louis Program and the City of St. Louis's Comprehensive Action Plan in 2003. Utilizing its analysis of St. Louis's capacity and systems, and based upon its experiences in Baltimore and other jurisdictions, GHHI drafted the Lead Safe St. Louis Comprehensive Action Plan that provided the comprehensive strategy for investments in lead hazard reduction grants, enforcement, blood lead testing, and outreach initiatives that have produced the significant decline in lead poisoning in the City of St. Louis. Improved protocols, agency coordination, and data systems have reduced the time frame from initial inspection to final clearance on properties by 25%. GHHI's assisted in the forging of public and private partnerships and its work has produced significant outcomes in the reduction in childhood lead poisoning and the development of greater Healthy Homes capacity. The St. Louis Action Plan's adoption and implementation showed immediate results in decreasing St. Louis's lead poisoning rate from 23% in 2003 to 1.7% by 2014.

In 2013, the John T. Gorman Foundation provided technical assistance funding for GHHI to develop the Lead Poisoning Prevention Comprehensive Action Plan for Lewiston, Maine to combat disproportionately high lead poisoning rates. GHHI supported efforts to pass Maine legislation in 2015 that established Maine as the first state in the country to set its blood lead action level for environmental investigation to conform with the CDC's new blood lead reference level of 5 µg/dl. GHHI was hired by the City of Waukesha in 2010 to provide technical assistance to the City in developing lead poisoning prevention strategies and lead hazard reduction program models, increasing the City's overall lead poisoning prevention capacity, and better positioning the City to successfully pursue future HUD lead hazard control funding. GHHI contracted with the CDC in 2009 to provide technical assistance to the City of Houston in the development of lead poisoning prevention legislation, policies, and strategic enforcement plans. GHHI served as the project leader for the national \$32 million Ad Council Campaign for lead poisoning prevention that was launched in April 2010 in partnership with the Ad Council, HUD, and EPA. GHHI's extensive media experience on the Ad Council Campaign and other initiatives is utilized to develop enhanced communications plans and media strategies for its technical assistance clients.

Pay For Success/Social Impact Bond Project Technical Assistance

GHHI is one of the lead organizations in the country providing technical assistance on the development of healthy homes and asthma Pay For Success projects. GHHI received a \$1.1 million grant from the White House Social Innovation Fund and the Corporation for National and Community Service (CNCS) in 2015 to provide technical assistance to lead asthma Pay for Success (PFS) feasibility studies with a cohort of healthcare organizations and housing service providers in: Buffalo, NY, Grand Rapids, MI, Memphis, TN, Salt Lake, UT and Springfield, MA. GHHI has completed the technical assistance feasibility work for these projects and expects to move to project transaction structuring in 2017 for these initial five sites. GHHI received a new \$1.77 million grant from the White House Social Innovation Fund and the CNCS in 2016 GHHI to provide technical assistance and transaction developmental support to SIF-supported Pay for Success projects that address the social determinants of health. In December 2015, GHHI received a \$1.83 million award from the Robert Wood Johnson Foundation to support the expansion of the PFS feasibility and development work. The Robert Wood Johnson Foundation



grant provides funding for GHHI to provide technical assistance in the completion of asthma PFS feasibility studies in a second cohort of healthcare organizations and service providers in five additional cities in Chicago, IL, Houston, TX, New York City, NY, Philadelphia, PA and the State of Rhode Island.

GHHI's current transformative work involves 20 asthma PFS or innovative health care financing projects that are designed to address the lack of funding for healthy homes and asthma prevention measures that exists and has the potential to fundamentally change how those services are funded in the United States through sustainable funding streams such as Medicaid/CHIP and health care provider investments. To advance policy changes to permit in-home health resident education and health-based housing assessment and intervention to be covered medical costs for Medicaid recipients. GHHI meets regularly with State Medicaid Offices across the country to further the development of coverage for preventive interventions for asthma, household injury and other illnesses which have a high return on investment.



General Assembly

February Session, 2018

Governor's Bill No. 9

LCO No. 340



Referred to Committee on ENERGY AND TECHNOLOGY

Introduced by:

SEN. LOONEY, 11th Dist.

SEN. DUFF, 25th Dist.

REP. ARESIMOWICZ, 30th Dist.

REP. RITTER M., 1st Dist.

AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE.

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

1 Section 1. Subsection (a) of section 16-245a of the 2018 supplement
2 to the general statutes is repealed and the following is substituted in
3 lieu thereof (*Effective from passage*):

4 (a) An electric supplier and an electric distribution company
5 providing standard service or supplier of last resort service, pursuant
6 to section 16-244c, as amended by this act, shall demonstrate:

7 (1) On and after January 1, 2006, that not less than two per cent of
8 the total output or services of any such supplier or distribution
9 company shall be generated from Class I renewable energy sources
10 and an additional three per cent of the total output or services shall be
11 from Class I or Class II renewable energy sources;

12 (2) On and after January 1, 2007, not less than three and one-half per
13 cent of the total output or services of any such supplier or distribution
14 company shall be generated from Class I renewable energy sources
15 and an additional three per cent of the total output or services shall be
16 from Class I or Class II renewable energy sources;

17 (3) On and after January 1, 2008, not less than five per cent of the
18 total output or services of any such supplier or distribution company
19 shall be generated from Class I renewable energy sources and an
20 additional three per cent of the total output or services shall be from
21 Class I or Class II renewable energy sources;

22 (4) On and after January 1, 2009, not less than six per cent of the
23 total output or services of any such supplier or distribution company
24 shall be generated from Class I renewable energy sources and an
25 additional three per cent of the total output or services shall be from
26 Class I or Class II renewable energy sources;

27 (5) On and after January 1, 2010, not less than seven per cent of the
28 total output or services of any such supplier or distribution company
29 shall be generated from Class I renewable energy sources and an
30 additional three per cent of the total output or services shall be from
31 Class I or Class II renewable energy sources;

32 (6) On and after January 1, 2011, not less than eight per cent of the
33 total output or services of any such supplier or distribution company
34 shall be generated from Class I renewable energy sources and an
35 additional three per cent of the total output or services shall be from
36 Class I or Class II renewable energy sources;

37 (7) On and after January 1, 2012, not less than nine per cent of the
38 total output or services of any such supplier or distribution company
39 shall be generated from Class I renewable energy sources and an
40 additional three per cent of the total output or services shall be from
41 Class I or Class II renewable energy sources;

42 (8) On and after January 1, 2013, not less than ten per cent of the
43 total output or services of any such supplier or distribution company
44 shall be generated from Class I renewable energy sources and an
45 additional three per cent of the total output or services shall be from
46 Class I or Class II renewable energy sources;

47 (9) On and after January 1, 2014, not less than eleven per cent of the
48 total output or services of any such supplier or distribution company
49 shall be generated from Class I renewable energy sources and an
50 additional three per cent of the total output or services shall be from
51 Class I or Class II renewable energy sources;

52 (10) On and after January 1, 2015, not less than twelve and one-half
53 per cent of the total output or services of any such supplier or
54 distribution company shall be generated from Class I renewable
55 energy sources and an additional three per cent of the total output or
56 services shall be from Class I or Class II renewable energy sources;

57 (11) On and after January 1, 2016, not less than fourteen per cent of
58 the total output or services of any such supplier or distribution
59 company shall be generated from Class I renewable energy sources
60 and an additional three per cent of the total output or services shall be
61 from Class I or Class II renewable energy sources;

62 (12) On and after January 1, 2017, not less than fifteen and one-half
63 per cent of the total output or services of any such supplier or
64 distribution company shall be generated from Class I renewable
65 energy sources and an additional three per cent of the total output or
66 services shall be from Class I or Class II renewable energy sources;

67 (13) On and after January 1, 2018, not less than seventeen per cent of
68 the total output or services of any such supplier or distribution
69 company shall be generated from Class I renewable energy sources
70 and an additional four per cent of the total output or services shall be
71 from Class I or Class II renewable energy sources;

72 (14) On and after January 1, 2019, not less than nineteen and one-
73 half per cent of the total output or services of any such supplier or
74 distribution company shall be generated from Class I renewable
75 energy sources and an additional four per cent of the total output or
76 services shall be from Class I or Class II renewable energy sources;

77 (15) On and after January 1, 2020, not less than [twenty] twenty-one
78 per cent of the total output or services of any such supplier or
79 distribution company shall be generated from Class I renewable
80 energy sources and an additional four per cent of the total output or
81 services shall be from Class I or Class II renewable energy sources; [.]

82 (16) On and after January 1, 2021, not less than twenty-two and one-
83 half per cent of the total output or services of any such supplier or
84 distribution company shall be generated from Class I renewable
85 energy sources and an additional four per cent of the total output or
86 services shall be from Class I or Class II renewable energy sources;

87 (17) On and after January 1, 2022, not less than twenty-four per cent
88 of the total output or services of any such supplier or distribution
89 company shall be generated from Class I renewable energy sources
90 and an additional four per cent of the total output or services shall be
91 from Class I or Class II renewable energy sources;

92 (18) On and after January 1, 2023, not less than twenty-six per cent
93 of the total output or services of any such supplier or distribution
94 company shall be generated from Class I renewable energy sources
95 and an additional four per cent of the total output or services shall be
96 from Class I or Class II renewable energy sources;

97 (19) On and after January 1, 2024, not less than twenty-eight per cent
98 of the total output or services of any such supplier or distribution
99 company shall be generated from Class I renewable energy sources
100 and an additional four per cent of the total output or services shall be
101 from Class I or Class II renewable energy sources;

102 (20) On and after January 1, 2025, not less than thirty per cent of the
103 total output or services of any such supplier or distribution company
104 shall be generated from Class I renewable energy sources and an
105 additional four per cent of the total output or services shall be from
106 Class I or Class II renewable energy sources;

107 (21) On and after January 1, 2026, not less than thirty-two per cent of
108 the total output or services of any such supplier or distribution
109 company shall be generated from Class I renewable energy sources
110 and an additional four per cent of the total output or services shall be
111 from Class I or Class II renewable energy sources;

112 (22) On and after January 1, 2027, not less than thirty-four per cent
113 of the total output or services of any such supplier or distribution
114 company shall be generated from Class I renewable energy sources
115 and an additional four per cent of the total output or services shall be
116 from Class I or Class II renewable energy sources;

117 (23) On and after January 1, 2028, not less than thirty-six per cent of
118 the total output or services of any such supplier or distribution
119 company shall be generated from Class I renewable energy sources
120 and an additional four per cent of the total output or services shall be
121 from Class I or Class II renewable energy sources;

122 (24) On and after January 1, 2029, not less than thirty-eight per cent
123 of the total output or services of any such supplier or distribution
124 company shall be generated from Class I renewable energy sources
125 and an additional four per cent of the total output or services shall be
126 from Class I or Class II renewable energy sources;

127 (25) On and after January 1, 2030, not less than forty per cent of the
128 total output or services of any such supplier or distribution company
129 shall be generated from Class I renewable energy sources and an
130 additional four per cent of the total output or services shall be from
131 Class I or Class II renewable energy sources.

132 Sec. 2. Subdivision (1) of subsection (h) of section 16-244c of the 2018
133 supplement to the general statutes is repealed and the following is
134 substituted in lieu thereof (*Effective from passage*):

135 (h) (1) Notwithstanding the provisions of subsection (b) of this
136 section regarding an alternative standard service option, an electric
137 distribution company providing standard service, supplier of last
138 resort service or back-up electric generation service in accordance with
139 this section shall contract with its wholesale suppliers to comply with
140 the renewable portfolio standards. The Public Utilities Regulatory
141 Authority shall annually conduct an uncontested proceeding in order
142 to determine whether the electric distribution company's wholesale
143 suppliers met the renewable portfolio standards during the preceding
144 year. On or before December 31, 2013, the authority shall issue a
145 decision on any such proceeding for calendar years up to and
146 including 2012, for which a decision has not already been issued. Not
147 later than December 31, 2014, and annually thereafter, the authority
148 shall, following such proceeding, issue a decision as to whether the
149 electric distribution company's wholesale suppliers met the renewable
150 portfolio standards during the preceding year. An electric distribution
151 company shall include a provision in its contract with each wholesale
152 supplier that requires the wholesale supplier to pay the electric
153 distribution company an amount of: (A) For calendar years up to and
154 including calendar year 2017, five and one-half cents per kilowatt hour
155 if the wholesale supplier fails to comply with the renewable portfolio
156 standards during the subject annual period, [and] (B) for calendar
157 years commencing on [and after] January 1, 2018, up to and including
158 the calendar year commencing on January 1, 2020, five and one-half
159 cents per kilowatt hour if the wholesale supplier fails to comply with
160 the renewable portfolio standards during the subject annual period for
161 Class I renewable energy sources, and two and one-half cents per
162 kilowatt hour if the wholesale supplier fails to comply with the
163 renewable portfolio standards during the subject annual period for
164 Class II renewable energy sources, and (C) for calendar years

165 commencing on and after January 1, 2021, four cents per kilowatt hour
166 if the wholesale supplier fails to comply with the renewable portfolio
167 standards during the subject annual period for Class I renewable
168 energy sources, and two and one-half cents per kilowatt hour if the
169 wholesale supplier fails to comply with the renewable portfolio
170 standards during the subject annual period for Class II renewable
171 energy sources. The electric distribution company shall promptly
172 transfer any payment received from the wholesale supplier for the
173 failure to meet the renewable portfolio standards to the Clean Energy
174 Fund for the development of Class I renewable energy sources,
175 provided, on and after June 5, 2013, any such payment shall be
176 refunded to ratepayers by using such payment to offset the costs to all
177 customers of electric distribution companies of the costs of contracts
178 and tariffs entered into pursuant to sections 16-244r, [and] 16-244t and
179 section 5 of this act. Any excess amount remaining from such payment
180 shall be applied to reduce the costs of contracts entered into pursuant
181 to subdivision (2) of this subsection, and if any excess amount remains,
182 such amount shall be applied to reduce costs collected through
183 nonbypassable, federally mandated congestion charges, as defined in
184 section 16-1.

185 Sec. 3. Subsection (k) of section 16-245 of the 2018 supplement to the
186 general statutes is repealed and the following is substituted in lieu
187 thereof (*Effective from passage*):

188 (k) Any licensee who fails to comply with a license condition or who
189 violates any provision of this section, except for the renewable
190 portfolio standards contained in subsection (g) of this section, shall be
191 subject to civil penalties by the Public Utilities Regulatory Authority in
192 accordance with section 16-41, or the suspension or revocation of such
193 license or a prohibition on accepting new customers following a
194 hearing that is conducted as a contested case in accordance with
195 chapter 54. Notwithstanding the provisions of subsection (b) of section
196 16-244c regarding an alternative transitional standard offer option or
197 an alternative standard service option, the authority shall require a

198 payment by a licensee that fails to comply with the renewable portfolio
199 standards in accordance with subdivision (4) of subsection (g) of this
200 section in the amount of: (1) For calendar years up to and including
201 calendar year 2017, five and one-half cents per kilowatt hour, [and] (2)
202 for calendar years commencing on [and after] January 1, 2018, and up
203 to and including the calendar year commencing on January 1, 2020,
204 five and one-half cents per kilowatt hour if the licensee fails to comply
205 with the renewable portfolio standards during the subject annual
206 period for Class I renewable energy sources, and two and one-half
207 cents per kilowatt hour if the licensee fails to comply with the
208 renewable portfolio standards during the subject annual period for
209 Class II renewable energy sources, and (3) for calendar years
210 commencing on and after January 1, 2021, four cents per kilowatt hour
211 if the licensee fails to comply with the renewable portfolio standards
212 during the subject annual period for Class I renewable energy sources,
213 and two and one-half cents per kilowatt hour if the licensee fails to
214 comply with the renewable portfolio standards during the subject
215 annual period for Class II renewable energy sources. On or before
216 December 31, 2013, the authority shall issue a decision, following an
217 uncontested proceeding, on whether any licensee has failed to comply
218 with the renewable portfolio standards for calendar years up to and
219 including 2012, for which a decision has not already been issued. On
220 and after June 5, 2013, the Public Utilities Regulatory Authority shall
221 annually conduct an uncontested proceeding in order to determine
222 whether any licensee has failed to comply with the renewable portfolio
223 standards during the preceding year. Not later than December 31,
224 2014, and annually thereafter, the authority shall, following such
225 proceeding, issue a decision as to whether the licensee has failed to
226 comply with the renewable portfolio standards during the preceding
227 year. The authority shall allocate such payment to the Clean Energy
228 Fund for the development of Class I renewable energy sources,
229 provided, on and after June 5, 2013, any such payment shall be
230 refunded to ratepayers by using such payment to offset the costs to all
231 customers of electric distribution companies of the costs of contracts

232 and tariffs entered into pursuant to sections 16-244r, [and] 16-244t and
233 section 5 of this act. Any excess amount remaining from such payment
234 shall be applied to reduce the costs of contracts entered into pursuant
235 to subdivision (2) of subsection (j) of section 16-244c, and if any excess
236 amount remains, such amount shall be applied to reduce costs
237 collected through nonbypassable, federally mandated congestion
238 charges, as defined in section 16-1.

239 Sec. 4. Section 16-243h of the general statutes is repealed and the
240 following is substituted in lieu thereof (*Effective from passage*):

241 On and after January 1, 2000, and until (1) for residential customers,
242 the expiration of the residential solar investment program pursuant to
243 subsection (b) of section 16-245ff, and (2) for all other customers not
244 covered in subdivision (1) of this section, December 31, 2018, each
245 electric supplier or any electric distribution company providing
246 standard offer, transitional standard offer, standard service or back-up
247 electric generation service, pursuant to section 16-244c, as amended by
248 this act, shall give a credit for any electricity generated by a customer
249 from a Class I renewable energy source or a hydropower facility that
250 has a nameplate capacity rating of two megawatts or less for a term
251 ending on December 31, 2039. The electric distribution company
252 providing electric distribution services to such a customer shall make
253 such interconnections necessary to accomplish such purpose. An
254 electric distribution company, at the request of any residential
255 customer served by such company and if necessary to implement the
256 provisions of this section, shall provide for the installation of metering
257 equipment that [(1)] (A) measures electricity consumed by such
258 customer from the facilities of the electric distribution company, [(2)]
259 (B) deducts from the measurement the amount of electricity produced
260 by the customer and not consumed by the customer, and [(3)] (C)
261 registers, for each billing period, the net amount of electricity either
262 [(A)] (i) consumed and produced by the customer, or [(B)] (ii) the net
263 amount of electricity produced by the customer. If, in a given monthly
264 billing period, a customer-generator supplies more electricity to the

265 electric distribution system than the electric distribution company or
266 electric supplier delivers to the customer-generator, the electric
267 distribution company or electric supplier shall credit the customer-
268 generator for the excess by reducing the customer-generator's bill for
269 the next monthly billing period to compensate for the excess electricity
270 from the customer-generator in the previous billing period at a rate of
271 one kilowatt-hour for one kilowatt-hour produced. The electric
272 distribution company or electric supplier shall carry over the credits
273 earned from monthly billing period to monthly billing period, and the
274 credits shall accumulate until the end of the annualized period. At the
275 end of each annualized period, the electric distribution company or
276 electric supplier shall compensate the customer-generator for any
277 excess kilowatt-hours generated, at the avoided cost of wholesale
278 power. A customer who generates electricity from a generating unit
279 with a nameplate capacity of more than ten kilowatts of electricity
280 pursuant to the provisions of this section shall be assessed for the
281 competitive transition assessment, pursuant to section 16-245g and the
282 systems benefits charge, pursuant to section 16-245l, based on the
283 amount of electricity consumed by the customer from the facilities of
284 the electric distribution company without netting any electricity
285 produced by the customer. For purposes of this section, "residential
286 customer" means a customer of a single-family dwelling or
287 multifamily dwelling consisting of two to four units. The Public
288 Utilities Regulatory Authority shall establish a rate on a cents-per-
289 kilowatt-hour basis for the electric distribution company to purchase
290 the electricity generated by a customer pursuant to this section after
291 December 31, 2039.

292 Sec. 5. (NEW) (*Effective from passage*) (a) (1) Not later than one
293 hundred eighty days after January 1, 2019, and annually thereafter,
294 each electric distribution company shall solicit and file with the Public
295 Utilities Regulatory Authority for its approval one or more twenty-
296 year tariffs with (A) customers that own or develop new generation
297 projects that are less than two megawatts in size, serve the distribution

298 system of the electric distribution company and use a Class I
299 renewable energy source that either (i) uses anaerobic digestion, or (ii)
300 has emissions of no more than 0.07 pounds per megawatt-hour of
301 nitrogen oxides, 0.10 pounds per megawatt-hour of carbon monoxide,
302 0.02 pounds per megawatt-hour of volatile organic compounds and
303 one grain per one hundred standard cubic feet, and (B) customers that
304 own or develop new generation projects that are less than two
305 megawatts in size, serve the distribution system of the electric
306 distribution company and use a Class I renewable energy source that
307 emits no pollutants.

308 (2) On or before September 1, 2018, the authority shall initiate a
309 proceeding to establish a procurement plan for such electric
310 distribution companies pursuant to this subsection and may give a
311 preference to technologies manufactured, researched or developed in
312 the state. The authority may require such electric distribution
313 companies to conduct separate solicitations for the resources in
314 subparagraphs (A) and (B) of subdivision (1) of this subsection based
315 upon the size of such resources to allow for a diversity of selected
316 projects.

317 (3) Each electric distribution company shall conduct an annual
318 solicitation or solicitations, as determined by the authority, for the
319 purchase of energy and renewable energy certificates produced by
320 eligible generation projects under this subsection over the duration of
321 the tariff. Such generation projects shall be sized so as not to exceed the
322 load at the customer's individual electric meter or a set of electric
323 meters, when such meters are combined for billing purposes, from the
324 electric distribution company providing service to such customer, as
325 determined by such electric distribution company, unless such
326 customer is a state, municipal or agricultural customer, then such
327 generation project shall be sized so as not to exceed the load at such
328 customer's individual electric meter or a set of electric meters, when
329 such meters are combined for billing purposes, and the load of up to
330 five state, municipal or agricultural beneficial accounts identified by

331 such state, municipal or agricultural customer, and such state,
332 municipal or agricultural customer may include the load of up to five
333 additional nonstate or municipal beneficial accounts when sizing such
334 generation project, provided such accounts are critical facilities, as
335 defined in subdivision (2) of subsection (a) of section 16-243y of the
336 general statutes and are connected to a microgrid. A shared clean
337 energy facility, as defined in section 16-244x of the general statutes,
338 may participate in any solicitation pursuant to this subsection
339 consistent with the program requirements established by the
340 Department of Energy and Environmental Protection.

341 (4) The selected purchase price of energy and renewable energy
342 certificates on a cents-per-kilowatt-hour basis in any given solicitation
343 shall not exceed such selected purchase price for the same resources in
344 the prior year's solicitation, unless the authority makes a determination
345 that there are changed circumstances in any given year. For the first
346 year solicitation issued pursuant to this subsection, the authority shall
347 establish a cap for the selected purchase price for energy and
348 renewable energy certificates on a cents-per-kilowatt-hour basis for
349 any resources authorized under this subsection.

350 (b) At the expiration of the residential solar investment program
351 pursuant to subsection (b) of section 16-245ff of the general statutes,
352 each electric distribution company shall offer a tariff to residential
353 customers for the purchase of energy and renewable energy certificates
354 generated from a Class I renewable energy source that has a nameplate
355 capacity rating of twenty-five kilowatts or less for a term not to exceed
356 twenty years. Such generation projects shall be sized so as not to
357 exceed the load at the customer's individual electric meter or a set of
358 electric meters, when such meters are combined for billing purposes,
359 from the electric distribution company providing service to such
360 customer, as determined by such electric distribution company. The
361 authority shall initiate a proceeding not later than September 1, 2018,
362 to establish a rate on a cents-per-kilowatt-hour basis for such tariff,
363 which may be based upon the results of one or more competitive

364 solicitations issued pursuant to subsection (a) of this section and shall
365 be guided by the Comprehensive Energy Strategy prepared pursuant
366 to section 16a-3d of the general statutes. The authority may modify
367 such rate for new customers under this subsection based on changed
368 circumstances and may establish an interim rate prior to the expiration
369 of the residential solar investment program pursuant to subsection (b)
370 of section 16-245ff of the general statutes as an alternative to such
371 program.

372 (c) The aggregate procurement and tariff purchases of energy and
373 renewable energy certificates by electric distribution companies
374 pursuant to subsections (a) and (b) of this section shall be up to thirty-
375 five million dollars in year one and increase by up to an additional
376 thirty-five million dollars per year in each of the years two through
377 twelve of such a tariff, provided the annual purchases under
378 subparagraph (A) of subdivision (1) of subsection (a) of this section,
379 subparagraph (B) of subdivision (1) of subsection (a) of this section or
380 subsection (b) of this section, each in the aggregate, shall not exceed
381 forty per cent of the total annual dollar amount established pursuant to
382 this subsection. The authority shall monitor the competitiveness of any
383 procurements authorized under this section and may adjust the annual
384 purchase amount established in this subsection or other procurement
385 parameters to maintain competitiveness. Any money not allocated in
386 any given year shall not roll into the next year's available funds. The
387 obligation to purchase energy and renewable energy certificates shall
388 be apportioned to electric distribution companies based on their
389 respective distribution system loads, as determined by the authority.
390 The authority may give preference to projects that provide electric
391 distribution system benefits, include energy storage systems, utilize
392 time of use rates or other dynamic pricing or provide other energy
393 policy benefits identified in the Comprehensive Energy Strategy
394 prepared pursuant to section 16a-3d of the general statutes.

395 (d) Each electric distribution company shall retire the renewable
396 energy certificates it purchases pursuant to this subsection on behalf of

397 all ratepayers to satisfy the obligations of all electric suppliers and
398 electric distribution companies providing standard service or supplier
399 of last resort service pursuant to section 16-245a of the general statutes,
400 as amended by this act. The authority shall establish procedures for the
401 retirement of such renewable energy certificates.

402 (e) The net costs of any tariff offered by an electric distribution
403 company pursuant to this section shall be recovered on a timely basis
404 through a fully reconciling component of electric rates for all
405 customers of the electric distribution company. Any net revenues from
406 the sale of products purchased in accordance with any tariff offered
407 pursuant to this section shall be credited to customers through the
408 same fully reconciling rate component for all customers of such electric
409 distribution company.

410 Sec. 6. (NEW) (*Effective from passage*) The state shall reduce energy
411 consumption by not less than 1.6 million MMBtu, as defined in
412 subdivision (4) of section 22a-197 of the general statutes, annually each
413 year for calendar years commencing on and after January 1, 2020, up to
414 and including calendar year 2025.

415 Sec. 7. Subdivision (1) of subsection (d) of section 16-245m of the
416 general statutes is repealed and the following is substituted in lieu
417 thereof (*Effective from passage*):

418 (d) (1) Not later than November 1, 2012, and every three years
419 thereafter, electric distribution companies, as defined in section 16-1, in
420 coordination with the gas companies, as defined in section 16-1, shall
421 submit to the Energy Conservation Management Board a combined
422 electric and gas Conservation and Load Management Plan, in
423 accordance with the provisions of this section, to implement cost-
424 effective energy conservation programs, demand management and
425 market transformation initiatives. All supply and conservation and
426 load management options shall be evaluated and selected within an
427 integrated supply and demand planning framework. Services

428 provided under the plan shall be available to all customers of electric
429 distribution companies and gas companies. [Each such company shall
430 apply to the Energy Conservation Management Board for
431 reimbursement for expenditures pursuant to the plan.] The Energy
432 Conservation Management Board shall advise and assist the electric
433 distribution companies and gas companies in the development of such
434 plan. The Energy Conservation Management Board shall approve the
435 plan before transmitting it to the Commissioner of Energy and
436 Environmental Protection for approval. The commissioner shall, in an
437 uncontested proceeding during which the commissioner may hold a
438 public meeting, approve, modify or reject said plan prepared pursuant
439 to this subsection. Following approval by the commissioner, the board
440 shall assist the companies in implementing the plan and collaborate
441 with the Connecticut Green Bank to further the goals of the plan. Said
442 plan shall include a detailed budget sufficient to fund all energy
443 efficiency that is cost-effective or lower cost than acquisition of
444 equivalent supply, and shall be reviewed and approved by the
445 commissioner. The plan shall be executed through procurements put
446 in place pursuant to section 8 of this act and any applicable
447 conservation adjustment mechanisms applied in accordance with this
448 section. [To the extent that the budget in the plan approved by the
449 commissioner with regard to electric distribution companies exceeds
450 the revenues collected pursuant to subdivision (1) of subsection (a) of
451 this section, the] The Public Utilities Regulatory Authority shall, not
452 later than sixty days after the plan is approved by the commissioner,
453 ensure that the balance of revenues required to fund such [budget]
454 plan is provided through [a] fully reconciling conservation adjustment
455 [mechanism of not more than three mills per kilowatt hour of
456 electricity sold to each end use customer of an electric distribution
457 company during the three years of any Conservation and Load
458 Management Plan] mechanisms. Electric distribution companies shall
459 collect a conservation adjustment mechanism that ensures the plan is
460 fully funded by collecting an amount that is not more than the sum of
461 six mills per kilowatt hour of electricity sold to each end use customer

462 of an electric distribution company during the three years of any
463 Conservation and Load Management Plan, less the annual revenue
464 requirement to fund any contracts entered into by the electric
465 distribution companies pursuant to section 8 of this section. The
466 authority shall ensure that the revenues required to fund such [budget]
467 plan with regard to gas companies are provided through a fully
468 reconciling conservation adjustment mechanism for each gas company
469 of not more than the equivalent of four and six-tenth cents per
470 hundred cubic feet during the three years of any Conservation and
471 Load Management Plan. Said plan shall include steps that would be
472 needed to achieve the goal of weatherization of eighty per cent of the
473 state's residential units by 2030 and to reduce energy consumption by
474 1.6 million MMBtu, as defined in subdivision (4) of section 22a-197,
475 annually each year for calendar years commencing on and after
476 January 1, 2020, up to and including calendar year 2025. Each program
477 contained in the plan shall be reviewed by such companies and
478 accepted, modified or rejected by the Energy Conservation
479 Management Board prior to submission to the commissioner for
480 approval. The Energy Conservation Management Board shall, as part
481 of its review, examine opportunities to offer joint programs providing
482 similar efficiency measures that save more than one fuel resource or
483 otherwise to coordinate programs targeted at saving more than one
484 fuel resource. Any costs for joint programs shall be allocated equitably
485 among the conservation programs. The Energy Conservation
486 Management Board shall give preference to projects that maximize the
487 reduction of federally mandated congestion charges.

488 Sec. 8. (NEW) (*Effective from passage*) (a) The Commissioner of
489 Energy and Environmental Protection, in consultation with the
490 procurement manager identified in subsection (l) of section 16-2 of the
491 general statutes, the Office of Consumer Counsel, the Attorney General
492 and a representative of the Energy Conservation Management Board,
493 may issue one or more solicitations for long-term contracts from
494 providers of passive demand response measures including, but not

495 limited to, energy efficiency and conservation and load management
496 programs, that are capable, either singly or through aggregation, of
497 reducing electric demand by one megawatt or more. Proposals
498 pursuant to this subsection shall not have a contract term exceeding
499 twenty years.

500 (b) The commissioner, in consultation with the procurement
501 manager identified in subsection (l) of section 16-2 of the general
502 statutes, the Office of Consumer Counsel, the Attorney General and a
503 representative of the Energy Conservation Management Board, shall
504 evaluate project proposals received under any solicitation issued
505 pursuant to this section based on factors including, but not limited to,
506 (1) whether the benefits of the proposal outweigh the costs to
507 ratepayers, (2) whether the proposal is in the best interest of
508 ratepayers, (3) whether the proposal is aligned with the policy goals
509 outlined in the Integrated Resources Plan, approved pursuant to
510 section 16a-3a of the general statutes, and the Comprehensive Energy
511 Strategy, prepared pursuant to section 16a-3d of the general statutes,
512 and (4) the degree to which the electric demand reduction can be
513 verified using automated measurement.

514 (c) If the commissioner finds proposals received pursuant to this
515 section to be in the best interest of electric ratepayers, in accordance
516 with the provisions of subsection (b) of this section, the commissioner
517 may select any such proposal or proposals, provided the total capacity
518 of the resources selected under all solicitations issued pursuant to this
519 section in any given year in the aggregate do not exceed twenty-five
520 megawatts of electric demand reduction. The commissioner may, on
521 behalf of all customers of electric distribution companies, direct the
522 electric distribution companies to enter into long-term contracts for
523 such selected proposal or proposals.

524 (d) Any agreement entered into pursuant to this section shall be
525 subject to review and approval by the Public Utilities Regulatory
526 Authority. The electric distribution company shall file an application

527 for the approval of any such agreement with the authority. The
528 authority shall approve such agreement if it is prudent and cost
529 effective. The authority shall issue a decision not later than ninety days
530 after such filing. If the authority does not issue a decision within ninety
531 days after such filing, the agreement shall be deemed approved. The
532 net costs of any such agreement, including costs incurred by the
533 electric distribution company under the agreement and reasonable
534 costs incurred by the electric distribution company in connection with
535 the agreement, shall be recovered on a timely basis through a fully
536 reconciling component of electric rates for all customers of the electric
537 distribution company. Any net revenues from the sale of products
538 purchased in accordance with long-term contracts entered into
539 pursuant to this section shall be credited to customers through the
540 same fully reconciling rate component for all customers of the
541 contracting electric distribution company.

542 (e) The commissioner may hire consultants to assist in
543 implementing this section including, but not limited to, the evaluation
544 of proposals submitted pursuant to this section. All reasonable costs
545 associated with the commissioner's solicitation and review of
546 proposals pursuant to this section shall be recoverable through a fully
547 reconciling component of electric rates for all customers of the electric
548 distribution company. Such costs shall be recoverable even if the
549 commissioner does not select any proposals pursuant to solicitations
550 issued pursuant to this section.

551 Sec. 9. Subsection (b) of section 16-245n of the general statutes is
552 repealed and the following is substituted in lieu thereof (*Effective from*
553 *passage*):

554 (b) On and after July 1, 2004, and until June 30, 2019, the Public
555 Utilities Regulatory Authority shall assess or cause to be assessed a
556 charge of not less than one mill per kilowatt hour charged to each end
557 use customer of electric services in this state which shall be deposited
558 into the Clean Energy Fund established under subsection (c) of this

559 section. On and after July 1, 2019, and until June 30, 2025, the Public
560 Utilities Regulatory Authority shall assess or cause to be assessed a
561 charge of not less than two mills per kilowatt hour charged to each end
562 use customer of electric services in this state which shall be deposited
563 into the Clean Energy Fund established under subsection (c) of this
564 section.

565 Sec. 10. Subdivision (2) of subsection (c) of section 12-264 of the 2018
566 supplement to the general statutes is repealed and the following is
567 substituted in lieu thereof (*Effective July 1, 2020*):

568 (2) For purposes of this subsection, gross earnings from providing
569 electric transmission services or electric distribution services shall
570 include (A) all income classified as income from providing electric
571 transmission services or electric distribution services, as determined by
572 the Commissioner of Revenue Services in consultation with the Public
573 Utilities Regulatory Authority, and (B) the competitive transition
574 assessment collected pursuant to section 16-245g, other than any
575 component of such assessment that constitutes transition property as
576 to which an electric distribution company has no right, title or interest
577 pursuant to subsection (a) of section 16-245h, the systems benefits
578 charge collected pursuant to section 16-245l, the conservation
579 adjustment mechanisms charged under section 16-245m, as amended
580 by this act, and the assessments charged under [sections 16-245m and]
581 section 16-245n, as amended by this act. Such gross earnings shall not
582 include income from providing electric transmission services or
583 electric distribution services to a company described in subsection (c)
584 of section 12-265.

585 Sec. 11. Subsections (b) to (d), inclusive, of section 16-243q of the
586 general statutes are repealed and the following is substituted in lieu
587 thereof (*Effective July 1, 2020*):

588 (b) Except as provided in subsection (d) of this section, the Public
589 Utilities Regulatory Authority shall assess each electric supplier and

590 each electric distribution company that fails to meet the percentage
591 standards of subsection (a) of this section a charge of up to five and
592 five-tenths cents for each kilowatt hour of electricity that such supplier
593 or company is deficient in meeting such percentage standards.
594 Seventy-five per cent of such assessed charges shall be [deposited in]
595 used in furtherance of the [Energy] Conservation and Load
596 Management [Fund] Plan established in section 16-245m, as amended
597 by this act, and twenty-five per cent shall be deposited in the Clean
598 Energy Fund established in section 16-245n, as amended by this act,
599 except that such seventy-five per cent of assessed charges with respect
600 to an electric supplier shall be [divided] allocated among the [Energy]
601 Conservation and Load Management [Funds] Plan of electric
602 distribution companies in proportion to the amount of electricity such
603 electric supplier provides to end use customers in the state using the
604 facilities of each electric distribution company.

605 (c) An electric supplier or electric distribution company may satisfy
606 the requirements of this section by participating in a conservation and
607 distributed resources trading program approved by the Public Utilities
608 Regulatory Authority. Credits created by conservation and customer-
609 side distributed resources shall be allocated to the person that
610 conserved the electricity or installed the project for customer-side
611 distributed resources to which the credit is attributable and to the
612 [Energy] Conservation and Load Management [Fund] Plan. Such
613 credits shall be made in the following manner: A minimum of twenty-
614 five per cent of the credits shall be allocated to the person that
615 conserved the electricity or installed the project for customer-side
616 distributed resources to which the energy credit is attributable and the
617 remainder of the credits shall be [allocated to] used in furtherance of
618 the [Energy] Conservation and Load Management [Fund] Plan, based
619 on a schedule created by the authority no later than January 1, 2007,
620 and reviewed annually thereafter. The authority may, in a proceeding
621 and for good cause shown, allocate a larger proportion of such credits
622 to the person who conserved the electricity or installed the customer-

623 side distributed resources. The authority shall consider the proportion
624 of investment made by a ratepayer through various ratepayer-funded
625 incentive programs and the resulting reduction in federally mandated
626 congestion charges. The portion [allocated to] used in furtherance of
627 the [Energy] Conservation and Load Management [Fund] Plan shall be
628 used for measures that respond to energy demand and for peak
629 reduction programs.

630 (d) An electric distribution company providing standard service
631 may contract with its wholesale suppliers to comply with the
632 conservation and customer-side distributed resources standards set
633 forth in subsection (a) of this section. The Public Utilities Regulatory
634 Authority shall annually conduct a contested case, in accordance with
635 the provisions of chapter 54, to determine whether the electric
636 distribution company's wholesale suppliers met the conservation and
637 distributed resources standards during the preceding year. Any such
638 contract shall include a provision that requires such supplier to pay the
639 electric distribution company in an amount of up to five and one-half
640 cents per kilowatt hour if the wholesale supplier fails to comply with
641 the conservation and distributed resources standards during the
642 subject annual period. The electric distribution company shall
643 immediately transfer seventy-five per cent of any payment received
644 from the wholesale supplier for the failure to meet the conservation
645 and distributed resources standards to the [Energy] Conservation and
646 Load Management [Fund] Plan and twenty-five per cent to the Clean
647 Energy Fund. Any payment made pursuant to this section shall not be
648 considered revenue or income to the electric distribution company.

649 Sec. 12. Section 16-243t of the general statutes is repealed and the
650 following is substituted in lieu thereof (*Effective July 1, 2020*):

651 (a) Notwithstanding the provisions of this title, a customer who
652 implements energy conservation or customer-side distributed
653 resources, as defined in section 16-1, on or after January 1, 2008, shall
654 be eligible for Class III credits, pursuant to section 16-243q, as

655 amended by this act. The Class III credit shall be not less than one cent
656 per kilowatt hour. For nonresidential projects receiving conservation
657 and load management funding, twenty-five per cent of the financial
658 value derived from the credits earned pursuant to this section shall be
659 directed to the customer who implements energy conservation or
660 customer-side distribution resources pursuant to this section with the
661 remainder of the financial value directed [to] in furtherance of the
662 Conservation and Load Management [Funds] Plan. For nonresidential
663 projects not receiving conservation and load management funding
664 submitted on or after March 9, 2007, seventy-five per cent of the
665 financial value derived from the credits earned pursuant to this section
666 shall be directed to the customer who implements energy conservation
667 or customer-side distribution resources pursuant to this section with
668 the remainder of the financial value directed [to] in furtherance of the
669 Conservation and Load Management [Funds] Plan. Not later than July
670 1, 2007, the Public Utilities Regulatory Authority shall initiate a
671 contested case proceeding in accordance with the provisions of chapter
672 54, to implement the provisions of this section.

673 (b) In order to be eligible for ongoing Class III credits, the customer
674 shall file an application that contains information necessary for the
675 authority to determine that the resource qualifies for Class III status.
676 Such application shall (1) certify that installation and metering
677 requirements have been met where appropriate, (2) provide a detailed
678 energy savings or energy output calculation for such time period as
679 specified by the authority, and (3) include any other information that
680 the authority deems appropriate.

681 (c) For conservation and load management projects that serve
682 residential customers, seventy-five per cent of the financial value
683 derived from the credits shall be directed [to] in furtherance of the
684 Conservation and Load Management [Funds] Plan.

685 Sec. 13. Subsections (d) and (e) of section 16-243v of the general
686 statutes are repealed and the following is substituted in lieu thereof

687 (Effective July 1, 2020):

688 (d) Commencing April 1, 2008, any person may apply to the
689 authority for certification and funding as a Connecticut electric
690 efficiency partner. Such application shall include the technologies that
691 the applicant shall purchase or provide and that have been approved
692 pursuant to subsection (b) of this section. In evaluating the application,
693 the authority shall (1) consider the applicant's potential to reduce
694 customers' electric demand, including peak electric demand, and
695 associated electric charges tied to electric demand and peak electric
696 demand growth, (2) determine the portion of the total cost of each
697 project that shall be paid for by the customer participating in this
698 program and the portion of the total cost of each project that shall be
699 paid for by all electric ratepayers and collected pursuant to subsection
700 (h) of this section. In making such determination, the authority shall
701 ensure that all ratepayer investments maintain a minimum two-to-one
702 payback ratio, and (3) specify that participating Connecticut electric
703 efficiency partners shall maintain the technology for a period sufficient
704 to achieve such investment payback ratio. The annual ratepayer
705 contribution for projects approved pursuant to this section shall not
706 exceed sixty million dollars. Not less than seventy-five per cent of such
707 annual ratepayer investment shall be used for the technologies
708 themselves. No person shall receive electric ratepayer funding
709 pursuant to this subsection if such person has received or is receiving
710 funding from the [Energy] Conservation and Load Management
711 [Funds] Plan for the projects included in said person's application. No
712 person shall receive electric ratepayer funding without receiving a
713 certificate of public convenience and necessity as a Connecticut electric
714 efficiency partner by the authority. The authority may grant an
715 applicant a certificate of public convenience if it possesses and
716 demonstrates adequate financial resources, managerial ability and
717 technical competency. The authority may conduct additional requests
718 for proposals from time to time as it deems appropriate. The authority
719 shall specify the manner in which a Connecticut electric efficiency

720 partner shall address measures of effectiveness and shall include
721 performance milestones.

722 (e) Beginning February 1, 2010, a certified Connecticut electric
723 efficiency partner may only receive funding if selected in a request for
724 proposal developed, issued and evaluated by the authority. In
725 evaluating a proposal, the authority shall take into consideration the
726 potential to reduce customers' electric demand including peak electric
727 demand, and associated electric charges tied to electric demand and
728 peak electric demand growth, including, but not limited to, federally
729 mandated congestion charges and other electric costs, and shall utilize
730 a cost benefit test established pursuant to subsection (c) of this section
731 to rank responses for selection. The authority shall determine the
732 portion of the total cost of each project that shall be paid by the
733 customer participating in this program and the portion of the total cost
734 of each project that shall be paid by all electric ratepayers and collected
735 pursuant to the provisions of this subsection. In making such
736 determination, the authority shall (1) ensure that all ratepayer
737 investments maintain a minimum two-to-one payback ratio, and (2)
738 specify that participating Connecticut electric efficiency partners shall
739 maintain the technology for a period sufficient to achieve such
740 investment payback ratio. The annual ratepayer contribution shall not
741 exceed sixty million dollars. Not less than seventy-five per cent of such
742 annual ratepayer investment shall be used for the technologies
743 themselves. No Connecticut electric efficiency partner shall receive
744 funding pursuant to this subsection if such partner has received or is
745 receiving funding from the [Energy] Conservation and Load
746 Management [Funds] Plan for such technology. The authority may
747 conduct additional requests for proposals from time to time as it
748 deems appropriate. The authority shall specify the manner in which a
749 Connecticut electric efficiency partner shall address measures of
750 effectiveness and shall include performance milestones.

751 Sec. 14. Subsection (e) of section 16-245c of the general statutes is
752 repealed and the following is substituted in lieu thereof (*Effective July*

753 1, 2020):

754 (e) Any municipal electric utility created on or after July 1, 1998,
755 pursuant to section 7-214 or a special act and any municipal electric
756 utility that expands its service area on or after July 1, 1998, shall collect
757 from its new customers the competitive transition assessment imposed
758 pursuant to section 16-245g, the systems benefits charge imposed
759 pursuant to section 16-245l, the conservation adjustment mechanisms
760 charged under section 16-245m, as amended by this act, and the
761 assessments charged under [sections 16-245m and] section 16-245n, as
762 amended by this act, in such manner and at such rate as the authority
763 prescribes, provided the authority shall order the collection of said
764 assessment and said charge in a manner and rate equal to that to
765 which the customers would have been subject had the municipal
766 electric utility not been created or expanded.

767 Sec. 15. Subdivisions (1) and (2) of subsection (a) of section 16-245e
768 of the general statutes are repealed and the following is substituted in
769 lieu thereof (*Effective July 1, 2020*):

770 (1) "Rate reduction bonds" means bonds, notes, certificates of
771 participation or beneficial interest, or other evidences of indebtedness
772 or ownership, issued pursuant to an executed indenture or other
773 agreement of a financing entity, in accordance with this section and
774 sections 16-245f to 16-245k, inclusive, as amended by this act, the
775 proceeds of which are used, directly or indirectly, to provide, recover,
776 finance, or refinance stranded costs or economic recovery transfer, or
777 to sustain funding of conservation and load management and
778 renewable energy investment programs by substituting for
779 disbursements to the General Fund from the [Energy] Conservation
780 and Load Management [Fund] Plan established by section 16-245m, as
781 amended by this act, and from the Clean Energy Fund established by
782 section 16-245n, as amended by this act, and which, directly or
783 indirectly, are secured by, evidence ownership interests in, or are
784 payable from, transition property;

785 (2) "Competitive transition assessment" means those nonbypassable
786 rates and other charges, that are authorized by the authority (A) in a
787 financing order in respect to the economic recovery transfer, or in a
788 financing order, to sustain funding of conservation and load
789 management and renewable energy investment programs by
790 substituting disbursements to the General Fund from proceeds of rate
791 reduction bonds for such disbursements from the [Energy]
792 Conservation and Load Management [Fund] Plan established by
793 section 16-245m, as amended by this act, and from the Clean Energy
794 Fund established by section 16-245n, as amended by this act, or to
795 recover those stranded costs that are eligible to be funded with the
796 proceeds of rate reduction bonds pursuant to section 16-245f, as
797 amended by this act, and the costs of providing, recovering, financing,
798 or refinancing the economic recovery transfer or such substitution of
799 disbursements to the General Fund or such stranded costs through a
800 plan approved by the authority in the financing order, including the
801 costs of issuing, servicing, and retiring rate reduction bonds, (B) to
802 recover those stranded costs determined under this section but not
803 eligible to be funded with the proceeds of rate reduction bonds
804 pursuant to section 16-245f, as amended by this act, or (C) to recover
805 costs determined under subdivision (1) of subsection (e) of section 16-
806 244g. If requested by the electric distribution company, the authority
807 shall include in the competitive transition assessment nonbypassable
808 rates and other charges to recover federal and state taxes whose
809 recovery period is modified by the transactions contemplated in this
810 section and sections 16-245f to 16-245k, inclusive, as amended by this
811 act;

812 Sec. 16. Subdivision (13) of subsection (a) of section 16-245e of the
813 general statutes is repealed and the following is substituted in lieu
814 thereof (*Effective July 1, 2020*):

815 (13) "State rate reduction bonds" means the rate reduction bonds
816 issued on June 23, 2004, by the state to sustain funding of conservation
817 and load management and renewable energy investment programs by

818 substituting for disbursements to the General Fund from the [Energy]
819 Conservation and Load Management [Fund] Plan, established by
820 section 16-245m, as amended by this act, and from the Clean Energy
821 Fund, established by section 16-245n, as amended by this act. The state
822 rate reduction bonds for the purposes of section 4-30a shall be deemed
823 to be outstanding indebtedness of the state;

824 Sec. 17. Subsection (a) of section 16-245f of the general statutes is
825 repealed and the following is substituted in lieu thereof (*Effective July*
826 *1, 2020*):

827 (a) An electric distribution company shall submit to the authority an
828 application for a financing order with respect to any proposal to
829 sustain funding of conservation and load management and renewable
830 energy investment programs by substituting disbursements to the
831 General Fund from proceeds of rate reduction bonds for such
832 disbursements from the [Energy] Conservation and Load Management
833 [Fund] Plan established by section 16-245m, as amended by this act,
834 and from the Clean Energy Fund established by section 16-245n, as
835 amended by this act, and may submit to the authority an application
836 for a financing order with respect to the following stranded costs: (1)
837 The cost of mitigation efforts, as calculated pursuant to subsection (c)
838 of section 16-245e; (2) generation-related regulatory assets, as
839 calculated pursuant to subsection (e) of section 16-245e; and (3) those
840 long-term contract costs that have been reduced to a fixed present
841 value through the buyout, buydown, or renegotiation of such
842 contracts, as calculated pursuant to subsection (f) of section 16-245e.
843 No stranded costs shall be funded with the proceeds of rate reduction
844 bonds unless (A) the electric distribution company proves to the
845 satisfaction of the authority that the savings attributable to such
846 funding will be directly passed on to customers through lower rates,
847 and (B) the authority determines such funding will not result in giving
848 the electric distribution company or any generation entities or affiliates
849 an unfair competitive advantage. The authority shall hold a hearing for
850 each such electric distribution company to determine the amount of

851 disbursements to the General Fund from proceeds of rate reduction
852 bonds that may be substituted for such disbursements from the
853 [Energy] Conservation and Load Management [Fund] Plan established
854 by section 16-245m, as amended by this act, and from the Clean Energy
855 Fund established by section 16-245n, as amended by this act, and
856 thereby constitute transition property and the portion of stranded costs
857 that may be included in such funding and thereby constitute transition
858 property. Any hearing shall be conducted as a contested case in
859 accordance with chapter 54, except that any hearing with respect to a
860 financing order or other order to sustain funding for conservation and
861 load management and renewable energy investment programs by
862 substituting the disbursement to the General Fund from the [Energy]
863 Conservation and Load Management [Fund] Plan established by
864 section 16-245m, as amended by this act, and from the Clean Energy
865 Investment Fund established by section 16-245n, as amended by this
866 act, shall not be a contested case, as defined in section 4-166. The
867 authority shall not include any rate reduction bonds as debt of an
868 electric distribution company in determining the capital structure of
869 the company in a rate-making proceeding, for calculating the
870 company's return on equity or in any manner that would impact the
871 electric distribution company for rate-making purposes, and shall not
872 approve such rate reduction bonds that include covenants that have
873 provisions prohibiting any change to their appointment of an
874 administrator of the [Energy] Conservation and Load Management
875 [Fund. Nothing in this subsection shall be deemed to affect the terms
876 of subsection (b) of section 16-245m] Plan.

877 Sec. 18. Subsections (a) and (b) of section 16-245i of the general
878 statutes are repealed and the following is substituted in lieu thereof
879 (*Effective July 1, 2020*):

880 (a) The authority may issue financing orders in accordance with
881 sections 16-245e to 16-245k, inclusive, as amended by this act, to fund
882 the economic recovery transfer, to sustain funding of conservation and
883 load management and renewable energy investment programs by

884 substituting disbursements to the General Fund from proceeds of rate
885 reduction bonds for such disbursements [from the Energy] in
886 furtherance of the Conservation and Load Management [Fund] Plan
887 established by section 16-245m, as amended by this act, and from the
888 Clean Energy Fund established by section 16-245n, as amended by this
889 act, and to facilitate the provision, recovery, financing, or refinancing
890 of stranded costs. Except for a financing order in respect to the
891 economic recovery revenue bonds, a financing order may be adopted
892 only upon the application of an electric distribution company,
893 pursuant to section 16-245f, as amended by this act, and shall become
894 effective in accordance with its terms only after the electric distribution
895 company files with the authority the electric distribution company's
896 written consent to all terms and conditions of the financing order. Any
897 financing order in respect to the economic recovery revenue bonds
898 shall be effective on issuance.

899 (b) (1) Notwithstanding any general or special law, rule, or
900 regulation to the contrary, except as otherwise provided in this
901 subsection with respect to transition property that has been made the
902 basis for the issuance of rate reduction bonds, the financing orders and
903 the competitive transition assessment shall be irrevocable and the
904 authority shall not have authority either by rescinding, altering, or
905 amending the financing order or otherwise, to revalue or revise for
906 rate-making purposes the stranded costs, or the costs of providing,
907 recovering, financing, or refinancing the stranded costs, the amount of
908 the economic recovery transfer or the amount of disbursements to the
909 General Fund from proceeds of rate reduction bonds substituted for
910 such disbursements [from the Energy] in furtherance of the
911 Conservation and Load Management [Fund] Plan established by
912 section 16-245m, as amended by this act, and from the Clean Energy
913 Fund established by section 16-245n, as amended by this act,
914 determine that the competitive transition assessment is unjust or
915 unreasonable, or in any way reduce or impair the value of transition
916 property either directly or indirectly by taking the competitive

917 transition assessment into account when setting other rates for the
918 electric distribution company; nor shall the amount of revenues arising
919 with respect thereto be subject to reduction, impairment,
920 postponement, or termination.

921 (2) Notwithstanding any other provision of this section, the
922 authority shall approve the adjustments to the competitive transition
923 assessment as may be necessary to ensure timely recovery of all
924 stranded costs that are the subject of the pertinent financing order, and
925 the costs of capital associated with the provision, recovery, financing,
926 or refinancing thereof, including the costs of issuing, servicing, and
927 retiring the rate reduction bonds issued to recover stranded costs
928 contemplated by the financing order and to ensure timely recovery of
929 the costs of issuing, servicing, and retiring the rate reduction bonds
930 issued to sustain funding of conservation and load management and
931 renewable energy investment programs contemplated by the financing
932 order, and to ensure timely recovery of the costs of issuing, servicing
933 and retiring the economic recovery revenue bonds issued to fund the
934 economic recovery transfer contemplated by the financing order.

935 (3) Notwithstanding any general or special law, rule, or regulation
936 to the contrary, any requirement under sections 16-245e to 16-245k,
937 inclusive, as amended by this act, or a financing order that the
938 authority take action with respect to the subject matter of a financing
939 order shall be binding upon the authority, as it may be constituted
940 from time to time, and any successor agency exercising functions
941 similar to the authority and the authority shall have no authority to
942 rescind, alter, or amend that requirement in a financing order. Section
943 16-43 shall not apply to any sale, assignment, or other transfer of or
944 grant of a security interest in any transition property or the issuance of
945 rate reduction bonds under sections 16-245e to 16-245k, inclusive, as
946 amended by this act.

947 Sec. 19. Subparagraph (A) of subdivision (4) of subsection (c) of
948 section 16-245j of the general statutes is repealed and the following is

949 substituted in lieu thereof (*Effective July 1, 2020*):

950 (4) (A) The proceeds of any rate reduction bonds, other than
951 economic recovery revenue bonds, shall be used for the purposes
952 approved by the authority in the financing order, including, but not
953 limited to, disbursements to the General Fund in substitution for such
954 disbursements [from the Energy] in furtherance of the Conservation
955 and Load Management [Fund] Plan established by section 16-245m, as
956 amended by this act, and from the Clean Energy Fund established by
957 section 16-245n, as amended by this act, the costs of refinancing or
958 retiring of debt of the electric distribution company, and associated
959 federal and state tax liabilities; provided such proceeds shall not be
960 applied to purchase generation assets or to purchase or redeem stock
961 or to pay dividends to shareholders or operating expenses other than
962 taxes resulting from the receipt of such proceeds.

963 Sec. 20. Subdivision (3) of subsection (d) of section 16-245m of the
964 general statutes is repealed and the following is substituted in lieu
965 thereof (*Effective July 1, 2020*):

966 (3) Programs included in the plan developed under subdivision (1)
967 of this subsection shall be screened through cost-effectiveness testing
968 that compares the value and payback period of program benefits for all
969 energy savings to program costs to ensure that programs are designed
970 to obtain energy savings and system benefits, including mitigation of
971 federally mandated congestion charges, whose value is greater than
972 the costs of the programs. Program cost-effectiveness shall be reviewed
973 by the Commissioner of Energy and Environmental Protection
974 annually, or otherwise as is practicable, and shall incorporate the
975 results of the evaluation process set forth in subdivision (4) of this
976 subsection. If a program is determined to fail the cost-effectiveness test
977 as part of the review process, it shall either be modified to meet the test
978 or shall be terminated, unless it is integral to other programs that in
979 combination are cost-effective. On or before March 1, 2005, and on or
980 before March first annually thereafter, the board shall provide a report,

981 in accordance with the provisions of section 11-4a, to the joint standing
982 committees of the General Assembly having cognizance of matters
983 relating to energy and the environment that documents (A)
984 expenditures and fund balances and evaluates the cost-effectiveness of
985 such programs conducted in the preceding year, and (B) the extent to
986 and manner in which the programs of such board collaborated and
987 cooperated with programs, established under section 7-233y, of
988 municipal electric energy cooperatives. To maximize the reduction of
989 federally mandated congestion charges, programs in the plan may
990 allow for disproportionate allocations between the amount of
991 contributions [to the Energy Conservation and Load Management
992 Funds] pursuant to this section by a certain rate class and the
993 programs that benefit such a rate class. Before conducting such
994 evaluation, the board shall consult with the board of directors of the
995 Connecticut Green Bank. The report shall include a description of the
996 activities undertaken during the reporting period.

997 Sec. 21. Subdivision (1) of subsection (f) of section 16-245n of the
998 general statutes is repealed and the following is substituted in lieu
999 thereof (*Effective July 1, 2020*):

1000 (f) (1) The board shall issue annually a report to the Department of
1001 Energy and Environmental Protection reviewing the activities of the
1002 Connecticut Green Bank in detail and shall provide a copy of such
1003 report, in accordance with the provisions of section 11-4a, to the joint
1004 standing committees of the General Assembly having cognizance of
1005 matters relating to energy and commerce. The report shall include a
1006 description of the programs and activities undertaken during the
1007 reporting period jointly or in collaboration with the [Energy]
1008 Conservation and Load Management [Funds] Plan established
1009 pursuant to section 16-245m, as amended by this act.

1010 Sec. 22. Subsection (b) of section 16-245w of the general statutes is
1011 repealed and the following is substituted in lieu thereof (*Effective July*
1012 *1, 2020*):

1013 (b) The Public Utilities Regulatory Authority shall design a process
1014 for determining a fee to be paid by customers who have installed self-
1015 generation facilities in order to offset any loss or potential loss in
1016 revenue from such facilities toward the competitive transition
1017 assessment, the systems benefits charge, [the conservation and load
1018 management assessment] the conservation adjustment mechanisms
1019 collected under section 16-245m, as amended by this act, and the Clean
1020 Energy Fund assessment collected under section 16-245n, as amended
1021 by this act. Except as provided in subsection (c) of this section, such fee
1022 shall apply to customers who have installed self-generation facilities
1023 that begin operation on or after July 1, 1998.

1024 Sec. 23. Subsection (d) of section 16-258d of the general statutes is
1025 repealed and the following is substituted in lieu thereof (*Effective July*
1026 *1, 2020*):

1027 (d) The Public Utilities Regulatory Authority shall ensure that the
1028 revenues required to fund such incentive payments made pursuant to
1029 this section are provided through a fully reconciling conservation
1030 adjustment mechanism, which shall not exceed more than nine million
1031 dollars in total for the program established under this section,
1032 provided (1) such revenues shall be in addition to the revenues
1033 authorized to fund the [conservation and load management fund]
1034 Conservation and Load Management Plan pursuant to section 16-
1035 245m, as amended by this act, and (2) such revenues exceeding two
1036 million dollars required to fund such incentive payments shall be paid
1037 over a period of not less than two years. Such revenues shall only be
1038 collected from the gas customers of the company in whose service area
1039 such district heating system is located.

1040 Sec. 24. Subdivision (1) of subsection (a) of section 16-245m of the
1041 general statutes is repealed. (*Effective July 1, 2020*)

1042 Sec. 25. Subsection (b) of section 16-245m of the general statutes is
1043 repealed. (*Effective July 1, 2020*)

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>from passage</i>	16-245a(a)
Sec. 2	<i>from passage</i>	16-244c(h)(1)
Sec. 3	<i>from passage</i>	16-245(k)
Sec. 4	<i>from passage</i>	16-243h
Sec. 5	<i>from passage</i>	New section
Sec. 6	<i>from passage</i>	New section
Sec. 7	<i>from passage</i>	16-245m(d)(1)
Sec. 8	<i>from passage</i>	New section
Sec. 9	<i>from passage</i>	16-245n(b)
Sec. 10	<i>July 1, 2020</i>	12-264(c)(2)
Sec. 11	<i>July 1, 2020</i>	16-243q(b) to (d)
Sec. 12	<i>July 1, 2020</i>	16-243t
Sec. 13	<i>July 1, 2020</i>	16-243v(d) and (e)
Sec. 14	<i>July 1, 2020</i>	16-245c(e)
Sec. 15	<i>July 1, 2020</i>	16-245e(a)(1) and (2)
Sec. 16	<i>July 1, 2020</i>	16-245e(a)(13)
Sec. 17	<i>July 1, 2020</i>	16-245f(a)
Sec. 18	<i>July 1, 2020</i>	16-245i(a) and (b)
Sec. 19	<i>July 1, 2020</i>	16-245j(c)(4)(A)
Sec. 20	<i>July 1, 2020</i>	16-245m(d)(3)
Sec. 21	<i>July 1, 2020</i>	16-245n(f)(1)
Sec. 22	<i>July 1, 2020</i>	16-245w(b)
Sec. 23	<i>July 1, 2020</i>	16-258d(d)
Sec. 24	<i>July 1, 2020</i>	Repealer section
Sec. 25	<i>July 1, 2020</i>	Repealer section

Statement of Purpose:

To implement the Governor's budget recommendations.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]



Legislative Testimony of the Connecticut Green Bank
Energy and Technology Committee
March 1, 2018

Regarding [Senate Bill 9](#)
AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE

As the nation's first green bank, the Connecticut Green Bank ("Green Bank") leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Since its inception, the Green Bank has mobilized nearly \$1.2 billion of investment into Connecticut's clean energy economy, supported the creation of over 14,000 direct, indirect and induced jobs, reduced the energy burden on over 26,000 families and businesses, deployed over 250 MW of clean energy, helped reduce over 4.0 million metric tons of CO2 emissions over the life of the projects, and generated over \$50 million in tax revenues to the State of Connecticut. For its innovation and performance, the Green Bank was awarded with the "Innovations in American Government Awards" by Harvard University's Kennedy School's Ash Center in 2017. The Green Bank supports the policy vision of cleaner, cheaper and more reliable energy sources for Connecticut – while creating jobs and supporting local economic development.

The Connecticut Green Bank is supportive of Senate Bill 9 with the following comments and proposed modifications and inclusions.

Section 1 – RPS Increase

The Green Bank supports the proposed expansion of the Class I Renewable Portfolio Standard (RPS). This expansion takes the state's statutory targets from 20% by 2020 to 40% by 2030. In our view this is a necessary step to support the renewable energy market by sending a long-term signal of public policy support to market participants. Connecticut and other states in the region, have successfully used long-term contracting and behind the meter policies to support renewable energy deployment in-state and across the region.

Sections 2 and 3 – Controlling for RPS Policy Cost Exposure on Electric Ratepayers

The proposal to expand the Class I RPS along with reducing the Alternative Compliance Payment (ACP) from \$55 to \$40 starting on January 1, 2021 is wise because it contains overall public policy cost exposure to electric ratepayers for the increase in the Class I RPS.

Section 4 – Grandfathering of Behind the Meter Net Metered Customers

The proposal to grandfather those residential solar PV systems installed through the residential solar investment program and the other commercial and industrial behind the meter programs for net metering after a 20-year period is appropriate. Following the period of net metering – through December 31, 2039 – a tariff structure is to be established by the Public Utilities Regulatory Authority (PURA), whereby the utilities would purchase energy and renewable energy credits from those systems.

Section 5 – Tariff for Behind the Meter Customers

In order to support the sustained orderly development of the local installer industry, the transition from a net metering policy to a tariff policy must be carefully executed. This section proposes a tariff structure that transitions all current behind the meter policies, including zero emissions renewable energy credit (ZREC), low emissions zero emissions renewable energy credit (LREC), virtual net metering (VNM), shared clean energy facilities (SCEF), and the residential solar investment program. The tariff price would include both the value of the energy as well as the renewable energy credit for Class I RPS compliance.

Commercial, VNM, and SCEF Programs

In order to promote the continued growth of commercial and industrial behind the meter solar in Connecticut and the solar industry, the Green Bank is in support of a program that continues on the success ZREC/LREC while balancing the issue of overall ratepayer cost. To promote the transition to a more dynamic and “smarter” grid that includes storage, we agree with the policy approach under SB 9 that supports time of use rates and other dynamic pricing to ensure that the value of the solar PV systems’ excess generation is shared between the owner and ratepayers.

The Green Bank believes shared clean energy facilities have a critical role to play in the clean energy mix for the state. We would like to see SCEF’s competing against each other in a separate competitive procurement or auction process. We support a SCEF program that incents policy goals such as locational siting to alleviate grid congestion as well as promoting access to low-to-moderate income subscribers. The Green Bank welcomes the opportunity to be involved in the design or administration of a SCEF program in collaboration with DEEP and industry stakeholders. The Green Bank has a track record of managing down the subsidy cost of residential solar over time, while expanding its deployment, and could apply similar strategies in a SCEF program.

Residential Solar Investment Program

As the Green Bank implements a renewable energy credit incentive through the residential solar investment program (RSIP), with a lesser of target of 300 MW or the end of 2022, we would offer the following observations:

- Tariff Price – it should appropriately value projects that provide participating household, electric system, and societal benefits, with adders, including for example the inclusion of energy storage and support for low-to-moderate income households. It should also recognize time of use rates, or other dynamic pricing to ensure that the value of the solar PV systems’ excess generation is being shared between the owner and electric ratepayers.

- Tariff Pilot – to assist the transition from net metering to the tariff policy, to ensure sustained orderly development of a local industry, the bill proposes a pilot tariff, which the Green Bank supports. The Green Bank expects to work closely with the residential solar industry and PURA to establish an appropriate tariff price that is economically comparable to the current residential solar investment program alternatives while transitioning between net metering to a tariff policy.
- Target Deployment – it appears that the annual allocation of the \$35 million for tariff purchases on energy and renewable energy credits for residential solar PV deployment would be approximately 40 MW a year – based on the Comprehensive Energy Strategy (Table S2 on Page 39). It should be noted that thus far in 2018, the residential solar PV market is on pace for 45-50 MW, and that the best year in Connecticut was 2015 where nearly 55 MW of residential solar PV projects were approved.

The RSIP has been a very successful and “cost effective”¹ behind the meter program – effective in deployment (i.e., nearly 200 MW in 6 years) and efficient in ratepayer incentives (i.e., \$105 million in REC incentives over 6 years of the program) – see Table 1.

Table 1. Performance of the Residential Solar Investment Program (Calendar Years 2012-2017)

Year	# Projects	kW _{STC}	Total System Cost (\$MM)	Total Incentive (\$MM)	Cost / kW _{STC}	Incentive / kW _{STC}	Incentive % of Cost
2012	790	5,520	\$26.522	\$9.203	\$4,805	\$1,667	35%
2013	1,465	10,410	\$46.105	\$13.778	\$4,429	\$1,323	30%
2014	4,506	33,468	\$145.757	\$32.492	\$4,355	\$971	22%
2015	7,053	54,216	\$234.726	\$23.586	\$4,329	\$435	10%
2016	5,709	45,453	\$169.601	\$15.001	\$3,731	\$330	9%
2017	5,053	40,062	\$138.915	\$11.911	\$3,467	\$297	9%
Total	24,576	189,130	\$761.626	\$105.971	\$4,027	\$560	14%

It should be noted, that in comparison, each of the six rounds of the ZREC is \$120 million of long-term REC contracts – and that current ZREC prices range between \$55 to \$90 in comparison to the RSIP which has an equivalent current ZREC price of \$25. The RSIP REC incentive has decreased by over 80 percent since 2012.

The Green Bank has also made substantial progress ensuring that residential solar PV deployment is increasingly reaching low-to-moderate income households over time – see Table 2.

¹ Residential Solar Investment Program Evaluation by Cadmus (January 28, 2015)

Table 2. Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100%

Year	Projects		Deployment		Investment	
	Total # Projects	% at 100% or Below AMI	Total kW _{STC} Installed	% at 100% or Below AMI	Total Investment (\$MM)	% at 100% or Below AMI
2012	156	20%	1,003.0	18%	\$4.596	17%
2013	368	25%	2,334.6	22%	\$10.538	23%
2014	1,316	29%	8,895.6	27%	\$39.618	27%
2015	2,593	37%	18,422.6	34%	\$80.514	34%
2016	2,684	47%	19,494.8	43%	\$72.741	43%
2017	2,460	49%	17,602.2	44%	\$62.055	45%
Total	9,577	39%	67,752.8	36%	\$270.063	35%

Ensuring that clean energy is more affordable and accessible to all ratepayers has been a goal of the Green Bank. By mobilizing more private investment in underserved market segments like low to moderate income communities, the Green Bank is ensuring that the clean energy economy can provide benefits to all – especially those in need of assistance the most to reduce the burden of energy costs.

The RSIP has created over 10,000 jobs (i.e., direct, indirect and induced), will reduce over 3 million tons of CO₂ emissions over the life of the projects, and has generated \$26.1 in individual income taxes and corporate income taxes to the State of Connecticut.

With the successful growth of residential solar PV in Connecticut and the long-term public policy commitment proposed in SB 9, the Green Bank suggests that the Energy & Technology Committee consider removing the sales tax exemption for residential solar PV – see Appendix I for suggested policy language. The Green Bank proposes that the removal of this sales tax exemption be included in SB 9 as part of Section 5, or immediately thereafter to signify the synergies between the long-term public policy commitment embodied in SB 9 that supports a growing local solar PV industry that is also giving back to Connecticut. A phased in approach for the removal of the sales tax exemption should also be considered to minimize any impact on the solar industry.

The Green Bank estimates that the removal of the sales tax exemption will have minimal impact on the economics of a solar PV system for a household – see Table 3. Note that the sales tax would only apply to the equipment or hardware costs of a project and not the labor, as all residential contractor service work is exempt from sales tax.

Despite the minimal impact of the sales tax exemption removal on the economics of residential solar PV (i.e., 6-9 months of payback²), a demand of at least 50 MW a year would generate \$7.4 million in sales tax revenue, \$3.7 million a year in personal income tax

² Assumes the following: degradation rate of 0.5%, useful life of 20 years, capacity factor of 13%, electricity price of \$0.20 non-escalating, and sales tax rate of 6.35% applied only to the hardware – or 65% for an effective tax rate on the total installed cost of the project of 4.1%.

revenue, and \$6.6 million a year in corporate income tax receipts – or a total of \$17.7 million a year in state tax revenues from the residential solar PV market.

Table 3. Analysis of Economic Impact to Households of Sales Tax on Residential Solar PV

	With Sales Tax Exemption	Without Sales Tax Exemption	Variance
Installed Capacity (kW)	8.0	8.0	-
Installed Cost (\$/W)	\$3.50	\$3.50	-
Total Installed Cost	\$28,000	\$28,000	-
Installed Cost after Incentives ³	\$17,800	\$17,800	-
Sales Tax	-	\$1,190	\$1,190

It should be noted that the average installed cost for residential solar PV in Connecticut during its best year (i.e., 2015 and nearly 55 MW) was \$4.33/W. Removal of the sales tax exemption is an even-handed approach weighing the removal of the exemption in return for the long term public policy support that the solar industry will receive through passage of SB 9 and at least an additional 400 MW beyond the RSIP.

Section 6 – Renewable Heating and Cooling Technologies

This section establishes an annual 1.6 million MMBtu target that would support the deployment of renewable heating and cooling technologies in Connecticut, including ground source heat pumps, air source heat pumps, heat pump water heaters, solar hot water, etc. Renewable heating and cooling technology deployment are among the highest job creating clean energy technologies in Connecticut.⁴ The Yale Center for Business and the Environment estimates that the target corresponds to a net energy efficiency of nearly 1 percent per year – or the equivalent of 30,000 households installing air source heat pumps⁵ or 27,000 ground source heat pumps.⁶

As the Green Bank has successfully demonstrated how it can catalyze a new market for residential solar PV that is less-and-less reliant on subsidies over time, while at the same time growing by orders of magnitude in deployment that supports a local industry, attracting private investment, creating jobs, and generating tax revenues, we are willing to, if provided the resources to do so, play a larger public policy role in implementing this policy given our demonstrated results and experience building new markets that catalyze private investment.

Sections 7 and 8 – Conservation Adjustment Mechanism and Procurement of Energy Efficiency

The Green Bank supports the transfer of the 3 mills from the Conservation and Load Management Fund (C&LMF) to the Conservation Adjustment Mechanism (CAM). This would

³ State incentives through the RSIP administered by the Green Bank and federal incentives through the ITC.

⁴ Clean Energy Jobs in Connecticut by Navigant Consulting for the Connecticut Green Bank (August 10, 2016)

⁵ At COP of 2.5 and 100 percent share of heating load

⁶ At COP of 3.0 and 100 percent share of heating load

leave 6 mills in the CAM, which would serve as a mechanism to limit sweeps of these important energy efficiency and load management funds to the General Fund.

The use of competitive procurements for energy efficiency, as has been practiced for renewable energy over the past several years through various requests for proposals (RFP), is good public policy. Allowing private market actors to compete to deliver energy savings at the least cost to electric ratepayers will create new opportunities for market development and access to private investment. For example, Eversource Energy was able to procure 30 MW of energy efficiency through a statewide RFP for clean energy. The Green Bank recommends that consideration be given to expanding beyond 25 MW of annual energy efficiency procurement to 50 to 75 MW of procurement.

Section 9 – Connecticut Green Bank Additional Mill to Clean Energy Fund

The proposal to increase the Clean Energy Fund (CEF) by an additional mill, starting in fiscal year 2020, ending at the end of fiscal year 2025, would potentially provide an additional \$160 million of ratepayer funds for investment by the Green Bank during this period of time. With the intention of enabling the Green Bank to be self-sustainable for which we are appreciative, we believe there is an opportunity to strengthen this proposal and protect ratepayer funds. No guarantees or protections are currently in place that would prevent future sweeps of such funds, and cause further erosion of private investment in clean energy in Connecticut through the Green Bank. Furthermore, it likely will lead to financial distress of the Green Bank, and potential bankruptcy if it cannot meet its contractual obligations or the erosion of the Green Bank's or the State's bond rating. As a result, we recommend some additions to SB 9 that we believe will restore the capital markets' confidence in the Green Bank's stability and soundness as a financial counterparty that was lost as a result of the Clean Energy Fund sweeps.

Here are several proposed policies we would recommend:

- **Assessment of Clean Energy Fund** – The Clean Energy Fund Assessment proposal will require the legislature to conduct an assessment on how any proposed future sweeps impact the Clean Energy Fund, its operations, its ability to sustain then-existing contractual obligations and financing facilities, maintain its access to the capital markets, the potential for adverse consequences, including bankruptcy and an erosion of the Green Bank's bond credit rating, if applicable – see Appendix II. This is crucial to avoid an inadvertent unwinding, bankruptcy or triggering of the Green Bank's non-impairment clause. Such an unintended event could be damaging to both the Green Bank and the State's fiscal standing with creditors, unknown spillover effects to other quasi-public agencies, and the Green Bank's ability to meet its stated public mission.
- **Clarification of Non-Impairment Provision** – With the initial proposal to fully sweep the Green Bank's public funding, it would have bankrupted the organization. The consequence of the adopted sweep of over half of the Green Bank's public funding is that

capital providers are now hesitant to partner with us – as evidenced by withdrawal from facilities, RFPs and proposed short-term financing facilities. The bolstered non-impairment language as provided for in Conn. General Statute Section 16-245n will further insulate the Green Bank from sweeps that could shutter the doors of the organization and provide confidence to the market that the Green Bank can meet its contractual commitments on an on-going basis – see Appendix III.

Given the recent sweeps, the capacity of the Green Bank to attract private investment in Connecticut has been diminished. The sweeps have resulted in the following:

- Statement of Subsequent Events Footnote – included in the financial statements of the Green Bank, our independent auditor wanted the inclusion of this statement (i.e., Footnote 20) within our financial statements to signal to readers the risks of the Green Bank’s financial position by General Fund sweeps.
- Loss of Investment – with the weakening of the Green Bank’s financial position, the Green Bank lost a \$10 million loan at 1% interest for a 10-year term. The proceeds of the loan would have been used to reduce the burden of energy costs on small businesses and low-to-moderate income households. Also, this transaction would have put the Green Bank on a pathway to sustainability. Subsequently, a major financial institution withdrew from the RFP seeking financing facilities for the Solar Home Renewable Energy Credit program, and a further local bank’s credit committee declined to consider a short term secured credit facility for the Green Bank, specifically citing the recent Clean Energy Fund sweeps.
- Special Capital Reserve Fund (SCRF) Requirement – to support the reduction of energy costs for state buildings, the Green Bank was able to access Clean Renewable Energy Bonds from the federal government to finance solar PV projects on campuses of the Connecticut State College and University System that will save them \$240,000 a year on energy costs over the next 20-years. With the weakening of the Green Bank’s financial position, the private investor in the bonds required as a condition to closing default protection from the State of Connecticut by accessing the SCRF.
- Limited Access to Working Capital – as the Green Bank is now in a cash management mode resulting from the sweeps, local banks have, so far, been unwilling to provide us access to low cost working capital to manage through negative cash flow periods.

We propose that the Green Bank turn its economic development engine of using limited public funds to attract multiples of private capital investment to mobilize between \$135 million to \$270 million of additional investment per year, further reducing the burden of energy costs on families and businesses in our communities.

- **Additional Clean Energy Fund Mill** – an additional mill to the Green Bank through the CEF could be applied to attract private investment at the 5 to 10 leverage ratio achieved thus far with a focus to reduce energy costs on public facilities like schools. With the additional mill, the Green Bank could mobilize between \$135 to \$270 million of investment per year for projects in public facilities – see Appendix IV.

By supporting these policies, the General Assembly would be sending a signal that it wants private investment in its clean energy economy and would restore the confidence we lost as a result of the sweeps. As the Green Bank model espouses, private investment leads to economic growth, economic growth leads to job creation, and with more work deploying clean energy, families and businesses will lower the burden of energy costs.

APPENDIX I

Remove Sales Tax Exemption for Residential Solar PV

Suggested Draft Language

Sec. 12-412. Exemptions. Taxes imposed by this chapter shall not apply to the gross receipts from the sale of and the storage, use or other consumption in this state with respect to the following items:

(117) **Solar energy electricity generating, water and space heating systems and geothermal resource systems. Machinery, equipment, tools, materials, supplies and fuel used in renewable energy and clean energy technology industries.** (A) Sales and use of solar energy electricity generating systems and passive or active solar water or space heating systems and geothermal resource systems, including equipment related to such systems, and sales of services relating to the installation of such systems. However, commencing after December 31, 2018, the exemptions described in this Section 12-412(117)(A) shall not apply to RESIDENTIAL solar energy electricity generating systems, including equipment related to such systems, and services related to the installation, repair or maintenance of such systems or equipment RELATED to such systems.

(B) Sales of and the storage, use or other consumption of machinery, equipment, tools, materials, supplies and fuel used directly in the renewable energy and clean energy technology industries. As used in this subdivision, “renewable energy and clean energy technology industries” means industries that apply technologies to produce, improve or develop solar energy electricity generating systems, passive or active solar water or space heating systems, geothermal resource systems and wind power electric generation systems, including equipment related to such systems.

APPENDIX II
Assessment of Clean Energy Fund

Suggested draft language

The Clean Energy Fund Assessment provision would be new language added to Conn. General Statutes Section 16-245n as follows:

(NEW) Subsection (k) to read as follows:

(k)(i) No transfer or withdrawal of funds shall be made from the undesignated funds of the clean energy fund unless and until the legislative committee of cognizance conducts an assessment of the impact of such transfer or withdrawal on the financial stability and sustainability of the bank, its ability to meet contractual obligations, covenants or warranties, and the bond credit rating of the bank, if applicable.

(ii) No transfer or withdrawal of funds shall be made from the undesignated funds of the bank unless and until the legislative committee of cognizance conducts an assessment of the impact of such transfer or withdrawal on the financial stability and sustainability of the bank, and its ability to meet contractual obligations, covenants or warranties, and the bond credit rating of the bank, if applicable.

APPENDIX III
Clarification of Non-Impairment Provision

Suggested draft language

(h) (i) The state of Connecticut does hereby pledge to and agree with any person with whom the Connecticut Green Bank may enter into contracts pursuant to the provisions of this section that the state will not limit or alter the rights hereby vested in said bank until such contracts and the obligations thereunder are fully met and performed on the part of said bank, provided nothing herein contained shall preclude such limitation or alteration if adequate provision shall be made by law for the protection of such persons entering into contracts with said bank. The pledge provided by this subsection shall be interpreted and applied broadly to effectuate and maintain the bank's financial capacity to perform its essential public and governmental function.

(ii) The contracts and obligations thereunder of said bank shall be obligatory upon the bank, and the bank may appropriate in each year during the term of such contracts, an amount of money that, together with other funds of the bank available for such purposes, shall be sufficient to pay such contracts and obligations or meet any contractual covenants or warranties, and there shall be included in the charge assessed to each end use customer of electric services, as provided in subsection (b) of this section, an amount that, together with other funds of the bank available for such purposes, shall be sufficient to meet such appropriation.

APPENDIX IV
Additional Clean Energy Fund Mill

Suggested draft language

(b) On and after July 1, 2004, and until June 30, 2019, the Public Utilities Regulatory Authority shall assess or cause to be assessed a charge of not less than one mill per kilowatt hour charged to each end use customer of electric services in this state which shall be deposited into the Clean Energy Fund established under subsection (c) of this section. On and after July 1, 2019, and until June 30, 2025, the Public Utilities Regulatory Authority shall assess or cause to be assessed a charge of not less than two mills per kilowatt hour charged to each end use customer of electric services in this state which shall be deposited into the Clean Energy Fund established under subsection (c) of this section. On and after July 1, 2025, the Public Utilities Regulatory Authority shall assess or cause to be assessed a charge of not less than one mill per kilowatt hour charged to each end use customer of electric services in this state which shall be deposited into the Clean Energy Fund established under subsection (c) of this section.



General Assembly

February Session, 2018

Governor's Bill No. 7

LCO No. 235



Referred to Committee on ENVIRONMENT

Introduced by:

SEN. LOONEY, 11th Dist.

SEN. DUFF, 25th Dist.

REP. ARESIMOWICZ, 30th Dist.

REP. RITTER M., 1st Dist.

AN ACT CONCERNING CLIMATE CHANGE PLANNING AND RESILIENCY.

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

1 Section 1. Subsection (d) of section 8-23 of the 2018 supplement to
2 the general statutes is repealed and the following is substituted in lieu
3 thereof (*Effective from passage*):

4 (d) In preparing such plan, the commission or any special
5 committee shall consider the following: (1) The community
6 development action plan of the municipality, if any, (2) the need for
7 affordable housing, (3) the need for protection of existing and potential
8 public surface and ground drinking water supplies, (4) the use of
9 cluster development and other development patterns to the extent
10 consistent with soil types, terrain and infrastructure capacity within
11 the municipality, (5) the state plan of conservation and development

12 adopted pursuant to chapter 297, (6) the regional plan of conservation
13 and development adopted pursuant to section 8-35a, (7) physical,
14 social, economic and governmental conditions and trends, (8) the
15 needs of the municipality including, but not limited to, human
16 resources, education, health, housing, recreation, social services, public
17 utilities, public protection, transportation and circulation and cultural
18 and interpersonal communications, (9) the objectives of energy-
19 efficient patterns of development, the use of solar and other renewable
20 forms of energy and energy conservation, (10) protection and
21 preservation of agriculture, (11) [sea level change scenarios published
22 by the National Oceanic and Atmospheric Administration in Technical
23 Report OAR CPO-1] the most recent sea level change scenario updated
24 pursuant to subsection (b) of section 25-68o, as amended by this act,
25 and (12) the need for technology infrastructure in the municipality.

26 Sec. 2. Subsection (a) of section 16a-3a of the general statutes is
27 repealed and the following is substituted in lieu thereof (*Effective from*
28 *passage*):

29 (a) The Commissioner of Energy and Environmental Protection, in
30 consultation with the electric distribution companies, shall review the
31 state's energy and capacity resource assessment and approve the
32 Integrated Resources Plan for the procurement of energy resources,
33 including, but not limited to, conventional and renewable generating
34 facilities, energy efficiency, load management, demand response,
35 combined heat and power facilities, distributed generation and other
36 emerging energy technologies to meet the projected requirements of
37 customers in a manner that minimizes the cost of all energy resources
38 to customers over time and maximizes consumer benefits consistent
39 with the state's environmental goals and standards, including, but not
40 limited to, the state's greenhouse gas reduction goals established in
41 section 22a-200a, as amended by this act. The Integrated Resources
42 Plan shall seek to lower the cost of electricity while meeting such
43 environmental goals and standards in the most cost-effective manner.

44 Sec. 3. Section 16a-3d of the general statutes is repealed and the
45 following is substituted in lieu thereof (*Effective from passage*):

46 (a) On or before October 1, [2016] 2020, and every [three] four years
47 thereafter, the Commissioner of Energy and Environmental Protection
48 shall prepare a Comprehensive Climate and Energy Strategy. Said
49 strategy shall reflect the legislative findings and policy stated in
50 section 16a-35k, [and shall] provide any analysis and
51 recommendations necessary to guide the state's energy policy to meet
52 greenhouse gas emission reduction requirements, as established in
53 section 22a-200a, as amended by this act, in the most cost-effective
54 manner and incorporate (1) an assessment and plan for all energy
55 needs in the state, including, but not limited to, electricity, heating,
56 cooling, and transportation, (2) the findings of the Integrated
57 Resources Plan, (3) the findings of the plan for energy efficiency
58 adopted pursuant to section 16-245m, (4) the findings of the plan for
59 renewable energy adopted pursuant to section 16-245n, [and] (5) the
60 Energy Assurance Plan developed for the state of Connecticut
61 pursuant to the American Recovery and Reinvestment Act of 2009, P.L.
62 111-5, or any successor Energy Assurance Plan developed within a
63 reasonable time prior to the preparation of any Comprehensive
64 Climate and Energy Strategy, and (6) the findings of any report
65 prepared pursuant to section 22a-200a, as amended by this act. Said
66 strategy shall further include, but not be limited to, (A) an assessment
67 of current energy supplies, demand and costs, (B) identification and
68 evaluation of the factors likely to affect future energy supplies,
69 demand and costs, (C) a statement of progress made toward achieving
70 the goals and milestones set in the preceding Comprehensive Climate
71 and Energy Strategy, (D) a statement of energy policies and long-range
72 energy planning objectives and strategies appropriate to achieve,
73 [among other things] the state's greenhouse gas reduction goals
74 established in section 22a-200a, as amended by this act, a sound
75 economy, the least-cost mix of energy supply sources to meet said
76 goals and measures that reduce demand for energy, giving due regard

77 to such factors as consumer price impacts, security and diversity of
78 fuel supplies and energy generating methods, protection of public
79 health and safety, environmental goals and standards, conservation of
80 energy and energy resources and the ability of the state to compete
81 economically, (E) recommendations for administrative and legislative
82 actions to implement such policies, objectives and strategies, (F) an
83 assessment of the potential costs savings and benefits to ratepayers,
84 including, but not limited to, carbon dioxide emissions reductions or
85 voluntary joint ventures to repower some or all of the state's coal-fired
86 and oil-fired generation facilities built before 1990, [and] (G) the
87 benefits, costs, obstacles and solutions related to the expansion and use
88 and availability of natural gas in Connecticut, and (H) a strategy for
89 ensuring the state's energy efficiency goals are met. [If the department
90 finds that such expansion is in the public interest, it shall develop a
91 plan to increase the use and availability of natural gas.]

92 (b) In adopting the Comprehensive Climate and Energy Strategy,
93 the Commissioner of Energy and Environmental Protection shall
94 conduct a proceeding that shall not be considered a contested case
95 under chapter 54, but shall include not less than one public meeting
96 and one technical meeting at which technical personnel shall be
97 available to answer questions. Such meetings shall be transcribed and
98 posted on the department's Internet web site. Said commissioner shall
99 give not less than fifteen days' notice of such proceeding by electronic
100 publication on the department's Internet web site. Not later than
101 fifteen days prior to any such public meeting and not less than thirty
102 days prior to any such technical meeting, the commissioner shall
103 publish notice of either such meeting and post the text of the proposed
104 Comprehensive Climate and Energy Strategy on the department's
105 Internet web site. Notice of such public meeting or technical meeting
106 may also be published in one or more newspapers having state-wide
107 circulation if deemed necessary by the commissioner. Such notice shall
108 state the date, time, and place of the meeting, the subject matter of the
109 meeting, the manner and time period during which comments may be

110 submitted to said commissioner, the statutory authority for the
111 proposed strategy and the location where a copy of the proposed
112 strategy may be obtained or examined in addition to posting the
113 proposed strategy on the department's Internet web site. Said
114 commissioner shall provide a time period of not less than sixty days
115 from the date the notice is published on the department's Internet web
116 site for public review and comment. During such time period, any
117 person may provide comments concerning the proposed strategy to
118 said commissioner. Said commissioner shall consider fully all written
119 and oral comments concerning the proposed strategy after all public
120 meetings and technical meetings and before approving the final
121 strategy. Said commissioner shall (1) notify by electronic mail each
122 person who requests such notice, and (2) post on the department's
123 Internet web site the electronic text of the final strategy and a report
124 summarizing all public comments and the changes made to the final
125 strategy in response to such comments and the reasons therefor. The
126 Public Utilities Regulatory Authority shall comment on the strategy's
127 impact on natural gas and electric rates.

128 (c) The Commissioner of Energy and Environmental Protection shall
129 submit the final Comprehensive Climate and Energy Strategy
130 electronically to the joint standing committees of the General Assembly
131 having cognizance of matters relating to energy and the environment.

132 (d) The Commissioner of Energy and Environmental Protection may
133 modify the Comprehensive Climate and Energy Strategy in accordance
134 with the procedures outlined in subsections (b) and (c) of this section.

135 Sec. 4. Section 16a-3e of the general statutes is repealed and the
136 following is substituted in lieu thereof (*Effective from passage*):

137 The Integrated Resources Plan, as described in section 16a-3a, as
138 amended by this act, shall (1) indicate specific options to reduce
139 electric rates and costs while achieving the state's greenhouse gas
140 emission reduction requirements established in section 22a-200a, as

141 amended by this act. Such options may include the procurement of
142 new sources of generation. In the review of new sources of generation,
143 the Integrated Resources Plan shall indicate whether the private
144 wholesale market can supply such additional sources or whether state
145 financial assistance, long-term purchasing of electricity contracts or
146 other interventions are needed to achieve the goal; (2) analyze in-state
147 renewable sources of electricity in comparison to transmission line
148 upgrades or new projects and out-of-state renewable energy sources,
149 provided such analysis also considers the benefits of additional jobs
150 and other economic impacts and how they are created and subsidized;
151 (3) include an examination of average consumption and other states'
152 best practices to determine why electricity rates are lower elsewhere in
153 the region; (4) assess and compare the cost of transmission line
154 projects, new power sources, renewable sources of electricity,
155 conservation and distributed generation projects to ensure the state
156 pursues only the least-cost alternative projects; (5) analyze the
157 potential for electric vehicles, as defined in section 16-19eee, to provide
158 energy storage and other services to the electric grid and identify
159 strategies to ensure that the grid is prepared to support increased
160 electric vehicle charging, based on projections of sales of electric
161 vehicles; (6) continually monitor supply and distribution systems to
162 identify potential need for transmission line projects early enough to
163 identify alternatives; and (7) assess the least-cost alternative to address
164 reliability concerns, including, but not limited to, lowering electricity
165 demand through conservation and distributed generation projects
166 before an electric distribution company submits a proposal for
167 transmission lines or transmission line upgrades to the independent
168 system operator or the Federal Energy Regulatory Commission,
169 provided no provision of such plan shall be deemed to prohibit an
170 electric distribution company from making any filing required by law
171 or regulation.

172 Sec. 5. Subsection (h) of section 16a-27 of the general statutes is
173 repealed and the following is substituted in lieu thereof (*Effective from*

174 *passage*):

175 (h) Any revision made after October 1, [2013] 2019, shall (1) take into
176 consideration risks associated with increased coastal flooding and
177 erosion, depending on site topography, as anticipated in [sea level
178 change scenarios published by the National Oceanic and Atmospheric
179 Administration in Technical Report OAR CPO-1] the most recent sea
180 level change scenario updated pursuant to subsection (b) of section 25-
181 68o, as amended by this act, (2) identify the impacts of such increased
182 flooding and erosion on infrastructure and natural resources, [and] (3)
183 make recommendations for the siting of future infrastructure and
184 property development to minimize the use of areas prone to such
185 flooding and erosion, and (4) take into consideration the state's
186 greenhouse gas reduction goals established pursuant to section 22a-
187 200a, as amended by this act.

188 Sec. 6. Subsection (a) of section 22a-92 of the general statutes is
189 repealed and the following is substituted in lieu thereof (*Effective from*
190 *passage*):

191 (a) The following general goals and policies are established by this
192 chapter:

193 (1) To ensure that the development, preservation or use of the land
194 and water resources of the coastal area proceeds in a manner
195 consistent with the rights of private property owners and the
196 capability of the land and water resources to support development,
197 preservation or use without significantly disrupting either the natural
198 environment or sound economic growth;

199 (2) To preserve and enhance coastal resources in accordance with
200 the policies established by chapters 439, 440, 446i, 446k, 447, 474 and
201 477;

202 (3) To give high priority and preference to uses and facilities which
203 are dependent upon proximity to the water or the shorelands

204 immediately adjacent to marine and tidal waters;

205 (4) To resolve conflicts between competing uses on the shorelands
206 adjacent to marine and tidal waters by giving preference to uses that
207 minimize adverse impacts on natural coastal resources while
208 providing long term and stable economic benefits;

209 (5) To consider [in the planning process] the potential impact of a
210 rise in sea level, coastal flooding and erosion patterns on coastal
211 development so as to minimize damage to and destruction of life and
212 property and minimize the necessity of public expenditure and
213 shoreline armoring to protect future new development from such
214 hazards;

215 (6) To encourage public access to the waters of Long Island Sound
216 by expansion, development and effective utilization of state-owned
217 recreational facilities within the coastal area that are consistent with
218 sound resource conservation procedures and constitutionally
219 protected rights of private property owners;

220 (7) To conduct, sponsor and assist research in coastal matters to
221 improve the data base upon which coastal land and water use
222 decisions are made;

223 (8) To coordinate the activities of public agencies to ensure that state
224 expenditures enhance development while affording maximum
225 protection to natural coastal resources and processes in a manner
226 consistent with the state plan for conservation and development
227 adopted pursuant to part I of chapter 297;

228 (9) To coordinate planning and regulatory activities of public
229 agencies at all levels of government to ensure maximum protection of
230 coastal resources while minimizing conflicts and disruption of
231 economic development; and

232 (10) To ensure that the state and the coastal municipalities provide

233 adequate planning for facilities and resources which are in the national
234 interest as defined in section 22a-93, as amended by this act, and to
235 ensure that any restrictions or exclusions of such facilities or uses are
236 reasonable. Reasonable grounds for the restriction or exclusion of a
237 facility or use in the national interest shall include a finding that such a
238 facility or use: (A) May reasonably be sited outside the coastal
239 boundary; (B) fails to meet any applicable federal and state
240 environmental, health or safety standard; or (C) unreasonably restricts
241 physical or visual access to coastal waters. This policy does not exempt
242 any nonfederal facility in use from any applicable state or local
243 regulatory or permit program nor does it exempt any federal facility or
244 use from the federal consistency requirements of Section 307 of the
245 federal Coastal Zone Management Act.

246 Sec. 7. Subdivision (7) of section 22a-93 of the general statutes is
247 repealed and the following is substituted in lieu thereof (*Effective from*
248 *passage*):

249 (7) "Coastal resources" means the coastal waters of the state, their
250 natural resources, related marine and wildlife habitat and adjacent
251 shorelands, both developed and undeveloped, that together form an
252 integrated terrestrial and estuarine ecosystem; coastal resources
253 include the following: (A) "Coastal bluffs and escarpments" means
254 naturally eroding shorelands marked by dynamic escarpments or sea
255 cliffs which have slope angles that constitute an intricate adjustment
256 between erosion, substrate, drainage and degree of plant cover; (B)
257 "rocky shorefronts" means shorefront composed of bedrock, boulders
258 and cobbles that are highly erosion-resistant and are an insignificant
259 source of sediments for other coastal landforms; (C) "beaches and
260 dunes" means beach systems including barrier beach spits and
261 tombolos, barrier beaches, pocket beaches, land contact beaches and
262 related dunes and sandflats; (D) "intertidal flats" means very gently
263 sloping or flat areas located between high and low tides composed of
264 muddy, silty and fine sandy sediments and generally devoid of
265 vegetation; (E) "tidal wetlands" means "wetland" as defined by section

266 22a-29; (F) "freshwater wetlands and watercourses" means "wetlands"
267 and "watercourses" as defined by section 22a-38; (G) "estuarine
268 embayments" means a protected coastal body of water with an open
269 connection to the sea in which saline sea water is measurably diluted
270 by fresh water including tidal rivers, bays, lagoons and coves; (H)
271 "coastal hazard areas" means those land areas inundated during
272 coastal storm events or subject to erosion induced by such events,
273 including flood hazard areas as defined and determined by the
274 National Flood Insurance Act, as amended (USC 42 Section 4101, P.L.
275 93-234), all areas subject to inundation as determined by the most
276 recent sea level change scenario updated pursuant to subsection (b) of
277 section 25-68o, as amended by this act, and all erosion hazard areas as
278 determined by the commissioner; (I) "developed shorefront" means
279 those harbor areas which have been highly engineered and developed
280 resulting in the functional impairment or substantial alteration of their
281 natural physiographic features or systems; (J) "island" means land
282 surrounded on all sides by water; (K) "nearshore waters" means the
283 area comprised of those waters and their substrates lying between
284 mean high water and a depth approximated by the ten meter contour;
285 (L) "offshore waters" means the area comprised of those waters and
286 their substrates lying seaward of a depth approximated by the ten
287 meter contour; (M) "shorelands" means those land areas within the
288 coastal boundary exclusive of coastal hazard areas, which are not
289 subject to dynamic coastal processes and which are comprised of
290 typical upland features such as bedrock hills, till hills and drumlins;
291 (N) "shellfish concentration areas" means actual, potential or historic
292 areas in coastal waters, in which one or more species of shellfish
293 aggregate;

294 Sec. 8. Subdivision (19) of section 22a-93 of the general statutes is
295 repealed and the following is substituted in lieu thereof (*Effective from*
296 *passage*):

297 (19) "Rise in sea level" means the [arithmetic mean of the most
298 recent equivalent per decade rise in the surface level of the tidal and

299 coastal waters of the state, as documented in National Oceanic and
300 Atmospheric Administration online or printed publications for said
301 agency's Bridgeport and New London tide gauges] most recent sea
302 level change scenario updated pursuant to subsection (b) of section 25-
303 68o, as amended by this act.

304 Sec. 9. Section 22a-94 of the general statutes is repealed and the
305 following is substituted in lieu thereof (*Effective from passage*):

306 (a) The Connecticut coastal area shall include the land and water
307 within the area delineated by the following: The westerly, southerly
308 and easterly limits of the state's jurisdiction in Long Island Sound; the
309 towns of Greenwich, Stamford, Darien, Norwalk, Westport, Fairfield,
310 Bridgeport, Stratford, Shelton, Milford, Orange, West Haven, New
311 Haven, Hamden, North Haven, East Haven, Branford, Guilford,
312 Madison, Clinton, Westbrook, Deep River, Chester, Essex, Old
313 Saybrook, Lyme, Old Lyme, East Lyme, Waterford, New London,
314 Montville, Norwich, Preston, Ledyard, Groton and Stonington.

315 (b) Within the coastal area, there shall be a coastal boundary which
316 shall be a continuous line delineated on the landward side by the
317 interior contour elevation of the one hundred year frequency coastal
318 flood zone, as defined and determined by the National Flood
319 Insurance Act, as amended (USC 42 Section 4101, P.L. 93-234), plus the
320 elevation of the most recent sea level change scenario updated
321 pursuant to subsection (b) of section 25-68o, as amended by this act, or
322 a one thousand foot linear setback measured from the mean high
323 water mark in coastal waters that shall be determined from the
324 elevation of the most recent sea level change scenario updated
325 pursuant to subsection (b) of section 25-68o, as amended by this act, or
326 a one thousand foot linear setback measured from the inland boundary
327 of tidal wetlands, [mapped under section 22a-20,] whichever is farthest
328 inland; and shall be delineated on the seaward side by the seaward
329 extent of the jurisdiction of the state.

330 (c) The coastal boundary as defined in subsection (b) of this section
331 shall be shown on maps or photographs prepared by the commissioner
332 which supplement flood hazard rate maps prepared by the United
333 States Department of Housing and Urban Development under the
334 National Flood Insurance Act. Such maps shall be sufficiently precise
335 to demonstrate whether the holdings of a property owner, or portions
336 thereof, lie within the coastal boundary. Copies of such maps or
337 photographs shall be filed with the commissioner and with the clerk of
338 each coastal municipality.

339 (d) The maps described in subsection (c) of this section shall be
340 promulgated not later than July 1, 1980. Prior to final adoption of any
341 map, the commissioner shall hold a public hearing in accordance with
342 the provisions of chapter 54 within the applicable coastal town. The
343 commissioner may use interim maps prepared on United States
344 Geological Survey Topographic base at a scale of one to twenty-four
345 thousand or their metric equivalent. In preparing such interim maps,
346 the commissioner may use any man-made structure, natural feature,
347 property line, preliminary flood hazard boundary maps as prepared
348 by the United States Department of Housing and Urban Development,
349 or a combination thereof which most closely approximates the
350 landward side of the boundary. Further, the commissioner may use
351 city or town property tax maps or aerial photographs, state tidal
352 wetlands photographs, or similar maps of property delineation as they
353 are available.

354 (e) The commissioner may, from time to time, amend such maps
355 described in subsection (c) of this section. Prior to the adoption of an
356 amendment to any map, the commissioner shall hold a public hearing
357 in the affected municipality in accordance with the provisions of
358 chapter 54. The commissioner shall consider for amendment changes
359 in the boundary petitioned by the coastal municipality, by any person
360 owning real property within the boundary, or by twenty-five residents
361 of such municipality. The commissioner shall approve, deny or modify
362 such petition within sixty days of receipt and shall state, in writing, the

363 reasons for his action. All amendments to the boundary shall be
364 consistent with subsection (b) of this section.

365 (f) A municipal coastal boundary may be adopted or amended by
366 the municipal planning commission of each coastal municipality in
367 accordance with the notice, hearing and other procedural requirements
368 of section 8-24. Not later than one year after the most recent sea level
369 change scenario updated pursuant to subsection (b) of section 25-68o,
370 as amended by this act, the municipal planning commission of each
371 coastal municipality shall adopt or amend a municipal coastal
372 boundary, in accordance with the notice, hearing and other procedural
373 requirements of section 8-24, to reflect the landward extent of the
374 interior contour elevation of the coastal boundary established in
375 accordance with subsection (b) of this section. Such boundary may be
376 delineated by roads, property lines or other identifiable natural or
377 man-made features, provided such boundary shall approximate and in
378 no event diminish the area within the coastal boundary as [defined]
379 established in accordance with subsection (b) of this section and as
380 mapped under subsection (d) of this section. Such boundary shall be
381 sufficiently precise to demonstrate whether the holdings of a property
382 owner, or portions thereof, lie within the boundary. Upon adoption,
383 such boundary shall be submitted to the commissioner, [for mapping
384 in accordance with subsection (c) of this section] in electronic and
385 paper form, as specified by the commissioner, for the commissioner's
386 review and approval and shall be effective upon receipt of the
387 commissioner's written approval. The municipal planning commission
388 may, at its own discretion or upon request of a property owner, amend
389 the coastal boundary in accordance with the procedures and criteria of
390 this subsection.

391 (g) All property lying within the coastal boundary shall be subject to
392 the regulatory, development and planning requirements of this
393 chapter.

394 Sec. 10. Subsection (a) of section 22a-200a of the general statutes is

395 repealed and the following is substituted in lieu thereof (*Effective from*
396 *passage*):

397 (a) The state shall reduce the level of emissions of greenhouse gas:

398 (1) Not later than January 1, 2020, to a level at least ten per cent
399 below the level emitted in 1990; [and]

400 (2) Not later than January 1, 2030, to a level at least forty-five per
401 cent below the level emitted in 2001; and

402 ~~[(2)]~~ (3) Not later than January 1, 2050, to a level at least eighty per
403 cent below the level emitted in 2001.

404 ~~[(3)]~~ (4) All of the levels referenced in this subsection shall be
405 determined by the Commissioner of Energy and Environmental
406 Protection.

407 Sec. 11. Subsection (a) of section 22a-478 of the general statutes is
408 repealed and the following is substituted in lieu thereof (*Effective from*
409 *passage*):

410 (a) The commissioner shall maintain a priority list of eligible water
411 quality projects and shall establish a system setting the priority for
412 making project grants, grant account loans and project loans. In
413 establishing such priority list and ranking system, the commissioner
414 shall consider all factors he deems relevant, including but not limited
415 to the following: (1) The public health and safety; (2) protection of
416 environmental resources; (3) population affected; (4) attainment of
417 state water quality goals and standards; (5) consistency with the state
418 plan of conservation and development; (6) state and federal
419 regulations; (7) the formation in municipalities of local housing
420 partnerships pursuant to the provisions of section 8-336f; and (8) the
421 necessity and feasibility of implementing measures designed to
422 mitigate the impact of a rise in sea level, as defined in section 22a-93, as
423 amended by this act, over the projected life span of such project. The

424 priority list of eligible water quality projects shall include a description
425 of each project and its purpose, impact, cost and construction schedule,
426 and an explanation of the manner in which priorities were established.
427 The commissioner shall adopt an interim priority list of eligible water
428 quality projects for the purpose of making project grants, grant account
429 loans and project loans prior to adoption of final regulations, which
430 priority list shall be the priority list currently in effect under subsection
431 (c) of section 22a-439.

432 Sec. 12. Section 25-68b of the general statutes is repealed and the
433 following is substituted in lieu thereof (*Effective from passage*):

434 As used in sections 25-68b to 25-68h, inclusive:

435 (1) "Activity" means any proposed state action in a floodplain or any
436 proposed state action that impacts natural or man-made storm
437 drainage facilities that are located on property that the commissioner
438 determines to be controlled by the state;

439 (2) "Base flood" means that flood which has a one per cent chance of
440 being equaled or exceeded in any year, as defined in regulations of the
441 National Flood Insurance Program (44 CFR 59 et seq.), or that flood
442 designated by the commissioner pursuant to section 25-68c. Any flood
443 so designated by the commissioner shall have at least a one per cent
444 chance of being equaled or exceeded in any year. Such flood may be
445 designated as the A or V zones on maps published by the National
446 Flood Insurance Program. The "base flood for a critical activity" means
447 the flood that has at least a .2 per cent chance of being equaled or
448 exceeded in any year. Such flood may be designated as the B zone on
449 maps published for the National Flood Insurance Program;

450 (3) "Commissioner" means the Commissioner of Energy and
451 Environmental Protection;

452 (4) "Critical activity" means any activity, including, but not limited
453 to, the treatment, storage and disposal of hazardous waste and the

454 siting of hospitals, housing for the elderly, schools or residences, in the
455 .2 per cent floodplain in which the commissioner determines that a
456 slight chance of flooding is too great;

457 (5) "Floodplain" means that area located within the real or
458 theoretical limits of the base flood or base flood for a critical activity;

459 (6) "Flood-proofing" means any combination of structural or
460 nonstructural additions, changes or adjustments which reduce or
461 eliminate flood damage to real estate or improved real property, to
462 water and sanitary facilities, and to structures and their contents,
463 including, but not limited to, for properties within the coastal
464 boundary, as established pursuant to subsection (b) of section 22a-94,
465 as amended by this act, not less than an additional two feet of
466 freeboard above base flood and any additional freeboard necessary to
467 account for the most recent sea level change scenario updated
468 pursuant to subsection (b) of section 25-68o, as amended by this act;

469 (7) "Freeboard" means a safety factor, expressed in feet above a
470 calculated flood level, that compensates for unknown factors
471 contributing to flood heights greater than the calculated height,
472 including, but not limited to, ice jams, debris accumulations, wave
473 actions, obstructions of bridge openings and floodways, the effects of
474 urbanization on the hydrology of a watershed, loss of flood storage
475 due to development and sedimentation of a watercourse bed;

476 (8) "Proposed state action" means individual activities or a sequence
477 of planned activities proposed to be undertaken by a state department,
478 institution or agency, any state or federal grant or loan proposed to be
479 used to fund a project that affects land use, or proposed transfer of real
480 property belonging to the state.

481 Sec. 13. Subsection (h) of section 25-68d of the 2018 supplement to
482 the general statutes is repealed and the following is substituted in lieu
483 thereof (*Effective from passage*):

484 (h) The provisions of subsections (a) to (d), inclusive, and (f) and (g)
485 of this section shall not apply to the following critical activities above
486 [the one-hundred-year flood elevation] base flood that involve state
487 funded housing reconstruction, rehabilitation or renovation, provided
488 the state agency that provides funding for such activity certifies that it
489 complies with the provisions of the National Flood Insurance Program
490 and the requirements of this subsection: (1) Projects involving the
491 renovation or rehabilitation of existing housing on the Department of
492 Housing's most recent affordable housing appeals list; (2) construction
493 of minor structures to an existing building for the purpose of
494 providing accessibility to persons with disabilities pursuant to the
495 State Building Code; (3) construction of open decks attached to
496 residential structures, properly anchored in accordance with the State
497 Building Code; (4) the demolition and reconstruction of existing
498 housing for persons and families of low and moderate income,
499 provided there is no increase in the number of dwelling units and (A)
500 such reconstruction is limited to the footprint of the existing
501 foundation of the building or buildings used for such purpose, or
502 which could be used for such purpose subsequent to reconstruction, or
503 (B) such reconstruction is on a parcel of land where the elevation of
504 such land is above the one-hundred-year flood elevation, provided
505 there is no placement of fill within an adopted Federal Emergency
506 Management Agency flood zone.

507 Sec. 14. Section 25-68o of the general statutes is repealed and the
508 following is substituted in lieu thereof (*Effective from passage*):

509 (a) On and after October 1, [2013] 2019, in the preparation of any
510 municipal evacuation plan or hazard mitigation plan, such
511 municipality shall consider [sea level change scenarios published by
512 the National Oceanic and Atmospheric Administration in Technical
513 Report OAR CPO-1] the most recent sea level change scenario updated
514 pursuant to subsection (b) of this section.

515 (b) Within available resources and not less than once every ten

516 years, the Marine Sciences Division of The University of Connecticut
517 shall update the sea level change scenarios published by the National
518 Oceanic and Atmospheric Administration in Technical Report OAR
519 CPO-1. Within available resources and not less than ninety days prior
520 to any update of such sea level change scenarios by said Marine
521 Sciences Division, the division shall conduct not less than one public
522 hearing concerning such update. Not later than sixty days after the last
523 public hearing conducted by the Marine Sciences Division on any such
524 update, the Commissioner of Energy and Environmental Protection
525 shall post such update on the Internet web site of the Department of
526 Energy and Environmental Protection along with a notice that any
527 previous updates are superseded.

528 Sec. 15. Subsection (g) of section 28-5 of the general statutes is
529 repealed and the following is substituted in lieu thereof (*Effective from*
530 *passage*):

531 (g) On and after October 1, [2013] 2019, the state civil preparedness
532 plan and program established pursuant to subsection (b) of this section
533 shall consider [sea level change scenarios published by the National
534 Oceanic and Atmospheric Administration in Technical Report OAR
535 CPO-1] the most recent sea level change scenario updated pursuant to
536 subsection (b) of section 25-68o, as amended by this act.

537 Sec. 16. (NEW) (*Effective from passage*) (a) There is established a
538 Connecticut Council on Climate Change that shall facilitate and
539 coordinate efforts among state agencies, businesses, municipalities and
540 nongovernmental organizations to reduce greenhouse gas emissions
541 and make Connecticut more resilient to the effects of climate change.

542 (b) The Connecticut Council on Climate Change shall:

543 (1) Meet not less than biannually;

544 (2) Monitor climate change science and the state's progress in
545 meeting the greenhouse gas reduction requirements established in

546 section 22a-200a of the general statutes, as amended by this act;

547 (3) Review existing state and municipal policies, statutes,
548 ordinances and regulations, as applicable, and recommend emission
549 reduction measures to meet state-wide greenhouse gas reduction
550 requirements established in section 22a-200a of the general statutes, as
551 amended by this act, in a manner that minimizes costs and maximizes
552 benefits for Connecticut's economy, improves and modernizes
553 Connecticut's energy infrastructure, maintains electric system
554 reliability and complements the state's efforts to improve air quality;

555 (4) For each agency that is represented on the Connecticut Council
556 on Climate Change:

557 (A) Include in any agency planning strategies, measures to support
558 the greenhouse gas reduction requirements established in section 22a-
559 200a of the general statutes, as amended by this act; and

560 (B) Report annually to the Connecticut Council on Climate Change
561 on its progress in implementing measures to support the greenhouse
562 gas reduction requirements established in section 22a-200a of the
563 general statutes, as amended by this act; and

564 (5) Report any findings and recommendations made pursuant to
565 this section to the Governor and the joint standing committees of the
566 General Assembly having cognizance of matters relating to the
567 environment, energy and technology and transportation not later than
568 October 1, 2020, and biennially thereafter.

569 (c) The Department of Energy and Environmental Protection and
570 the Office of Policy and Management shall coordinate the Connecticut
571 Council on Climate Change, which shall consist of the following
572 members: (1) The Secretary of the Office of Policy and Management, or
573 the secretary's designee, who shall serve as cochairperson, (2) the
574 Commissioner of Energy and Environmental Protection, or the
575 commissioner's designee, who shall serve as cochairperson, (3) the

576 chairperson of the Public Utilities Regulatory Authority, or the
577 chairperson's designee, (4) the Commissioner of Economic and
578 Community Development, or the commissioner's designee, (5) the
579 Commissioner of Administrative Services, or the commissioner's
580 designee, (6) the Insurance Commissioner, or the commissioner's
581 designee, (7) the Commissioner of Housing, or the commissioner's
582 designee, (8) the Commissioner of Transportation, or the
583 commissioner's designee, (9) the commissioner of any other state
584 agency, as appointed by the Governor, (10) the president of the
585 Connecticut Green Bank, (11) the Executive Director of the Connecticut
586 Institute for Resilience and Climate Adaptation, (12) the Executive
587 Director of the Connecticut Conference of Municipalities, (13) the
588 Executive Director of the Connecticut Council of Small Towns, and
589 (14) any other individual who represents business and industry, a
590 nongovernmental organization, or a local government, as appointed by
591 the Governor.

592 (d) All appointed members of the Connecticut Council on Climate
593 Change shall serve a two-year term from May first in the year in which
594 such members are appointed or until a successor is appointed. All
595 appointed members shall serve at the pleasure of the Governor.

596 Sec. 17. Subsection (m) of section 16-2 of the general statutes is
597 repealed and the following is substituted in lieu thereof (*Effective from*
598 *passage*):

599 (m) Notwithstanding any provision of the general statutes, the
600 decisions of the Public Utilities Regulatory Authority, including, but
601 not limited to, decisions relating to rate amendments arising from the
602 Comprehensive Climate and Energy Strategy, the Integrated Resources
603 Plan, the Conservation and Load Management Plan and policies
604 established by the Department of Energy and Environmental
605 Protection, shall be guided by said strategy and plans and such
606 policies.

607 Sec. 18. Subsections (b) and (c) of section 16-19e of the general
608 statutes are repealed and the following is substituted in lieu thereof
609 (*Effective from passage*):

610 (b) The Public Utilities Regulatory Authority shall promptly
611 undertake a separate, general investigation of, and shall hold at least
612 one public hearing on new pricing principles and rate structures for
613 electric distribution companies and for gas companies to consider,
614 without limitation, long run incremental cost of marginal cost pricing,
615 peak load or time of day pricing and proposals for optimizing the
616 utilization of energy and restraining its wasteful use and encouraging
617 energy conservation, and any other matter with respect to pricing
618 principles and rate structures as the authority shall deem appropriate.
619 The authority shall determine whether existing or future rate
620 structures place an undue burden upon those persons of poverty
621 status and shall make such adjustment in the rate structure as is
622 necessary or desirable to take account of their indigency. The authority
623 shall require the utilization of such new principles and structures to
624 the extent that the authority determines that their implementation is in
625 the public interest, as identified by the Department of Energy and
626 Environmental Protection in the Integrated Resources Plan and the
627 Comprehensive Climate and Energy Strategy, and necessary or
628 desirable to accomplish the purposes of this provision without being
629 unfair or discriminatory or unduly burdensome or disruptive to any
630 group or class of customers, and determines that such principles and
631 structures are capable of yielding required revenues. In reviewing the
632 rates and rate structures of electric and gas companies, the authority
633 shall be guided by the goals of the Department of Energy and
634 Environmental Protection, as described in section 22a-2d, the
635 Comprehensive Climate and Energy Strategy, the Integrated Resources
636 Plan and the Conservation and Load Management Plan. The authority
637 shall issue its initial findings on such investigation by December 1,
638 1976, and its final findings and order by June 1, 1977; provided that
639 after such final findings and order are issued, the authority shall at

640 least once every two years undertake such further investigations as it
641 deems appropriate with respect to new developments or desirable
642 modifications in pricing principles and rate structures and, after
643 holding at least one public hearing thereon, shall issue its findings and
644 order thereon.

645 (c) The Department of Energy and Environmental Protection shall
646 coordinate and integrate its actions, decisions and policies pertaining
647 to gas and electric distribution companies, so far as possible, with the
648 actions, decisions and policies of other agencies and instrumentalities
649 in order to further the development and optimum use of the state's
650 energy resources and conform to the greatest practicable extent with
651 the state energy policy as stated in section 16a-35k, the Comprehensive
652 Climate and Energy Strategy and the Integrated Resources Plan taking
653 into account prudent management of the natural environment and
654 continued promotion of economic development within the state. The
655 department shall defer, as appropriate, to any actions taken by other
656 agencies and instrumentalities on matters within their respective
657 jurisdictions.

658 Sec. 19. Subsection (a) of section 16-19ff of the general statutes is
659 repealed and the following is substituted in lieu thereof (*Effective from*
660 *passage*):

661 (a) Notwithstanding any provisions of the general statutes to the
662 contrary, each electric distribution company shall allow the installation
663 of submeters at (1) a recreational campground, (2) individual slips at
664 marinas for metering the electric use by individual boat owners, (3)
665 commercial, industrial, multifamily residential or multiuse buildings
666 where the electric power or thermal energy is provided by a Class I
667 renewable energy source, as defined in section 16-1, or a combined
668 heat and power system, as defined in section 16-1, or (4) in any other
669 location as approved by the authority where submetering promotes
670 the state's energy goals, as described in the Comprehensive Climate
671 and Energy Strategy, while protecting consumers against termination

672 of residential utility service or other related issues. Each entity
673 approved to submeter by the Public Utilities Regulatory Authority,
674 pursuant to subsection (c) of this section, shall provide electricity to
675 any allowed facility, as described in this subsection, at a rate no greater
676 than the rate charged to that customer class for the service territory in
677 which such allowed facility is located, provided nothing in this section
678 shall permit such entity to charge a submetered account for (A) usage
679 for any common areas of a commercial, industrial or multifamily
680 residential building, or (B) other usage not solely for use by such
681 account.

682 Sec. 20. Section 16-244y of the 2018 supplement to the general
683 statutes is repealed and the following is substituted in lieu thereof
684 (*Effective from passage*):

685 An electric distribution company may submit to the Public Utilities
686 Regulatory Authority for approval one or more plans to acquire new
687 fuel cell electricity generation that began operation on or after July 1,
688 2017. Any such plan shall utilize a competitive process for the purpose
689 of providing distribution system benefits, including, but not limited to,
690 avoiding or deferring distribution capacity upgrades, and enhancing
691 distribution system reliability, including, but not limited to, voltage or
692 frequency improvements. Any such plan shall give preference to
693 proposals that make efficient use of existing sites and supply
694 infrastructure. In the event that the authority approves such plan, an
695 electric distribution company may submit to the authority (1) one or
696 more proposals to build, own and operate new fuel cell generation, (2)
697 proposed power purchase agreements negotiated with persons to
698 build, own and operate new fuel cell generation, or (3) proposals to
699 provide financial incentives for the installation of combined heat and
700 power systems powered by fuel cells, provided any such incentives
701 shall be consistent with the Comprehensive Climate and Energy
702 Strategy pursuant to section 16a-3d, as amended by this act. The
703 facilities acquired, built pursuant to said power purchase agreements
704 and that receive said financial incentives under this section shall not

705 exceed a total nameplate capacity rating of thirty megawatts in the
706 aggregate. Any proposal submitted by an electric distribution
707 company to build, own and operate a fuel cell shall include the electric
708 distribution company's full projected costs and shall demonstrate to
709 the authority that such facility is not supported in any form of cross
710 subsidization by affiliated entities. The authority shall evaluate any
711 proposal submitted pursuant to this section in a manner that is
712 consistent with the principles of sections 16-19 and 16-19e, as amended
713 by this act, and may approve one or more proposals if it finds that
714 such proposal (A) was developed in a manner that is consistent with
715 the acquisition plan approved by the authority, (B) serves the long-
716 term interests of ratepayers, and (C) cost-effectively avoids or defers
717 distribution system costs. The costs incurred by an electric distribution
718 company under this section shall be recovered from all customers of
719 the electric distribution company through a fully reconciling
720 component of electric rates for all customers of the electric distribution
721 company, until the electric distribution company's next rate case, at
722 which time any costs and investments for new fuel cell generation
723 owned by the electric distribution company pursuant to subdivision
724 (1) of this section shall be recoverable through base distribution rates.
725 Nothing in this section shall preclude the resale or other disposition of
726 any energy products, capacity and associated environmental attributes
727 purchased by the electric distribution company, provided the electric
728 distribution company shall net the cost of payments made to projects
729 under any long-term contracts entered into pursuant to subdivision (2)
730 of this section against the proceeds of the sale of any energy products,
731 capacity and environmental attributes and the difference thereof plus
732 any net costs incurred pursuant to subdivision (3) of this section shall
733 be credited or charged to distribution customers through a reconciling
734 component of electric rates, as determined by the authority, that is
735 nonbypassable when switching electric suppliers. The electric
736 distribution company may use any energy products, capacity and
737 environmental attributes produced by such facility to meet the needs
738 of customers served pursuant to section 16-244c. Notwithstanding the

739 provisions of subdivision (1) of subsection (h) of section 16-244c,
740 certificates issued by the New England Power Pool Generation
741 Information System for any Class I renewable energy source acquired
742 pursuant to this section may be retained by the electric distribution
743 company to meet the requirements of section 16-245a.

744 Sec. 21. Subsection (a) of section 16-258e of the 2018 supplement to
745 the general statutes is repealed and the following is substituted in lieu
746 thereof (*Effective from passage*):

747 (a) In furtherance of the Comprehensive Climate and Energy
748 Strategy established pursuant to section 16a-3d, as amended by this
749 act, relating to the evaluation of district heating and thermal loops in
750 high-density areas, on or before January 1, 2018, an electric distribution
751 company serving customers located in a distressed municipality, as
752 defined in section 32-9p, that has a population in excess of one
753 hundred twenty-seven thousand, shall conduct a procurement for
754 electricity and renewable energy credits from a combined heat and
755 power system located in such municipality that (1) has a nameplate
756 capacity of not more than ten megawatts, (2) is in a configuration that
757 is compatible for use with a district heating system, as defined in
758 section 16-258, (3) is owned by a thermal energy transportation
759 company, and (4) may include fuel cells. Such combined heat and
760 power system shall be (A) procured by a thermal energy
761 transportation company through a competitive bidding process, (B) in
762 a configuration compatible for use with a district heating system, and
763 (C) installed at a location that will maximize the efficient use of the
764 thermal energy from the combined heat and power system by a
765 thermal energy transportation company. The thermal energy produced
766 by such combined heat and power system shall be subject to firm
767 customer commitments to subscribe to thermal energy services from
768 such thermal energy transportation company, as demonstrated by
769 such thermal energy transportation company, for the term of the
770 power purchase agreement entered into pursuant to this section. After
771 reviewing any proposals submitted in response to such procurement,

772 the electric distribution company may enter into a power purchase
773 agreement with a thermal energy distribution company for the
774 purchase of electricity and renewable energy credits for a period of not
775 more than twenty years.

776 Sec. 22. Section 16a-3f of the general statutes is repealed and the
777 following is substituted in lieu thereof (*Effective from passage*):

778 On or after January 1, 2013, the Commissioner of Energy and
779 Environmental Protection, in consultation with the procurement
780 manager identified in subsection (l) of section 16-2, the Office of
781 Consumer Counsel and the Attorney General, shall, in coordination
782 with other states in the region of the regional independent system
783 operator, as defined in section 16-1, or on the commissioner's own,
784 solicit proposals, in one solicitation or multiple solicitations, from
785 providers of Class I renewable energy sources, as defined in section 16-
786 1, constructed on or after January 1, 2013. If the commissioner finds
787 such proposals to be in the interest of ratepayers including, but not
788 limited to, the delivered price of such sources, and consistent with the
789 requirements to reduce greenhouse gas emissions in accordance with
790 section 22a-200a, as amended by this act, and in accordance with the
791 policy goals outlined in the Comprehensive Climate and Energy
792 Strategy, adopted pursuant to section 16a-3d, as amended by this act,
793 the commissioner may select proposals from such resources to meet up
794 to four per cent of the load distributed by the state's electric
795 distribution companies. The commissioner may direct the electric
796 distribution companies to enter into power purchase agreements for
797 energy, capacity and environmental attributes, or any combination
798 thereof, for periods of not more than twenty years. Certificates issued
799 by the New England Power Pool Generation Information System for
800 any Class I renewable energy sources procured under this section shall
801 be sold in the New England Power Pool Generation Information
802 System renewable energy credit market to be used by any electric
803 supplier or electric distribution company to meet the requirements of
804 section 16-245a. Any such agreement shall be subject to review and

805 approval by the Public Utilities Regulatory Authority, which review
806 shall commence upon the filing of the signed power purchase
807 agreement with the authority. The authority shall issue a decision on
808 such agreement not later than thirty days after such filing. In the event
809 the authority does not issue a decision within thirty days after such
810 agreement is filed with the authority, the agreement shall be deemed
811 approved. The net costs of any such agreement, including costs
812 incurred by the electric distribution companies under the agreement
813 and reasonable costs incurred by the electric distribution companies in
814 connection with the agreement, shall be recovered through a fully
815 reconciling component of electric rates for all customers of electric
816 distribution companies.

817 Sec. 23. Section 16a-3g of the general statutes is repealed and the
818 following is substituted in lieu thereof (*Effective from passage*):

819 On or after July 1, 2013, the Commissioner of Energy and
820 Environmental Protection, in consultation with the procurement
821 manager identified in subsection (l) of section 16-2, the Office of
822 Consumer Counsel and the Attorney General, may, in coordination
823 with other states in the region of the regional independent system
824 operator, as defined in section 16-1, or on the commissioner's own,
825 solicit proposals, in one solicitation or multiple solicitations, from
826 providers of Class I renewable energy sources, as defined in section 16-
827 1, or verifiable large-scale hydropower, as defined in section 16-1. If
828 the commissioner finds such proposals to be in the interest of
829 ratepayers, including, but not limited to, the delivered price of such
830 sources, and consistent with the requirements to reduce greenhouse
831 gas emissions in accordance with section 22a-200a, as amended by this
832 act, and in accordance with the policy goals outlined in the
833 Comprehensive Climate and Energy Strategy, adopted pursuant to
834 section 16a-3d, as amended by this act, and section 129 of public act 11-
835 80, including, but not limited to, base load capacity, peak load shaving
836 and promotion of wind, solar and other renewable and low carbon
837 energy technologies, the commissioner may select proposals from such

838 resources to meet up to five per cent of the load distributed by the
839 state's electric distribution companies. The commissioner may on
840 behalf of all customers of electric distribution companies, direct the
841 electric distribution companies to enter into power purchase
842 agreements for energy, capacity and any environmental attributes, or
843 any combination thereof, for periods of not more than (1) fifteen years,
844 if any such agreement is with a provider of verifiable large-scale
845 hydropower, or (2) twenty years, if any such agreement is with a
846 provider of a Class I renewable energy source. Certificates issued by
847 the New England Power Pool Generation Information System for any
848 Class I renewable energy sources procured under this section shall be
849 sold in the New England Power Pool Generation Information System
850 renewable energy credit market to be used by any electric supplier or
851 electric distribution company to meet the requirements of section 16-
852 245a. Any such agreement shall be subject to review and approval by
853 the Public Utilities Regulatory Authority, which review shall (A)
854 include a public hearing, and (B) be completed not later than sixty
855 days after the date on which such agreement is filed with the
856 authority. The net costs of any such agreement, including costs
857 incurred by the electric distribution companies under the agreement
858 and reasonable costs incurred by the electric distribution companies in
859 connection with the agreement, shall be recovered through a fully
860 reconciling component of electric rates for all customers of electric
861 distribution companies.

862 Sec. 24. Section 16a-3h of the 2018 supplement to the general statutes
863 is repealed and the following is substituted in lieu thereof (*Effective*
864 *from passage*):

865 On or after October 1, 2013, the Commissioner of Energy and
866 Environmental Protection, in consultation with the procurement
867 manager identified in subsection (l) of section 16-2, the Office of
868 Consumer Counsel and the Attorney General, may solicit proposals, in
869 one solicitation or multiple solicitations, from providers of the
870 following resources or any combination of the following resources:

871 Run-of-the-river hydropower, landfill methane gas, biomass, fuel cell,
872 offshore wind or anaerobic digestion, provided such source meets the
873 definition of a Class I renewable energy source pursuant to section 16-
874 1, or energy storage systems. In making any selection of such
875 proposals, the commissioner shall consider factors, including, but not
876 limited to (1) whether the proposal is in the interest of ratepayers,
877 including, but not limited to, the delivered price of such sources, (2)
878 the emissions profile of a relevant facility, (3) any investments made by
879 a relevant facility to improve the emissions profile of such facility, (4)
880 the length of time a relevant facility has received renewable energy
881 credits, (5) any positive impacts on the state's economic development,
882 (6) whether the proposal is consistent with requirements to reduce
883 greenhouse gas emissions in accordance with section 22a-200a, as
884 amended by this act, including, but not limited to, the development of
885 combined heat and power systems, (7) whether the proposal is
886 consistent with the policy goals outlined in the Comprehensive
887 Climate and Energy Strategy adopted pursuant to section 16a-3d, as
888 amended by this act, (8) whether the proposal promotes electric
889 distribution system reliability and other electric distribution system
890 benefits, including, but not limited to, microgrids, (9) whether the
891 proposal promotes the policy goals outlined in the state-wide solid
892 waste management plan developed pursuant to section 22a-241a, and
893 (10) the positive reuse of sites with limited development opportunities,
894 including, but not limited to, brownfields or landfills, as identified by
895 the commissioner in any solicitation issued pursuant to this section.
896 The commissioner may select proposals from such resources to meet
897 up to four per cent of the load distributed by the state's electric
898 distribution companies, provided the commissioner shall not select
899 proposals for more than three per cent of the load distributed by the
900 state's electric distribution companies from offshore wind resources.
901 The commissioner may direct the electric distribution companies to
902 enter into power purchase agreements for energy, capacity and
903 environmental attributes, or any combination thereof, for periods of
904 not more than twenty years on behalf of all customers of the state's

905 electric distribution companies. Certificates issued by the New
906 England Power Pool Generation Information System for any Class I
907 renewable energy sources procured under this section may be: (A)
908 Sold in the New England Power Pool Generation Information System
909 renewable energy credit market to be used by any electric supplier or
910 electric distribution company to meet the requirements of section 16-
911 245a, provided the revenues from such sale are credited to all
912 customers of the contracting electric distribution company; or (B)
913 retained by the electric distribution company to meet the requirements
914 of section 16-245a. In considering whether to sell or retain such
915 certificates, the company shall select the option that is in the best
916 interest of such company's ratepayers. Any such agreement shall be
917 subject to review and approval by the Public Utilities Regulatory
918 Authority, which review shall be completed not later than sixty days
919 after the date on which such agreement is filed with the authority. The
920 net costs of any such agreement, including costs incurred by the
921 electric distribution companies under the agreement and reasonable
922 costs incurred by the electric distribution companies in connection
923 with the agreement, shall be recovered through a fully reconciling
924 component of electric rates for all customers of electric distribution
925 companies. All reasonable costs incurred by the Department of Energy
926 and Environmental Protection associated with the commissioner's
927 solicitation and review of proposals pursuant to this section shall be
928 recoverable through the nonbypassable federally mandated congestion
929 charges, as defined in section 16-1.

930 Sec. 25. Subsection (d) of section 16a-3i of the general statutes is
931 repealed and the following is substituted in lieu thereof (*Effective from*
932 *passage*):

933 (d) In the event there is such a presumption pursuant to subsection
934 (a) of this section and the commissioner finds a material shortage of
935 Class I renewable energy sources pursuant to subsection (b) of this
936 section, and in addition to determining the adequacy pursuant to
937 subsection (c) of this section, the commissioner shall, in consultation

938 with the procurement manager identified in subsection (l) of section
939 16-2, the Office of Consumer Counsel and the Attorney General, solicit
940 proposals from providers of Class I renewable energy sources, as
941 defined in section 16-1, operational as of the date that such solicitation
942 is issued. If the commissioner, in consultation with the procurement
943 manager identified in subsection (l) of section 16-2, finds such
944 proposals to be in the interest of ratepayers including, but not limited
945 to, the delivered price of such sources, and consistent with the
946 requirements to reduce greenhouse gas emissions in accordance with
947 section 22a-200a, as amended by this act, and in accordance with the
948 policy goals outlined in the Comprehensive Climate and Energy
949 Strategy, adopted pursuant to section 16a-3d, as amended by this act,
950 the commissioner, in consultation with the procurement manager
951 identified in subsection (l) of section 16-2, may select proposals from
952 such sources to meet up to the amount necessary to ensure an
953 adequate incremental supply of Class I renewable energy sources to
954 rectify any projected shortage of Class I renewable energy supply
955 identified pursuant to subsection (c) of this section. The commissioner
956 shall direct the electric distribution companies to enter into power
957 purchase agreements for energy, capacity and environmental
958 attributes, or any combination thereof, from such selected proposals
959 for periods of not more than ten years. Certificates issued by the New
960 England Power Pool Generation Information System for any Class I
961 renewable energy sources procured under this section shall be sold in
962 the New England Power Pool Generation Information System
963 renewable energy credit market to be used by any electric supplier or
964 electric distribution company to meet the requirements of section 16-
965 245a. Any such agreement shall be subject to review and approval by
966 the Public Utilities Regulatory Authority, which review shall
967 commence upon the filing of the signed power purchase agreement
968 with the authority. The authority shall issue a decision on such
969 agreement not later than thirty days after such filing. In the event the
970 authority does not issue a decision within thirty days after such
971 agreement is filed with the authority, the agreement shall be deemed

972 approved. The net costs of any such agreement, including costs
973 incurred by the electric distribution companies under the agreement
974 and reasonable costs incurred by the electric distribution companies in
975 connection with the agreement, shall be recovered through a fully
976 reconciling component of electric rates for all customers of electric
977 distribution companies.

978 Sec. 26. Subsection (a) of section 16a-3j of the general statutes is
979 repealed and the following is substituted in lieu thereof (*Effective from*
980 *passage*):

981 (a) In order to secure cost-effective resources to provide more
982 reliable electric service for the benefit of the state's electric ratepayers
983 and to meet the state's energy and environmental goals and policies
984 established in the Integrated Resources Plan, pursuant to section 16a-
985 3a, as amended by this act, and the Comprehensive Climate and
986 Energy Strategy, pursuant to section 16a-3d, as amended by this act,
987 the Commissioner of Energy and Environmental Protection, in
988 consultation with the procurement manager identified in subsection (l)
989 of section 16-2, the Office of Consumer Counsel and the Attorney
990 General, may, in coordination with other states in the control area of
991 the regional independent system operator, as defined in section 16-1,
992 or on behalf of Connecticut alone, issue multiple solicitations for long-
993 term contracts from providers of resources described in subsections
994 (b), (c) and (d) of this section.

995 Sec. 27. Subsection (e) of section 16a-3j of the general statutes is
996 repealed and the following is substituted in lieu thereof (*Effective from*
997 *passage*):

998 (e) The Commissioner of Energy and Environmental Protection, in
999 consultation with the procurement manager identified in subsection (l)
1000 of section 16-2, the Office of Consumer Counsel and the Attorney
1001 General, shall evaluate project proposals received under any
1002 solicitation issued pursuant to subsection (b), (c) or (d) of this section,

1003 based on factors including, but not limited to, (1) improvements to the
1004 reliability of the electric system, including during winter peak
1005 demand; (2) whether the benefits of the proposal outweigh the costs to
1006 ratepayers; (3) fuel diversity; (4) the extent to which the proposal
1007 contributes to meeting the requirements to reduce greenhouse gas
1008 emissions and improve air quality in accordance with sections 16-245a,
1009 22a-174 [L] and 22a-200a, as amended by this act; (5) whether the
1010 proposal is in the best interest of ratepayers; and (6) whether the
1011 proposal is aligned with the policy goals outlined in the Integrated
1012 Resources Plan, pursuant to section 16a-3a, as amended by this act,
1013 and the Comprehensive Climate and Energy Strategy, pursuant to
1014 section 16a-3d, as amended by this act, including, but not limited to,
1015 environmental impacts. In conducting such evaluation, the
1016 commissioner may also consider the extent to which project proposals
1017 provide economic benefits for the state. In evaluating project proposals
1018 received under any solicitation issued pursuant to subsection (b), (c) or
1019 (d) of this section, the commissioner shall compare the costs and
1020 benefits of such proposals relative to the expected or actual costs and
1021 benefits of other resources eligible to respond to the other
1022 procurements authorized pursuant to this section.

1023 Sec. 28. Subsection (a) of section 16a-3m of the 2018 supplement to
1024 the general statutes is repealed and the following is substituted in lieu
1025 thereof (*Effective from passage*):

1026 (a) For the purposes of this section:

1027 (1) "Best interest of ratepayers" means the benefits of a contract or
1028 proposal outweigh the costs to electric ratepayers, based on whether
1029 the delivered prices of sources included in such contract or proposal
1030 are less than the forecasted price of energy and capacity, as determined
1031 by the commissioner or the commissioner's designee, and based on a
1032 consideration of the following factors, as determined by the
1033 commissioner or the commissioner's designee: (A) Impacts on electric
1034 system operations and reliability; (B) the extent to which such contract

1035 or proposal will contribute to (i) the local sourcing requirement set by
1036 the regional independent system operator, as defined in section 16-1,
1037 and (ii) meeting the requirements to reduce greenhouse gas emissions
1038 and improve air quality in accordance with sections 16-245a, 22a-174
1039 and 22a-200a, as amended by this act; (C) fuel diversity; and (D)
1040 whether the proposal is aligned with the policy goals outlined in the
1041 Integrated Resources Plan developed pursuant to section 16a-3a, as
1042 amended by this act, and the Comprehensive Climate and Energy
1043 Strategy developed pursuant to section 16a-3d, as amended by this act,
1044 including, but not limited to, environmental impacts; and

1045 (2) "Eligible nuclear power generating facility" means a nuclear
1046 power generating facility that is located in the control area of the
1047 regional independent system operator, as defined in section 16-1, and
1048 is licensed to operate through January 1, 2030, or later.

1049 Sec. 29. Subsections (b) and (c) of section 22a-200a of the general
1050 statutes are repealed and the following is substituted in lieu thereof
1051 (*Effective from passage*):

1052 (b) On or before January 1, 2010, and biannually thereafter, the state
1053 agencies that are members of the [Governor's Steering Committee]
1054 Connecticut Council on Climate Change shall submit a report to the
1055 Secretary of the Office of Policy and Management and the
1056 Commissioner of Energy and Environmental Protection. The report
1057 shall identify existing and proposed activities and improvements to
1058 the facilities of such agencies that are designed to meet state agency
1059 energy savings goals established by the Governor. The report shall also
1060 identify policies and regulations that could be adopted in the near
1061 future by such agencies to reduce greenhouse gas emissions in
1062 accordance with subsection (a) of this section.

1063 (c) Not later than January 1, 2012, and every three years thereafter,
1064 the Commissioner of Energy and Environmental Protection shall, in
1065 consultation with the Secretary of the Office of Policy and

1066 Management and the [Governor's Steering Committee] Connecticut
 1067 Council on Climate Change, report, in accordance with the provisions
 1068 of section 11-4a, to the joint standing committees of the General
 1069 Assembly having cognizance of matters relating to the environment,
 1070 energy and transportation on the quantifiable emissions reductions
 1071 achieved pursuant to subsection (a) of this section. The report shall
 1072 include a schedule of proposed regulations, policies and strategies
 1073 designed to achieve the limits of greenhouse gas emissions imposed by
 1074 said subsection, an assessment of the latest scientific information and
 1075 relevant data regarding global climate change and the status of
 1076 greenhouse gas emission reduction efforts in other states and
 1077 countries.

1078 Sec. 30. Section 22a-200e of the general statutes is repealed. (*Effective*
 1079 *from passage*)

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>from passage</i>	8-23(d)
Sec. 2	<i>from passage</i>	16a-3a(a)
Sec. 3	<i>from passage</i>	16a-3d
Sec. 4	<i>from passage</i>	16a-3e
Sec. 5	<i>from passage</i>	16a-27(h)
Sec. 6	<i>from passage</i>	22a-92(a)
Sec. 7	<i>from passage</i>	22a-93(7)
Sec. 8	<i>from passage</i>	22a-93(19)
Sec. 9	<i>from passage</i>	22a-94
Sec. 10	<i>from passage</i>	22a-200a(a)
Sec. 11	<i>from passage</i>	22a-478(a)
Sec. 12	<i>from passage</i>	25-68b
Sec. 13	<i>from passage</i>	25-68d(h)
Sec. 14	<i>from passage</i>	25-68o
Sec. 15	<i>from passage</i>	28-5(g)
Sec. 16	<i>from passage</i>	New section
Sec. 17	<i>from passage</i>	16-2(m)
Sec. 18	<i>from passage</i>	16-19e(b) and (c)
Sec. 19	<i>from passage</i>	16-19ff(a)

Sec. 20	<i>from passage</i>	16-244y
Sec. 21	<i>from passage</i>	16-258e(a)
Sec. 22	<i>from passage</i>	16a-3f
Sec. 23	<i>from passage</i>	16a-3g
Sec. 24	<i>from passage</i>	16a-3h
Sec. 25	<i>from passage</i>	16a-3i(d)
Sec. 26	<i>from passage</i>	16a-3j(a)
Sec. 27	<i>from passage</i>	16a-3j(e)
Sec. 28	<i>from passage</i>	16a-3m(a)
Sec. 29	<i>from passage</i>	22a-200a(b) and (c)
Sec. 30	<i>from passage</i>	Repealer section

Statement of Purpose:

To implement the Governor's budget recommendations.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]



Legislative Testimony of the Connecticut Green Bank
Environment Committee
March 14, 2018

Regarding Senate Bill 7

AN ACT CONCERNING CLIMATE CHANGE PLANNING AND RESILIENCY

As the nation's first green bank, the Connecticut Green Bank ("Green Bank") leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Since its inception, the Green Bank has mobilized nearly \$1.2 billion of investment into Connecticut's clean energy economy, supported the creation of over 14,000 direct, indirect and induced jobs, reduced the energy burden on over 26,000 families and businesses, deployed over 250 MW of clean energy, helped reduce over 4.0 million metric tons of CO2 emissions over the life of the projects, and generated over \$50 million in tax revenues to the State of Connecticut. For its innovation and performance, the Green Bank was awarded with the "Innovations in American Government Award" by Harvard University's Kennedy School's Ash Center in 2017. The Green Bank supports the policy vision of cleaner, cheaper and more reliable energy sources for Connecticut – while creating jobs and supporting local economic development.

The Connecticut Green Bank (Green Bank) is supportive of Senate Bill 7.

Specifically, the Green Bank is supportive of the following items:

- **Comprehensive Energy Strategy** – the inclusion of Connecticut's public policy goals to reduce greenhouse gas emissions in the most "cost-effective" manner in the Comprehensive Energy Strategy (i.e., Comprehensive Climate and Energy Strategy), as well as the requirement to complete such strategy every four (4) years. The Green Bank would like to note that the Governor's Council on Climate Change has also included some principles in relation to how future measures to reduce greenhouse gas emissions should be looked at – see DEEP climate change website for details;¹
- **Integrated Resources Plan** – the inclusion of Connecticut's public policy goals to reduce greenhouse gas emissions in the Integrated Resources Plan;
- **Emission Reduction Target** – the addition of a greenhouse gas emission reduction target of 45 percent by 2030;
 - The Governor's Council on Climate Change has for the past two years assessed a number of pathways to achieve the long-term emission reduction

¹ http://www.ct.gov/deep/cwp/view.asp?a=4423&q=521742&deepNav_GID=2121

target of reducing emissions of 2001 levels by 80 percent by the year 2050. The analyses have shown that it will be a challenge to achieve these targets, however, there will be economy-wide benefits in Connecticut along the way by reducing greenhouse gas emissions.

- **Creation of Council** – the establishment of the Connecticut Council on Climate Change, and the various public and quasi-public agency involvement on that council; and
- **Coastal Resilience** – the preservation and enhancement of coastal resources and communities in the face of climate change and sea level rise.
 - The challenges of climate change and sea level rise present a formidable challenge for preserving and improving Connecticut’s coastal resources and communities. The Green Bank is committed to investing in solutions that will allow our state both to combat these environmental changes and adapt to them. Energy systems that combine clean energy generation such as solar with battery energy storage can provide affordable, emissions-free electricity from a source that is also available when most needed, including during periods of grid outage, and can provide additional savings through energy load and demand management.

In 2017, the Green Bank was awarded a program-related investment from the Kresge Foundation to support resilient solar and battery energy storage systems in coastal and urban Connecticut. The Green Bank has combined the financial investment from Kresge with new and existing expertise and resources to help identify, develop and fund projects. These efforts include a special focus on fostering projects that serve low- and moderate-income communities.

Projects that include energy storage are complex. Developing a solution that meets the energy needs of a building and can generate sufficient economic returns requires more granular analysis of energy loads than a generation-alone project. The Green Bank, relying on our own expertise and partnerships, is bringing together the resources needed for initial opportunity assessments, deeper technical analysis, and funding of viable projects. However, the lack of a statewide policy and program for deploying energy storage and capturing its benefits severely hampers the scale that we and others can achieve in delivering cleaner and more resilient energy to the regions and communities who need it most.



General Assembly

February Session, 2018

Raised Bill No. 420

LCO No. 2121



Referred to Committee on PLANNING AND DEVELOPMENT

Introduced by:
(PD)

AN ACT REPEALING THE COMMERCIAL SOLAR TAX EXEMPTION.

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

1 Section 1. Subdivision (57) of section 12-81 of the general statutes is
2 repealed and the following is substituted in lieu thereof (*Effective*
3 *January 1, 2019*):

4 (57) (A) (i) Any Class I renewable energy source, as defined in
5 section 16-1, or hydropower facility described in subdivision (21) of
6 subsection (a) of section 16-1, installed for the generation of electricity
7 for private residential use or on a farm, as defined in subsection (q) of
8 section 1-1, provided such installation occurs on or after October 1,
9 2007, and further provided such installation is for a single family
10 dwelling, a multifamily dwelling consisting of two to four units or a
11 farm, (ii) any passive or active solar water or space heating system, or
12 (iii) any geothermal energy resource. In the case of clause (ii) or (iii) of
13 this subparagraph, such exemption shall apply only to the amount by
14 which the assessed valuation of the real property equipped with such
15 system or resource exceeds the assessed valuation of such real
16 property equipped with the conventional portion of the system or

17 resource;

18 (B) For assessment years commencing on and after October 1, 2013,
19 except for solar power, any Class I renewable energy source, as
20 defined in section 16-1, hydropower facility described in subdivision
21 (21) of subsection (a) of section 16-1, [or solar thermal] or geothermal
22 renewable energy source, installed for generation or displacement of
23 energy, provided (i) such installation occurs on or after January 1,
24 2010, (ii) such installation is for commercial or industrial purposes, (iii)
25 the nameplate capacity of such source or facility does not exceed the
26 load for the location where such generation or displacement is located,
27 and (iv) such source or facility is located in a distressed municipality,
28 as defined in section 32-9p, with a population between one hundred
29 twenty-five thousand and one hundred thirty-five thousand ;

30 (C) For assessment years commencing on and after October 1, 2013,
31 any municipality may, upon approval by its legislative body or in any
32 town in which the legislative body is a town meeting, by the board of
33 selectmen, abate up to one hundred per cent of property tax, except for
34 solar power, for any Class I renewable energy source, as defined in
35 section 16-1, hydropower facility described in subdivision (21) of
36 subsection (a) of section 16-1, [or solar thermal] or geothermal
37 renewable energy source, installed for generation or displacement of
38 energy, provided (i) such installation occurs between January 1, 2010,
39 and December 31, 2013, (ii) such installation is for commercial or
40 industrial purposes, (iii) the nameplate capacity of such source or
41 facility does not exceed the load for the location where such generation
42 or displacement is located, and (iv) such source or facility is not
43 located in a municipality described in subparagraph (B) of this
44 subdivision;

45 (D) For assessment years commencing on and after October 1, 2014,
46 except for solar power, any (i) Class I renewable energy source, as
47 defined in section 16-1, (ii) hydropower facility described in
48 subdivision (21) of subsection (a) of section 16-1, or (iii) [solar thermal
49 or] geothermal renewable energy source, installed for generation or

50 displacement of energy, provided (I) such installation occurs on or
51 after January 1, 2014, (II) is for commercial or industrial purposes, (III)
52 the nameplate capacity of such source or facility does not exceed the
53 load for the location where such generation or displacement is located
54 or the aggregated load of the beneficial accounts for any Class I
55 renewable energy source participating in virtual net metering pursuant
56 to section 16-244u, and (IV) in the case of clause (iii) of this
57 subparagraph, such exemption shall apply only to the amount by
58 which the assessed valuation of the real property equipped with such
59 source exceeds the assessed valuation of such real property equipped
60 with the conventional portion of the source;

61 (E) Any person claiming the exemption provided in this subdivision
62 for any assessment year shall, on or before the first day of November
63 in such assessment year, file with the assessor or board of assessors in
64 the town in which such hydropower facility, Class I renewable energy
65 source, solar thermal or geothermal renewable energy source or
66 passive or active solar water or space heating system or geothermal
67 energy resource is located, a written application claiming such
68 exemption. Failure to file such application in the manner and form as
69 provided by such assessor or board within the time limit prescribed
70 shall constitute a waiver of the right to such exemption for such
71 assessment year. Such application shall not be required for any
72 assessment year following that for which the initial application is filed,
73 provided if such hydropower facility, Class I renewable energy source,
74 solar thermal or geothermal renewable energy source or passive or
75 active solar water or space heating system or geothermal energy
76 resource is altered in a manner which would require a building permit,
77 such alteration shall be deemed a waiver of the right to such
78 exemption until a new application, applicable with respect to such
79 altered source, is filed and the right to such exemption is established as
80 required initially;

81 (F) For assessment years commencing on and after October 1, 2015,
82 any municipality may, by vote of its legislative body or, in a
83 municipality where the legislative body is a town meeting, by vote of

84 the board of selectmen, abate up to one hundred per cent of the
85 property taxes due for any tax year, for not longer than the term of the
86 power purchase agreement, with respect to any Class I renewable
87 energy source, as defined in section 16-1, that is the subject of such
88 power purchase agreement approved by the Public Utilities
89 Regulatory Authority pursuant to section 16a-3f;

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>January 1, 2019</i>	12-81(57)

Statement of Purpose:

To repeal a commercial solar tax exemption.

[Proposed deletions are enclosed in brackets. Proposed additions are indicated by underline, except that when the entire text of a bill or resolution or a section of a bill or resolution is new, it is not underlined.]



Legislative Testimony of the Connecticut Green Bank
Planning and Development Committee
March 16, 2018

Regarding [Senate Bill 420](#)
AN ACT REPEALING THE COMMERCIAL SOLAR TAX EXEMPTION

As the nation’s first green bank, the Connecticut Green Bank (“Green Bank”) leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Since its inception, the Green Bank has mobilized nearly \$1.2 billion of investment into Connecticut’s clean energy economy, supported the creation of over 14,000 direct, indirect and induced jobs, reduced the energy burden on over 26,000 families and businesses, deployed over 250 MW of clean energy, helped reduce over 4.0 million metric tons of CO2 emissions over the life of the projects, and generated over \$50 million in tax revenues to the State of Connecticut. For its innovation and performance, the Green Bank won the “Innovations in American Government Awards” by Harvard University’s Kennedy School’s Ash Center in 2017. The Green Bank supports the policy vision of cleaner, cheaper and more reliable energy sources for Connecticut – while creating jobs and supporting local economic development.

The Connecticut Green Bank (Green Bank) opposes Senate Bill 420 and proposes alternative language.

Connecticut has been supportive of clean energy policies to date. Solar photovoltaic (“solar PV”) systems that primarily utilize the electricity produced onsite to lower a residential or commercial property owner’s energy bill have tax exemptions in place for both local property tax and state sales tax, as do many other states. In return, the solar industry creates jobs, reduces carbon dioxide emissions from central station power plants, and generates individual and corporate income taxes to the State. Most of the leading states in solar PV deployment exempt commercial owners from the incremental value of solar PV equipment (see Table 1).

Table 1. State rankings for solar PV deployment, with commercial property tax data.¹

Total		Property Tax Exemption	Average Property Tax Mill Rate
State	Ranking		
CA	1	Yes	0.81%

¹ State rankings based on Solar Energy and Industry Association (SEIA). Property tax exemption policy based on DSIRE and (for CT) OPM website (<http://www.ct.gov/opm/cwp/view.asp?a=2987&q=385976>).

Total		<u>Property Tax Exemption</u>	<u>Average Property Tax Mill Rate</u>
State	Ranking		
NV	2	<u>Yes</u>	0.86%
TX	3	<u>Yes</u>	1.90%
NC	4	<u>Yes</u>	0.85%
FL	5	<u>Yes</u>	1.06%
MA	6	<u>Yes</u> (For 20 years)	1.21%
NY	7	<u>No</u> (Local Can Exempt)	1.64%
AZ	8	<u>Yes</u>	0.80%
SC	9	No	0.57%
MS	10	No	0.80%
CT	15	Yes	3.04%

A business' use of electricity produced by their solar PV system is for self-consumption. Under the current compensation regime of net metering, power generated in excess of a property's typical electric demand is compensated at a lower rate that doesn't help improve the marginal economics of a project (e.g., for what it costs to add extra system capacity to the project). This same principle applies in the residential sector, where the incentive offered by the Green Bank is sized to less than or equal to 100% of a household's annual electricity usage.

Per existing law, Connecticut General Statute Section 12-81, commercial solar PV systems that export energy for offsite use is not generally exempt from property tax.² The Green Bank agrees with this policy. Land use intensive, grid-scale systems are worthy and cost-efficient projects that help "green" the power grid. These systems often have generating capacities in megawatts or tens of megawatts (MW), and they are *not* built with the aim of offsetting electricity demand at the site of the project.

² Except for the export of energy pursuant to virtual net metering. See Connecticut General Statute 12-81(57) (D)(iii)(III).

By contrast, SB 420 aims to treat solar differently than other Class I renewable energy sources. SB 420 will revoke the remaining property tax exemptions for commercial solar PV systems by including those that property owners install solely for their own use. Small, non-merchant solar PV projects are fundamentally different from the energy-exporting grid-scale solar PV projects that do currently pay property tax. For both commercial and residential systems, the Green Bank believes that these should remain exempt from property taxes.

State policy aims are to expand renewable energy in Connecticut, and this proposal would increase the cost of commercial solar PV, disincentivizing it and making it less viable for commercial customers seeking to reduce the burden of energy costs. Solar PV projects are most frequently developed under lease or “power purchase agreement” (PPA) models, whereby the actual owner of the system is the 3rd party solar company. Currently, costs associated with leases or PPAs are passed on to the property owner. Thus it should be expected that solar companies would price their commercial projects higher in response to this proposal as this change would add 5.6 cents to the cost of each kilowatt hour of electricity supplied by a typical 50 kilowatt system in its initial years of service. Such an increase would make it impossible for PPAs to be offered in the state (see Table 2 attached).

Local businesses and manufacturers remain competitive by taking control of their energy profile – reining in their usage and costs, and diversifying their resources. SB 420 would harm the cost calculus employers face when considering solar PV, and would significantly damage the speed at which such systems pay their own costs back through the energy savings they create or potentially eliminate savings altogether. Adding the incremental assessed solar PV system value to a property’s taxable base will result in higher taxes and thus higher recurring costs for the owner. This would be a natural disincentive to install solar PV as it would increase the time needed to achieve economic payback or render the breakeven point impossible to achieve for systems owned by 3rd party solar companies.

We fully recognize the fiscal constraints municipalities face. However, the solution is not to make it harder for local manufacturers to install solar PV. By improving their buildings, commercial properties are creating operational efficiencies and becoming more durable fixtures in our communities.

Also, the Green Bank expects that the early 2018 imposition of federal trade tariffs on solar PV module imports will weigh most heavily on *commercial* solar PV projects, negatively impacting their economics and the average payback on upfront system costs. This is because the commercial market with larger system sizes and installation efficiencies tends to see narrower profit margins on a per panel basis than residential projects.

Rather than pursue SB420, the Green Bank recommends the committee instead substitute a new bill draft to clarify the existing residential property tax exemption on solar PV.

As stated earlier, solar PV for the residential sector (1-4 family homes) is exempt from property taxes. The Green Bank has begun seeing several municipalities rejecting this exemption. These rejections are unexplainedly only on residential third party owned (TPO) solar PV systems, e.g., systems on a roof as part of a lease or PPA as opposed to systems owned outright by the homeowner.

The Green Bank believes the legislative intent of the tax exemption is clear, however a small but growing group of assessors are challenging it. They are making an argument that net metered systems are not for “residential use” - as would be required by statute for the exemption - because the systems can supply a small portion of their power back to the grid. In net metering, solar is deemed to be consumed onsite and extinguished as a credit on the customer’s electricity bill; it acts as an offset of the property’s energy use. The physical reality is that virtually all solar PV systems supply electricity back to the grid since the electrons produced from solar modules are immediately comingled with the interconnected utility distribution system. Importantly, this same regime was in place at the time the original exemption was enacted. Moreover, in challenging the statutory exemption only for third party owned systems, these municipalities are likely making less of a legal calculation and more of a political one. The Green Bank believes that this statute should be revised to better convey the intent of the exemption to include all residential solar PV systems; this would alleviate the intensifying resource drain that these court proceedings represent.

**Table 2. Value of Property Tax Exemption at the CT Average Mill Rate
(cents per kilowatt-hour)**

Yr End	Orig Cost	Dep	Dep Val	Assmt	average mill rate	Tax \$	gross power (kwh)	degredation factor	net power (kwh)	Property tax cost per kwh
2018	162,500	97%	157,625	110,338	30.4	3,354.26	56,940	100	56,940	\$ 0.059
2019	162,500	94%	152,750	106,925	30.4	3,250.52	56,940	99.5	56,655	\$ 0.057
2020	162,500	91%	147,875	103,513	30.4	3,146.78	56,940	99	56,371	\$ 0.056
2021	162,500	88%	143,000	100,100	30.4	3,043.04	56,940	98.5	56,086	\$ 0.054
2022	162,500	85%	138,125	96,688	30.4	2,939.30	56,940	98	55,801	\$ 0.053
2023	162,500	82%	133,250	93,275	30.4	2,835.56	56,940	97.5	55,517	\$ 0.051
2024	162,500	79%	128,375	89,863	30.4	2,731.82	56,940	97	55,232	\$ 0.049
2025	162,500	76%	123,500	86,450	30.4	2,628.08	56,940	96.5	54,947	\$ 0.048
2026	162,500	73%	118,625	83,038	30.4	2,524.34	56,940	96	54,662	\$ 0.046
2027	162,500	70%	113,750	79,625	30.4	2,420.60	56,940	95.5	54,378	\$ 0.045
2028	162,500	67%	108,875	76,213	30.4	2,316.86	56,940	95	54,093	\$ 0.043
2029	162,500	64%	104,000	72,800	30.4	2,213.12	56,940	94.5	53,808	\$ 0.041
2030	162,500	60%	97,500	68,250	30.4	2,074.80	56,940	94	53,524	\$ 0.039
2031	162,500	57%	92,625	64,838	30.4	1,971.06	56,940	93.5	53,239	\$ 0.037
2032	162,500	54%	87,750	61,425	30.4	1,867.32	56,940	93	52,954	\$ 0.035
2033	162,500	51%	82,875	58,013	30.4	1,763.58	56,940	92.5	52,670	\$ 0.033
2034	162,500	48%	78,000	54,600	30.4	1,659.84	56,940	92	52,385	\$ 0.032
2035	162,500	44%	71,500	50,050	30.4	1,521.52	56,940	91.5	52,100	\$ 0.029
2036	162,500	40%	65,000	45,500	30.4	1,383.20	56,940	91	51,815	\$ 0.027
2037	162,500	30%	48,750	34,125	30.4	1,037.40	56,940	90.5	51,531	\$ 0.020

Example: 2018 162,500 X .97= 157,625 X .7 = 110,338 X mill rate = tax dollar

PROPOSED LEGISLATION FOR SPECIAL CAPITAL RESERVE FUND (SCRF)

This proposal (i) clarifies the current statute that authorizes the Green Bank to issue its debt obligations secured by the State's special capital reserve fund (SCRF) when those obligations are other than in the form of a "bond", and (ii) validates the ability for the State, acting through the Secretary of OPM and the State Treasurer, to approve the SCRF application to a lease/purchase agreement obligation entered into by the Green Bank in December, 2017. Due to the expeditious adoption of the federal *Tax Cuts and Jobs Act* (the "Act"), the Green Bank did not have sufficient time to prepare all documentation required to satisfy the self-sufficiency requirements in order for the Secretary of OPM and the State Treasurer to approve the SCRF before the transaction closed in December, 2017.

Suggested draft language to effectuate these provisions would be as follows:

Connecticut General Statutes Section 16-245mm would be revised to read as follows:

Sec. 16-245mm. Special capital reserve funds. (a) For purposes of this section, "required minimum capital reserve" means the maximum amount permitted to be deposited in a special capital reserve fund by the Internal Revenue Code of 1986, or any subsequent corresponding internal revenue code of the United States, as amended from time to time, to permit the interest on such bonds to be excluded from gross income for federal tax purposes and secured by such special capital reserve fund.

(b) In connection with the issuance of bonds, notes or other obligations, or to refund bonds previously issued by the Connecticut Green Bank, or in connection with the issuance of bonds, notes or other obligations to effect a refinancing or other restructuring with respect to one or more projects, said bank may create and establish one or more reserve funds to be known as special capital reserve funds, and may pay into such special capital reserve funds (1) any moneys appropriated and made available by the state for the purposes of such special capital reserve funds, (2) any proceeds of the sale of notes or bonds or other obligations, to the extent provided in the resolution of said bank authorizing the issuance thereof, and (3) any other moneys which may be made available to said bank for the purpose of such special capital reserve funds from any other source or sources.

(c) The moneys held in or credited to any special capital reserve fund established under this section, except as hereinafter provided, shall be used for (1) the payment of the principal of and interest, when due, whether at maturity or by mandatory sinking fund installments, on bonds, notes or other obligations of the Connecticut

Green Bank secured by such special capital reserve fund as such payments become due, or (2) the purchase of such bonds, notes or other obligations of said bank and the payment of any redemption premium required to be paid when such bonds, notes or other obligations are redeemed prior to maturity, including in any such case by way of reimbursement of a provider of bond insurance or of a credit or liquidity facility that has paid such redemption premiums. Notwithstanding the provisions of subdivisions (1) and (2) of this subsection, said bank may provide that moneys in any such special capital reserve fund shall not be withdrawn therefrom at any time in such amount as would reduce the amount of such moneys to less than the maximum amount of principal and interest becoming due by reasons of maturity or a required sinking fund installment in the then current or any succeeding calendar year on the bonds, notes or other obligations of said bank then outstanding, or less than the required minimum capital reserve, except for the purpose of paying such principal of, redemption premium and interest on such bonds, notes or other obligations of said bank secured by such special capital reserve becoming due and for the payment of which other moneys of said bank are not available. Said bank may provide that it shall not issue bonds, notes or other obligations secured by a special capital reserve fund at any time if the required minimum capital reserve on the bonds, notes or other obligations outstanding and the bonds, notes or other obligations then to be issued and secured by the same special capital reserve fund at the time of issuance exceeds the moneys in the special capital reserve fund, unless said bank, at the time of the issuance of such bonds, notes or other obligations deposits in such special capital reserve fund from the proceeds of the bonds, notes or other obligations so to be issued, or from other sources, an amount which, together with the amount then in such special capital reserve fund, will be not less than the required minimum capital reserve.

(d) Prior to December first, annually, the Connecticut Green Bank shall deposit into any special capital reserve fund, the balance of which has fallen below the required minimum capital reserve of such fund, the full amount required to meet the minimum capital reserve of such fund, as available to said bank from any resources of said bank not otherwise pledged or dedicated to another purpose. On or before December first, annually, but after said bank has made such required deposit, there is deemed to be appropriated from the General Fund such sums, if any, as shall be certified by the chairperson or vice-chairperson of the Connecticut Green Bank to the Secretary of the Office of Policy and Management, the State Treasurer and the joint standing committees of the General Assembly having cognizance of matters relating to finance, revenue and bonding and energy, as necessary to restore each such special capital reserve fund to the amount equal to the required minimum capital reserve of such fund, and such amounts shall be allotted and paid to said bank. For the purpose of evaluation of any such special

capital reserve fund, obligations acquired as an investment for any such special capital reserve fund shall be valued at market. Nothing contained in this section shall preclude said bank from establishing and creating other debt service reserve funds in connection with the issuance of bonds or notes or other obligations of said bank which are not special capital reserve funds. Subject to any agreement or agreements with holders of outstanding notes and bonds and other obligations of said bank, any amount or amounts allotted and paid to said bank pursuant to this subsection shall be repaid to the state from moneys of said bank at such time as such moneys are not required for any other of said bank's corporate purposes, and in any event shall be repaid to the state on the date one year after all bonds and notes and other obligations of said bank theretofore issued on the date or dates such amount or amounts are allotted and paid to said bank or thereafter issued, together with interest on such bonds and notes and other obligations, with interest on any unpaid installments of interest and all costs and expenses in connection with any action or proceeding by or on behalf of the holders thereof, are fully met and discharged.

(e) No bonds, notes or other obligations secured by a special capital reserve fund shall be issued to pay project costs unless the Connecticut Green Bank is of the opinion and determines that the revenues from the project shall be sufficient to (1) pay the principal of and interest on the bonds, notes or other obligations issued to finance the project, (2) establish, increase and maintain any reserves deemed by said bank to be advisable to secure the payment of the principal of and interest on such bonds, notes or other obligations, (3) pay the cost of maintaining the project in good repair and keeping it properly insured, and (4) pay such other costs of the project as may be required.

(f) Notwithstanding the provisions of this section, no bonds, notes or other obligations secured by a special capital reserve fund shall be issued by the Connecticut Green Bank until and unless such issuance has been approved by the Secretary of the Office of Policy and Management or his or her deputy. Any such approval by the secretary pursuant to this subsection shall be in addition to (1) the otherwise required opinion of sufficiency by said bank set forth in subsection (e) of this section, and (2) the approval of the State Treasurer or the Deputy State Treasurer and the documentation by said bank otherwise required under subsection (a) of section 1-124. Such approval may provide for the waiver or modification of such other requirements of this section as the secretary determines to be necessary or appropriate in order to effectuate such issuance, subject to all applicable tax covenants of said bank and the state.

(g) Notwithstanding any other provision contained in this section, the aggregate amount of bonds, notes or other obligations secured by such special capital reserve

fund authorized to be created and established by this section shall not exceed one hundred million dollars.

(h) Notwithstanding any other provision contained in this section, the equipment lease/purchase agreement entered into by the bank in December, 2017 for the installation of solar equipment at various locations of the Connecticut State College and University System may be secured by a special capital reserve fund if the bank provides assurance to the Secretary of the Office of Policy and Management that the revenues from the project and other revenues and funds of the bank shall be sufficient and available to meet all of the obligations of the bank under the lease/purchase agreement so that the amount deemed to be appropriated from the General Fund on any December first under subsection (d) shall not exceed the required minimum capital reserve amount.