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



July 20, 2018

Dear Board of Directors:

I hope everyone is enjoying the great weather we have been having!

We have a regular meeting scheduled for next week for Friday, July 27, 2018 from 9:00-11:00 a.m. in the Colonel Albert Pope Board Room of the Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

In advance, please forgive me! There is a lot of material in this mailing.

On the agenda we have the following items:

- Consent Agenda approval of the meeting minutes for June 28, 2018, progress to target memos, revisions to Comprehensive Plan, and position descriptions. We have also included report outs on governance, PSA approvals over \$75,000, and updated financial statements for the Green Bank through May of 2018 for your perusal.
- <u>Committee Recommendations</u> the Audit, Compliance, and Governance Committee will be recommending the Board of Director approval of the proposed revisions to internal control procedures and employee handbook. The Budget & Operations Committee will be reporting out its review of the 5-year proformas of the Green Bank with and without the Nonprofit (Note document coming next week from Lamont Financial).
- Nonprofit with all of the questions answered, documentation revised, and targets and budgets approved for FY 2019, the staff will be recommending the board approval of the various agreements between the Green Bank and the Nonprofit.
- <u>Incentive Business</u> the staff will provide an update on the pending SHREC securitization. The staff will present their recommendations for Step 14 and beyond incentives for the RSIP as it has reached 70 percent of the public policy target and now focuses on the 300 MW finish line (Note documents coming next week).
- Investment Business the staff will discuss the recently passed "non-impairment" legislation and its implications on the Green Bank's ability to attract private investment into Connecticut given the recent sweeps. The staff will be bringing forth a recommendation to approve the self-sufficiency findings for the use of the SCRF for the CSCU solar PV transaction. And the staff will be bringing forward a continued investment in PosiGen for FY 2019 (Note documents coming next week).
- Other Business if there is time, we will be able to discuss other business.

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. Have a great weekend!

Sincerely,

Bryan Garcia

President and CEO



# **AGENDA**

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

Friday, July 27, 2018 9:00-11:00 a.m.

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

- Call to order
- 2. Public Comments 5 minutes
- 3. Consent Agenda 5 minutes
- 4. Committee Recommendations and Updates 15 minutes
  - a. Audit, Compliance, and Governance Committee 5 minutes
    - i. Internal Account Procedures
    - ii. Employee Handbook Revisions
  - b. Budget and Operations Committee 10 minutes
- 5. Non-Profit Organization Underserved Markets 30 minutes
  - a. Shared Services Agreement
  - b. Capital Grant Agreement CT Green Bank and Nonprofit
  - c. Professional Services Agreements
  - d. Licensing Agreement
  - e. Fee Review Process
- 6. Incentive Business 20 minutes
  - a. SHREC Update
  - b. Residential Solar Investment Program Steps 14 and Beyond
- 7. Investment Business Clean Energy Finance 30 minutes
  - a. Non-Impairment Provision

- b. CSCU SCRF Self Sufficiencyc. PosiGen Investment
- 8. Other Business – 15 minutes
  - a. 2018 Legislative Update
  - b. Sector Updates and Progress to Targets for FY 2018
  - c. CESA SLICE Award for 2018
  - d. Small Business Energy Advantage
  - e. Other Business
- 9. Adjourn

Next Regular Meeting: Friday, October 26, 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

Friday, July 27, 2018 9:00-11:00 a.m.

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

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

#### Resolution #1

Motion to approve the meeting minutes of the Board of Directors for June 28, 2018.

#### Resolution #2

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

**WHEREAS,** the Act directs the Green Bank to develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state;

WHEREAS, the Board of Directors of the Connecticut Green Bank approved a Comprehensive Plan for FY 2017 and FY 2018, including approving annual budgets and targets for FY 2017 and FY 2018.

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Program Performance towards Targets for FY 2018 memos dated July 27, 2018, which provide an overview of the performance of the Infrastructure, Residential, Commercial, Industrial, and Institutional sectors with respect to their FY 2018 targets.

### Resolution #3

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

**WHEREAS,** the Act directs the Green Bank to develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state;

**WHEREAS**, the Budget and Operations Committee reviewed the Comprehensive Plan for FY 2017 and FY 2018 at a meeting on June 7, 2016 and recommended the approval to the Board of Directors; and the Board of Directors subsequently reviewed and approved on July 22, 2016:

**WHEREAS**, Article V of the Green Bank Operating Procedures requires the Green Bank Board of Directors (the "Board") to adopt an Annual Plan for each forthcoming fiscal year;

**WHEREAS**, the Board of Directors reviewed and approved the FY 2018 targets and budget on June 23, 2017, which together with the Comprehensive Plan, are effectively the Annual Plan:

**WHEREAS**, the Board of Directors reviewed and approved the FY 2019 targets and budget on June 28, 2018, which together with the Comprehensive Plan, are effectively the Annual Plan; and

**WHEREAS**, the staff of the Connecticut Green Bank have revised in a redline draft version the Comprehensive Plan for FY 2017 through FY 2019 to include recently approved budget and targets for FY 2019 for the review and approval by the Board of Directors.

**NOW**, therefore be it:

**RESOLVED,** that the Board approves of the revised Comprehensive Plan for FY 2017 through FY 2019 as presented to the Board on July 27, 2018, and subject to nonmaterial modifications made by the officers as described above.

#### Resolution #4

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

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

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Overview of Compliance Reporting and the Board of Directors and Committees for FY 2018 memo dated July 27, 2018 prepared by staff, which provides a summary report of the FY 2018 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

#### Resolution #5

Motion to approve the position descriptions for Vice President of Finance and Managing Director of Operations

- 4. Committee Recommendations and Updates 15 minutes
  - a. Audit, Compliance, and Governance Committee 5 minutes
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    - ii. Employee Handbook Revisions

#### **Resolution #6**

**WHEREAS**, the Audit, Compliance and Governance Committee recommended to the Board of Directors for approval the proposed revisions to Internal Accounting Control Procedures on June 8, 2018.

NOW, therefore be it:

**RESOLVED,** that the Connecticut Green Bank Board of Directors approve the proposed revisions to Internal Accounting Control Procedures as presented.

#### Resolution #7

**RESOLVED,** that the Board of Directors approves the recommendation by the Audit, Compliance, and Governance Committee of the revisions to the Connecticut Green Bank Employee Handbook presented to it on June 8, 2018.

- b. Budget and Operations Committee 10 minutes
- 5. Non-Profit Organization Underserved Markets 30 minutes
  - a. Shared Services Agreement
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**WHEREAS**, on January 5, 2017 the Board of Directors of the Connecticut Green Bank had a strategic retreat at Yale University which identified a need to create a private entity for things that the Green Bank was unable to achieve through the current programs;

**WHEREAS**, on July 12, 2017 the Harvard Kennedy School Ash Center names the Connecticut Green Bank as the winner of the "Innovations in American Government Awards" in 2017 for its nomination of "Sparking the Green Bank Movement" in which the staff presented a vision of "inclusive prosperity";

**WHEREAS,** on October 31, 2017, a budget for the State of Connecticut was signed into law sweeping \$32.6 million of funding from the Green Bank – \$14.0 million from the Clean Energy Fund and \$2.3 million from the Regional Greenhouse Gas Initiative – each year for FY 2018 and FY 2019;

**WHEREAS**, on December 15, 2017, in response to the sweeps, the Board of Directors of the Green Bank approved of a budget mitigation strategy consistent with the Sustainability Pathway Strategy, including the need for staff to present a detailed business plan, budget, and transition plan for certain employees to a Nonprofit;

WHEREAS, on April 3, 2018, the Board of Directors of the Green Bank was presented by staff a detailed business plan to which the Board of Directors then authorized the President and any other duly authorized officers of the Green Bank to participate in the formation of an independent nonprofit non-stock corporation to further the purposes of the Green Bank, including achieving operating leverage and attracting mission-oriented investors for a set of products serving underserved market segments;

WHEREAS, on April 27, 2018, the Board of Directors of the Green Bank was presented a staff transition plan for those individual staff members of the Green Bank transitioning to the Nonprofit and authorized the President of the Green Bank and any other duly authorized officer of the Green Bank to (1) ensure the orderly transition of individuals transitioning from the Green Bank to the Nonprofit, taking into consideration, but not limited to, the Advisory Opinion No. 2018-2 by the Office of State Ethics, (2) provide assistance to the Nonprofit to identify, analyze, and recommend benefit options for the staff transitioning to the Nonprofit, and (3) notifying the individuals that will be transitioning to the Green Bank to the Nonprofit of their last day with the Green Bank tentatively planned for June 30, 2018;

**WHEREAS**, on June 13, 2018, the staff of the Green Bank presented a series of agreements between the Green Bank and the Nonprofit, including Shared Services Agreement, Capital Grant Agreement, Professional Services Agreements, Licensing Agreement, and Working Capital Agreement, for review and approval by the Board of Directors of the Green Bank;

WHEREAS, on June 28, 2018, the Board of Directors of the Green Bank reviewed and approved the recommendation of the staff and Budget & Operations Committee for FY 2019 targets and budget, including allocation of expenses to cover the services being provided by the Nonprofit. The staff of the Green Bank also presented answers to a series of questions raised by the Board of Directors regarding the Green Bank and the Nonprofit prior to presenting a resolution to approve of the series of agreements between the Green Bank and the Nonprofit.

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# **RESOLUTIONS**

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**WHEREAS,** the Act directs the Green Bank to develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state;

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NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Program Performance towards Targets for FY 2018 memos dated July 27, 2018, which provide an overview of the performance of the Infrastructure, Residential, Commercial, Industrial, and Institutional sectors with respect to their FY 2018 targets.

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

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**WHEREAS**, the Budget and Operations Committee reviewed the Comprehensive Plan for FY 2017 and FY 2018 at a meeting on June 7, 2016 and recommended the approval to the Board of Directors; and the Board of Directors subsequently reviewed and approved on July 22, 2016:

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**WHEREAS**, the Board of Directors reviewed and approved the FY 2018 targets and budget on June 23, 2017, which together with the Comprehensive Plan, are effectively the Annual Plan:

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**WHEREAS**, the staff of the Connecticut Green Bank have revised in a redline draft version the Comprehensive Plan for FY 2017 through FY 2019 to include recently approved budget and targets for FY 2019 for the review and approval by the Board of Directors.

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**RESOLVED,** that the Board approves of the revised Comprehensive Plan for FY 2017 through FY 2019 as presented to the Board on July 27, 2018, and subject to nonmaterial modifications made by the officers as described above.

#### Resolution #4

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

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

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Overview of Compliance Reporting and the Board of Directors and Committees for FY 2018 memo dated July 27, 2018 prepared by staff, which provides a summary report of the FY 2018 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

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Motion to approve the position descriptions for Vice President of Finance and Managing Director of Operations

- 4. Committee Recommendations and Updates 15 minutes
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    - ii. Employee Handbook Revisions

#### **Resolution #6**

**WHEREAS**, the Audit, Compliance and Governance Committee recommended to the Board of Directors for approval the proposed revisions to Internal Accounting Control Procedures on June 8, 2018.

NOW, therefore be it:

**RESOLVED,** that the Connecticut Green Bank Board of Directors approve the proposed revisions to Internal Accounting Control Procedures as presented.

#### Resolution #7

**RESOLVED,** that the Board of Directors approves the recommendation by the Audit, Compliance, and Governance Committee of the revisions to the Connecticut Green Bank Employee Handbook presented to it on June 8, 2018.

- b. Budget and Operations Committee 10 minutes
- 5. Non-Profit Organization Underserved Markets 30 minutes
  - a. Shared Services Agreement
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WHEREAS, on January 5, 2017 the Board of Directors of the Connecticut Green Bank had a strategic retreat at Yale University which identified a need to create a private entity for things that the Green Bank was unable to achieve through the current programs;

**WHEREAS**, on July 12, 2017 the Harvard Kennedy School Ash Center names the Connecticut Green Bank as the winner of the "Innovations in American Government Awards" in 2017 for its nomination of "Sparking the Green Bank Movement" in which the staff presented a vision of "inclusive prosperity";

**WHEREAS,** on October 31, 2017, a budget for the State of Connecticut was signed into law sweeping \$32.6 million of funding from the Green Bank – \$14.0 million from the Clean Energy Fund and \$2.3 million from the Regional Greenhouse Gas Initiative – each year for FY 2018 and FY 2019;

**WHEREAS**, on December 15, 2017, in response to the sweeps, the Board of Directors of the Green Bank approved of a budget mitigation strategy consistent with the Sustainability Pathway Strategy, including the need for staff to present a detailed business plan, budget, and transition plan for certain employees to a Nonprofit;

WHEREAS, on April 3, 2018, the Board of Directors of the Green Bank was presented by staff a detailed business plan to which the Board of Directors then authorized the President and any other duly authorized officers of the Green Bank to participate in the formation of an independent nonprofit non-stock corporation to further the purposes of the Green Bank, including achieving operating leverage and attracting mission-oriented investors for a set of products serving underserved market segments;

WHEREAS, on April 27, 2018, the Board of Directors of the Green Bank was presented a staff transition plan for those individual staff members of the Green Bank transitioning to the Nonprofit and authorized the President of the Green Bank and any other duly authorized officer of the Green Bank to (1) ensure the orderly transition of individuals transitioning from the Green Bank to the Nonprofit, taking into consideration, but not limited to, the Advisory Opinion No. 2018-2 by the Office of State Ethics, (2) provide assistance to the Nonprofit to identify, analyze, and recommend benefit options for the staff transitioning to the Nonprofit, and (3) notifying the individuals that will be transitioning to the Green Bank to the Nonprofit of their last day with the Green Bank tentatively planned for June 30, 2018;

**WHEREAS**, on June 13, 2018, the staff of the Green Bank presented a series of agreements between the Green Bank and the Nonprofit, including Shared Services Agreement, Capital Grant Agreement, Professional Services Agreements, Licensing Agreement, and Working Capital Agreement, for review and approval by the Board of Directors of the Green Bank;

WHEREAS, on June 28, 2018, the Board of Directors of the Green Bank reviewed and approved the recommendation of the staff and Budget & Operations Committee for FY 2019 targets and budget, including allocation of expenses to cover the services being provided by the Nonprofit. The staff of the Green Bank also presented answers to a series of questions raised by the Board of Directors regarding the Green Bank and the Nonprofit prior to presenting a resolution to approve of the series of agreements between the Green Bank and the Nonprofit.

**WHEREAS**, on July 27, 2018, the staff presented answers to the final remaining questions raised by the Board of Directors with regards to the Green Bank and the Nonprofit, specifically preparing 5-year proforma statements for the Green Bank (with and without the

Nonprofit) and for the Nonprofit for review of reasonableness and determination of non-impairment by an independent consultant.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors approves of the series of agreements set forth in the attached materials and authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank to execute on such agreements.

**RESOLVED**, that the Board of Directors approves of the amount of administrative expenses for the Nonprofit as presented in the FY 2019 targets and budget approved on June 28, 2018 to be included in the Professional Services Agreements and the Shared Services Agreement.

- 6. Incentive Business 20 minutes
  - a. SHREC Update
  - b. Residential Solar Investment Program Steps 14 and Beyond

#### Resolution #9

WHEREAS, Public Act 15-194 "An Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy" (the "Act") requires the Connecticut Green Bank ("Green Bank") to design and implement a Residential Solar Photovoltaic ("PV") Investment Program ("Program") that results in no more than three-hundred (300) megawatts of new residential PV installation in Connecticut before December 31, 2022 and creates a Solar Home Renewable Energy Credit ("SHREC") requiring the electric distribution companies to purchase through 15-year contracts the Renewable Energy Credits ("RECs");

**WHEREAS**, as of June 30, 2018, the Program has thus far resulted in over two hundred and fifteen megawatts of new residential PV installation application approvals and completions in Connecticut;

WHEREAS, pursuant to Conn. Gen Stat. 16-245a, a renewable portfolio standard (RPS) was established that requires that Connecticut Electric Suppliers and Electric Distribution Company Wholesale Suppliers obtain a minimum percentage of their retail load by using renewable energy, and an update to this RPS was provided in PA 18-50 that increased the Class I RPS from 20% by 2020 to 40% by 2030, reduces the Alternative Compliance Payment (ACP) to \$40 from \$55, adds power generation from waste heat and expands the definition of run of river hydropower as Class I resources.

**WHEREAS**, real-time revenue quality meters are included as part of solar PV systems being installed through the Program that determine the amount of clean energy production from such systems as well as the associated RECs which, in accordance with Public Act 15-194 will be sold to the Electric Distribution Companies through a master purchase agreement entered into between the Green Bank, Eversource Energy, and United Illuminating, and approved by the Public Utility Regulatory Authority;

**WHEREAS**, pursuant to the Act, the Green Bank has prepared a declining incentive block schedule ("Schedule") that offers direct financial incentives, in the form of the expected performance based buy down ("EPBB") and performance-based incentives ("PBI"), for the

purchase or lease of qualifying residential solar photovoltaic systems, respectively, fosters the sustained orderly development of a state-based solar industry, and sets program requirements for participants, including standards for deployment of energy efficient equipment as a condition for receiving incentive funding;

**WHEREAS**, pursuant to the Act, to address willingness to pay discrepancies between communities, the Green Bank will continue to provide additional incentive dollars to improve the deployment of residential solar PV in low to moderate income communities.

**WHEREAS**, pursuant to the Act, to address sustained orderly development of a state-based solar industry, the proposed grid modernization and climate change pilot will provide incentives for solar PV to offset the additional energy load from clean energy sources and storage needs.

**WHEREAS**, pursuant to Section 16-245(d)(2) of the Connecticut General Statutes, a Joint Committee of the Energy Conservation Management Board and the Connecticut Green Bank was established to "examine opportunities to coordinate the programs and activities" contained in their respective plans (i.e., Conservation and Load Management Plan and Comprehensive Plan);

**WHEREAS**, the Global Warming Solutions Act of 2008 requires Connecticut to reduce its greenhouse gas emissions by 80 percent from 2001 levels by 2050, all the while transportation and the thermal heating and cooling of buildings representing the largest emitting sectors:

**WHEREAS,** residential solar PV can provide cleaner, cheaper, and more reliable sources of energy for electric vehicles and renewable thermal technologies while creating jobs and supporting local economic development;

**NOW**, therefore be it:

**RESOLVED**, that the Board, including the Commissioner of the Department of Energy and Environmental Protection, approves of the Schedule of Incentives as set forth in Tables 4, 5, and 6 of the memo dated July 27, 2018, including setting the Step 14 incentive levels the same as Step 13 incentive levels for the EPBB, PBI, and LMI PBI incentive types through the end of RSIP's 300 MW target.

- 7. Investment Business Clean Energy Finance 30 minutes
  - a. Non-Impairment Provision

#### Resolution #10

Whereas, Public Act 18-50, AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE (the Act), amended subsection (h) of the Connecticut Green Bank's (Green Bank) enabling statute C.G.S. § 16-245n; and

**Whereas**, the Act revised the Green Bank's nonimpairment provision to read as the following:

"h(1) The state of Connecticut does hereby pledge to and agree with any person with whom the Connecticut Green Bank may enter into contracts

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

Friday, July 27, 2018 9:00-11:00 a.m.

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

- Call to order
- 2. Public Comments 5 minutes
- 3. Consent Agenda 5 minutes
- 4. Committee Recommendations and Updates 15 minutes
  - a. Audit, Compliance, and Governance Committee 5 minutes
    - i. Internal Account Procedures
    - ii. Employee Handbook Revisions
  - b. Budget and Operations Committee 10 minutes
- 5. Non-Profit Organization Underserved Markets 30 minutes
  - a. Shared Services Agreement
  - b. Capital Grant Agreement CT Green Bank and Nonprofit
  - c. Professional Services Agreements
  - d. Licensing Agreement
  - e. Fee Review Process
- 6. Incentive Business 20 minutes
  - a. SHREC Update
  - b. Residential Solar Investment Program Steps 14 and Beyond
- 7. Investment Business Clean Energy Finance 30 minutes
  - a. Non-Impairment Provision

- b. CSCU SCRF Self Sufficiencyc. PosiGen Investment
- 8. Other Business – 15 minutes
  - a. 2018 Legislative Update
  - b. Sector Updates and Progress to Targets for FY 2018
  - c. CESA SLICE Award for 2018
  - d. Small Business Energy Advantage
  - e. Other Business
- 9. Adjourn

Next Regular Meeting: Friday, October 26, 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

Friday, July 27, 2018 9:00-11:00 a.m.

Staff Invited: George Bellas, Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Ben Healey, Dale Hedman, Bert Hunter, Kerry O'Neill, 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 meeting minutes of the Board of Directors for June 28, 2018.

#### Resolution #2

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

**WHEREAS,** the Act directs the Green Bank to develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state;

WHEREAS, the Board of Directors of the Connecticut Green Bank approved a Comprehensive Plan for FY 2017 and FY 2018, including approving annual budgets and targets for FY 2017 and FY 2018.

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Program Performance towards Targets for FY 2018 memos dated July 27, 2018, which provide an overview of the performance of the Infrastructure, Residential, Commercial, Industrial, and Institutional sectors with respect to their FY 2018 targets.

### Resolution #3

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

**WHEREAS,** the Act directs the Green Bank to develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state;

**WHEREAS**, the Budget and Operations Committee reviewed the Comprehensive Plan for FY 2017 and FY 2018 at a meeting on June 7, 2016 and recommended the approval to the Board of Directors; and the Board of Directors subsequently reviewed and approved on July 22, 2016:

**WHEREAS**, Article V of the Green Bank Operating Procedures requires the Green Bank Board of Directors (the "Board") to adopt an Annual Plan for each forthcoming fiscal year;

**WHEREAS**, the Board of Directors reviewed and approved the FY 2018 targets and budget on June 23, 2017, which together with the Comprehensive Plan, are effectively the Annual Plan:

**WHEREAS**, the Board of Directors reviewed and approved the FY 2019 targets and budget on June 28, 2018, which together with the Comprehensive Plan, are effectively the Annual Plan; and

**WHEREAS**, the staff of the Connecticut Green Bank have revised in a redline draft version the Comprehensive Plan for FY 2017 through FY 2019 to include recently approved budget and targets for FY 2019 for the review and approval by the Board of Directors.

**NOW**, therefore be it:

**RESOLVED,** that the Board approves of the revised Comprehensive Plan for FY 2017 through FY 2019 as presented to the Board on July 27, 2018, and subject to nonmaterial modifications made by the officers as described above.

#### Resolution #4

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

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

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Overview of Compliance Reporting and the Board of Directors and Committees for FY 2018 memo dated July 27, 2018 prepared by staff, which provides a summary report of the FY 2018 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

#### Resolution #5

Motion to approve the position descriptions for Vice President of Finance and Managing Director of Operations

- 4. Committee Recommendations and Updates 15 minutes
  - a. Audit, Compliance, and Governance Committee 5 minutes
    - i. Internal Account Procedures
    - ii. Employee Handbook Revisions

#### **Resolution #6**

**WHEREAS**, the Audit, Compliance and Governance Committee recommended to the Board of Directors for approval the proposed revisions to Internal Accounting Control Procedures on June 8, 2018.

NOW, therefore be it:

**RESOLVED,** that the Connecticut Green Bank Board of Directors approve the proposed revisions to Internal Accounting Control Procedures as presented.

#### Resolution #7

**RESOLVED,** that the Board of Directors approves the recommendation by the Audit, Compliance, and Governance Committee of the revisions to the Connecticut Green Bank Employee Handbook presented to it on June 8, 2018.

- b. Budget and Operations Committee 10 minutes
- 5. Non-Profit Organization Underserved Markets 30 minutes
  - a. Shared Services Agreement
  - b. Capital Grant Agreement CT Green Bank and Nonprofit
  - c. Professional Services Agreements
  - d. Licensing Agreement

#### Resolution #8

WHEREAS, on January 5, 2017 the Board of Directors of the Connecticut Green Bank had a strategic retreat at Yale University which identified a need to create a private entity for things that the Green Bank was unable to achieve through the current programs;

**WHEREAS**, on July 12, 2017 the Harvard Kennedy School Ash Center names the Connecticut Green Bank as the winner of the "Innovations in American Government Awards" in 2017 for its nomination of "Sparking the Green Bank Movement" in which the staff presented a vision of "inclusive prosperity";

**WHEREAS,** on October 31, 2017, a budget for the State of Connecticut was signed into law sweeping \$32.6 million of funding from the Green Bank – \$14.0 million from the Clean Energy Fund and \$2.3 million from the Regional Greenhouse Gas Initiative – each year for FY 2018 and FY 2019;

**WHEREAS**, on December 15, 2017, in response to the sweeps, the Board of Directors of the Green Bank approved of a budget mitigation strategy consistent with the Sustainability Pathway Strategy, including the need for staff to present a detailed business plan, budget, and transition plan for certain employees to a Nonprofit;

WHEREAS, on April 3, 2018, the Board of Directors of the Green Bank was presented by staff a detailed business plan to which the Board of Directors then authorized the President and any other duly authorized officers of the Green Bank to participate in the formation of an independent nonprofit non-stock corporation to further the purposes of the Green Bank, including achieving operating leverage and attracting mission-oriented investors for a set of products serving underserved market segments;

WHEREAS, on April 27, 2018, the Board of Directors of the Green Bank was presented a staff transition plan for those individual staff members of the Green Bank transitioning to the Nonprofit and authorized the President of the Green Bank and any other duly authorized officer of the Green Bank to (1) ensure the orderly transition of individuals transitioning from the Green Bank to the Nonprofit, taking into consideration, but not limited to, the Advisory Opinion No. 2018-2 by the Office of State Ethics, (2) provide assistance to the Nonprofit to identify, analyze, and recommend benefit options for the staff transitioning to the Nonprofit, and (3) notifying the individuals that will be transitioning to the Green Bank to the Nonprofit of their last day with the Green Bank tentatively planned for June 30, 2018;

**WHEREAS**, on June 13, 2018, the staff of the Green Bank presented a series of agreements between the Green Bank and the Nonprofit, including Shared Services Agreement, Capital Grant Agreement, Professional Services Agreements, Licensing Agreement, and Working Capital Agreement, for review and approval by the Board of Directors of the Green Bank;

WHEREAS, on June 28, 2018, the Board of Directors of the Green Bank reviewed and approved the recommendation of the staff and Budget & Operations Committee for FY 2019 targets and budget, including allocation of expenses to cover the services being provided by the Nonprofit. The staff of the Green Bank also presented answers to a series of questions raised by the Board of Directors regarding the Green Bank and the Nonprofit prior to presenting a resolution to approve of the series of agreements between the Green Bank and the Nonprofit.

**WHEREAS**, on July 27, 2018, the staff presented answers to the final remaining questions raised by the Board of Directors with regards to the Green Bank and the Nonprofit, specifically preparing 5-year proforma statements for the Green Bank (with and without the

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



July 20, 2018

Dear Board of Directors:

I hope everyone is enjoying the great weather we have been having!

We have a regular meeting scheduled for next week for Friday, July 27, 2018 from 9:00-11:00 a.m. in the Colonel Albert Pope Board Room of the Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

In advance, please forgive me! There is a lot of material in this mailing.

On the agenda we have the following items:

- Consent Agenda approval of the meeting minutes for June 28, 2018, progress to target memos, revisions to Comprehensive Plan, and position descriptions. We have also included report outs on governance, PSA approvals over \$75,000, and updated financial statements for the Green Bank through May of 2018 for your perusal.
- <u>Committee Recommendations</u> the Audit, Compliance, and Governance Committee will be recommending the Board of Director approval of the proposed revisions to internal control procedures and employee handbook. The Budget & Operations Committee will be reporting out its review of the 5-year proformas of the Green Bank with and without the Nonprofit (Note document coming next week from Lamont Financial).
- Nonprofit with all of the questions answered, documentation revised, and targets and budgets approved for FY 2019, the staff will be recommending the board approval of the various agreements between the Green Bank and the Nonprofit.
- <u>Incentive Business</u> the staff will provide an update on the pending SHREC securitization. The staff will present their recommendations for Step 14 and beyond incentives for the RSIP as it has reached 70 percent of the public policy target and now focuses on the 300 MW finish line (Note documents coming next week).
- Investment Business the staff will discuss the recently passed "non-impairment" legislation and its implications on the Green Bank's ability to attract private investment into Connecticut given the recent sweeps. The staff will be bringing forth a recommendation to approve the self-sufficiency findings for the use of the SCRF for the CSCU solar PV transaction. And the staff will be bringing forward a continued investment in PosiGen for FY 2019 (Note documents coming next week).
- Other Business if there is time, we will be able to discuss other business.

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. Have a great weekend!

Sincerely,

Bryan Garcia

President and CEO



# **AGENDA**

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**WHEREAS,** the Act directs the Green Bank to develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state;

WHEREAS, the Board of Directors of the Connecticut Green Bank approved a Comprehensive Plan for FY 2017 and FY 2018, including approving annual budgets and targets for FY 2017 and FY 2018.

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Program Performance towards Targets for FY 2018 memos dated July 27, 2018, which provide an overview of the performance of the Infrastructure, Residential, Commercial, Industrial, and Institutional sectors with respect to their FY 2018 targets.

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**WHEREAS**, Article V of the Green Bank Operating Procedures requires the Green Bank Board of Directors (the "Board") to adopt an Annual Plan for each forthcoming fiscal year;

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**WHEREAS**, the staff of the Connecticut Green Bank have revised in a redline draft version the Comprehensive Plan for FY 2017 through FY 2019 to include recently approved budget and targets for FY 2019 for the review and approval by the Board of Directors.

**NOW**, therefore be it:

**RESOLVED,** that the Board approves of the revised Comprehensive Plan for FY 2017 through FY 2019 as presented to the Board on July 27, 2018, and subject to nonmaterial modifications made by the officers as described above.

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

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

NOW, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Overview of Compliance Reporting and the Board of Directors and Committees for FY 2018 memo dated July 27, 2018 prepared by staff, which provides a summary report of the FY 2018 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

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- 4. Committee Recommendations and Updates 15 minutes
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NOW, therefore be it:

**RESOLVED,** that the Connecticut Green Bank Board of Directors approve the proposed revisions to Internal Accounting Control Procedures as presented.

#### Resolution #7

**RESOLVED,** that the Board of Directors approves the recommendation by the Audit, Compliance, and Governance Committee of the revisions to the Connecticut Green Bank Employee Handbook presented to it on June 8, 2018.

- b. Budget and Operations Committee 10 minutes
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**WHEREAS**, on July 12, 2017 the Harvard Kennedy School Ash Center names the Connecticut Green Bank as the winner of the "Innovations in American Government Awards" in 2017 for its nomination of "Sparking the Green Bank Movement" in which the staff presented a vision of "inclusive prosperity";

**WHEREAS,** on October 31, 2017, a budget for the State of Connecticut was signed into law sweeping \$32.6 million of funding from the Green Bank – \$14.0 million from the Clean Energy Fund and \$2.3 million from the Regional Greenhouse Gas Initiative – each year for FY 2018 and FY 2019;

**WHEREAS**, on December 15, 2017, in response to the sweeps, the Board of Directors of the Green Bank approved of a budget mitigation strategy consistent with the Sustainability Pathway Strategy, including the need for staff to present a detailed business plan, budget, and transition plan for certain employees to a Nonprofit;

WHEREAS, on April 3, 2018, the Board of Directors of the Green Bank was presented by staff a detailed business plan to which the Board of Directors then authorized the President and any other duly authorized officers of the Green Bank to participate in the formation of an independent nonprofit non-stock corporation to further the purposes of the Green Bank, including achieving operating leverage and attracting mission-oriented investors for a set of products serving underserved market segments;

WHEREAS, on April 27, 2018, the Board of Directors of the Green Bank was presented a staff transition plan for those individual staff members of the Green Bank transitioning to the Nonprofit and authorized the President of the Green Bank and any other duly authorized officer of the Green Bank to (1) ensure the orderly transition of individuals transitioning from the Green Bank to the Nonprofit, taking into consideration, but not limited to, the Advisory Opinion No. 2018-2 by the Office of State Ethics, (2) provide assistance to the Nonprofit to identify, analyze, and recommend benefit options for the staff transitioning to the Nonprofit, and (3) notifying the individuals that will be transitioning to the Green Bank to the Nonprofit of their last day with the Green Bank tentatively planned for June 30, 2018;

**WHEREAS**, on June 13, 2018, the staff of the Green Bank presented a series of agreements between the Green Bank and the Nonprofit, including Shared Services Agreement, Capital Grant Agreement, Professional Services Agreements, Licensing Agreement, and Working Capital Agreement, for review and approval by the Board of Directors of the Green Bank;

WHEREAS, on June 28, 2018, the Board of Directors of the Green Bank reviewed and approved the recommendation of the staff and Budget & Operations Committee for FY 2019 targets and budget, including allocation of expenses to cover the services being provided by the Nonprofit. The staff of the Green Bank also presented answers to a series of questions raised by the Board of Directors regarding the Green Bank and the Nonprofit prior to presenting a resolution to approve of the series of agreements between the Green Bank and the Nonprofit.

**WHEREAS**, on July 27, 2018, the staff presented answers to the final remaining questions raised by the Board of Directors with regards to the Green Bank and the Nonprofit, specifically preparing 5-year proforma statements for the Green Bank (with and without the

Nonprofit) and for the Nonprofit for review of reasonableness and determination of non-impairment by an independent consultant.

**NOW**, therefore be it:

**RESOLVED**, that the Board of Directors approves of the series of agreements set forth in the attached materials and authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank to execute on such agreements.

**RESOLVED**, that the Board of Directors approves of the amount of administrative expenses for the Nonprofit as presented in the FY 2019 targets and budget approved on June 28, 2018 to be included in the Professional Services Agreements and the Shared Services Agreement.

- 6. Incentive Business 20 minutes
  - a. SHREC Update
  - b. Residential Solar Investment Program Steps 14 and Beyond

#### Resolution #9

WHEREAS, Public Act 15-194 "An Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy" (the "Act") requires the Connecticut Green Bank ("Green Bank") to design and implement a Residential Solar Photovoltaic ("PV") Investment Program ("Program") that results in no more than three-hundred (300) megawatts of new residential PV installation in Connecticut before December 31, 2022 and creates a Solar Home Renewable Energy Credit ("SHREC") requiring the electric distribution companies to purchase through 15-year contracts the Renewable Energy Credits ("RECs");

**WHEREAS**, as of June 30, 2018, the Program has thus far resulted in over two hundred and fifteen megawatts of new residential PV installation application approvals and completions in Connecticut;

WHEREAS, pursuant to Conn. Gen Stat. 16-245a, a renewable portfolio standard (RPS) was established that requires that Connecticut Electric Suppliers and Electric Distribution Company Wholesale Suppliers obtain a minimum percentage of their retail load by using renewable energy, and an update to this RPS was provided in PA 18-50 that increased the Class I RPS from 20% by 2020 to 40% by 2030, reduces the Alternative Compliance Payment (ACP) to \$40 from \$55, adds power generation from waste heat and expands the definition of run of river hydropower as Class I resources.

**WHEREAS**, real-time revenue quality meters are included as part of solar PV systems being installed through the Program that determine the amount of clean energy production from such systems as well as the associated RECs which, in accordance with Public Act 15-194 will be sold to the Electric Distribution Companies through a master purchase agreement entered into between the Green Bank, Eversource Energy, and United Illuminating, and approved by the Public Utility Regulatory Authority;

**WHEREAS**, pursuant to the Act, the Green Bank has prepared a declining incentive block schedule ("Schedule") that offers direct financial incentives, in the form of the expected performance based buy down ("EPBB") and performance-based incentives ("PBI"), for the

purchase or lease of qualifying residential solar photovoltaic systems, respectively, fosters the sustained orderly development of a state-based solar industry, and sets program requirements for participants, including standards for deployment of energy efficient equipment as a condition for receiving incentive funding;

**WHEREAS**, pursuant to the Act, to address willingness to pay discrepancies between communities, the Green Bank will continue to provide additional incentive dollars to improve the deployment of residential solar PV in low to moderate income communities.

**WHEREAS**, pursuant to the Act, to address sustained orderly development of a state-based solar industry, the proposed grid modernization and climate change pilot will provide incentives for solar PV to offset the additional energy load from clean energy sources and storage needs.

**WHEREAS**, pursuant to Section 16-245(d)(2) of the Connecticut General Statutes, a Joint Committee of the Energy Conservation Management Board and the Connecticut Green Bank was established to "examine opportunities to coordinate the programs and activities" contained in their respective plans (i.e., Conservation and Load Management Plan and Comprehensive Plan);

**WHEREAS**, the Global Warming Solutions Act of 2008 requires Connecticut to reduce its greenhouse gas emissions by 80 percent from 2001 levels by 2050, all the while transportation and the thermal heating and cooling of buildings representing the largest emitting sectors:

**WHEREAS,** residential solar PV can provide cleaner, cheaper, and more reliable sources of energy for electric vehicles and renewable thermal technologies while creating jobs and supporting local economic development;

**NOW**, therefore be it:

**RESOLVED**, that the Board, including the Commissioner of the Department of Energy and Environmental Protection, approves of the Schedule of Incentives as set forth in Tables 4, 5, and 6 of the memo dated July 27, 2018, including setting the Step 14 incentive levels the same as Step 13 incentive levels for the EPBB, PBI, and LMI PBI incentive types through the end of RSIP's 300 MW target.

- 7. Investment Business Clean Energy Finance 30 minutes
  - a. Non-Impairment Provision

#### Resolution #10

Whereas, Public Act 18-50, AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE (the Act), amended subsection (h) of the Connecticut Green Bank's (Green Bank) enabling statute C.G.S. § 16-245n; and

**Whereas**, the Act revised the Green Bank's nonimpairment provision to read as the following:

"h(1) 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.

(2) 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."

**Whereas**, this statutory revision was offered to and received by legislators with the understanding that it constituted a response to the funding diversions enacted in the October 2017 state budget passed by the General Assembly and enacted into law; and

**Whereas**, this statutory revision provides the strongest State nonimpairment pledge to date on the Green Bank's capacity to maintain successful public-private partnerships, ensuring a broad interpretation and application of the pledge in order to maintain the Green Bank's financial capacity to perform its essential public and governmental function.

**Now**, therefore be it:

**Resolved**, that future investment transactions of the Green Bank shall include reference to this statutory provision as further inducement for third parties entering into contracts with the Green Bank.

b. CSCU – SCRF Self Sufficiency

#### Resolution #11

WHEREAS, at its September 28 and December 15, 2017 meetings ("Prior Meetings"), the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") authorized (i) a \$9,350,000 issuance of Clean Renewable Energy Bonds ("CREBs"), (ii) the use of ratepayer capital in an amount not to exceed \$1,200,000, and (iii) the President of the Green Bank to secure the use of the Special Capital Reserve Fund ("SCRF") to support the installation of various solar projects for the benefit of the Connecticut State College and University ("CSCU") system (the "Project");

**WHEREAS**, on December 29, 2017, Green Bank issued the CREBs in a principal amount of \$9,101,729.15 to Banc of America Leasing & Capital, LLC ("BALC") through an Equipment Lease/Purchase Agreement.

**NOW, THEREFORE, BE IT RESOLVED,** that the actions taken by and resolutions adopted by the Board at the Prior Meetings are hereby ratified and confirmed in all respects, except as otherwise revised or amended by this Resolution; and

FURTHER RESOLVED, that the establishment, funding and maintenance of a debt

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.

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**NOW, THEREFORE, BE IT RESOLVED,** that the actions taken by and resolutions adopted by the Board at the Prior Meetings are hereby ratified and confirmed in all respects, except as otherwise revised or amended by this Resolution; and

FURTHER RESOLVED, that the establishment, funding and maintenance of a debt

service reserve fund in an amount not to exceed \$965,000, as required for the SCRF, is hereby ratified and confirmed; and

**FURTHER RESOLVED,** that the Self Sufficiency Findings presented to the Board at this meeting and as attached hereto are hereby approved and adopted, and the President of the Green Bank and any other duly authorized officer are authorized to take appropriate actions to secure the SCRF for the CREBs issuance, provided the Green Bank complies with all statutory requirements for the SCRF, which will require among other things (1) State of Connecticut Office of Policy and Management approval, and (2) approval by the Office of the State Treasurer and other documentation required under the Connecticut General Statutes; and

**FURTHER RESOLVED,** that the Green Bank may provide additional ratepayer capital, in the form of equity to finance the Project as required for the successful structuring of the CREBs issuance, in the amount of \$300,000, so that the total amount of ratepayer capital authorized shall not exceed \$1,500,000; and,

**FURTHER RESOLVED,** that the Equipment Lease/Purchase Agreement, the Escrow and Account Control Agreement, the Deposit Account Control Agreements and all other documents executed and delivered by the President of the Green Bank and other proper Green Bank officers, employees and representatives in connection with the closing of the CREBs financing on December 29, 2017 are hereby ratified and confirmed, and the President of the Green Bank and said officers, employees and representatives are authorized to execute and deliver the First Amendment to the Equipment Lease/Purchase Agreement and the Project Support Agreement, substantially in the form as presented at this meeting of the Board with such revisions as may be determined by the President of the Green Bank, and any additional documents in connection with the CREBs financing as they shall deem necessary and desirable to carry out the intent of this Resolution.

#### c. PosiGen Investment

#### Resolution #12

**WHEREAS**, the Connecticut Green Bank ("Green Bank") has a mandate to deploy its resources to benefit all ratepayers, including low and moderate income ("LMI") residential households;

WHEREAS, LMI households bear a disproportionate burden of the state's high energy costs as a percentage of their income, generally do not benefit from existing federal incentives for clean energy adoption given that such incentives require sufficient tax liabilities to be of value, and traditional financing for residential solar PV and energy efficiency upgrades rely on credit tests that screen out many LMI households and exclude them from third-party ownership models for residential solar PV;

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

**WHEREAS**, the Green Bank has provided an initial debt capital commitment of \$5,000,000 (the "Term Loan A Facility") to PosiGen that is currently in repayment with no outstanding payments or amounts due at this time;

**WHEREAS**, the Term Loan A Facility was amended on June 13, 2018 to include an increased debt capital commitment of an additional \$3,500,000 to PosiGen that has since been advanced in full:

**WHEREAS**, PosiGen has successfully deployed approximately 1,699 residential solar PV systems in Connecticut since the formation of its existing and successful partnership with Green Bank;

**WHEREAS**, PosiGen endeavors to merge the current overall PosiGen credit facility in Connecticut (the "CT Debt Facility"), of which the Term Loan A Facility is part, with a larger credit facility encompassing all of PosiGen's solar PV system and energy efficiency leases in the United States (both "Back-Levered" or "BL" credit facilities and as combined, the "Expanded BL Facility") as part of its strategic growth plan;

**NOW**, therefore be it:

**RESOLVED,** that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver changes to the Term Loan A Facility agreements and execute and deliver agreements to consummate arrangements pursuant to which the Green Bank will participate in the Expanded BL Facility with the with terms and conditions consistent with the memorandum submitted to the Board dated July 27, 2018, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board; and

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

- 8. Other Business 15 minutes
  - a. 2018 Legislative Update
  - b. Sector Updates and Progress to Targets for FY 2018
  - c. CESA SLICE Award for 2018
  - d. Other Business
- 9. Adjourn

Next Regular Meeting: Friday, October 26, 2018 from 9:00 -11:00 a.m. Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT

#### CONNECTICUT GREEN BANK

Board of Directors Draft Minutes Thursday, June 28, 2018

A regular meeting of the Board of Directors of the Connecticut Green Bank (the "Green Bank") was held on June 28, 2018, at the office of the Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope boardroom.

# 1. Call to Order

Catherine Smith, Chairperson of the Green Bank, called the meeting to order at 9:39 a.m. Board members participating: Matt Ranelli, Gina McCarthy (by phone), Rob Klee, Bettina Bronisz (by phone), John Harrity, Betsy Crum (by phone), and Eric Brown (by phone)

Members Absent: Kevin Walsh, and Tom Flynn

Others Attending: Guy West and Scott Murphy

Staff Attending: Bryan Garcia, Brian Farnen, Eric Shrago, Bert Hunter, Cheryl Samuels, Matt Macunas, Mackey Dykes, Kerry O'Neill, George Bellas, Jane Murphy, Nick Zuba (by phone), Dale Hedman, and Ben Healey

## 2. Public Comments

Bert Hunter presented George Bellas with a plaque from the Montgomery County Green Bank for helping them with their Accounting.

#### 3. Consent Agenda

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

## **Resolution #1**

Motion to approve the meeting minutes of the Board of Directors for June 13, 2018.

## 4. Incentive Business

#### a. SHREC Warehouse

Bert Hunter discussed the type and structure of the warehouse funding facility for the SHREC securitization program. He stated that it is a \$16 million non-restoring facility, meaning that once the funds are borrowed under the facility, and

subsequently repaid, the funds cannot be "re-borrowed" as with a revolving credit facility. He stated that when the securitization proceeds comes in, the Green Bank will repay the borrowings under the warehouse funding facility. At that point, he continued, the facility would end – but with agreement of the lenders (Webster Bank and Liberty Bank) the facility could be extended by way of an amendment. He stated that when the third tranche is set next year, the Green Bank and the lenders will likely amend the facility. He stated that the first tranche is ready and the second should be set in July – permitting access to the full \$16 million available under the facility.

Mr. Hunter explained that there are two matters that need adjustment to the resolutions that the Board previously approved in April to approve the warehouse funding facility. First – the facility is "non-restoring" and not a "revolving credit facility" as approved by the Board in April. Second, due to a drafting issue in the Master Purchase Agreements (MPAs) between the Green Bank and each utility (Eversource and UI), the borrowing for the time being would need to be by the Green Bank, rather than by an SPV 100% owned and guaranteed by the Green Bank as was approved. He stated that once the MPAs are amended, Green Bank will be able to move those tranches into an SPV providing security to the lenders, which was the mechanism agreed by Green Bank and the utilities originally. Unfortunately, he mentioned, the drafting of the MPAs did not capture this process as tightly as required – so an amendment to the MPAs is needed. He stated that they have confirmed that the utilities have approved the MPA amendment and it is ready to go to PURA for approval.

Catherine Smith questioned if the warehouse has closed. Bert Hunter stated that it would close tomorrow (June 29). Catherine Smith questioned if the security is going to be the Balance Sheet of the Green Bank. Bert Hunter stated, yes – plus the benefit of the cash flows from Tranche 1 and Tranche 2 of the SHREC program. Rob Klee questioned the timeline for PURA. Brian Farnen stated that the utilities have signed off and that staff will do the PURA filing next week. He stated that it should be relatively straightforward since the utilities are on board with the amendment. As for the resolution, Brian stated that there is no change to the concept, it's just a general cleanup resolution and clarification that the Webster-Liberty financing is not a revolving loan.

Upon a motion made by Rob Klee and seconded by John Harrity, the Board voted unanimously to approve.

## **Resolution #2**

WHEREAS, Connecticut Green Bank ("Green Bank") staff has submitted to the Green Bank Board of Directors ("Board") a draft Credit Agreement for Green Bank whereby Webster Bank and Liberty Bank ("Webster-Liberty") will make available to Green Bank a \$16,000,000 secured non-revolving line of credit ("SHREC Credit Facility") whereby the SHREC Credit Facility would be used for a period of up to one year in order to bridge

Green Bank's short-term liquidity and working capital needs prior to funding anticipated from a long-term asset backed securitization ("ABS") financing of the Solar Home Renewable Energy Credit ("SHREC") program;

WHEREAS, along with a general repayment obligation by the Green Bank, Webster-Liberty will be secured by a first priority security interest in and collateral assignment of those Master Purchase Agreements by and between Green Bank and each of The Connecticut Light & Power Company d/b/a Eversource Energy and The United Illuminating Company each dated February 7, 2017 which collateral assignment shall include those cash flows associated with the SHREC program (the "SHREC Collateral"); and

**WHEREAS**, Green Bank staff recommends that the Board approve the proposed SHREC Credit Facility, in accordance with the terms of the Credit Agreement draft.

**NOW**, therefore be it:

**RESOLVED**, that the Board hereby authorizes and directs Green Bank to enter into the SHREC Credit Facility with each of Liberty Bank and Webster Bank substantially as set forth in the draft Credit Agreement and further authorizes and directs Green Bank to pledge the SHREC Collateral and any other assets associated with the SHREC Collateral to Webster-Liberty;

**RESOLVED**, that the Board hereby authorizes Green Bank in the discretion of the President of Green Bank to establish a bankruptcy remote special purpose entity 100% owned by Green Bank ("SPV"), if the President deems it appropriate or necessary or if required by the lenders to secure their interest in the SHREC Collateral;

**RESOLVED**, that the President, Chief Investment Officer and General Counsel of Green Bank and any other duly authorized officer of Green Bank, are each hereby authorized and directed to negotiate, finalize, execute and deliver, on behalf of Green Bank, any of the definitive agreements related to the SHREC Credit Facility that they deem necessary and appropriate to carry out the foregoing objectives of Green Bank, and to establish the SPV and any other agreements, contracts, legal instruments or documents as he shall deem necessary or appropriate and in the interests of Green Bank and the ratepayers in order to carry out the intent and accomplish the purpose of the foregoing resolutions; and

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

## 5. Investment Business – Clean Energy Finance

a. CSCU – SCRF Self Sufficiency

Bryan Garcia stated that they are working on finalizing and will bring this back to the Board.

## **b.** C-PACE Transaction – Proposed Restructuring

Bryan Garcia stated that they would go into Executive Session for strategies and negotiations about pending claims or pending litigation involving the Green Bank.

Upon a motion made by Rob Klee and seconded by John Harrity, the Board went into Executive Session at 9:49 a.m.

The meeting resumed at 10:42 a.m.

# 6. Committee Recommendations and Updates

## a. Budget & Operations Committee

# i. Approval of FY 2019 Budget and Targets

Catherine Smith expressed her appreciation to the group regarding the budget process.

Bryan Garcia discussed the budget process and thanked the team for their work on the budget. He stated that, as a result of the sweeps and the subsequent Sustainability Plan, that they had expanded the process by adding additional meetings of the B & O Committee. He discussed the FY 2019 targets and the budget. He stated that they hope to move forward with Resolution 5, but not moving to approve the agreements between the Green Bank and the non-profit. He stated that they are still in the process of responding to questions raised by the Board.

Eric Shrago discussed the proposed goals and targets. He stated that they are aiming to continue to do everything that they have been and continue to grow, all while staying within the sustainability plan. He discussed the RSIP stating that they expect to see a bit of growth. He stated that they are expecting to see about 40 loans per month in Smart-E. He stated that they expect flat performance with PosiGen. He stated that Multifamily as well should be flat performance. He stated that C & I and CPACE continue to perform. He stated that overall, they expect to see approximately 6500 projects with \$225 million invested. He stated that they are still attracting third-party money into the space.

Eric Shrago discussed the revenues stated that overall, they are expecting \$22 million, which is down from the original forecast given the \$14 million of Clean

Energy Funds and \$2.3 million of RGGI funds. He stated that the primary reason is the sweeps to the State of Connecticut. Bryan Garcia discussed the revenue projections on the REC side. He stated that they wanted to bring transparency to the Board for those revenues. He stated that they wanted the Board to see how they're estimating these revenues given their complexity. He discussed the new P4 Schedule, highlighting what is estimated at the P90 level for REC generation. He stated that they don't know the non-SHREC REC prices in the market. He stated that REC prices in the Class 1 RPS have dropped. Catherine Smith questioned what the assumption on the pricing was. Bryan Garcia stated that they assume \$18.25/REC for approximately 40,000 of the 50,000 owned. He stated that the remaining recs not under contract they assume about \$10/REC. He stated that they need to go to market to secure a price. Rob Smith questioned if the \$18.25 was already locked in. Bryan Garcia stated, yes. Rob Klee questioned if they are looking to lock in the prices for remaining RECs. Bryan Garcia stated yes so that they can have a future REC price that they are comfortable with and so that they will not have to worry about fluctuations. He stated that the market is saying that there is an oversupply of RECs that is why they are low, in comparison to the ceiling price or alternative compliance price of \$55. Eric Shrago stated that the price would increase, but not necessarily in the short-term as a result of the recent increases to the Class 1 RPS to 40% by 2030.

Matt Ranelli questioned if the Green Bank harvests Class 3 RECs from any projects. Bryan Garcia stated that CPACE usually involves incentives from the utility partners, which means the Class 3 REC is gone. He stated that they are now working with ISO New England to be able to trade FCM's into that market for residential and commercial solar PV projects.

Bryan Garcia discussed the expenses, stating that there is a 26% reduction from 2018 to 2019 – just slightly off the target of 27% given the additional costs for the SHREC securitization. He stated that they had dramatic reductions across the board from program development and administration to marketing, EM&V, and R&D. He stated that it has been difficult to get to where they are today. He stated that on the investment and incentive sides of the business, they'd made most of the reductions on the investment side.

Bryan Garcia stated that they are closely monitoring their cash flow on a monthly basis to see how they are progressing towards the sustainability plan. He stated that they've just made their payment of \$14 million to the State of Connecticut. He stated that they will work on a similar transaction with the new administration to transfer funds to the State at the end of the fiscal year 2019, which will assist in their cash flow management.

Bettina Bronisz questioned why there was such a drop in the Marketing expense. Eric Shrago stated that it's due to the programs that are moving over to the non-profit. Rob Klee questioned what the Green Bank is continuing to do regarding

marketing. Eric Shrago stated that they are continuing CPACE, Multifamily, and some Smart-E.

Eric Shrago discussed the investments stating that CPACE investing is a bit larger than in the past. Catherine Smith questioned how many transactions. Eric Shrago stated, 57, including other monies. He stated those that are the Green Bank's; there are 15 that are CPACE and nine that are CPACE backed PPA's, which is representative of what is in the pipeline.

Bettina Bronisz questioned the Kresge loans and the percentage to the Green Bank. Bryan Garcia stated that it is footnoted that it is 1% net to the Green Bank.

Eric Shrago discussed the repurchase of the Hannon Portfolio. He stated that they have the opportunity to purchase that portfolio back and add that interest to the Green Bank's P&L and the assets to the balance sheet. He stated that this would assist in the advancing of the Sustainability Plan. He stated that they have zero acquisition costs to bring that back to the Green Bank's books. Bryan Garcia stated that they need to build the balance sheet and that they've decided to purchase those assets back at par. Rob Klee stated that this is only possible due to the SHREC Securitization. Matt Ranelli questioned why they would not dial back the SHREC Securitization rather than buy back the portfolio. Rob Klee stated that it's because the revenues trickle in from the Securitization.

Eric Shrago highlighted Triangle Fuel Cell, which they are expecting to close next fiscal year. Bert Hunter described the PosiGen investment and stated that they are calling this a third variation of how the Green Bank can participate in transactions through the non-profit (the first 2 examples were discussed at the Board meeting on May 25). He stated that in this variation (V3) Green Bank is directly lending to the borrower. He stated that the non-profit would take on the management oversight role. He stated that the revenue is not coming from the non-profit, but as shown in the diagram it will be coming externally and directly from the borrower. Eric Shrago stated that under the solar fund investment with the nonprofit, the Green Bank has a participation agreement with the non-profit and that income flows from the non-profit back to the Green Bank. Catherine Smith questioned the fact that there is no income from these in the first year. Ben Healey stated that the expectation is that while the contracts would be approved within the next fiscal year, the projects themselves will get built after the end of the fiscal year (FY 19), but the income will not come in until the next fiscal year (FY 20).

Bryan Garcia discussed the summary of the FY 19 cash flow and the FY 19 through FY 29 cash flow with respect to the Sustainability Plan. He stated that in December they had a 4-7-year break-even point on the investment side. He stated that the focus has been on their core business of financing. He stated that

they can increase their balance sheet by purchasing the portfolio from Hannon Armstrong, which reduces the breakeven point and costs to 4 to 5 years.

Eric Shrago discussed the core partners part of the budget. He stated that they want to continue to contract with their partners. Catherine Smith questioned what the strategy is on how they go out to RFP. Brian Farnen stated that it's usually every three years. He stated that they are talking about extending it out longer for certain contracts assuming that it was done through an RFP with proper approvals, with an additional restriction that a longer period, say up to 4 or 5 years but that would be contingent on the PSA amount not increasing on an annual basis by more than 4% for example. Mackey Dykes discussed the RFP for Sustainable Real Estate Solutions. He stated that it has been quite some time since they've gone out to RFP for that, but that in the past they had only received one or two responses. He stated that they would like to extend the contract with them for one more year. Catherine Smith mentioned that the extension terms are not identical. Bryan Garcia stated, they are up to one year.

Upon a motion made by John Harrity and seconded by Rob Klee, the Board voted unanimously to approve.

# **Resolution #5**

WHEREAS, as a result of the \$32.6 million of sweeps of the Clean Energy Fund and Regional Greenhouse Gas Initiative allowance proceeds to the General Fund, the Board of Directors of the Connecticut Green Bank approved Sustainability Plan on December 15, 2017 directing staff to cut personnel, and non-personnel operating expenses, proactively manage cash balances, cancel and transfer commitments, and facilitate the creation of a nonprofit to further reduce the costs of managing existing Green Bank programs;

**WHEREAS**, the Fiscal Year 2019 Targets and Budget are in line with the previously approved Sustainability Plan; and

**WHEREAS**, the members of the Connecticut Green Bank Budget and Operations Committee independently recommended that the Green Bank Board of Directors approve the Fiscal Year 2019 Targets and Budget; and

WHEREAS, the members of the Budget and Operations Committee recommends that the Board of Directors authorizes Green Bank staff to extend the professional services agreements (PSAs) currently in place with the following, contingent upon a competitive bid process having occurred in the last three years (except MREN, Inc. (formerly Metis, Financial Network, Inc.) which will be in its fourth and final year of engagement with the Green Bank):

I. Adnet Technologies, LLC

- II. Clean Power Research, LLC
- III. Cortland Capital Market Services LLC
- IV. Locus Energy LLC
- V. MREN, Inc., (formerly METIS, Financial Network, Inc.)
- VI. New Ecology, Inc.
- VII. Strategic Environmental Associates, Inc.
- VIII. Sustainable Real Estate Solutions, Inc.
- IX. Wegowise, Inc.

For fiscal year 2019 with the amounts of each PSA not to exceed the applicable approved budget line item.

**NOW**, therefore be it:

**RESOLVED**, that the Connecticut Green Bank Board of Directors hereby approves: (1) the FY 2019 Targets and Budget with the understanding that there shall be no (i) expenditures related to professional service agreements and the memorandum of understanding for Inclusive Prosperity Capital Inc. or (ii) transitioning of Green Bank staff until the Board of Directors authorize such expenditures and actions at a future date, and (2) the nine PSAs listed above, as both items were recommended by the members Connecticut Green Bank Budget and Operations Committee.

## 7. Other Business

Bryan Garcia discussed the Q & A Memo, stating that there are a few questions left. He stated that they are developing a Proforma Statement for the Green Bank, which will go to Lamont Financial. He stated that they would assess whether or not it is reasonable. They will then send it to the Treasurer's Office. Catherine Smith questioned the timing on this. Bryan Garcia stated that the week of July 16th should complete it.

Brian Farnen introduced Scott Murphy, who explained the background and powers of the Green Bank statutorily to enable and invest in an unaffiliated nonprofit entity. Catherine Smith expressed her opinion that she felt the answer to the authority questions was sufficient and comprehensive.

## 8. Adjourn

Upon a motion made by Rob Klee and seconded by John Harrity, the Board adjourned the meeting at 11:35 a.m.

	Respectfully Submitted,
_	
	Catherine Smith, Chairperson

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



# Memo

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

From: Lucy Charpentier, Bryan Garcia, Dale Hedman, and Eric Shrago

**CC:** Mackey Dykes, Brian Farnen, and Bert Hunter

**Date:** July 27, 2018

Re: Infrastructure Sector Programs – Program Performance towards Targets for FY 2018 -

**Preliminary** 

#### Overview

Public Act 11-80, An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future, requires that the Connecticut Green Bank (Green Bank) develop and implement several programs to support the deployment of solar photovoltaic (PV), combined heat and power (CHP), and anaerobic digester (AD) technologies. Alongside this act, through the Comprehensive Energy Strategy (CES) released by the Department of Energy and Environmental Protection (DEEP), there is the goal of delivering cleaner, cheaper and more reliable sources of energy through the deployment of in-state renewable energy sources, including the need for more microgrids. Due to the Connecticut General Assembly's reappropriation of monies from the Clean Energy Fund and RGGI to the General Fund, the Green Bank has had to scale back its programs including the termination of the CHP and AD pilots.

For a description of the programs and the TAM and SAM, please see the Comprehensive Plan for Fiscal Years 2017 through 2019.

# **Performance Targets and Progress**

With respect to the Comprehensive Plan approved by the Board of Directors of the Green Bank on July 21, 2017 and revised on January 26, 2018, the following are the performance targets for FY 2018 and progress made to targets for the Infrastructure Sector Programs (see Table 1) as of June 30, 2018.

Table 1. Program Performance Targets and Progress Made to the Comprehensive Plan for FY 2018

<sup>&</sup>lt;sup>1</sup> For mid-year revisions to budget and targets, see "Q2 Progress to Targets" memo of January 19, 2018 on page 74

Key Metrics	Program Performance Original Targets (as of 07/01/17)	Program Performance Revised Targets (as of 01/26/18)	Program Progress <sup>2</sup>	% of Goal
Capital Deployed <sup>3</sup>	\$136,300,000	\$136,300,000	\$181,734,456	133%
Investment at Risk <sup>4</sup>			\$14,032,729	
Private Capital <sup>5</sup>			\$167,701,727	
Deployed (MW)	37.0	37.0	48.8	132%
# of Loans/Projects	4,431	4,431	5,971	135%
Leverage Ratio			13.0	

In summary, for Infrastructure Sector Programs in FY 2018, there were 5,971 projects (achieving 135% of the goal) requiring \$181.7 M of investment (achieving 133% of the goal) that led to the deployment of 48.8 MW of clean energy deployed (achieving 132% of the goal), that delivered a leverage ratio of about 13:1 for private to public funds invested.

# **Executive Summary for the Infrastructure Sector Programs**

The following is a bulleted executive summary of the Infrastructure Sector Programs:

- RSIP milestones since program inception: Over 215 MW and more than 27,700 projects approved (more than 70% of 300 MW policy target), nearly 182 MW completed, over \$115M invested in incentives at 7.5:1 leverage across all steps (7:1 for FY17)
- Sale of 39,221 SHRECs to EDCs in the first 3 quarters of FY18
- Creation of 31,807 residential and commercial Class I RECs (i.e., non-SHREC RECs) in the first 3 quarters of FY18
- DOE SolSmart technical advisor contract winner (\$19K) to continue work with municipalities on solar PV permitting and zoning improvements to earn town's SolSmart certification for solar-friendliness and contribute to town's Sustainable CT goals
- DOE SunShot grant awarded last FY for \$162K over three years in FY18, developed an LMI deployment strategy to expand penetration into LMI single family market through PosiGen and Sunrun, as well as expand LMI deployment through community solar and the Green and Healthy Homes Initiative.
- Attracted SunRun into the RSIP LMI PBI incentive program with a discounted product offering for low-income homeowners
- Accepted into NREL Solar Energy Innovation Network which provides technical assistance and a \$10,000 grant to explore how solar can improve grid reliability and resilience

<sup>2</sup> Includes only closed transactions, including projects in approved and completed statuses. An estimated 3 MW of approved projects will likely be cancelled in 1Q 2019 due to expired incentives for projects approved more than 365 days earlier and not yet completed. Using per project averages of 8 kW and \$30,000, this would reduce the totals by 375 projects and \$11.3M in capital.

<sup>&</sup>lt;sup>3</sup> Capital Deployed is used to measure Investment actuals to targets and it includes fees related to financing costs and adjustments for Fair Market Value which are not included in the Gross System Cost. It represents: the Fair Market Value for Commercial/Residential Leases, the Amount Financed or Gross System Cost (whichever is greater) for CPACE, the Amount Financed for Residential financing products and the Gross System Cost for all other programs.

<sup>&</sup>lt;sup>4</sup> Includes funds from the Clean Energy Fund, RGGI allowance revenue, repurposed ARRA-SEP funds, and other resources that are managed by the Green Bank that are committed and invested in subsidies, credit enhancements, and loans and leases.

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

 Green Bank and United Illuminating partner on "Localized Targeting of DERs" demonstration project

# Infrastructure Sector Programs

The following are overviews of the Infrastructure Sector Programs being implemented and the contributions towards the achievement of the targets noted in the Comprehensive Plan.

 Residential Solar Investment Program – \$14.0 million in subsidies<sup>6</sup> from the Green Bank has attracted \$167.7 million of funds from other sources.

Table 2. RSIP Overview for FY 2018

Program Data	Submitted but		
	not Closed	Closed <sup>7</sup>	Total
Projects	91	5,971	6,062
Installed Capacity (MW)	0.8	48.8	49.6
Lifetime Clean Energy			
Produced (MWh)	22,162	1,389,701	1,411,864
Annual Combined Energy			
Generated & Saved			
(MMBtu)	3,025	189,666	192,691
Subsidies (\$'s)	\$210,298	\$14,032,729	\$14,243,027
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	<u>\$0</u>	\$0	<u>\$0</u>
Total Green Bank			
Investment (\$'s)	\$210,298	\$14,032,729	\$14,243,027
Private Capital (\$'s)	\$2,958,864	\$167,701,727	\$170,660,591
Direct Job Years	12	709	721
Indirect & Induced Job			
Years	16	927	943
Lifetime Tons of CO2			
Emissions	11,941	753,480	765,421

The residential solar PV market in Connecticut has seen a dramatic improvement over the past decade (see Figure 1). Installed costs have decreased by nearly 60% from a high of \$8.80/W in 2007 to \$3.71/W in FY18. Incentives have decreased by over 90% from a high of \$4.51/W in 2006 to \$0.28/W today.

Since RSIP's inception in FY12, installed costs have decreased by nearly 30%, incentives have decreased by over 80%, and capacity additions increased over 1600% from 2.9 MW in FY12 to 48.8 MW in FY17.

RSIP capacity additions increased 25% from 38.9 MW in FY17 to 48.8 MW in FY18. FY18 deployment of 48.8 MW is 32% or 11.8 MW higher than the FY18 target of 37.0 MW.

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

<sup>&</sup>lt;sup>7</sup> Based on nearly 10-years of historical experience, 91% of projects approved result in project completions.

RSIP submission volume had dropped to a 34-month low in February 2017 at just below 2 MW, before beginning a climb to between 3-4 MW per month and averaging about 4 MW per month in FY18. May and June 2018 were high-volume months, with about 6 MW and 5.5 MW submitted respectively. Partial data for July 2018 suggests that volume may stabilize back closer to 4 MW as FY19 begins.

Also of note in FY18 was a reduction of the RSIP incentive to just over 8% of installed project cost, as well as an increase of about 6% in the average installed cost, from \$3.48/W in FY17 to \$3.71/W in FY18 (see later discussion on reasons for this cost increase).

The increase in RSIP deployment from FY17 to FY18 was due to the recovery of the residential solar PV market from the exit of SolarCity from RSIP in FY17 when their market share dropped to less than 1% as compared to market dominance at 56% market share in FY15 and 43% in FY16. The ramp up by other large national companies in FY17 and FY18 included Sunnova, Vivint Solar, PosiGen, Sunrun and SunPower Capital, as well as steady volume from local and regional installers. The large national players participating in the Connecticut market primarily deploy third-party owned (TPO) projects (though Vivint sells PPAs and homeowner owned projects). Local and regional installers primarily sold homeowner-owned projects and also partnered with TPOs to perform installation and/or sales.

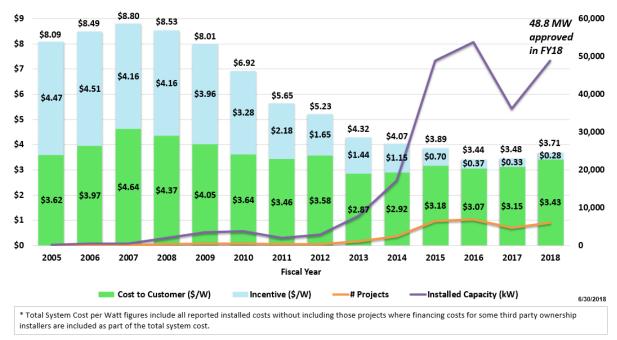
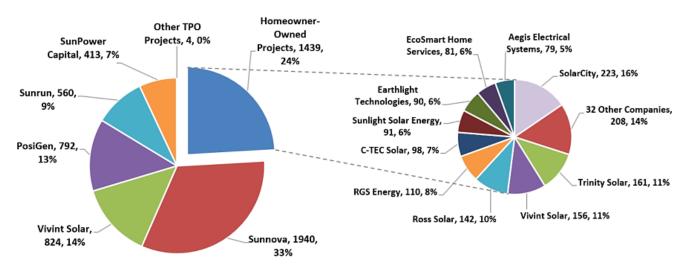


Figure 1. RSIP Installed Cost, Incentives and Installed Capacity by Fiscal Year

Third party owned (TPO) companies deployed 76% of RSIP projects in FY18 (as well as in FY17), led by Sunnova with 33% of RSIP market share. See Figure 2 for a breakdown of market share among TPO companies as well as homeowner-owned projects which made up 24% of RSIP volume in FY18. Figure 2 also presents RSIP installers with the top 10 highest market shares for homeowner owned projects. These 10 companies installed 86% of homeowner owned projects or 20% of total RSIP volume. SolarCity rejoined RSIP in FY18, selling loans and cash purchases instead of PPAs, but at a small volume compared to earlier fiscal years when they had dominated the market. SolarCity will likely reduce their participation in RSIP again in FY19 due to focus by parent company Tesla on their electric vehicle business going forward. Trinity Solar was RSIP's highest volume participant in FY18, having installed 2373 or 40% of RSIP projects in FY18 through a combination of homeowner owned projects and as a dealer partner for TPOs.

Figure 2. FY18 RSIP Projects and Market Share by System Owner and by Installer

FY18 RSIP Projects and Market Share by System Owner, and Homeowner Owned Projects and Market Share by Installer



PosiGen increased their volume by 17% from last fiscal year and continues to successfully penetrate the LMI market using the RSIP LMI PBI. Sunrun was approved this fiscal year as the second RSIP company to offer the LMI PBI. PosiGen, Sunrun and other TPOs are being encouraged to further tap into an LMI market which grew from having 22% of projects in 100% or lower income bands to 50% of RSIP projects in 100% or lower income bands in FY17 and FY18 – see Figure 3.

Figure 3. Percentage of Projects in Census Tract Area Median Income (AMI) Bands by FY



For a breakdown of RSIP project volume and investment by census tracts categorized by Area Median Income (AMI) bands and Distressed Communities as designated by DECD, see Tables 3 and 4, respectively. It should be noted that RSIP is not an income targeted program.

Table 3 presents market penetration of RSIP projects among census tract AMI bands as a percentage of owner occupied households in these same income bands. CT has reached parity with respect to reaching the same or better adoption of solar PV among 100% and lower AMI bands as with 100% and higher AMI band customers. For example, the Cumulative Project Units per 1000 households (HHs) is highest in the less than 60% AMI band at 38.5 projects per 1000 HHs, which equates to 3.85%. Similarly, market penetration is 34.8 projects per 1000 HHs or 3.48% in the 60-80% AMI band, 3.08% in the 80-100% band, 3.46% in the 100-120% AMI band, and 3.02% in the greater than 120% AMI band.

Table 3. RSIP Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	Owner Occupied 1-4 Unit Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
<60%	60,769	7%	775	13%	2,339	8%	38.5	\$59,252,197	7%
60%-80%	99,220	12%	958	16%	3,453	12%	34.8	\$93,596,450	11%
80%-100%	165,331	19%	1,198	20%	5,091	18%	30.8	\$155,284,061	18%
100%-120%	187,463	22%	1,280	21%	6,485	23%	34.6	\$206,773,779	24%
>120%	345,311	40%	1,759	29%	10,421	37%	30.2	\$352,324,968	41%
Unknown		0%	1	0%	1	0%	0.0	\$41,014	0%
Total	858,094	100%	5,971	100%	27,790	100%	32.4	\$867,272,469	100%

**Table 4. RSIP Closed Activity in Distressed Communities** 

Distressed Designation	Total Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
Distressed	438,710	32%	2,239	37%	7,879	28%	18	\$219,895,419	\$501.23
Not Distressed	916,003	68%	3,732	63%	19,910	72%	22	\$647,356,801	\$706.72
Unknown		0%	0	0%	1	0%	0	\$20,250	\$0.00
Total	1,354,713	100%	5,971	100%	27,790	100%	21	\$867,272,469	\$640.19

An emerging market is residential solar plus energy storage. Over 90 RSIP projects approved in FY18 included energy storage, including the Tesla PowerWall and sonnenBatterie eco as the most prevalent equipment choices thus far.

As a requirement to receive the RSIP incentive, all residential solar PV customers must have an energy audit performed on their home, preferably the utility-administered Home Energy Solutions (HES) audit, but with other options if needed. In FY18, an estimated 93% of audits performed were either HES audits or DOE Home Energy Scores, even though HES budget constraints impacted HES volume. Non-HES audits performed by Building Performance Institute (BPI) certified auditors or Energy Star audits made up 6% of audits, while 1% of projects were exempt due to being new construction or having a health and safety exemption. These energy audits encourage adoption by customers of energy efficiency measures along with solar PV.

As noted earlier in this memo, installed costs increased about 6% on average from FY17 to FY18. Contractors indicated that the cost of doing business is going up, including increased customer

acquisition costs, privatizing of Solarize, increased financing costs, rising commodity prices due to trade tariffs, uncertainty in availability of equipment, increased competition, increased labor and insurance costs, and increased municipal permitting and interconnection costs including more frequent, costly utility requests for infrastructure (e.g., transformer) upgrades. Solar companies have been absorbing costs and reducing margins to keep prices stable, but these costs began adding up and necessitating price increases.

As previously established in FY17, all subsidies, administrative costs, and other expenses for the RSIP are to be cost recovered through the pricing and sale of SHRECs as specified in the MPA between the Green Bank and the electric distribution companies (EDC's). Tranche 1 includes 2015 and 2016 vintage RECs with a SHREC price of \$50 per SHREC over the 15-year Tranche 2017 contract. In the first 3 quarters of FY 2018, 30,187 Tranche 1 SHRECs and 9,034 Tranche 2 SHREC were sold to the EDCs. SHRECs are sold to the EDCs quarterly. Tranche 2 (which began January 1, 2018) includes over 7200 projects that received Class 1 certification and REC aggregation approvals in FY18 (as compared to about 6,700 projects in Tranche 1). SHREC monetization and securitization efforts in FY18 were highly successful and will continue in FY19.

With 85 MW out of 215 MW left in the RSIP runway, the program is estimated to reach its 300 MW target around the end of calendar year 2019, though volume could increase in FY19 and shorten this timeframe due to end of program demand. Administration of RSIP in FY19 will focus on the expected transition from RSIP and retail net metering to future compensation structures as provided in PA 15-808, as well as ongoing SHREC processing and financial transactions.

For a breakdown of the use of Green Bank resources for Infrastructure Sector Programs (see Table 5).

Table 5. Distribution of Green Bank Funds Invested in Projects and Programs through Subsidies, Credit Enhancements, and Loans and Leases for FY 2017<sup>9</sup>

Program	Subsidies		Credit Enhancements		Loans and Leases		Total
RSIP	\$14,032,729	100%	\$0	0%	\$0	0%	\$14,032,729
Total	\$14,032,729	100%	\$0	0%	\$0	0%	\$14,032,729

Of these programs, the following is a breakdown of their contributions made thus far towards the performance target and the human resources required to implement them (see Table 6):

Table 6. Program Progress Made in FY 2018<sup>10</sup>

Key Metrics	RSIP	Total Program Progress
Date of Program Approval	Feb 2012	
Date of Program Launch	Mar 2012	
Ratepayer Capital at Risk	\$14,032,729 <sup>11</sup>	\$14,032,729
Private Capital	\$167,701,727	\$167,701,727
Deployed (MW)	48.8	48.8
# of Loans/Installations	5,971	5,971

<sup>&</sup>lt;sup>8</sup> Public Act 18-50, An Act Concerning Connecticut's Energy Future: <a href="https://www.cga.ct.gov/2018/act/pa/pdf/2018PA-00050-R00SB-00009-PA.pdf">https://www.cga.ct.gov/2018/act/pa/pdf/2018PA-00050-R00SB-00009-PA.pdf</a>

<sup>&</sup>lt;sup>9</sup> Includes only closed transactions

<sup>&</sup>lt;sup>10</sup> Includes only closed transactions

 $<sup>^{\</sup>rm 11}$  Includes incentives over the 6 year course of term of the agreement

Key Metrics	RSIP	Total Program Progress
Lifetime Production (MWh)	1,389,701	1,389,701
Annual Combined Energy Generated & Saved (MMBtu)	189,666	189,666
Generated & Saved (MIMBLU)	109,000	109,000

# "Top 5" Headlines

The following are the "Top 5" headlines for Infrastructure Sector Programs for FY 2018:

#### 1. Connecticut Controversial Energy Bill Boosts Renewables Ends Net-Metering

SolarReviews (May 11, 2018)

The legislature in Connecticut passed SB 9, "An Act Concerning Connecticut's Energy Future," a controversial bill brought forward by Gov. Dannel Malloy (D). While the bill will expand the state's renewable energy portfolio to 40 percent by 2030, it will also end net metering, which the solar industry staunchly opposes. The legislation would actually replace the state's net-metering with a tariff-based reimbursement system. Those who are already net-metered in the state and those installed home solar before Dec. 31, 2018 will be net-metered through 2039.

# 2. Clean Energy States Alliance Receives Solar Energy Innovation Network Award

(April 12, 2018)

The Clean Energy States Alliance (CESA) was selected by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) to participate in a collaborative research effort to explore new ways solar energy can improve the affordability, reliability, and resiliency of the nation's electric grid. CESA will work with agencies in five states and the District of Columbia to identify locations for distributed energy resources (DER) that provide benefits to the grid.

#### 3. Connecticut Kicks off Grid Modernization Effort

RTO Insider (April 5, 2018)

Utility representatives and other stakeholders shared their views on evolving cost drivers, changing customer demand and new technologies at the Connecticut Public Utilities Regulatory Authority's first-ever technical conference on grid modernization.

## 4. Solar is again the flashpoint in CT's new energy strategy

The CT Mirror (February 12, 2018)

The Department of Energy and Environmental Protection has reworked the CES, as it is known, in key areas from a draft version released last summer. That version had sparked widespread objections – some 2,000 comments were filed – mainly involving solar policy.

#### 5. CT Solar Industry Wants a Clawback

CT Post (October 28, 2017)

Connecticut's solar power industry wants a court to block the General Assembly from "confiscating" money earmarked for Green energy projects and instead using it to balance the state budget.

#### **Lessons Learned**

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

- There are many forces outside of Green Bank and RSIP control that impact the solar industry Continue to develop creative solutions to budget, policy and regulatory challenges that arise, and plan for potential future conditions (i.e., hope for the best but plan for the worst).
- <u>Talk to RSIP system owners and installers</u> With respect to solar PV policy, regulation and administration of incentive programs and structures, it is always valuable and informative to have dialogue with and input from solar contractors since they have boots on the ground and are experienced with what works and what doesn't.
- Continue to improve upon and leverage technology platforms and resources RSIP recognizes the need to continue leveraging resources that enable effective management of the fleet of over 27,000 projects, both in terms of incentive application and project completion paperwork processing, as well as monitoring of and resolution of issues pertaining to solar PV electricity production in order to monetize RECs and SHRECs. RSIP launched a new PowerClerk platform in August 2017 that provides better functionality, more flexibility and staff control, and increased efficiency. RSIP has engaged Locus Energy and SunSystem Technology (SST) to assist with monitoring of production data, trouble-shooting of system issues, and to provide new analytical tools to better understand factors impacting production. Lastly, the RSIP team continues to review, validate, and update data in the PowerClerk and Locus platforms to ensure data integrity that meets program needs.
- Consumer protection continues to be an important long-term issue in the residential solar PV market The Green Bank has made progress working with state organizations on consumer protection, especially the State of CT Department of Consumer Protection (DCP). It will be valuable to leverage resources put together by the Clean Energy States Alliance (CESA) to take further steps toward protecting solar consumers, especially in preparation for when RSIP ends. This should include consideration of solutions that can be put in place in collaboration with DCP that can persist post-RSIP.
- The focus of FY19 (and possibly FY20) will be on carrying RSIP through the home stretch and helping to provide a sustained orderly transition for the residential solar industry This context also includes the phasing out of the federal ITC and changes to state net metering policy with implementation of new compensation structures for solar. This will involve thoughtful attention to the economics and other aspects of what makes solar a viable choice for residential customers in CT and what can continue to make CT a viable state for solar companies to do business in.
- Leverage experience, resources, and Sustainable CT platform to continue improving soft costs for solar PV The Green Bank team has done tremendous work over the past few years understanding and making an impact on addressing soft costs in the industry. Going forward, the team can leverage this knowledge, experience and resources continue guiding municipalities and supporting solar contractors in making improvements and taking next steps to further affect soft costs. For example, the RSIP team will continue its work in supporting implementation of Sustainable CT and the platform it provides to improve municipal solar permitting and other processes that affect solar soft costs. In addition to Sustainable CT which provides a broad umbrella for municipal improvements, resources, and recognition, the RSIP team has provided technical support to 5 towns through a Solar Foundation grant. These five towns worked to

streamline permitting and zoning processes for solar deployment in order to receive the SolSmart certification for solar friendliness.

- Grid modernization and locational value of solar critical to future market growth and integration of high penetrations of DERs - Understanding the value solar can bring to the grid and the ability of new technologies to increase hosting capacity are key to sustained market growth and adequately valuing solar resources post-RSIP. Green Bank and UI are hoping to demonstrate this value via the Localized Targeting of DERs demonstration project by deferring a planned infrastructure upgrade and shedding light on the ability of advanced inverter technologies to increase the hosting capacity of the distribution system. If successful, these technologies could have a significant impact on solar soft costs and enable more PV systems to be interconnected without additional infrastructure costs. In addition, Green Bank is participating in a PURA docket on Distribution System Planning that provides a forum to address significant barriers to greater DER deployment, for example: (1) clarification and improvement of interconnection processes, specifications and requirements for battery storage, (2) addressing infrastructure upgrade challenges especially for transformers, and (3) providing a suitable regulatory and process framework and physical infrastructure to implement new policy around DER compensation that continues to encourage DER deployment and contributes to grid modernization.
- Continue to focus on the LMI market RSIP census tract AMI data shows that about 50% of RSIP approved projects in FY17 and FY18 were in 100% or lower AMI bands, demonstrating that there is a large opportunity to deploy solar PV in the LMI sector.

# **Infrastructure Sector Programs FY 2019 Targets**

Of the programs being implemented in the Infrastructure Sector Programs, the following is a breakdown of the key targets for each program (see Table 7):

Table 7. Number of Projects, Capital Deployed, and Clean Energy Deployed (MW)

Program	# of Projects	Capital Deployed	Clean Energy Deployed (MW)
RSIP	6,000	\$168,000,000	48.0
Total	6,000	\$168,000,000	48.0

For Infrastructure Sector Programs, there are 10.3 full time equivalent staff members supporting one program, RSIP. The AD program was closed out in FY18.

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# Memo

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

From: Lucy Charpentier, Bryan Garcia, Kerry O'Neill, and Eric Shrago

**Cc** Mackey Dykes, Brian Farnen, and Bert Hunter

**Date:** July 27, 2018

Re: Residential Sector Programs – Program Performance towards Targets for FY 2018 -

**Preliminary** 

#### Overview

Public Act 11-80 (PA 11-80), An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future, requires that the Connecticut Green Bank (Green Bank) develop and implement several programs to finance and otherwise support clean energy investment in residential projects to promote deep energy efficiency retrofits, renewable energy deployment, and fuel and equipment conversions in single-family and multifamily homes across the state. Due to the Connecticut General Assembly's mid-year reappropriation of monies from the Clean Energy Fund and RGGI to the General Fund, the Green Bank has had to scale back its programs.

For a description of the programs and the TAM and SAM, please see the Comprehensive Plan for Fiscal Years 2017 through 2019.

## **Performance Targets and Progress**

With respect to the Comprehensive Plan approved by the Board of Directors of the Green Bank on July 21, 2017 and revised on January 26, 2018,<sup>1</sup> the following are the performance targets for FY 2018 and progress made to targets for the Residential Sector Programs (see Table 1) as of June 30, 2018.

Table 1. Program Performance Targets and Progress Made to the Comprehensive Plan for FY 2018

<sup>&</sup>lt;sup>1</sup> For mid-year revisions to budget and targets, see "Q2 Progress to Targets" memo of January 19, 2018 on page 74 – click here

Key Metrics	Program Performance Original Targets (as of 07/01/17)	Program Performance Revised Targets <sup>2</sup> (as of 01/26/18)	Program Progress <sup>34</sup>	% of Goal
Capital Deployed <sup>5</sup>	\$35,979,196	\$47,567,394	\$74,819,502	157%
Investment at Risk <sup>6</sup>			\$11,101,151	
Private Capital <sup>7</sup>			\$68,034,391	
Deployed (MW)	6.4	6.2	7.8	126%
# of Loans/Projects	1,185	1,926	2,392	124%
Leverage Ratio			7.1	

In summary, for Residential Sector Programs in FY 2018, there were 2,392 projects (achieving 124% of the goal) requiring \$74.8MM of investment (achieving 157% of the goal) that led to the deployment of 7.1 MW of clean energy deployed (achieving 124% of the goal), that delivered a leverage ratio of nearly 7:1 for private to public funds invested.

# **Executive Summary for the Residential Sector Programs**

The following is a bulleted executive summary of the Residential Sector Programs:

- Exceeded targets for all programs, though it should be noted that Multifamily Programs benefited from one \$18.8 million "whale" deal this year
- Broke the \$200 million threshold with \$218 million of cumulative financing activity in the sector, including \$146 million in residential 1-4 (6,027 projects) and \$72 million in multifamily (73 projects)
- Multifamily is seeing mixed success with partnerships, resulting in staff and Green Bank consultants sourcing and driving the bulk of the deal flow, which limits growth and is not scalable
- By including sustainability points in the competition for coveted 9% low income housing tax credits, CHFA, with support from Green Bank, is singularly catalyzing development and transformation of the multifamily high performance building sector

<sup>4</sup> Includes \$106,950 in Capital Deployed, \$106,950 in CGB Investment, and \$25,500 in Private Capital for 4 Multifamily Predevelopment financing.

<sup>&</sup>lt;sup>2</sup> Multifamily Predevelopment financing target were not set for fiscal year 2017.

<sup>&</sup>lt;sup>3</sup> Includes only closed transactions.

<sup>&</sup>lt;sup>5</sup> Capital Deployed is used to measure Investment actuals to targets and it includes fees related to financing costs and adjustments for Fair Market Value which are not included in the Gross System Cost. It represents: the Fair Market Value for Commercial/Residential Leases, the Amount Financed or Gross System Cost (whichever is greater) for CPACE, the Amount Financed for Residential financing products and the Gross System Cost for all other programs.

<sup>&</sup>lt;sup>6</sup> Includes funds from the Clean Energy Fund, RGGI allowance revenue, repurposed ARRA-SEP funds, and other resources that are managed by Green Bank that are committed and invested in subsidies, credit enhancements, and loans and leases. Does not include commitments for the \$600,000 guarantee for Connecticut Housing Investment Fund (now called Capital for Change) to support their recapitalization from Webster Bank for residential 1-4 energy lending, including Smart-E lending, or the \$5,000,000 guarantee to Housing Development Fund for the repayment of the MacArthur Foundation program related investment.

<sup>&</sup>lt;sup>7</sup> Private Investment is based on the Gross System Cost and includes adjustments related to financing costs or Fair Market Value.

- Launched the EnergizeCT Health and Safety Revolving Loan Fund for multifamily properties using \$1.5 million from CT Department of Energy and Environmental Protection, but uptake was limited speaking to the challenges in addressing this market
- Invested in \$6.4 million of project systems in the PosiGen Solar for All program
- Achieved some market transformation in Smart-E with a \$4 million investment of ARRA-SEP funds in a 0.99% special offer available from Jun-Dec 2017: saw a 4x increase in monthly volume post-offer, vs. pre-offer, strong interest in the product from new contractors, and a movement towards self-funding interest rate buydowns by select contractors and one lender (for a limited-time offer with Eversource for gas expansion).
- The number of credit challenged Smart-E loans remains low due to the inability to promote the offer broadly after the budget was eliminated due to the legislative sweeps, however the gap is closing in terms of uptake across the income bands
- Launched the Smart-EV Loan Pilot which saw 32 closed loans in the first 6 months and \$1 million in principal, though not the uptake of used vehicles that was hoped for
- Concluded the first phase of the Green and Healthy Homes project, which highlighted a strong foundation in the state for an integrated energy, housing and health intervention model; secured access to Medicaid data to begin ROI analysis (one of 2 states to do this)

# Residential Sector Programs - Single Family

The following are brief descriptions of the progress made under the Comprehensive Plan for FY 2018 in the Residential Sector Programs:

■ Energize CT Smart-E Loan — a credit enhancement program that uses repurposed ARRA-SEP funds as a loan loss reserve and interest rate buy down to attract private capital from local credit unions and community banks. The product provides low interest (i.e. 4.49-6.99%) unsecured loans at long terms (i.e. between 5 to 20 years) for technologies that are consistent with the goals of the Comprehensive Energy Strategy and included in FY18 special offers of 0.99% rates for installing multiple eligible measures or converting to natural gas or installing renewable heating and cooling technologies (see Table 2).

Table 2. Energize CT Smart-E Loan Overview for FY 2018 (Lender data is as of June 30, 2018)

Program Data	Approved	Closed	Total
Projects	296	1,762	2,058
Installed Capacity (MW)	0.2	3.8	4.0
Lifetime Clean Energy			
Produced (MWh)	9,275	199,280	208,555
Annual Combined Energy			
Generated & Saved (MMBtu)	1,763	40,726	42,490
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)8	\$0	\$5,434,236	\$5,434,236

<sup>&</sup>lt;sup>8</sup> Interest rate buydown data as of 5/31/2018. Based on the Objective Functions for the Smart-E Loan, the credit enhancement for the second loss reserve represents 7.5% of the value of the local lender loans for Class A loans (FICO of >680) or 15% of the value of the local lender loans for Class Be loans (FICO of 640-679). This Includes \$1,393,935 in loan loss reserves and \$4,040,301 in interest rate buydowns.

Loans or Leases (\$'s)	\$0	<u>\$0</u>	<u>\$0</u>
Total Green Bank Investment			
(\$'s)	\$0	\$5,434,236	\$5,434,236
Private Capital (\$'s)	\$3,696,060	\$30,184,420	\$33,880,480
Direct Job Years	6	146	152
Indirect & Induced Job Years	8	190	198
Lifetime Tons of CO2			
Emissions	4,984	107,737	112,721

For a breakdown of the Smart-E Loan Channel, see Table 3.

**Table 3. Energize CT Smart-E Loans by Channel** 

Smart-E Loan Channel	Closed	% of All Loans
Home Performance	167	9%
HVAC	1,141	65%
Solar PV	390	22%
Blank	62	4%
Total	1,762	100%

For a breakdown of the Smart-E Special Offers, see Table 4.

**Table 4. Energize CT Smart-E Loan Special Offers** 

Smart-E Loan Special Offers	Target	Closed	% of Goal	% of Special Offers
Bundle	299	686	229%	53%
Natural Gas	19	379	1995%	29%
Heat Pump	56	220	393%	17%
Total Special Offers	374	1,285	344%	100%
Standard Offer	66	477	723%	
Total Offers	440	1,762	400%	

For a breakdown of Smart-E loan volume by credit score band, see Table 5.

**Table 5. Energize CT Smart-E Credit Scores** 

Unknown <639 640-679 680-699 700-719 720-739							Grand Total
44	47	114	166	198	193	1,000	1,762
2%	3%	6%	9%	11%	11%	57%	

For a breakdown of Smart-E loan volume and investment by census tracts categorized by Area Median Income (AMI) bands and Distressed Communities as designated by DECD, see Tables 6 and 7. It should be noted that Smart-E is not an income targeted program and only in the second half of FY18 began offering the expanded credit-challenged version of the program, opening new opportunities to partner with mission-oriented lenders focused on reaching consumers in underserved lower income markets.

Table 6. Smart-E Loan Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	Owner Occupied 1- 4 Unit Househol ds	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulativ e Project Units	% of Cumulativ e Projects	Cumulativ e Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
<60%	60,769	7%	111	6%	185	6%	3.0	\$2,438,108	5%
60%-80%	99,220	12%	195	11%	313	11%	3.2	\$4,050,762	8%
80%-100%	165,331	19%	312	18%	529	18%	3.2	\$7,931,520	15%
100%-120%	187,463	22%	397	23%	649	22%	3.5	\$10,951,565	21%
>120%	345,311	40%	744	42%	1,263	43%	3.7	\$26,345,285	51%
Unknown		0%	3	0%	3	0%	0.0	\$100,311	0%
Total	858,094	100%	1,762	100%	2,942	100%	3.4	\$51,817,551	100%

**Table 7. Smart-E Loan Closed Activity in Distressed Communities** 

Distressed Designation	Total Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	l % of	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
Distressed	438,710	32%	380	22%	624	21%	1	\$8,704,246	\$19.84
Not Distressed	916,003	68%	1,377	78%	2,312	79%	3	\$42,961,789	\$46.90
Unknown		0%	5	0%	6	0%	0	\$151,515	\$0.00
Total	1,354,713	100%	1,762	100%	2,942	100%	2	\$51,817,551	\$38.25

PosiGen Solar for All – a solar PV lease and energy efficiency ESA financing program that focuses on the low to moderate income (LMI) market segment. Supported by \$8.5 million subordinated debt investment from the Connecticut Green Bank, into a total fund of \$45 million to support nearly 1,700 homes with a focus on the low-to-moderate income market segment utilizing alternative underwriting approaches that examine factors such as bill payment history and bad debt and bank databases (see Table 8). 97% of projects include light weatherization and efficiency provided by HES or HES-IE and 63% of customers received deeper measures through PosiGen's energy efficiency agreement. The Solar for All program has been successful at reaching the LMI market segment with 63% of homes verified as low incomes. An independent survey of PosiGen customers has been conducted that found high levels of satisfaction with the product and with their savings.

Table 8. PosiGen Solar for All Overview for FY 2018 (data is as of June 30, 2018)

Program Data	Approved	Closed	Total
Projects	92	612	704
Installed Capacity (MW)	0.6	3.9	4.5
Lifetime Clean Energy			
Produced (MWh)	25,774	159,807	185,581

Annual Combined Energy			
Generated & Saved (MMBtu)9	4,888	30,991	35,878
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$828,000	\$5,508,000	\$6,336,000
Total Green Bank Investment			
(\$'s)	\$828,000	\$5,508,000	\$6,336,000
Private Capital (\$'s)	\$1,402,690	\$11,126,184	\$12,528,874
Direct Job Years	7	44	51
Indirect & Induced Job Years	8	55	64
Lifetime Tons of CO2			
Emissions	13,886	86,192	100,078

For a breakdown of PosiGen Solar for All volume and investment by census tracts categorized by Area Median Income bands and Distressed Communities as designated by DECD, see Tables 9 and 10. As an income-targeted program, this table illustrates the degree to which the goal of serving consumers in lower income communities is being met.

Table 9. PosiGen Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	Owner Occupied 1- 4 Unit Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
<60%	60,769	7%	225	37%	615	38%	10.1	\$16,437,932	37%
60%-80%	99,220	12%	143	23%	358	22%	3.6	\$9,704,975	22%
80%-100%	165,331	19%	109	18%	282	17%	1.7	\$8,010,661	18%
100%-120%	187,463	22%	65	11%	160	10%	0.9	\$4,572,183	10%
>120%	345,311	40%	70	11%	200	12%	0.6	\$5,808,885	13%
Unknown		0%	0	0%	0	0%	0.0	\$0	0%
Total	858,094	100%	612	100%	1,615	100%	1.9	\$44,534,636	100%

Table 10. PosiGen Closed Activity in Distressed Communities

Distressed Designation	Total Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
Distressed	438,710	32%	379	62%	984	61%	2	\$26,762,149	\$61.00
Not Distressed	916,003	68%	231	38%	629	39%	1	\$17,706,587	\$19.33
Unknown	·	0%	2	0%	2	0%	0	\$65,900	\$0.00
Total	1,354,713	100%	612	100%	1,615	100%	1	\$44,534,636	\$32.87

# **Residential Sector Programs – Multifamily**

The following are brief descriptions of the progress made under the Comprehensive Plan for FY 2018 in the Residential Sector Programs for Multifamily properties:

<sup>&</sup>lt;sup>9</sup> Includes an additional 15.0 MMBtu for each project for the HES audit.

• Multifamily – offerings for both the affordable and market rate multifamily segments include pre-development loan programs supported by Green Bank capital and term financing options such as the Low Income Multifamily (LIME) loan offered by Capital for Change and supported by \$3,500,000 of seed capital and \$625,000 of ARRA-SEP and Green Bank funds for a loss reserve, a Catalyst Loan Fund for gap financing and health and safety remediation supported by Green Bank capital and Regional Greenhouse Gas Initiative funds provided by DEEP, and C-PACE and solar PPA options, leveraging the C&I sector programs (see Table 11). Affordable pre-development loans and gap financing are offered through a \$5 million program-related investment from the MacArthur Foundation, housed at the Housing Development Fund (HDF), backed by a Green Bank repayment guaranty (see Table 12). Units served this fiscal year are noted in Table 13.

Table 11. Multifamily Term Financing Overview for FY 2018

Program Data	Approved	Closed	Total
Projects	6	11	17
Installed Capacity (MW)	0.3	0.1	0.4
Lifetime Clean Energy			
Produced (MWh)	2,426	19,702	22,128
Annual Combined Energy			
Generated & Saved (MMBtu)	331	5,034	5,635
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s) 10	\$0	\$43,373	\$43,373
Loans or Leases (\$'s)	\$0	\$101,190	\$101,190
Total Green Bank			
Investment (\$'s)	\$0	\$144,563	\$144,563
Private Capital (\$'s)	\$4,144,180	\$25,949,670	\$30,093,850
Direct Job Years	18	39	56
Indirect & Induced Job Years	23	50	74
Lifetime Tons of CO2			
Emissions	1,307	10,469	11,776

Table 12. Multifamily Pre-Development Financing Overview for FY 2018

Program Data	Approved	Closed	Total
Projects	35	7	42
Installed Capacity (MW)	-	-	-
Lifetime Clean Energy			
Produced (MWh)	-	-	-
Annual Combined Energy			
Generated & Saved (MMBtu)	-	-	-
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$49,275	\$14,351	\$63,626
Total Green Bank			
Investment (\$'s)	\$49,275	\$14,351	\$63,626
Private Capital (\$'s)	\$501,235	\$774,117	\$1,275,352
Direct Job Years	-	1	1

<sup>&</sup>lt;sup>10</sup> This is the actual loan loss reserve position of the LIME loan as of 6/30/2017

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Indirect & Induced Job Years	-	2	2
Lifetime Tons of CO2			
Emissions	-	-	-

**Table 13. Multifamily Number of Units** 

	Approved	Closed	Total
Affordable	1,303	1,694	2,991
Market Rate	1,181	0	1,187
Total # of Multifamily			
Units	2,484	1,694	4,178

For a breakdown of Multifamily volume and investment by census tracts categorized by Area Median Income bands and Distressed Communities as designated by DECD, see Tables 14 and 15. As a program predominantly focused on properties that serve low-to-moderate income residents, this table doesn't reflect the degree to which the goal of serving lower income residents is being met. The program is equally focused on affordable housing properties located in more affluent communities and census tracts that are housing families of lower incomes as it is on affordable housing properties in lower income census tracts.

Table 14. Multifamily Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	Total Owner/Rental Occupied 5+ Unit Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
<60%	86,225	37%	1,609	95%	2,384	44%	27.6	\$42,015,830	\$487.28
60%-80%	45,398	19%	32	2%	645	12%	14.2	\$6,036,438	\$132.97
80%-100%	49,125	21%	30	2%	977	18%	19.9	\$7,831,793	\$159.43
100%-120%	30,753	13%	0	0%	739	14%	24.0	\$8,514,735	\$276.87
>120%	22,618	10%	24	1%	362	7%	16.0	\$5,696,116	\$251.84
Unknown		0%	0	0%	298	6%	0.0	\$2,112,015	\$0.00
Total	234,119	100%	1,695	100%	5,405	100%	23.1	\$72,206,926	\$308.42

**Table 15. Multifamily Closed Activity in Distressed Communities** 

Distressed Designation	Total Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
Distressed	438,710	32%	1,495	88%	2,501	46%	6	\$43,920,159	\$100.11
Not Distressed	916,003	68%	200	12%	2,904	54%	3	\$28,286,768	\$30.88
Unknown	·	0%	0	0%	0	0%	0	\$0	\$0.00
Total	1,354,713	100%	1,695	100%	5,405	100%	4	\$72,206,926	\$53.30

For a breakdown of the use of Green Bank resources for Residential Programs – see Table 16.

Table 16. Distribution of Green Bank Funds Invested in Projects and Programs through Subsidies, Credit Enhancements, and Loans and Leases for FY 2018<sup>11</sup>

Program	Subsidies		Credit Enhancements		Loans and Leases		Total
Smart-E Loan	\$0				\$0	0%	\$5,434,236
PosiGen	\$0	0%	\$0	0%	\$5,508,000	100%	\$5,508,000
Multifamily Term	\$0	0%	\$43,373	30%	\$101,190	70%	\$144,563
Multifamily Pre-							
Development	\$0	0%	\$0	0%	\$14,351	100%	\$14,351
Total	\$0	0%	\$5,477,610	49%	\$5,623,541	51%	\$11,101,151

Of these programs, the following is a breakdown of their contributions made thus far towards the performance target and the human resources required to implement them (see Table 17):

Table 17. Program Progress Made for FY 2018<sup>13</sup>

			Multifamily	Multifamily	Total Program
Key Metrics	Smart-E	PosiGen	Term <sup>14</sup>	Pre-Dev	Progress
Date of Program			Oct 2013 -	Oct 2013 -	
Approval	Nov 2012	Jun 2015	Jan 2017	Oct 2015	
			Oct 2013 –	Oct 2013 –	
Date of Program Launch	Nov 2013	Jul 2015	Jan 2017	Oct 2015	
Ratepayer Capital at					
Risk	\$5,434,236	\$5,508,000	\$144,563	\$14,351	\$11,101,151
Private Capital	\$30,184,420	\$11,126,184	\$25,949,670	\$774,117	\$68,034,391
Deployed (MW)	3.8	3.9	0.1	-	7.8
# of Loans/Installations	1,762	612	11	7	2,392
Lifetime Production					
(MWh)	199,280	159,807	19,702	-	378,790
Annual Combined					
Energy Generated &					
Saved (MMBtu)	40,726	30,991	5,034	-	76,751

# "Top 5" Headlines

The following are the "Top 5" headlines for Residential Sector Programs for FY 2018:

1. PosiGen solar company announces \$5M investment

Greenwich Time

Stonehenge Growth Capital, a subsidiary of Stonehenge Capital Co., made a \$5 million investment in PosiGen that will enable the solar company to expand operations in

<sup>&</sup>lt;sup>11</sup> Includes only closed transactions

<sup>&</sup>lt;sup>12</sup> Includes \$341,751 in loan loss reserves and \$421,648 in interest rate buydowns.

<sup>&</sup>lt;sup>13</sup> Includes only closed transactions

<sup>&</sup>lt;sup>14</sup> Multifamily is a collection of individual programs, each with their own approval and launch dates.

Connecticut. PosiGen, based in Louisiana with local offices in Bridgeport, has installed panels for 10,000 families across four states, including Connecticut.

## 2. Manchester Housing Authority to Become More Energy Efficient and Sustainable

#### Facilitiesnet

The Connecticut Green Bank provides funding for infrastructure improvements for Manchester Housing Authority (MHA) in Conn., located 11 miles east of Hartford. Valued at almost \$2.7 million, the 20-year performance contract is projected to generate annual energy savings through use of solar photovoltaic as well as other energy efficiency measures. The project is part of a comprehensive modernization plan for approximately 60 percent of the Authority's portfolio of housing units and developments.

# 3. CESA honors six states for clean energy excellence

Solar Power World

The Clean Energy States Alliance (CESA), a national nonprofit coalition of public agencies working together to advance clean energy, announced the Connecticut Green Bank's "Solar for All" partnership as a recipient of the 2018 State Leadership in Clean Energy Awards as an exemplary model for bringing LMI finance solutions to scale and achieving inclusive participation in the clean energy economy.

#### 4. Hamden Announces Partnership with "Solar for All"

Hamden Patch

Mayor Curt Balzano Leng is pleased to announce Hamden's participation in the "Solar for All" program, which is a partnership between the Connecticut Green Bank and PosiGen Solar, to make clean energy more accessible and affordable to all Hamden homeowners.

#### 5. Greenlighting Green Lending

#### Multi-Housing News

Connecticut Green Bank helps multifamily property owners shift away from the tendency to finance energy upgrades with reserves or commercial loans, instead using projected savings from those upgrades as the source of capital.

#### **Lessons Learned**

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

#### Residential 1-4

- The 0.99% Smart-E special offer sparked market transformation, peaking enough interest to sustain the product at higher levels than before the offer was available. In 7 months, the special offer brought 54 new contractors to the program who continued to offer the product without the interest rate buydown funds when the offer ended, resulting in a 4-fold increase in the monthly run rate now, with the offer gone, than the run rate prior to the campaign. The product at standard rates continues to attract new contractors, with 25 added in the last 6 months. The special offer helped to solidify relationships between contractors and lenders, who are now creating partnerships to offer contractor-led interest rate buydowns without the Green Bank. One lender, Mutual Security Credit Union, has partnered with Eversource Gas to offer Smart-E at a rate below the standard program rates (with no Green Bank support), to encourage the conversion to natural gas in two of their target communities.
- Smart-E has seen higher penetration in lower Area Median Income bands but is still struggling to reach credit-challenged borrowers. The program is closing the gap for market penetration across the income bands. This speaks to the continued appeal of the program and product for a wide swath of consumers in the market, and was bolstered by the addition of many new contractors during the 0.99% campaign. Smart-E is the only EnergizeCT product that does not require a down payment, which means more low-to-moderate income (LMI) homeowners were able to take advantage of the product. Despite the product now allowing credit scores as low as 580, we were unable to roll out the marketing aimed at reaching more credit-challenged borrowers due to the sweeps and elimination of the marketing budget. This remains a critical market segment for us to reach.
- PosiGen is delivering on its promise to reach an underserved customer segment and deliver significant savings. Through the Solar for All community-based outreach model and PosiGen's affordable offering, PosiGen is showing hard-to-reach homeowners it's worth it to go solar. An independent study by Opinion Dynamics found that a majority of PosiGen customers were unconvinced by prior solar offers due to cost, low expected savings and process complexity. These customers were not only compelled by PosiGen's offering, but have since realized savings from their solar system and energy efficiency measures. Through Green Bank's own analysis of offerings and market penetration, PosiGen is delivering significant savings from both solar and efficiency, and has helped drive the overall increase in LMI market penetration for solar, often amongst our lowest income homeowners.
- The Smart-EV Loan Pilot accepted its first loan in January and has seen interest grow steadily. The Tesla customer base has seen the most engagement due to the sales team highlighting the loan as an option for their Connecticut customers, as well as their website's blog where financing is a popular topic. Customers are recommending the loan to one another. Strategic outreach is being developed to engage dealers to create more activity in the used vehicle space.
- Customer segmentation and credit data analysis shed light on size and motivations of LMI market. An Experian analysis of state credit data showed creditworthy LMI borrowers in greater numbers than presumed. Experian data shows that over 70% of LMI households would meet a minimum FICO score for a third-party ownership solar model and an even great portion meeting the Smart-E criteria. Based on a new customer segmentation analysis, 21% of LMI households would be interested in solar based on profiles of actual solar customers. Staff has worked to educate the solar

installer and contractor industries on these findings, dispelling the myth that income dictates creditworthiness, and is actively partnering to help focus outreach and targeting for this critical market segment.

#### Multi-Family

Steady progress continues to be made against heavy trade winds...

- Multifamily pipeline continues to be lumpy and long but progressing steadily. The focus on strategic financing interventions including: pre-development resources, term financing for mid-cycle properties, solar, and health & safety, as well as gap financing, appears to be the right approach. We closed deals that the team has been shepherding for 3+ years, with sizes ranging from \$6,000 for pre-development loans to a \$2.6 million term loan for holistic energy improvements. The number of pre-development loans nearly doubled from FY17 to FY18, with the average loan size nearly tripling (reflecting higher passive house design costs being financed). Average term financing increased from \$400K to ~\$526K.
- Deployment strategy for EnergizeCT Health & Safety Revolving Loan Fund needs adjustment. Response to our first round RFP for EnergizeCT Health & Safety Funds was lethargic. Those applicants that did apply were seeking (and required) grants to successfully fund their projects. Green Bank provided two contingent letters of commitment for grant funding, one of which recently notified us that they will not be proceeding because DOH funding was not approved for the project. Taken as a whole, Green Bank permanent financing projects frequently require complex permutations of grant and permanent financing. Projects like these, seeking a combination of health & safety grants, low-interest energy gap financing, unsecured term loans and DOH CHAMP awards are not outside the norm. The second round RFP deadline is in late July. Once compete, we will reassess how we approach that market with these loan funds.
- Strategic partnerships remain key to program marketing, outreach, delivery and overall sector development, but partner and client capacity remain a challenge. The Multifamily Program continues to rely heavily on our program partners for these functions. Despite important partnerships, Green Bank staff and consultants do the bulk of origination activities, including project sourcing, shepherding, and financing execution. This is a reality that won't scale and remains a critical strategic challenge to be solved.
- The joint EnergizeCT Multifamily Initiative continues to be an empty source of projects for mid-cycle multifamily financing by Green Bank. This joint initiative with the utility companies is a large potential channel, and significant opportunity for owners to leverage cash flow from energy savings to further improve their buildings. Efforts to work with the utility companies and the EEB to identify and resolve areas of misalignment need to continue. Launched in March of 2017, the joint Multifamily Initiative has shown some promise in recent months, having received 6 property applications since January 2018, although none have been viable for Green Bank programs to-date (either due to lack of owner responsiveness or project scopes limited to utility HES core services).

Identifying and successfully activating key points of leverage enables market transformation. CHFA's 2018 Qualified Allocation Plan (QAP), that establishes points for highly competitive and coveted 9% affordable housing low income housing tax credits (LIHTC's), has singularly catalyzed the affordable multifamily high-performance building and passive house sector in Connecticut. It did this by providing 6 points for energy sustainability and passive house new construction developments. The initial draft of the 2019 QAP proposed a reduction in these points, which would have substantially harmed this important and burgeoning industry. As a result of extensive lobbying efforts, headed by members of the Multifamily Peer-to-Peer Network, CHFA increased sustainability points from 6 to 7 in the final QAP. This action enables the sector to continue growing, which, in turn, supports overall demand for more sustainable buildings and continued capacity building among the professional community that serves the sector. Further, CGB's Navigator Pre-Development Loan Program has become a strategic resource to support low income housing tax credit (LIHTC) funded passive house developments.

# **Residential Sector Programs FY 2019 Targets**

Of the 4 program areas being implemented in the Residential Sector Programs, the following is a breakdown of the key targets for each program (see Table 18):

Table 18. Number of Projects, Capital Deployed, and Clean Energy Deployed (MW)

Program	# of Projects	Capital Deployed	Clean Energy Deployed (MW)
Smart-E Loan	540	\$8,775,000	1.3
PosiGen Solar for All	586	\$15,565,855	3.6
Multifamily Term Loans	15	\$2,500,000	0.1
Multifamily Predevelopment Loans	4	\$70,000	-
Total	1,145	\$26,910,855	5.0

For Residential Sector Programs, there are 13.2 full time equivalent staff members supporting four (4) different products and programs. In addition, staff also support ongoing asset management operations of closed programs CT Solar Lease and CT Solar Loan.

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# Memo

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

From: Lucy Charpentier, Mackey Dykes, Bryan Garcia, Eric Shrago, and Nicholas Zuba

**Cc** Brian Farnen and Bert Hunter

**Date:** July 27, 2018

Re: Commercial, Industrial and Institutional Sector Programs – Program Performance towards

Targets for FY 2018 - Preliminary

#### Overview

Pursuant to Public Act 12-2, the Connecticut Green Bank ("Green Bank") launched the Commercial and Industrial Property Assessed Clean Energy (C-PACE) program in January 2013. C-PACE is a statutorily mandated program that was the primary commercial and industrial (C&I) financing product in the comprehensive plan and budget for fiscal years 2017. In October 2017, the Connecticut General Assembly repurposed much of the funding provided by ratepayers for the Green Bank (for Fiscal Years 2018 and 2019) to the General Fund to close gaps in the state's budget forcing the Green Bank to reduce its operations and limiting its impact. Due to the Connecticut General Assembly's mid-year reappropriation of monies from the Clean Energy Fund to the General Fund, the Green Bank has had to scale back its programs including the development of an Energy Savings Agreement Product.

For a program description and information on the Total Addressable Market and Serviceable Addressable Market (SAM), please see the FY 2017 through FY 2019 Comprehensive Plan.

# **Performance Targets and Progress**

With respect to the Comprehensive Plan approved by the Board of Directors of the Green Bank on July 21, 2017 and revised on January 26, 2018,<sup>1</sup> the following are the performance targets for FY 2018 and progress made to targets for the Commercial, Industrial and Institutional Sector Programs (see Table 1) as of June 30, 2018.

Table 1. Program Performance Targets and Progress Made to the Comprehensive Plan for FY 2018

Key Metrics	Program	Program	Program	% of
-	Performance	Performance	Progress <sup>2</sup>	Goal
	Original Targets	Revised Targets		
	(as of 07/01/17)	(of 01/26/18)		

<sup>&</sup>lt;sup>1</sup> For mid-year revisions to budget and targets, see "Q2 Progress to Targets" memo of January 19, 2018 on page 74 – click here

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

Capital Deployed <sup>3</sup>	\$34,000,000	\$34,000,000	\$33,021,901	97%
Investment at Risk <sup>4</sup>			\$8,356,472	
Private Capital <sup>5</sup>			\$24,665,429	
Deployed (MW)	10.4	10.4	9.5	92%
# of Loans/Projects	67	67	78	116%
Leverage Ratio			4.0	

In summary, for Commercial, Industrial and Institutional Sector Programs in FY 2018, there were 78 projects (achieving 116% of the goal) requiring \$33.0M of investment (achieving 97% of the goal) that led to the deployment of 9.5 MW of clean energy deployed (achieving 92% of the goal), that delivered a leverage ratio of 4:1 for private to public funds invested.

### **Executive Summary for the CI&I Sector Programs**

The following is a bulleted executive summary of the Infrastructure Sector Programs:

- Despite CGB budget setbacks, C-PACE Program surpassed its projects closed and capital deployed goals for first time in program's history
- Broke 200 C-PACE projects closed threshold
- Launched C-PACE for New Construction pilot program, expanding C-PACE's reach to this untapped market
- Received increasing interest from 3<sup>rd</sup> party capital providers, with one new capital provider added in FY18
- 29% of the C-PACE project in FY18 included efficiency, slightly below the overall program average of 33%
- Deployed new Onyx and US Bank tax equity funds to support Commercial and Institutional Lease program, successfully closing new PPA projects using these funds in FY18
- Worked with utilities to select capital partners (Amalgamated Bank and National Energy Improvement Fund) and design a structure to the joint goal of CGB and the Energy Efficiency Board to reduce the cost and expand the availability of capital for the Small Business Energy Advantage program

## Commercial, Industrial and Institutional Sector Programs

The following are brief descriptions of the progress made under the last comprehensive plan in the Commercial, Industrial and Institutional Sector Programs:

■ <u>C-PACE</u> – Commercial Property Assessed Clean Energy (C-PACE) is an innovative financing program that is helping commercial, industrial and multi-family property owners access affordable, long-term financing for smart energy upgrades to their buildings (see Table 2).

<sup>&</sup>lt;sup>3</sup> Capital Deployed is used to measure Investment actuals to targets and it includes fees related to financing costs and adjustments for Fair Market Value which are not included in the Gross System Cost. It represents: the Fair Market Value for Commercial/Residential Leases, the Amount Financed or Gross System Cost (whichever is greater) for CPACE, the Amount Financed for Residential financing products and the Gross System Cost for all other programs.

<sup>&</sup>lt;sup>4</sup> Includes funds from the Clean Energy Fund, RGGI allowance revenue, repurposed ARRA-SEP funds, and other resources that are managed by the Connecticut Green Bank that are committed and invested in subsidies, credit enhancements, and loans and leases.

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

Table 2. C-PACE Overview for FY 2018

Program Data	Approved	Closed	Total
Projects	7	66	73
Installed Capacity (MW)	2.9	7.3	10.3
Lifetime Clean Energy Produced			
(MWh)	83,545	236,031	319,576
Annual Combined Energy			
Generated & Saved (MMBtu)	12,584	25,194	37,777
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
Loans or Leases (\$'s)	\$3,049,706	\$5,721,604	\$8,771,310
Total Green Bank Investment (\$'s)	\$3,049,706	\$5,721,604	\$8,771,310
Private Capital (\$'s)	\$4,704,202	\$21,034,002	\$25,738,204
Direct Job Years	28	85	112
Indirect & Induced Job Years	36	111	147
Lifetime Tons of CO2 Emissions	45,011	127,812	170,823

C-PACE has been used to fund projects in economically diverse locations across the state as reflected by Table 3 for Metropolitan Statistical Area (MSA) Area Median Income (AMI) and Table 4 for Distressed Communities as designated by DECD. It should be noted that C-PACE is not an income targeted program.

Table 3. C-PACE Closed Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands

MSA AMI Band	Total Population	% of Total Population	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 People	Cumulative Capital Deployed	Cumulative Capital Deployed / Population
<60%	649,617	18%	8	12%	50	22%	0.1	\$28,608,455	\$44.04
60%-80%	509,088	14%	11	17%	27	12%	0.1	\$11,959,162	\$23.49
80%-100%	641,084	18%	12	18%	38	16%	0.1	\$28,311,404	\$44.16
100%-120%	653,309	18%	8	12%	45	19%	0.1	\$20,743,162	\$31.75
>120%	1,126,543	31%	22	33%	64	28%	0.1	\$41,646,319	\$36.97
Unknown		0%	5	8%	8	3%	0.0	\$4,623,068	\$0.00
Total	3,579,641	100%	66	100%	232	100%	0.1	\$135,891,568	\$37.96

**Table 4. C-PACE Closed Activity in Distressed Communities** 

Distressed Designation	Total Population	% of Total Population	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 People	Cumulative Capital Deployed	Cumulative Capital Deployed / Population
Distressed	1,162,653	32%	18	27%	76	33%	0	\$58,827,769	\$50.60
Not Distressed	2,425,917	68%	48	73%	156	67%	0	\$77,063,799	\$31.77
Unknown		0%	0	0%	0	0%	0	\$0	\$0.00
Total	3,588,570	100%	66	100%	232	100%	0	\$135,891,568	\$37.87

■ CT Solar Lease (Commercial) — a third-party ownership offering that combines public and private funding through the Connecticut Solar Lease Program to provide Power Purchase Agreements (PPAs) for solar PV to creditworthy commercial and industrial, as well as nonprofit, municipal, and multifamily housing, end-users of electricity (see Table 5). This program supports solar PV projects between 50 kW - 2 MW in size — with an average size of 250 kW. As the CGB concludes its partnership with Onyx Renewables this fall, we will continue to serve the market with our PPA product through the Inclusive Prosperity Capital spin-out, while seeking to build on initial successes with the Connecticut State College and University system over the past year to further serve state agencies — alongside the rest of the market — in FY19.

Table 5. CT Solar Lease Overview for FY 2018

Program Data	Approved	Closed	Total
Projects	-	22	22
Installed Capacity (MW)	-	3.5	3.5
Lifetime Clean Energy Produced			
(MWh)	-	100,322	100,322
Annual Combined Energy			
Generated & Saved (MMBtu)	-	9,081	9,081
Subsidies (\$'s)	\$0	\$0	\$0
Credit Enhancement (\$'s)	\$0	\$0	\$0
PPAs (\$'s)	\$0	\$4,659,026	\$4,659,026
Total Green Bank Investment (\$'s)	\$0	\$4,659,026	\$4,659,026
Private Capital (\$'s)	\$0	\$5,612,309	\$5,612,309
Direct Job Years	-	21	21
Indirect & Induced Job Years	-	26	26
Lifetime Tons of CO2 Emissions	-	54,050	54,050

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

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

MSA AMI Band	Total Population	% of Total Population	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 People	Cumulative Capital Deployed	Cumulative Capital Deployed / Population
<60%	649,617	18%	1	5%	7	7%	0.0	\$4,102,532	\$6.32
60%-80%	509,088	14%	2	9%	7	7%	0.0	\$4,578,558	\$8.99
80%-100%	641,084	18%	3	14%	15	16%	0.0	\$11,080,393	\$17.28
100%-120%	653,309	18%	3	14%	26	28%	0.0	\$18,363,806	\$28.11
>120%	1,126,543	31%	13	59%	39	41%	0.0	\$31,165,366	\$27.66
Unknown		0%	0	0%	0	0%	0.0	\$0	\$0.00
Total	3,579,641	100%	22	100%	94	100%	0.0	\$69,290,655	\$19.36

**Table 7. CT Solar Lease Closed Activity in Distressed Communities** 

Distressed Designation	Total Population	% of Total Population	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 People	Cumulative Capital Deployed	Cumulative Capital Deployed / Population
Distressed	1,162,653	32%	5	23%	10	11%	0	\$6,241,486	\$5.37
Not Distressed	2,425,917	68%	17	77%	84	89%	0	\$63,049,169	\$25.99
Unknown		0%	0	0%	0	0%	0	\$0	\$0.00
Total	3,588,570	100%	22	100%	94	100%	0	\$69,290,655	\$19.31

For a breakdown of the use of the Green Bank resources for Commercial, Industrial and Institutional Programs, see table 8 below.

Table 8. Distribution of Green Bank Funds Invested in Projects and Programs through Subsidies, Credit Enhancements, and Loans and Leases for FY 2018

Program	Subsidies		Credit		Loans and	Leases	Total <sup>6</sup>
			Enhancements				
C-PACE	\$0	0%	\$0	0%	\$5,721,604	100%	\$5,721,604
CT Solar Lease	\$0	0%	\$0	0%	\$4,659,026	100%	\$4,659,026
Total*	\$	%	\$0	0%	\$8,356,472	100%	\$8,356,472

Of these programs, the following is a breakdown of their contributions made thus far towards the performance target and the human resources required to implement them (see Table 9):

Table 9. Program Progress Made in FY 2018<sup>7</sup>

Key Metrics		0	Total
	C-PACE	Commercial Lease	Program Progress <sup>8</sup>
Date of Program Approval	Sep 2012	Jun 2013	
Date of Program Launch	Jan 2013	Sep 2013	
Ratepayer Capital at Risk	\$5,721,604	\$4,659,026	\$8,356,472
Private Capital	\$21,034,002	\$5,612,309	\$24,665,429
Deployed (MW)	7.3	3.5	9.5
# of Loans/Installations	66	22	78
Lifetime Production (MWh)	236,031	100,322	299,132
Annual Combined Energy			
Generated & Saved (MMBtu)	25,194	9,081	33,806

#### "Top 5" Headlines

The following are the "Top 5" headlines for Commercial, Industrial and Institutional Sector Programs for FY 2018:

<sup>&</sup>lt;sup>6</sup> Totals are adjusted to remove projects that overlap programs.

<sup>&</sup>lt;sup>7</sup> Includes only closed transactions

<sup>&</sup>lt;sup>8</sup> Totals are adjusted to remove projects that overlap programs.

1. Green Bank extends renewable energy financing program to new construction 6/15/18 HARTFORD BUSINESS JOURNAL

The [Connecticut] Green Bank announces a two-year pilot for C-PACE program usage for the design and construction of new buildings.

2. CT clean energy program invests \$114M in 200 projects 1/31/18

HARTFORD BUSINESS JOURNAL

"The [Connecticut] Green Bank team has built a very effective program centered on high standards, great marketing, and an open market approach that encourages private sector engagement and investment in improving buildings throughout the state," said David Gabrielson, PACENation's executive director.

3. Green Bank names solar partner 9/14/17

HARTFORD BUSINESS JOURNAL

The **Connecticut Green Bank** selected Onyx Renewable Partners to help spur deployment of commercial-scale solar in the state.

4. Manchester Community College to receive solar energy system this fall 9/11/17 MANCHESTER JOURNAL INQUIRER

Bryan Garcia, the president and CEO of **Connecticut Green Bank**, said the solar project saves a significant amount of money for taxpayers. "The CSCU has shown tremendous leadership with this initiative," Garcia said. "And with a high-quality partner like GE overseeing the installations, there is little question these systems will perform and create a win-win-win for all involved."

5. Energy Upgrades Help Connecticut Businesses Save Money, Stay Competitive 8/1/17 HARTFORD COURANT

"The C-PACE financing program is the smartest long-term solution for achieving our clean energy demands," said Jerry Martorelli, owner of Galleria Design Center. "With C-PACE, we are able to reduce operation expenses and increase efficiency, all while making a measurable impact on the environment and surrounding community."

#### **Lessons Learned**

Based on the implementation of the Commercial, Industrial and Institutional Sector Programs thus far, the following are the key lessons learned:

- Contractors are vital to growth of C-PACE A clear majority of C-PACE contractors do not do repeat projects. While contractor training sessions with CGB's Technical Administrator have helped expand the contractor base in Connecticut, it has not translated into more repeat contractors. In addition to our previous efforts, CGB staff worked more closely with contractors by holding one-on-one meetings to provide them with tools and assistance to encourage them to do more projects. This one-on-one grooming has helped get some contractors (i.e. 64Solar, Total Energy Connection, etc.) to close on and develop multiple C-PACE projects in a single fiscal year. CGB has also focused on improving the process and reducing closing time to reduce the perception that C-PACE is too hard and takes too long.
  - CGB continues to invest in recruiting new contractors to the program and providing training and assistance to deploy C-PACE financing.
- <u>Campaigns and Partnerships</u> the focused marketing and grant offering to the manufacturing sector through the Energy on the Line campaign continued to be a

success. But it was apparent that campaigns and partnerships take time to flourish and mature. Projects that came from Energy on the Line largely closed in FY18, but this effort started late in FY16, showing that projects still take time to develop and campaigns like this take time to flourish. A campaign targeting older customers did help to yield one C-PACE PPA project, but it is clear more time is needed to yield more projects. Direct outreach to building owners works and CGB will focus on continuing to deploy direct-to-building owner campaigns as well as outreach by the team.

- Open Market Connecticut's open market platform continues to attract capital providers to Connecticut (one capital provider became their own originator, and five others expressed interest in becoming their own originators in FY18), seeing the most interest from new capital providers in a single year. The influx of new capital providers originating their own C-PACE transactions may help to scale up and grow the C-PACE Program in FY19 and beyond.
- PPA As this product has grown, it has become increasingly clear that a hands-on approach to the development and financing of commercial-scale PPA projects is a key to the Green Bank's success with this program. From credit underwriting to document negotiation to contractor management, these projects do best when the Green Bank can bring a combination of programmatic discipline and market-driven flexibility to solve problems and bring projects across the finish line. While we need to continue to streamline our processes to achieve scale, and enhance our asset management capabilities as program volume has grown, the Green Bank PPA remains a popular product in an underserved market and a source of positive net cash flow for the organization.

CGB continues to make progress on using the PPA to open up the state building portfolio for solar. The Attorney General has approved a template PPA and, working with DEEP, CGB has begun outreach to agencies to identify sites.

Commercial, Industrial, and Institutional Sector Programs FY 2019 Targets Of programs being implemented in the Commercial, Industrial, and Institutional Sector Programs, the following is a breakdown of the key targets (see Table 10):

Table 10. Number of Projects, Capital Deployed, and Clean Energy Deployed (MW)

Program	# of Projects	Capital Deployed	Clean Energy Deployed (MW)
C-PACE	57	\$24,082,500	6.6
CT Solar Lease	25	\$14,062,500	6.3
Total <sup>9</sup>	73	\$33,082,500	10.6

For Commercial, Industrial, and Institutional Sector Programs, there are 13 full time equivalent staff members supporting three (3) different products and programs.

<sup>&</sup>lt;sup>9</sup> Totals are adjusted to remove projects that overlap programs.



# **Comprehensive Plan**

July 2016 Revised July 2017

Revised July 2018

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## 1. Executive Summary

In June of 2011, in a near unanimous bipartisan manner, the Governor and the General Assembly set clean energy policy on a new course in Connecticut.¹ A major piece of that public policy was the creation of the nation's first "green bank" – the Connecticut Green Bank (the "Green Bank"). Over the past couple of years, the Green Bank has become a model for other states – as well as counties and countries – that are seeking to use public resources in a smarter way to attract more private capital investment in the acceleration and deployment of clean energy in our economies. Approaching \$1 billion of capital mobilized in clean energy deployment in Connecticut in its first five years, the Green Bank is delivering on its vision:

To lead the green bank movement by accelerating private capital investment in clean energy deployment for Connecticut to achieve economic prosperity, create jobs, promoted energy security, and address climate change.

Experts suggest that an investment gap of \$1 trillion a year – or the so called "clean trillion" – exists until 2030 for green infrastructure growth to address important environmental challenges such as global climate change.<sup>2</sup> The emergence of "Cli-Fi" (or climate finance) in an Intergovernmental Panel on Climate Change (IPCC) report,<sup>3</sup> acknowledges the scale of investment and finance needed to transition electric power generation technologies to a global low carbon economy at \$360 billion a year in order to stay within the two-degree Celsius safety zone. The Center for American Progress estimates that the U.S. needs at least \$200 billion in renewable energy and energy efficiency investment annually for 20 years to reduce carbon emissions and avert climate disaster.<sup>4</sup> Whatever the level of investment is, we know that it is substantial in order to achieve our national and global priorities, and that repercussions for not addressing them can be felt locally here in Connecticut.

Although this global capital challenge seems daunting, believe it or not, Connecticut has an important role to play in the grand scheme of things. In a recent economic analysis by FiveThirtyEight.com of metropolitan areas in the United States,<sup>5</sup> the cities of New Haven (#1) and Hartford (#3) are the most representative of a "normal America" based on the following demographic indicators – age, education attainment, race and ethnicity. The impact Connecticut can make to help citizens invest in clean energy will advance our clean energy economy, while serving as an example for the rest of the country. The Natural Resources Defense Council and the Coalition for Green Capital estimate that based on Connecticut's market size, growth rate, and public-private leverage ratio, a green bank in every state

<sup>&</sup>lt;sup>1</sup> Public Act 11-80 "An Act Concerning the Establishment of the Connecticut Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future"

<sup>&</sup>lt;sup>2</sup> Kaminker, C. et al. (2013), "Institutional Investors and Green Infrastructure Investments: Selected Case Studies", *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 35, OECD Publishing. *Note: The authors define "infrastructure" as energy, power, road, rail, water, waste, buildings and agriculture systems*.

<sup>&</sup>lt;sup>3</sup> Climate Change 2014: Mitigation of Climate Change by the IPCC in Chapter 16 "Cross-Cutting Investment and Finance Issues" (April 12, 2014).

<sup>&</sup>lt;sup>4</sup> "Green Growth: A U.S. Program for Controlling Climate Change and Expanding Job Opportunities" by the Center for American Progress (September 2014)

<sup>&</sup>lt;sup>5</sup> 'Normal America' Is Not a Small Town of White People by Jed Kolko of FiveThiryEight.com (April 28, 2016)

across the country would yield \$200 billion a year in annual investment in clean energy within five years — with 90% of the funds coming from private capital sources and all public contributions being returned over a 10- to 20-year period. Currently, the Green Bank mobilizes clean energy investment of approximately \$100 per person per year (with households contributing about \$10 to the Green Bank). In order to scale-up investment to achieve the target identified by the Center for American Progress, the Green Bank needs to mobilize 6 to 7 times more investment in Connecticut's clean energy economy — or the equivalent of \$2.4 billion a year.

#### President Obama said it best:

"We've got public banks like Connecticut's Green Bank and private banks like Goldman Sachs ready to invest billions of dollars in renewable energy."

The Green Bank issued its first green bonds in FY 2017. As a tool to raise capital to support the clean energy policies of Connecticut, green bonds bring great promise for attracting more private capital investment in the state. There have been nearly \$17 billion of green bonds issued in 2016 YTD – with about three-quarters of those funds being invested in each of the following three areas of projects – energy efficiency, renewable energy, and clean transportation. The Green Bank will be utilizing its bonding capability and capacity to raise funds enabling it to increase its impact by blending its financing with private capital investors.<sup>8</sup>

Beyond its current areas of investment, there are several emerging areas of opportunity for the Green Bank, including:

- Clean alternative fuel vehicles and infrastructure;
- Renewable thermal technologies; and
- Grid modernization

If one simply looks at Connecticut's greenhouse gas emissions inventory and the public policy goal of reducing emissions to 80% below 2001 levels by 2050, one can see that a significant level of investment is going to be needed in the fuels we use for transportation (i.e., about 40% of emissions) and how we heat our buildings (i.e., nearly 40% of emissions). This requires looking at the electrification of vehicles (i.e., electric and hydrogen fueled passenger vehicles and busses) and heating of buildings (i.e., deploying renewable thermal technologies in our homes, businesses, and institutions) – by using emission-free energy sources like solar PV and lower emission generation technologies like fuel cells. In order to secure renewable energy's place in the future, advances in battery storage and other distributed energy resources will be required to modernize the grid and seamlessly integrate cleaner, cheaper, and more reliable source of energy into our infrastructure.

<sup>&</sup>lt;sup>6</sup> Through a 1 mill surcharge called the Clean Energy Fund.

<sup>&</sup>lt;sup>7</sup> President Barack Obama in a speech on American Energy on May 9, 2014.

<sup>&</sup>lt;sup>8</sup> Trending: Blending in The Economist (April 23, 2016)

<sup>&</sup>lt;sup>9</sup> Connecticut Greenhouse Gas Emissions Inventory 2012 – Executive Summary by the Department of Energy and Environmental Protection.

The future of clean energy is bright in Connecticut! However, we need to ensure that clean energy is accessible and affordable to everyone. Low to moderate income families in Connecticut are struggling to manage their energy costs, as variable energy expenses that reduce household income can strain families that are struggling to make ends meet. The aging of residential buildings in Connecticut is leading to health and safety concerns as a result of asbestos, mold, lead, knob and tube wiring, and other adverse factors. In its efforts to mobilize more investment in clean energy, the Green Bank must ensure that clean energy is accessible and affordable to everyone, while at the same time coordinating with other stakeholders to ameliorate health and safety issues along the way.

Within this Comprehensive Plan (the "Comp Plan") is a detailed overview of the Green Bank, including various clean energy public policies in Connecticut supporting clean energy market development. As we begin to pursue the issuance of green bonds, we have included a new and succinct summary of our Evaluation Framework in the Comp Plan which describes the logic behind the green bank model. We delve into the integral financing and marketing efforts of the Green Bank from capitalization and customer acquisition to collaboration and learning. The structure of our organization and the programs and products that we offer is built around three market segments: infrastructure (i.e., behind the meter and grid tied solutions); residential (i.e., single family and multifamily); and commercial, industrial, and institutional. Within each market segment, the reader can get a better sense of the public policy drivers, market potential, product offerings, and performance indicators and targets. And lastly, we have included a new Research and Development (R&D) section in this Comp Plan to highlight emerging market opportunities.

This Comp Plan is the formal document required by statute to guide the decisions made by the Board of Directors and staff of the Green Bank. As you will read, the Green Bank will continue its efforts to accelerate the growth of clean energy deployment in Connecticut and lead the green bank movement across the country and around the world.

## 2. Organizational Overview

The Green Bank<sup>10</sup> was established by the Governor and Connecticut's General Assembly on July 1, 2011 through Public Act 11-80 as a quasi-public agency that supersedes the former Connecticut Clean Energy Fund. As the nation's first state "Green Bank", the Green Bank leverages public and private funds to drive investment and scale-up clean energy deployment in Connecticut.

The Green Bank's statutory purposes are:

- To develop programs to finance and otherwise support clean energy investment in residential, municipal, small business and larger commercial projects and such other programs as the Green Bank may determine;
- To support financing or other expenditures that promote investment in clean energy sources to foster the growth, development and commercialization of clean energy sources and related enterprises; and
- To stimulate demand for clean energy and the deployment of clean energy sources within the state that serves end-use customers in the state.

The Green Bank's purposes are codified in Section 16-245n(d)(1) of the General Statutes of Connecticut and restated in the Green Bank's Board approved Resolution of Purposes.

#### 2.1 Vision

To lead the green bank movement by accelerating private capital investment in clean energy deployment for Connecticut to achieve economic prosperity, create jobs, promote energy security and address climate change.

## 2.2 Mission

To support the Governor's and Legislature's energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development.

#### 2.3 Goals

To achieve its vision and mission, the Green Bank has established the following four goals:

- 1. To attract and deploy private capital investment to finance the clean energy policy goals for Connecticut.
- 2. To leverage limited public funds to attract multiples of private capital investment while returning by reinvesting public funds in clean energy deployment over time.
- 3. To develop and implement strategies that bring down the cost of clean energy in order to make it more accessible and affordable to customers.

<sup>&</sup>lt;sup>10</sup> Public Act 11-80 repurposed the Connecticut Clean Energy Fund (CCEF) administered by Connecticut Innovations, into a separate quasi-public organization called the Clean Energy Finance and Investment Authority (CEFIA). Per Public Act 14-94, CEFIA was renamed to the Connecticut Green Bank.

4. To support affordable and healthy buildings in low-to moderate income and distressed communities by reducing the energy burden and addressing health and safety issues in their homes, businesses, and institutions.

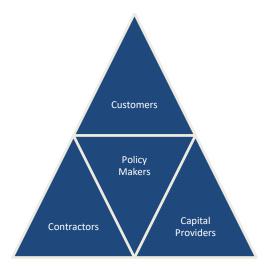
These goals support the implementation of Connecticut's clean energy policies be they statutory (i.e., Public Act 15-194, Public Act 13-298), planning (i.e., Comprehensive Energy Strategy, Integrated Resources Plan), or regulatory in nature.

## 2.4 Stakeholders

The Green Bank identifies four (4) primary stakeholders (see Figure 1) that are the focus of its programs, products, and services, including:

- Customers
- Capital Providers
- Contractors
- Policy-Makers

Figure 1. Stakeholders - The Three C's (Capital Providers, Customers, and Contractors) and Policy-Makers



#### **Customers**

A key Green Bank objective is to eliminate the financial barriers to clean energy investment faced by customers by facilitating the transition to innovative low-cost financing of clean energy deployment using private capital. Customers of all types (i.e., homeowners, renters, businesses, not-for-profits) seek cheaper, cleaner and more reliable sources of energy, yet often face informational gaps and financial challenges in their efforts to acquire these energy resources. Contractors must be able to provide customers with cost-effective and comprehensive (i.e., "deeper") energy solutions while capital providers must offer customers immediate cash flow positive returns by financing their investments. The Green Bank plays an important role in bringing customers and contractors together by providing them with easy access to affordable capital so that they can implement clean energy solutions for their homes, businesses, or institutions.

#### **Capital Providers**

As a key goal is to attract private capital to finance the clean energy goals for Connecticut and to develop and implement strategies that bring down the costs of clean energy to make it more accessible and affordable to consumers, working in partnerships with capital providers is vital to the success of the green bank model. There are local (e.g., community banks and credit unions), state, regional, and national banks, as well as equity, tax equity, and other institutional, foundation, and crowd-sourced investors that seek to invest in clean energy projects in Connecticut. The Green Bank's role is to use the limited public funds it receives and leverage it to attract more private capital investment in clean energy deployment in Connecticut. The Green Bank provides several channels for capital providers to get into clean energy investing in Connecticut while earning a reasonable rate of return.

#### Contractors

Working in partnership with qualified and certified contractors is also vital to the success of the green bank model, for the same reason as noted above. Qualified contractors (including the full gamut from smaller and more local businesses to the largest of energy services companies, or "ESCOs", that operate on a regional, national and even global scale) must have access to working capital to support the growth and operations of their businesses – including creating new jobs – while providing quality, timely, cost-effective and comprehensive clean energy solutions and financing options for customers.

#### **Policy-Makers**

The Green Bank was established by policy-makers to leverage public funds to attract more private capital investment to scale-up clean energy deployment in Connecticut. Through its Board of Directors, the Green Bank has established this Comprehensive Plan that will guide the implementation of the objectives of policy-makers, including the Department of Energy and Environmental Protection (DEEP), Department of Economic and Community Development (DECD), and other state agencies, to deploy more clean energy at a faster pace while more efficiently managing public funds and attracting significantly more private investment. As the implementer of the Conservation & Load Management Plan (C&LM Plan), the Electric Distribution Companies (EDCs) and Natural Gas Companies (LDCs), the Energy Efficiency Board (EEB) and Electric Distribution Companies (EDCs) are important stakeholders for the Green Bank as well, including through the Joint EEB-Green Bank Committee.

#### 2.5 Governance

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

Table 1. Board of Directors of the Connecticut Green Bank

Position	Status	Voting	Name	Organization
State Treasurer (or designee)	Ex Officio	Yes	Bettina Bronisz	Treasurer's Office
Commissioner of DEEP <sup>11</sup> (or designee)	Ex Officio	Yes	Robert Klee <sup>12</sup>	DEEP
Commissioner of DECD <sup>13</sup> (or designee)	Ex Officio	Yes	Catherine Smith <sup>14</sup>	DECD
Residential or Low Income Group	Appointed	Yes	Pat Wrice (Ret)	Operation Fuel
			Betsy Crum	Snowmass Village Housing
				<u>Department</u>
Investment Fund Management	Appointed	Yes	Norma Glover (Ret)	NJG Associates
			Eric Brown <sup>15</sup>	Connecticut Business and
				Industry Association
Environmental Organization	Appointed	Yes	Matthew Ranelli <sup>16</sup>	Shipman & Goodwin
Finance or Deployment of Renewable	Appointed	Yes	Thomas Flynn	Alvarez & Marsal
Energy				
Finance of Renewable Energy	Appointed	Yes	Reed Hundt17 (Res)	Coalition for Green Capital
Finance of Renewable Energy	Appointed	Yes	Kevin Walsh	GE Energy Financial Services
Labor	Appointed	Yes	John Harrity <sup>18</sup>	IAM Connecticut
R&D or Manufacturing	Appointed	Yes	Mun Choi (Ret)	University of Connecticut
			Gina McCarthy	Harvard University
President of the Green Bank	Ex Officio	No	Bryan Garcia	Connecticut Green Bank
	(non-voting)			
Board of Connecticut Innovations <sup>19</sup>	Ex Officio	No	(unfilled)	(unfilled)
	(non-voting)			

There are four (4) committees of the Board of Directors of the Green Bank, including:

- Audit, Compliance and Governance
- Budget and Operations
- Deployment
- Joint Committee of the Energy Efficiency Board and the Green Bank<sup>20</sup>

To support the Joint Committee of the Energy Efficiency Board and the Connecticut Green Bank, the following is a principal statement to guide its activities:

<sup>&</sup>lt;sup>11</sup> Department of Energy and Environmental Protection

<sup>&</sup>lt;sup>12</sup> Vice Chairperson of the Board of Directors, and Chairperson of the Budget and Operations Committee (through January 2018), Chairperson of the Deployment Committee (starting February 2018)

<sup>&</sup>lt;sup>13</sup> Department of Economic and Community Development

<sup>&</sup>lt;sup>14</sup> Chairperson of the Board of Directors

<sup>15</sup> Chair of the Joint Committee of the Conservation and Load Management Fund and the Connecticut Green Bank

<sup>&</sup>lt;sup>16</sup> Secretary of the Board of Directors and Chairperson of the Audit, Compliance and Governance Committee

<sup>&</sup>lt;sup>17</sup> Chairperson of the Deployment Committee (resigned January 2018)

<sup>&</sup>lt;sup>18</sup> Chairperson of the Budget & Operations Committee (starting February 2018)

<sup>&</sup>lt;sup>19</sup> It should be noted that several members of the Board of Directors of the Green Bank currently serve on the Board of Directors of Connecticut Innovations, including Mun Choi and Catherine Smith.

<sup>&</sup>lt;sup>20</sup> Pursuant to Section 16-245m(d)(2) of the Connecticut General Statutes

The Energy Efficiency Board and the Connecticut Green Bank have a shared goal to implement state energy policy throughout all sectors and populations of Connecticut with continuous innovation towards greater leveraging of ratepayer funds and a uniformly positive customer experience.

To expand the impact of Connecticut's energy efficiency programs, the Green Bank will continue to leverage public funds, including through the Connecticut Energy Efficiency Fund programs, to attract more private investment in the state through its financing programs.

The Board of Directors of the Green Bank is governed through enabling legislation, as well as by an <a href="Ethics Statement"><u>Ethics Statement</u></a> and <a href="Ethics Statement"><u>Ethical Conduct Policy</u></a>, <a href="Resolutions of Purposes"><u>Resolutions of Purposes</u></a>, <a href="Bylaws"><u>Bylaws</u></a>, <a href="Joint Committee"><u>Joint Committee</u></a></a>
<a href="Bylaws"><u>Bylaws</u></a>, and Comprehensive Plan. All meetings, agendas, and materials of the Green Bank's Board of Directors and its Committees are publicly available on the organizations website. <a href="21,22">21,22</a></a>

## 2.6 Organizational Structure

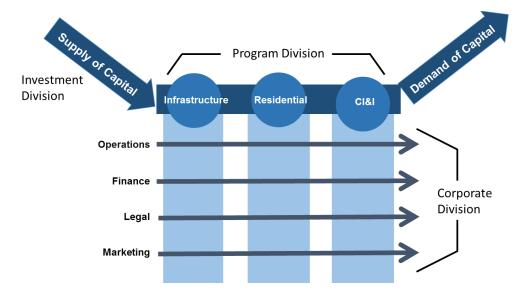
The organizational structure of the Green Bank is comprised of three parts (see Figure 2):

- <u>Investment Division</u> this division is responsible for investing limited ratepayer and other public funds into the clean energy market while *αttracting capital* to finance the clean energy policy goals for Connecticut, including the issuance of green bonds.
- Program Division in collaboration with marketing, this division is responsible for deploying capital to meet the clean energy policy goals for Connecticut. There are three (3) program divisions –Residential (including single family and multifamily), Commercial, Industrial, and Institutional (i.e., including Municipal, Universities, Schools & Hospitals ("MUSH")), and Infrastructure.
- <u>Corporate Division</u> this division is responsible for providing administrative, accounting, legal, marketing and operational support services to the investment and program divisions, as well as the President and C.E.O. to help the organization meet its goals.

<sup>&</sup>lt;sup>21</sup> http://www.ctgreenbank.com/about-us/board-member-resources/connecticut-grboard-meetings/

<sup>&</sup>lt;sup>22</sup> http://www.ctgreenbank.com/about-us/board-member-resources/connecticut-grittee-meetings/

Figure 2. Organizational Structure of the Connecticut Green Bank



The Green Bank staff is attentive to the needs of its stakeholders, committed to the vision and mission of the organization, and conducts itself in a collaborative and professional manner that demonstrates its knowledge and leadership of clean energy policy, finance, marketing and technology.

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

## 2.7 Comprehensive Annual Financial Report (CAFR)

A Comprehensive Annual Financial Report (CAFR) is a set of government financing statements that includes the financial report of a state, municipal or other government entity that complies with the accounting requirements promulgated by the Governmental Accounting Standards Board (GASB). GASB provides standards for the content of a CAFR in its annually updated publication *Codification of Governmental Accounting and Financial Reporting Standards*. A CAFR is compiled by a public agency's accounting staff and audited by an external American Institute of Certified Public Accountants (AICPA) certified accounting firm utilizing GASB requirements. It is composed of three sections – Introductory, Financial, and Statistical. The independent audit of the CAFR is not intended to include an assessment of the financial health of participating governments, but rather to ensure that users of their financial statements have the information they need to make those assessments themselves.<sup>23</sup> To date, the Green Bank has issued three-four CAFR's, including:

- Fiscal Year Ended June 30, 2014 (Certificate of Achievement)
- Fiscal Year Ended June 30, 2015 (Certificate of Achievement)

<sup>&</sup>lt;sup>23</sup> The Government Finance Officers Association (GFOA), founded in 1906, represents public finance officials throughout the United States and Canada. GFOA's mission is to enhance and promote the professional management of governmental financial resources by identifying, developing, and advancing fiscal strategies, policies, and practices for the public benefit. GFOA established the Certificate of Achievement for Excellent in Financial Reporting Program (CAFR Program) in 1945 to encourage and assist state and local governments to go beyond the minimum requirements of generally accepted accounting principles to prepare comprehensive annual financial reports that evidence the spirit of transparency and full disclosure and then to recognize individual governments that succeed in achieving that goal.

- Fiscal Year Ended June 30, 2016 (Certificate of Achievement)
- Fiscal Year Ended June 30, 2017 (Certificate of Achievement)

As the "gold standard" in government reporting, the CAFR is the mechanism the Green Bank uses to report its fiscal year financial and investment performance – including societal benefits – to its stakeholders.

Beyond the CAFR, the annual reports of the Green Bank are compiled by the marketing staff and include consolidated financial statement information and narratives of various program achievements in a condensed format that can be widely distributed. To date, the Green Bank has issued <a href="five-six">five-six</a> annual reports, including:

- Fiscal Year 2012 Annual Report
- Fiscal Year 2013 Annual Report
- Fiscal Year 2014 Annual Report
- Fiscal Year 2015 Annual Report
- Fiscal Year 2016 Annual Report
- Fiscal Year 2017 Annual Report

## 3. Public Policy Overview

The Green Bank's role is to support the implementation of public policy on clean energy in Connecticut by attracting and deploying capital to finance the achievement of those goals. Over the course of the legislative history on clean energy in Connecticut and specifically the last decade, there have been significant public policies passed that guide the programs of the Green Bank, including, but not limited to:

- Public Act 78-262 "An Act Establishing a State Energy Policy" is Connecticut's original energy policy from 1978. The original energy policy declared the following matters as important and are the focus of the policy engaging in energy conservation, energy efficiency, renewable energy deployment, energy diversification, reducing reliance on interruptible sources of energy, reducing energy costs, assuring that low-income households have essential energy services, public education and consumer awareness, and including financial and technical assistance.
- Public Act 98-28 "An Act Concerning Electric Restructuring," deregulated the generation component of the electric utility industry and opened it up to competition, established the Class I and Class II Renewable Portfolio Standards, and created the Conservation and Load Management (C&LM) Fund to be administered by the electric distribution companies (EDCs) and the Renewable Energy Investment Fund (later called Clean Energy Fund) to be administered by Connecticut Innovations (CI) (and later on by the Green Bank).
- Public Act 05-01 "An Act Concerning Energy Independence," established the Class III Renewable Portfolio Standard for CHP and energy efficiency, Project 100 requiring the electric distribution companies to sign long-term power purchase agreements for no less than 100 megawatts of Class I renewable energy sources developed in Connecticut, and the joint committee of the Energy Conservation Management Board (ECMB) and Connecticut Clean Energy Fund (CCEF) to coordinate on programs and activities.
- Public Act 07-242 "An Act Concerning Electricity and Energy Efficiency," expanded Project 100 to Project 150, requires the municipal utilities to submit a comprehensive report to the CCEF on the actions to promote renewable energy sources, and modifies the definition of clean energy for the CCEF. The act also addresses energy improvement districts, interconnection standards, property, sales, and use tax exemptions for clean energy, a definition for weatherization, and modifies the Class I and III RPS.

## **Definition of Clean Energy**

Clean energy means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in greenhouse gas emissions and fossil fuel consumption, usable electricity from combined heat and power systems with waste heat recovery systems, thermal storage systems, other energy resources and emerging technologies which have significant potential for commercialization and which do not involve the combustion of coal, petroleum or petroleum products, municipal solid waste or nuclear fission, financing of energy efficiency projects, projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and associated infrastructure, any related storage, distribution, manufacturing technologies or facilities and any Class I renewable energy source, as defined in section 16-1.

- Public Act 11-80 "An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future," created the Department of Energy and Environmental Protection (DEEP) and charged it with energy and policy planning and regulation, including increasing the use of clean energy and technologies that support clean energy. The act also creates the Green Bank, sets energy reduction targets for state facilities of 20% by 2018, initiates a 3-year pilot anaerobic digester and combined heat and power program administered by the Green Bank, establishes a residential solar investment program administered by the Green Bank, and creates a zero-emission renewable energy credit (ZREC) and low-emission renewable energy credit (LREC) reverse auction program for long-term contracts administered by the EDCs.
- Public Act 12-2 "An Act Implementing Certain Provisions Concerning Government Administration," established the Commercial Property Assessed Clean Energy (C-PACE) Program to be administered by the Green Bank, modifies the definition of clean energy for the Green Bank, permits the Green Bank to issue up to \$50 million in bonds backed by a special capital reserve fund (SCRF) to support bond financing for the Green Bank,<sup>24</sup> and clarifies the quasi-public status of the Green Bank.
- <u>Public Act 13-298</u> "An Act Concerning Implementation of Connecticut's Comprehensive Energy Strategy," reinforces key findings from DEEP with regards to the implementation of the Comprehensive Energy Strategy (CES) and includes the Green Bank in numerous instances, including coordination with ECMB, implementation of community-based marketing campaign

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<sup>&</sup>lt;sup>24</sup> Sec. 161 of PA 12-2 of the June Special Session contains the SCRF bonding provisions.

pilots for natural gas conversions and energy efficiency, and the development and implementation of an on bill repayment program for residential customers using private capital. The act also makes important adjustments to the C-PACE program to support lender consent, further defines critical facilities for micro grid purposes, and clarifies language with respect to virtual net metering, sub-metering, and energy improvement district policy.

- Public Act 14-94 "An Act Concerning Connecticut's Recycling and Materials Management Strategy, the Underground Damage Prevention Program, and Revisions to Energy and Environmental Statutes," renames the Clean Energy Finance and Investment Authority to the Green Bank, allows micro grid projects as eligible for C-PACE financing, and provides cost recovery mechanism for the residential on bill repayment program. The bill also requires the Green Bank to conduct a study on residential property assessed clean energy (R-PACE), updated high performance building standards for state facilities and state funded construction, and authorized a limited liability company to be a thermal energy transportation company, regulated by PURA, for a district heating loop in Bridgeport which the Green Bank is involved in.
- <u>Public Act 15-1</u> "An Act Authorizing and Adjusting Bonds of the State for Capital Improvements, Transportation and Other Purposes" increases, from \$50 million to \$100 million, the amount of bonds the Green Bank may issue that are backed by a special capital reserve fund (SCRF). It also allows electric companies to build, own, or operate demonstration projects under DEEP approval to investigate how distributed energy resources can be optimally integrated into the electric grid. The proposal must be complimentary to the existing ecosystem of programs.
- Public Act 15-194 "An Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy" expands the state's residential solar PV deployment target from no less than 30 MW to no more than 300 MW under RSIP. Under the law, 15-year Solar Home Renewable Energy Credits (SHRECs) are generated from qualifying residential PV systems and owned by the Green Bank, which sells SHRECs to electric distribution companies under a master purchase agreement negotiated by the parties. The Green Bank may fund its incentive program using the proceeds of the sale, and the electric companies may seek cost recovery from the Public Utilities Regulatory Authority (PURA). Also, municipalities must prepare for more residential solar PV applications by incorporating these systems into their building permit application process.
- Public Act 16-212 "An Act Concerning Administration of the Connecticut Green Bank, the Priority of the Benefit Assessments Lien Under the Green Bank's Commercial Sustainable Energy Program and the Green Bank's Solar Home Renewable Energy Credit Program" makes changes to a variety of Green Bank statutes. It creates new, direct statutory authority for the Green Bank so that it no longer needs to derive powers through a statutory link to Connecticut Innovations, Inc.; in the process it removes a potential complication to financial transactions. It also clarifies electric distribution companies' purchase obligations for SHRECs, makes power

purchase agreements eligible for RSIP incentives, and adjusts RSIP to only apply to the first 20 kW of installed solar PV. Lastly, it clarifies the C-PACE lienholder consent provisions.

These statutes comprise a majority of the public policies that seek to advance clean energy in Connecticut and fall within the sphere of the Green Bank.

Beyond these statutes, there are various planning documents as well as regulatory decisions that also

#### The Future of Residential Solar PV – Grid Modernization

There have been several recent developments in state and federal incentives for residential solar PV. With the passage of the SHREC policy in 2015, and subsequent revisions in 2016, incentives offered through the RSIP will continue to decline. With the extension of the federal ITC at the end of 2015, tax incentives will also continue to decline:

- State: The PA 15-194 SHREC policy phases out the RSIP through a declining block incentive structure, which must cease either by the end of 2022 or after 300 MW of deployment.
- Federal: The 30% Investment Tax Credit for residential and commercial projects runs through the end of 2019 before dropping to 26% in 2020 and 22% in 2021. It then drops permanently to 10% for commercial projects and 0% for residential projects.

The future of residential solar PV not only depends upon lowering installed costs – particularly "soft costs" from customer acquisition and permitting – and continuing to improve easier access to affordable private capital investment and financing, but it will also require sharing the benefits of behind-the-meter policy with the rest of those tied to the grid. Through various policy and technology approaches, including but not limited to rate structure and design (i.e., Time of Use Rates and demand charges) along with battery storage and smart inverters, residential solar PV systems can continue to deliver cost-effective benefits to households and the electric grid.

As the state continues its efforts to reduce GHG emissions to 80% below 2001 levels by 2050, the deployment of renewables both utility scale, and residential solar PV will help to further enable emission free transportation (e.g., EV) and deployment of renewable thermal technologies (e.g., air source heat pumps and ground source heat pumps).

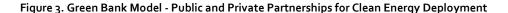
serve to inform the clean energy policies of the state. The public policies outlined in the 2013 CES and the 2014 IRP developed by DEEP's approval of the 2016-2018 Electric and Natural Gas C&LM Plan, and their impact on the programs of the Green Bank, are highlighted within each of the three programmatic sectors below. The Green Bank also interplays with the administrators of the Conservation and Load Management Fund (i.e. Eversource Energy and Avangrid) and the Energy Efficiency Board through coordination of our staff as well as a Joint Committee to continue to work to harmonize programs and initiatives to support the implementation of public policy goals.

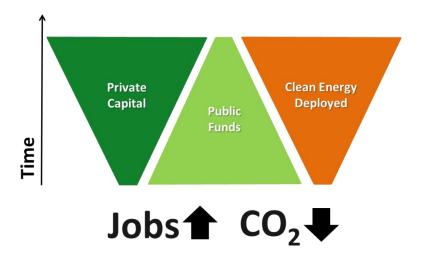
## 4. Evaluation Framework

The Evaluation Framework<sup>25</sup> of the Green Bank is intended as an internal Green Bank document to provide staff with the guidance on how to approach the evaluation and assessment of its programs' impacts. As the Framework document notes, "These impacts can broadly be viewed within two categories: 1) energy savings and clean energy production supported by the Green Bank programs and the resulting societal impacts or benefits arising from clean energy investments; and 2) market transformation impacts from Green Bank programs that lead to new opportunities to support clean energy projects, ultimately through the increase in private capital investment in clean energy."<sup>26</sup> It also recognizes the importance of continuously evaluating program impacts along the way (e.g., RSIP) that may be required by statute or requested by the Board.<sup>27</sup>

## 4.1 Green Bank Model

The high level, long term Green Bank financial market transformation objective – to rely increasingly on private capital to deploy increasing amounts of clean energy resources, increase jobs, and reduce greenhouse gas emissions – can be graphically represented in the following figure. This graphic also presents the green bank model of public-private partnerships which envisions public funds being leveraged more and more over time – for example, achieving a high leverage ratio for every \$1 of public funds invested by the Green Bank attracting \$10 of private capital investment. The Green Bank will also seek to recover the \$1 of investment it makes over time through its financing offerings, including its cost of capital.





<sup>&</sup>lt;sup>25</sup> Evaluation Framework – Assessing, Monitoring, and Reporting of Program Impacts and Processes (July 2016)

<sup>&</sup>lt;sup>26</sup> Ibid. p. 5

<sup>&</sup>lt;sup>27</sup> Cost-Effectiveness Assessment of the Residential Solar Investment Program (March 26, 2016) by Cadmus

## 4.2 Program Logic Model

A Program Logic Model (PLM) is a "graphical representation of the causal links between program activities, short-term responses to those activities among market actors and longer-term market effects. Logic models flow from decision-makers' hypotheses of how a program intervention strategy addresses barriers or market failures. A logic model can provide the basis for establishing metrics that indicate progress toward program goals and help program administrators, policymakers, and stakeholders assess the likely timeframe within which the theorized transformation might be realized." Figure 5 below presents a generalized market transformation and impact logic model of the Green Bank's program activities that can be adapted to apply to any of the Green Bank's specific programs, in alignment with the market transformation and associated evaluation strategies are developed. The Green Bank recognizes that a more formalized and detailed structure is typical of industry logic models, and that this is simply a high-level presentation. The PLM includes three parts: Energize CT Market Environment (including Other Ongoing Market Activities); Financing Market Transformation Process; and Societal Impacts.

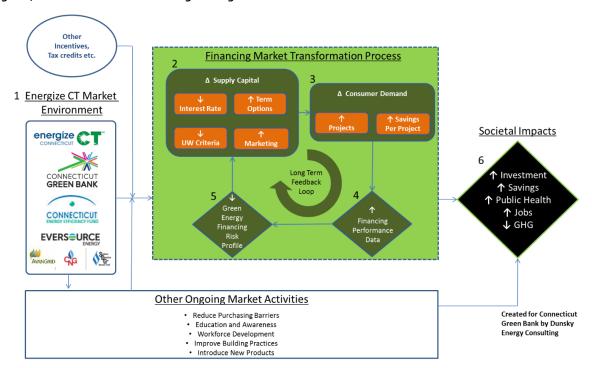


Figure 4. Connecticut Green Bank Program Logic Model

<sup>&</sup>lt;sup>28</sup> State and Local Energy Efficiency Action Network (2015). *Making it Count: Understanding the Value of Regulated Energy Efficiency Financing Programs*. Prepared by: Chris Kramer, Emily Martin Fadrhonc, Charles Goldman, Steve Schiller, and Lisa Schwartz of Lawrence Berkeley National Laboratory (pp 53). click here

#### **EnergizeCT Market Environment**

Energize CT is an initiative of the Green Bank, the Connecticut Energy Efficiency Fund, the State (i.e., DEEP), and the local electric and gas utilities. It provides Connecticut consumers, businesses and communities the resources and information they need to make it easy to save energy and build a clean energy future for everyone in the state.

## **Financing Market Transformation Process**

The efforts of the Green Bank are exemplified through the financing market transformation process, which focuses on accelerating the deployment of clean energy – more customers and "deeper" more comprehensive measures being undertaken – by securing increasingly affordable and attractive private capital. The Green Bank can enter the process at a number of points, such as supplying capital through financing offers, marketing clean energy financing, offsetting clean energy financing risk by backstopping loans, or sharing loan performance data.

- <u>Supply of Capital</u> financing programs aim to increase the supply of affordable and attractive capital available to support energy savings and clean energy production in the market place.
- <u>Consumer Demand</u> in combination with a comprehensive set of clean energy programs under the Energize CT initiative, the Green Bank drives demand for clean energy by marketing financing programs and increasing awareness of the potential benefits stemming from clean energy projects.
- <u>Financing Performance Data</u> the Green Bank gathers and communicates the performance of clean energy financing either through its own programs or for other financing options in the market place.
- Financing Risk Profile the Green Bank can help reduce clean energy financing risk profiles in a number of ways. For example, it can absorb a portion or all the credit risk by providing loan loss reserve (LLR) funds and guarantees or taking the first-loss position on investments (i.e., subordinated debt). It can also channel or attract rebates and incentives to finance energy saving projects, thus improving their economic performance and lowering the associated performance risk. In the long run, by making clean energy financing performance data available to the market, Green Bank programs increase lenders' and borrowers' understanding of clean energy investment risk profiles, which may allow them to (1) design more affordable and attractive financing products and/or (2) select projects for financing to reduce risks.

#### **Societal Impacts**

The efforts to accelerate and scale-up investment in clean energy deployment by the Green Bank lead to a myriad of societal impacts and benefits – among them economic development (e.g., job creation) and environmental protection (e.g., reduction of greenhouse gas emissions, improvement in public health, etc.). The transition to a cleaner energy Connecticut with the resulting societal benefits can be represented by the following figure:

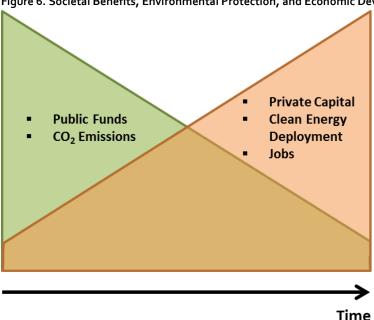


Figure 6. Societal Benefits, Environmental Protection, and Economic Development from a Cleaner Connecticut

For more information on Societal Impacts, visit the Strategy and Impact page of the Green Bank website.<sup>29</sup>

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<sup>&</sup>lt;sup>29</sup> http://www.ctgreenbank.com/strategy-impact/impact/

## 5. Financing

A major focus of the Green Bank is to attract private capital to finance the clean energy policy goals of Connecticut and ensure that customers and contractors are able to access and deploy cleaner, cheaper and more reliable sources of energy. Meeting these policy goals for the residential and commercial sectors alone, which do not begin to consider industrial, municipal or institutional potential, could require more than \$10 billion in investment over the next 5-10 years. Thus, reaching these goals will require a combination of private and ratepayer capital sources. Through a combination of ratepayer incentives alongside increasing low cost and long-term private capital investment, the market for clean energy will expand and customers will pursue deeper measures. Recognizing that ratepayer resources are limited, achieving greater uptake of measures by providing customers with easy access to affordable capital will result in a larger impact. Attracting low cost and long-term private capital will make clean energy more accessible and affordable to customers, resulting in greater and accelerated deployment.

The green bank model, which works by designing and implementing innovative financing, security and collection structures, has already enabled Connecticut to use its limited ratepayer and taxpayer resources to attract hundreds of millions of dollars in private investment from local, regional and national sources. This model offers Connecticut and other states the most promising route to source the capital required to achieve ambitious public policy objectives and to transition the state to a sustainable clean energy marketplace driven by private sector investment. Acknowledging the importance of attracting more and more private capital to help Connecticut meet its clean energy policy goals, DEEP established a policy to ensure that subsidized financing products aren't unfairly preventing private capital from entering the market.

"The ratepayer-supported C&LM financing products should be positioned in the market in such a way that they do not undermine financing products offered by the private market."

Final Decision on the 2013-2015 C&LM Plan Department of Energy and Environmental Protection October 31, 2013

## 5.1 Ratepayer and State Funds

The Green Bank is capitalized through a number of public – state and ratepayer – sources.

#### **Systems Benefit Charge**

As its main source of capitalization, the Green Bank through C.G.S. § 16-245n(b) receives a 1 mill surcharge called the Clean Energy Fund from customers of Eversource Energy and Avangrid. The fund has been in existence since Connecticut deregulated its electric industry in the late 1990's. On average, the Clean Energy Fund cost households about \$10 a year and generates about \$27 million a year to support the programs and initiatives of the Green Bank.

#### Regional Greenhouse Gas Emission Allowance Proceeds

The Green Bank receives a portion of Connecticut's funds from the Regional Greenhouse Gas Initiative (RGGI). As a result of Regulation of Connecticut State Agencies § 22a-174-31(f)(6)(B), the Green Bank receives all of the state RGGI funds for renewable energy (i.e., Class I RPS renewable energy sources). The Green Bank uses these carbon allowance proceeds from the nation's first cap and trade program to provide financing for energy improvement projects through its Commercial Property Assessed Clean Energy (C-PACE) program for commercial, industrial, non-profit, and multifamily buildings. Connecticut is the first state to use carbon emission allowance revenue as financing for C-PACE in order to (1) attract private capital investment, and (2) return funds back to the Green Bank for future reinvestment to lower energy costs and improve the competitiveness of its businesses and institutions.

#### **Special Capital Reserve Fund**

As part of C.G.S. § 16-245n(d)(1)(C), the Green Bank has access to the Special Capital Reserve Fund (SCRF), which allows quasi-public agencies to issue bonds for self-supporting projects or programs that are backed by the State of Connecticut, lowering the cost of capital for the program – in essence, having a no-cost insurance policy. The Green Bank has received \$100 million in SCRF authorization that can be placed on bonds issued for clean energy programs.

#### Connecticut State Treasurer's Office

The Green Bank will work cooperatively with the State Treasurer's Office to explore opportunities to co-invest in Connecticut projects that can deliver appropriate risk-adjusted returns for Connecticut pension assets, reduce the emissions of greenhouse gases, and contribute to job creation.

#### 5.2 Federal Funds

Alongside public funds made available through state channels, the Green Bank has access to and/or expects to pursue federal funds including stimulus monies, revolving loan funds, and competitive grant solicitations as well as loan guarantees, in order to bring private capital to these sources.

#### American Recovery and Reinvestment Act

The American Recovery and Reinvestment Act (ARRA) of 2009 awarded the Green Bank, and its predecessor the CCEF, \$20 million for its programs and initiatives. About \$8.25 million of those funds are currently being used as credit enhancements (i.e., loan loss reserves and interest rate buy-downs) for the Green Bank's residential financing programs including the Energize CT Smart-E Loan and CT Solar Loan. These funds have already been received and are being used to attract private capital investment in products that support the policy goals of Connecticut.

#### Clean Water State Revolving Fund

The Clean Water State Revolving Fund (CWSRF) serves as the nation's largest water quality financing source, helping communities across the country meet the goals of the Clean Water Act. The CWSRF programs provide low interest and long-term loans for many things including water quality protection projects for wastewater treatment. Recently, a nexus has been drawn in New York (e.g., Green Jobs and Green New York) between energy and water that permits programmatic guarantees for financing energy efficiency projects that results in a reduction of air emissions from stationary power plants, and thus deposition of airborne pollutants into our waterways. The Green Bank will explore with DEEP and the Treasurer's Office how the CWSRF can be leveraged to bring in more private capital for investments in key areas (e.g., food waste and sludge from waste water treatment plants to energy through anaerobic digester projects).

#### Loan Guarantees

Through the U.S Department of Energy and U.S. Department of Agriculture, potential sources of loan guarantee or low interest and long-term loans from the U.S. Treasury are accessible. The Green Bank will pursue – as necessary and appropriate – access to federal resources to attract more private capital investment in clean energy deployment in Connecticut.

#### 5.3 Green Bonds

Green Banks have an essential role in leveraging limited public funds with private capital to drive investment and scale-up clean energy deployment in order to achieve climate goals, create green jobs and promote economic development. While co-investment with banks has been a key element of its ability to leverage its core capital resources, C.G.S. § 16-245n(d)(1)(C) is the enabling statute that allows the Green Bank to issue revenue bonds to support its investments in clean energy. Bonds offer several advantages over co-investment with banks and other investors offering loan facilities. While interest on long-term loans are often structured with interest rates priced as a spread over a variable index, such as LIBOR<sup>30</sup>, bonds generally allow the issuer to lock in a long-term interest rate for the entire duration of the bond .<sup>31</sup> In addition, an issuer of bonds can repay the principal borrowed over 15, 20, 30 years or more, far beyond the reach of typical bank facilities, which are in most cases limited to 7, 10 or 15 years at the maximum.<sup>32</sup> The ability to raise funds for fixed interest rates for longer maturities make bonds a useful and attractive financing tool for the Green Bank's clean energy projects and programs.

Green Bonds are bonds whose proceeds are used for projects or activities with environmental or climate benefits, most usually climate change mitigation and adaptation. <sup>33</sup> Labeling a bond "green" makes it easier for institutional investors to identify green investments. <sup>34</sup> The size of investment required and revenue streams from clean energy infrastructure required under various government clean energy policies lend themselves well to bond structures. The Green Bank is a natural issuer of green bonds given its mandate to provide financing solutions to increase uptake of clean energy measures within Connecticut. Issuing green bonds can provide the Green Bank a lower-cost, longer-term source of capital, enabling the Green Bank to further leverage the ratepayer funds at its disposition. Given that the yields on investment-grade project bonds are generally lower than project finance rates available from commercial banking institutions with more generous maturities, the use of green bonds can not only contribute to a lower cost of capital, but also can ease annual debt service requirements, improving clean energy economics.

Growth in green bond issuance has continued to accelerate with \$58 billion of green bonds issued in the first half of 2017.<sup>35</sup> As of July 2017, in total over \$233 billion of green bonds has been issued by approximately 320 separate entities.<sup>36</sup> Total green bond issuance for 2017 could reach as high as \$123 billion, which would bring global outstanding issuance to around \$340 billion by the end of the year<sup>37</sup>.

<sup>&</sup>lt;sup>30</sup> London Interbank Offered Rate

<sup>&</sup>lt;sup>31</sup> Variable interest rate bank loan interest can be converted to fixed interest rates using interest rate swaps but add a degree of complexity and execution cost to the overall financing arrangement.

<sup>&</sup>lt;sup>32</sup> In 2014, the District of Columbia Water and Sewer Authority sold \$350 million of bonds with a 100-year maturity.

<sup>33</sup> Climate Bonds Initiative, "Scaling Up Green Bond Markets for Sustainable Development," (September 2015) www.climatebonds.net

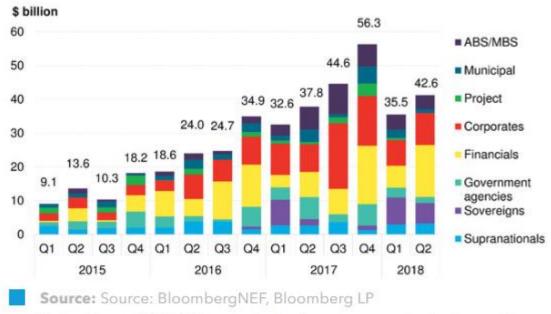
<sup>&</sup>lt;sup>34</sup> Climate Bonds Initiative, ibid.

<sup>35</sup> https://www.climatebonds.net/

<sup>&</sup>lt;sup>36</sup> Climate Bonds Initiative, Labelled Green Bonds Database, Accessed June 3, 2016. Available at: https://www.climatebonds.net/cbi/pub/data/bonds?items\_per\_page=All

<sup>&</sup>lt;sup>37</sup> Bloomberg New Energy Finance, Green Bonds Monthly – May 2017. June 2, 2017.





Note: Note: ABS/MBS is asset-basked or mortgage-backed securities.

ABS/MBS issuance updated through 1 May 2018

Table 3. Types of Green Bonds<sup>38</sup>

Type	Debt Recourse
Green "Use of Proceeds" Bond	Standard recourse-to-the-issuer debt obligation linked to issuer's lending and investment operations for eligible projects.
Green "Use of Proceeds" Revenue Bond	Non-recourse-to-the-issuer debt obligation in which credit exposure of the bond is to the pledged cash flows of the revenue streams. Use of proceeds of bond can be related or unrelated to the project cash flows.
Green Project Bond	Project bond for single or multiple green project(s) for which investor has direct exposure to the risk of the project with or without potential recourse to the issuer.
Green Securitized Bond	Bond collateralized by one or more specific projects, including covered bonds, ABS, and other structures. First source or repayment is generally cash flows of the assets. This type of bond covers asset-backed securitizations of rooftop solar PV and/or energy efficiency assets, for example.

Environmentally responsible investments are becoming more widely pursued every year. Green bonds attract a diverse investor base as investors seek the environmental attributes of the bonds. However, as with any emerging financial product there are also inherent risks. One of the most recognized risks associated with green bonds is that of "greenwashing," when environmental claims are made irresponsibly or without supporting evidence. The Green Bond Principles (GBP) and Climate Bond Standards (CBS) have been set up largely as a means to mitigate against greenwashing by providing

<sup>&</sup>lt;sup>38</sup> Climate Bonds Initiative, Explaining Green Bonds, <a href="https://www.climatebonds.net/market/explaining-green-bonds">https://www.climatebonds.net/market/explaining-green-bonds</a>

guidelines for what constitutes a "green bond" and a standardized means to evaluate the bonds against these guidelines.

The Green Bond Principles specifically focus on four components:39

- 1. Use of proceeds types of projects and their environmental benefits should be clear;
- 2. Process for evaluation and selection of projects funded with proceeds;
- 3. Management of proceeds proceeds and disbursements for "green" projects should be housed in separate, easily trackable accounts leaving a clear audit trail; and
- 4. Reporting use of proceeds should be reported and updated at least annually stating the disbursements and expected environmental impact.

The Climate Bond Standards were created as a certification scheme to verify the green credentials of a bond. The certification standards align with the Green Bond Principles and are guided by a panel of climate and energy experts. Other services providing independent reviews and/or third-party assurances have sprung up off the back of the Green Bond Principles and Climate Bond Standards as well.

Methodologies for evaluating the "greenness" of green bonds have also emerged, such as CICERO's 'Shades of Green' assessment and the Alliance to Save Energy's CarbonCount™ quantification of emissions and energy reduction impact of bonds. Detail of these evaluation techniques is included in the below table (see Table 4). In addition, the Green Bank has been providing input into the design of the Climate Action Reserve's Climate Impact Score framework (currently in development) which can be used to score the climate impact of green financing.

Table 4. Green Bond Evaluation Techniques

Name	Summary	Focus
Qualitative Evaluation of M	anagerial Aspects of Bonds (use o	of proceeds, management process, reporting/disclosure, etc.)
Green Bond Principles (GBP)	Voluntary guidelines to promote transparency and disclosure	<ul> <li>Use of proceeds</li> <li>Process of project evaluation and selection</li> <li>Management of proceeds</li> <li>Reporting</li> </ul>
Moody's Green Bond Assessment (GBA) <sup>40</sup>	Qualitative assessment 'rating' using similar parameters to GBP	<ul> <li>Use of proceeds</li> <li>Organization structure &amp; decision</li> <li>Disclosure on use of proceeds</li> <li>Management of proceeds</li> <li>Ongoing reporting &amp; disclosure</li> </ul>
Climate Bond Initiative's Climate Bond Standard (CBS) <sup>41</sup>	Certification scheme to verify green credentials of a bond, aligns with GBP; Guided by panel of climate and energy experts; focus on corporate issuers	<ul> <li>Monitoring, reporting, and assurance of conformance with Climate Bonds Standards</li> <li>Decision making process of underlying projects' eligibility</li> <li>Internal process &amp; controls (use and tracking of proceeds)</li> <li>Reporting (disclosure prior to issuance)</li> <li>Post-issuance reporting and disclosure</li> </ul>

<sup>&</sup>lt;sup>39</sup> http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/green-bond-principles/

<sup>&</sup>lt;sup>40</sup> https://www.moodys.com/research/Moodys-launches-new-Green-Bond-Assessment-service--PR 346590

<sup>41</sup> http://www.climatebonds.net/standards/standards-V2.0

Evaluation of Environm	nental Impact of Bond	
CarbonCount <sup>TM42</sup>	Quantitative metric to evaluate green impact of bonds	<ul> <li>Quantitative analysis of forecast power generation and/or energy savings</li> <li>Uses investment grade audit or independent engineer's analysis of underlying projects</li> <li>Estimates emissions impact using EPA's AVERT model and/or other EPA emissions factors</li> <li>Derives annual carbon savings per \$1,000 (face value) of bond to normalize emission savings</li> </ul>
CICERO43	Provides 'Shades of Green' qualitative assessment (dark, medium, light) on climate and environmental 'ambition' of bonds	•Grading is based on a broad qualitative assessment of each project, according to what extent it contributes to building a low-carbon society.

The Green Bank, in effect, enabled the issuance of "green bonds" when it securitized \$20 million of commercial PACE benefit assessment liens with Clean Fund. During FY2017, the Green Bank issued or participated in additional green bond issuances as follows:

- Approximately \$3 million in New Clean Renewable Energy Bonds (New CREBs) backed by the state's Special Capital Reserve Fund and purchased by Bank of America to fund the first Archimedean screw generator to produce hydroelectric power for the City of Meriden;
- Approximately \$2 million in Qualified Energy Conservation Bonds (QECBs) issued by the Connecticut Housing Finance Authority and purchased by Bank of America to provide debt capital to the Green Bank for solar PV energy to more than a dozen housing authorities under power purchase agreements.

During FY2018, the Green Bank expects to issue several millions of dollars of green bonds to support the Residential Solar Investment Program (RSIP) using revenues from contracted sales of Solar Home Renewable Energy Credits (SHRECs) to Eversource and Avangrid.

## 5.4 Public-Private Partnerships

The foundation of the green bank model rests on Connecticut's achievement of a legislative and regulatory policy framework that makes it possible for financing, security and collection structures and mechanisms to be put in place in order to facilitate significant pools of private capital into the marketplace to finance a diverse array of clean energy investment across all sectors. Since its formation, the Green Bank has attracted hundreds of millions of dollars in private investment from local, regional and national sources. These investments are the quintessential public private partnerships for clean energy finance, and include investments such as:

 <u>Dominion Bridgeport Fuel Cell Park</u> – Green Bank financing in support of the largest fuel cell in North America – a 15 MW project on an old brownfield site in a distressed community using a

<sup>42</sup> http://www.ase.org/resources/carboncounttm-quantitative-carbon-scoring-system-green-bonds

<sup>43</sup> http://www.cicero.uio.no/en/posts/news/cicero-grades-climate-friendly-bonds-with-shades-of-green

technology manufactured in Connecticut – attracted \$65M in initial investment from Dominion Resources.

- <u>CT Solar Lease</u> a unique combination of a tax equity investor, a syndicate of debt providers and the Green Bank to create a \$70 million fund for rooftop solar PV (i.e., residential lease financing for solar PV and commercial leases and PPAs for solar PV).
- CT Solar Loan a \$5 million pilot public-private partnership between the Green Bank and Sungage Financial resulting in the first crowd-funded solar loan program in the country and graduating to a \$100 million pool of capital from the Digital Federal Credit Union to enable citizens to own solar PV systems installed on their homes.
- <u>Energize CT Smart-E Loan</u> a second-loss reserve provided by the Green Bank to attract private capital investment for Energize CT Smart-E Loans offered by local community banks and credit unions offering state-wide coverage and supporting the implementation of the CES.
- PosiGen a \$5 million subordinated debt investment, with an additional \$5 million option from the Green Bank, into a total fund of \$27 million to support a solar PV lease and energy efficiency energy savings agreement (ESA) product for 1,000 homes in the low-to-moderate income market segment.
- C-PACE an offering by the Green Bank of C-PACE funded transactions that resulted in attracting \$24 million in private capital using \$6 million of Green Bank investment to fund a \$30 million securitization of commercial, industrial, non-profit, and multifamily projects. A follow-on \$100 million public-private partnership with Hannon Armstrong increased access to capital for C-PACE.
- <u>Private Foundations</u> as a result of C.G.S. § 16-245n(d)(2)(C)(iii), the Green Bank can receive grants and investment (e.g., Program Related Investments, or PRIs) from philanthropic foundations.
  - MacArthur Foundation In partnership with the MacArthur Foundation, the Green Bank is supporting a \$5 million PRI to support clean energy deployment in the affordable multifamily market segment.
  - Kresge Foundation The Green Bank is supporting the deployment of solar PV and battery energy storage systems for affordable housing and community institutions in Connecticut with funding from the Kresge Foundation in the form of a PRI for up to \$3 million and associated grant funding of 5% of the loan amount.

These partnerships with private capital are positive signs that the capital is ready, willing and able to be supplied to the clean energy marketplace in Connecticut.

#### **Cost of Capital**

It is not sufficient for private capital to be supplied into the market for clean energy and energy efficiency investment. Capital "at any cost" will not permit the market to scale-up to levels required to enable Connecticut to achieve its public policy goals. This is particularly true in Connecticut where the marketplace has become conditioned to subsidized interest rate loans, particularly for energy

efficiency. To date, much success has been observed in the Green Bank's ability to attract capital at rates that are viewed by consumers as both reasonable and affordable. The Green Bank's Energize CT Smart-E loan for homeowners is available at 5-year rates not-to-exceed 4.49% (4.24% from at least one lender). For homeowners without access to home equity financing, these rates compare quite favorably to unsecured lending rates, which frequently range from 9-12% or more. The C-PACE program is attracting funding at a level of approximately 300 basis points (100 basis points = 1%) over long term swap rates. An even lower rate was achieved for the debt funding associated with the leveraged solar lease fund. Crowd-funding could provide funding at even lower yields, but the potential for crowd funding is too uncertain at the present time to be relied upon as a meaningful supply of capital for clean energy projects.

#### Maturity

To date, the Green Bank has been successful in attracting capital for terms that enable consumers of all types to make the desired investments in clean energy with no cash investment upfront in most cases. In fact, Green Bank programs have demonstrated that lengthening the maturity of the loan can be an effective way to raise more capital for these projects. For instance, it would require a reduction in interest rate from 5% to nearly 0% to have the same impact as a one-year extension in repayment terms (i.e., from 6 years to 7 years) to finance a home oil-to-gas conversion with a new boiler/furnace for about the same \$100 per month outlay. The benefits of extended terms become even more significant for financing comprehensive energy efficiency retrofits called for by the CES that cost more to implement and deliver benefits to the homeowner over somewhat longer payback periods. In these cases, the 10, 12 and even up to 20-year maturities for the Smart-E loan and the 15 and 20-year maturity for the Sungage solar loan permit homeowners to become cash flow positive either throughout the life of the loan or after a modest fraction of the total loan payments have been made. With C-PACE, commercial and industrial property owners are able to finance their investments at periods extending to 25 years with a statutory requirement that expected energy savings exceed financing obligations levied on their property tax bill.

#### Private Investment and Leverage Ratio

In the end, these public-private partnerships are efforts by the Green Bank to attract private investment to finance Connecticut's clean energy policy goals. In doing so, the Green Bank uses a diverse array of financial structures and instruments to facilitate co-investment with a host of capital providers, participating in every level of the capital stack, from equity, to subordinated debt and senior debt (i.e., earning returns that range from "concessionary rates" to "market" rates of return). The Green Bank will also provide other credit enhancements, such as loss reserves, guarantees, funding warehouses, and other forms of support where such support for the sector or achieving Connecticut's policy goals is warranted. The Green Bank has no formula for the manner or level of support or credit enhancement it ultimately provides, but seeks to provide the least amount of support necessary to result in the highest possible levels of private financing for the projects concerned or to meet programmatic goals.

That said, the Green Bank has been successful in leveraging ratepayer and other forms of public capital from 4:1 to 12:1. For example, the Green Bank leverages ratepayer capital in various ways through its products, including a 5:1 leverage ratio through the CT Solar Lease whereby \$10 million of ratepayer capital was used to initially attract \$50 million in tax equity and debt investment.

Another example is yielding an 11:1 leverage ratio to support the growth and sustainability of a local residential solar PV contractor market, through the Energize CT Smart-E Loan whereby a \$2.5 million second loss reserve is attracting \$28 million of long-term and low-interest loans from local community banks and credit unions to help finance energy improvements in homes that are consistent with the CES.

### 5.5 Green Bank Network

The Green Bank Network is a new global organization and platform that will enable Green Banks and network participants to share experience, best practices and data around innovative green infrastructure financing activities. At the Conference of the Parties (COP) 21 conference in Paris, France in December 2015, the Green Bank joined with the UK Green Investment Bank, the Australian Clean Energy Finance Corporation, the Japan Green Fund, Malaysia Green Technology Financing Scheme, and the New York Green Bank to announce the formation of the Green Bank Network. The Green Bank Network is coordinated by two non-profit organizations, the National Resource Defense Council (NRDC) and the Coalition for Green Capital (CGC) with start-up funding from ClimateWorks for 2016.

The Green Bank Network will collect, organize and share know-how through virtual and in-person platforms. This will allow green banks, development finance institutions and other intermediaries to collaborate and learn from one another and will equip the global clean energy finance community with advanced tools and practices based on an "open source banking" model. Over time, the network aims to help private sector investors and developers partner with Green Banks, and to drive standardization in clean energy markets to increase the flow of capital to the sector and increase the scale, scope and efficiency of financing activities.

### 6. Marketing

As the Green Bank continues to grow and evolve from a grant distribution model to one whose success is increasingly measured by private market participation, the role of marketing and communications necessarily must too. Consequently, a great deal of effort has been focused on marketing innovation in order to raise stakeholders' awareness of, and engagement with, the Green Bank brand and its programs.

The Green Bank's marketing efforts support the organization's drive to attract private capital to finance the clean energy goals for Connecticut, as well as facilitate the deployment of more green energy throughout the state. Through various marketing channels including our utility partners, local lenders and contractors, on the ground community efforts, as well as our online assets, the Green Bank is helping more and more consumers receive access to cleaner, cheaper, and more reliable sources of green energy.

#### 6.1 Brand

The Green Bank brand was officially launched to the public on April 15, 2015. While a noticeable departure from CEFIA's previous visual identity, the new brand is much more than a distinctive logo and creative copy. It serves as a valuable asset designed to drive market activity, increase stakeholder engagement, and project the Green Bank's team-centered approach to achieving Connecticut's clean energy policy goals.

Many participated in the brand development process which included quantitative and qualitative research designed to capture stakeholder attitudes about the Green Bank and its predecessor CEFIA. Accordingly, it was only through the collective input of stakeholders that we were able to discover, and in turn, amplify Green Bank's authentic brand voice. As an organization, the Green Bank also strove to ensure the new brand properly expressed staff's commitment to being skilled listeners, connectors, and facilitators. To that end, the process not only revealed considerable insight into external stakeholders' perceptions of the Green Bank but also served as a touchstone for its corporate culture and identity.

When asked to describe the Green Bank, research efforts often observed respondents employing metaphors such as "catalyst" and "spark". As self-identified agents of change, this particular insight resonated strongly with internal stakeholders, and for good reason. Certainly, one of the most important roles of the Green Bank is to catalyze Connecticut's green energy market. However, many internal and external stakeholders viewed the Green Bank's mission and impact through a much broader lens. Several survey participants expressed that the Green Bank was responsible for "sparking a movement." Thus, the catalyst metaphor was heavily leveraged to underscore the new Green Bank brand identity.

#### **Pillars**

Supporting the Green Bank's new brand platform are three mission-driven pillars. They are: Innovate, Educate, and Activate. As the foundation of the brand, the pillars' collective role is to facilitate the acceleration of clean energy deployment in Connecticut; individually however, they serve to articulate the organization's commitment to engage all stakeholders on multiple levels. Through innovation, the Green Bank is making clean energy investment safer, more affordable and accessible. By educating

Connecticut residents and businesses, we are helping to illuminate the benefits of green energy in order to drive interest. And finally, by inspiring people to make green energy a part of their lives, we are activating consumer behavior change and accelerating clean energy market growth throughout the state.

#### Table 5. Pillars of the Connecticut Green Bank



#### Innovate

We are making clean energy investment safer, more affordable and accessible with our innovative model.

- Innovations in finance:
   Creative financial solutions that make green energy affordable and rewarding
- Innovations in green technology: Invest in cleaner, greener and more reliable sources of energy for a healthier economy and healthier planet
- Innovations in public-private collaborations: Work with local contractors and lenders to help businesses and homeowners access affordable financing



#### **Educate**

We are helping to make the benefits of green energy clear to drive interest.

- Empower residents and businesses to discover how to access green energy financing by providing education and answers
- Train and certify Connecticut Green Bank partners about green energy financing
- Raise community awareness of the benefits of green energy for a thriving Connecticut



#### Activate

We are inspiring people to take action and make green energy a part of their lives.

- Give residents and businesses the confidence to take action by helping them navigate the process
- Help them realize their goals by finding a solution that's right.

#### **Brand Promise**

Energy is essential to grow and thrive. Energy powers your life, your business, your community. And green energy, leveraging energy efficiency and renewable energy sources, guarantees an enduring future. You want to make a change, but are uncertain how to navigate the process of making green energy a part of your life. The Green Bank lowers barriers to make green energy financing more accessible and affordable. We introduce an innovative model that leverages public and private dollars to accelerate the growth of green energy. With this model, we create a robust marketplace that brings down the cost of energy so that Connecticut citizens thrive and businesses grow. We innovate to educate and activate people to accelerate the growth of green energy. We create jobs. We grow businesses. We promote healthier communities. We help people thrive. By creating a flourishing marketplace, we contribute to a better quality of life, a better environment and a better future for all.

#### **Customer Classifications**

In order to achieve the ambitious energy policy objectives of Connecticut, it is important to ensure that consumers are not only becoming increasingly educated and aware of what they can do to improve their personal energy habits, but, more importantly, to use public incentives and financing from private capital sources to take action and do more with less. Increasing consumer education and awareness by making strong impressions and generating leads will drive more consumers to install clean energy technologies and use more private capital to finance those projects.

- Impressions an impression is the earliest stage of consumer education and awareness. It includes things such as earned media, website hits, event attendance and customer relationship management. Impressions are a leading indicator of consumer action.
- Leads –an expressed interest by a consumer in wanting to understand the opportunity further. It includes less tangible things such as signing an interest list or having a site visit or audit, to more action oriented things such as submitting an application for approval on incentives and/or financing.
- <u>Installations</u> —a clean energy project that has received approval for an incentive (e.g., RSIP), in construction, or commissioned. Installations are expressed in terms of the number of consumers reached, renewable energy produced (e.g., kW installed, kWh generated), and energy saved (e.g., MMBTUs), along with the associated societal benefits that come with those installations (e.g., GHG emission reductions, jobs).
- <u>Financings</u> —a closed loan, lease, PPA, ESA or other financing transaction where the Green Bank is repaid (versus a subsidy), including the number of transactions, size of transaction1s, credit scores of borrowers and the trends towards increased financing over time.

### 6.2 Energize Connecticut

Energize Connecticut<sup>SM</sup> is an initiative dedicated to empowering Connecticut citizens to make smart energy choices, now and in the future. It provides Connecticut consumers, businesses and communities the resources and information to make it easier to save energy and build a clean energy future for everyone in the state. It is an initiative of the Connecticut Energy Efficiency Fund, the Green Bank, the state, and the local electric and gas utilities. The Green Bank's Smart-E loan is marketed under the Energize Connecticut brand. The Green Bank, in conjunction with its Energize Connecticut partners, has developed a statewide marketing plan for the brand to raise awareness as well as realizing the goal stated in the CES:

"To create a culture that understands the value of and therefore demands energy efficiency, establishes standards that enable consumers to easily ascertain the efficiency profile of their own homes or buildings, and makes financing for energy efficiency measures both easily accessible and affordable."

For more information, go to <u>www.energizect.com</u>

### 6.3 Channel Marketing

The Green Bank works on the ground in communities throughout the state with its channel marketing partners including the utilities, local lenders and contractors, and volunteer citizens and community-based organizations. It also engages consumers online through <a href="https://www.ctgreenbank.com">www.ctgreenbank.com</a>, <a href="https://www.gosolarct.com">www.gosolarct.com</a>, <a href="https://www.gosolarct.com">www.gosolarct.com</a>,

### **Utility Partners**

The electric (i.e., Avangrid, Eversource Energy, and Connecticut Municipal Electric Energy Cooperative) and natural gas (i.e., Connecticut Natural Gas, Southern Connecticut Gas, Yankee Gas, etc.) distribution companies are an important channel marketing partner. As administrators of the Connecticut Energy Efficiency Fund, our utility partners are helping consumers reduce their energy consumption, lower peak electric demand, and provide consumers with opportunities to access natural gas. Through the Conservation and Load Management Fund, the administrators of the CEEF are developing a customer engagement platform that can be used to target key market segments with various incentives and financing. Green Bank works with CEEF and DEEP to share data to better inform marketing tactics to acquire customers for clean energy improvements.

### **Local Lending Partners**

The Green Bank partners with local lenders including credit unions, community development finance institutions, community, state, regional, and national banks. Through credit enhancements – including subordinated debt, loan loss reserves, and interest rate buy downs – the Green Bank supports local lenders in providing customers with easy access to affordable capital. With low interest loans that have long maturities, customers can receive immediate positive cash flow returns from their energy improvements as their energy savings exceed debt service payments.

#### **Local Contractors**

The Green Bank supports local contractors installing clean energy systems in the residential, commercial, industrial, and institutional sectors. Contractors serving renewable energy, energy efficiency, and natural gas conversion projects – all components of the CES – are supported with access to private capital sources to support the growth of their businesses through working capital, as well as easy access to affordable capital for their consumers.

### **Community-Based Campaigns**

Community-based campaigns provide an opportunity to engage local residents, businesses and institutions in advancing the clean energy policy goals of the state. Over the years, the Green Bank, and its predecessor the CCEF, have been involved in the creation of several community-based campaigns that are attracting foundation contributions and winning federal grants by accelerating the deployment of clean energy in communities across the state, including the Clean Energy Communities program, <sup>44</sup> Neighbor to Neighbor Energy Challenge, Solarize Connecticut, and Energize Norwich.

<sup>&</sup>lt;sup>44</sup> The U.S. Environmental Protection Agency and U.S. Department of Energy awarded the CCEF and SmartPower with the Green Power Pilot Award for the Connecticut Clean Energy Communities Program in 2006. Such programs were supported by

### **Automated Marketing Platform**

The Green Bank recently implemented an automated marketing platform that enables our private sector marketing partners to easily and cost effectively create, distribute and measure the impact of their green energy related marketing efforts. As a means to promote the Green Bank's products, this new marketing technology infrastructure houses professionally developed marketing assets designed to help channel partners improve their sales efforts through the distribution of high quality, Green Bank co-branded marketing collateral. The platform's library currently stocks a variety of customizable collateral for our channel partners to leverage in their own campaigns, with many more pieces expected to be added throughout the course of the year. The automated platform also offers several step-by-step guides designed to help our channel partners develop, execute and ultimately measure the effectiveness of their marketing efforts.

### Digital and Online Media

As part of the Green Bank branding effort, the marketing unit conducted a thorough audit of all existing digital marketing assets and tools. As a result, the former CEFIA website was replaced with the much more user-friendly and "on-brand" <u>CTGreenBank.com</u>. Design of the new website experience was heavily influenced by a desire to create an environment that was easily navigable for all users across our diverse stakeholder base. Informed by the success of community-centric campaigns such as Solarize and Neighbor-to-Neighbor, another priority of the site was to present compelling stories and video testimonials that illustrate the benefits and relative ease of financing renewable energy upgrades with the Green Bank.

Still another digital communication and marketing channel that continues to command ever more attention is social and online media. Over the past decade, much has changed with regards to providing consumers with easier, quicker, and more substantive access to information through the internet and things such as Google, Facebook, LinkedIn and Twitter. Often in real time, the Green Bank employs these tools to increase the level of awareness and education of consumers to help them take action to receive cleaner, cheaper, and more reliable sources of energy.

6.4 Green Bank University Innovations in American Government Awards 2017

The well-documented success of the Green Bank and green energy finance in general has generated significant demand for more information about the creation, administration and ultimate evaluation of the quasi-public green bank model. As such, the Green Bank, Coalition for Green Capital, and Yale Center for Business and the Environment have seized the opportunity to leverage their collective experience and create resources that will support a Green Bank University to advance the green energy finance movement. Taking the form of an in-person and online experience, careful consideration has been given to both the nature and scope of its content and message. Equally important still, has been the determination by the partners of what purpose(s) the university does not intend to serve. Both are cited below:

contributions from the Emily Hall Tremaine Foundation, John Merck Fund, Pew Charitable Trusts, Rockefeller Brothers Fund, Surdna Foundation, and others.

### Key roles of the Green Bank University:

- **Establish standardization of green bank processes and procedures**
- Memorialize institutional wisdom / knowledge
- Provide insight into green bank operations
- Present an overview of successful financial innovations and marketing strategies
- Establish parameters around the scope of a green bank
- Illustrate the lifecycle of a green bank
  - documentation of key success factors pertaining to policy, implementation & adaptation
- Facilitate the proliferation of the green bank model
- Underscore the urgency of implementing the green bank model

### The University does not intend to:

- Be a guide for state banking
- Position green banks as a vehicle driven by profit maximization
- Confine or limit green banks' roles to that of market animators or solely as mechanisms for capital deployment
- In broad terms neither endorse, favor, nor condemn the value of public-private partnerships (PPP) over privatization or government-only run programs but demonstrate when and where a PPP like a green bank may be most effective at advancing/achieving policy goals.

In June of 2017, the <u>Ash Center</u> of the Harvard Kennedy School of Government named the Connecticut Green Bank winner of its 2017 Innovations in American Government Award. Along with The Green Bank was the honored of being included to be among the 7 finalists selected from over 500 submissions, as the winner, the Green Bank also receives a \$100,000 grant from The Ash Center. The monetary award, in addition to a matching sum approved by the Green Bank's board of directors, are being allocated to both development and subsequent operations of the Green Bank University. As part of winning the award, and the \$100,000 grant it receives, the Green Bank will raise the awareness of green banks to citizens and policymakers to support the green bank movement.

### 7. Infrastructure Sector – Behind the Meter and On the Grid

The Infrastructure Sector is focused on implementing statutorily mandated programs<sup>45</sup> as well as infrastructure projects<sup>46</sup> that provide cheaper, cleaner and more reliable sources of energy while creating jobs and supporting local economic development.

### Comprehensive Energy Strategy and Integrated Resource Plan

The Infrastructure Sector programs support the implementation of the 2012 CES and 2014 IRP. Specifically, the deployment of clean energy supports many of the strategy recommendations in Chapter 2 (i.e., Industry Sector Strategy) and Chapter 3 (i.e., Electricity Sector Strategy) of the CES that better enable Connecticut residents and businesses to take advantage of the opportunities. Programs such as the U.S. Department of Energy SunShot Initiative Rooftop Solar Challenge are but a few examples where the Green Bank's Infrastructure Sector is supporting the implementation of the CES. The pending release of and finding within the 2016 CES will be incorporated into the future Comprehensive Plan of the Green Bank.

Reducing the costs of the Class I RPS by deploying more cost-effective in-state and regional resources is a focus of the 2014 IRP. An additional challenge noted in the IRP is the need to reduce peak demand in the summer and winter months to release some of the cost pressures as a result of increasing peak demand.

The programs of the Infrastructure Sector are intended to support the implementation of the strategies and recommendations outlined in the CES and IRP.

### Conservation and Load Management Plan

The Infrastructure Sector programs support the implementation of programs in the 2016-2018 C&LM Plan and vice versa. Specifically, the deployment of solar PV systems through the Residential Solar Investment Program (RSIP) assists with the implementation of several programs in Chapter 3 (i.e., Residential Programs) of the C&LM Plan, including, but not limited to:

- Home Energy Solutions (HES) every residential solar PV project is required to undertake a
  HES assessment or an equivalent energy audit (e.g., BPI audit). Currently, approximately 55%
  of all RSIP projects undergo a HES assessment and 45% a BPI audit.
- Water Heating as a result of the HES assessment or the BPI audit requirement for residential solar PV projects, opportunities for more efficient water heating systems are being identified.
- Space Heating the increase in deployment of residential solar PV is providing an opportunity for homeowners to convert from heating oil furnaces to electricity powered air source and ground source heat pumps.

<sup>&</sup>lt;sup>45</sup> Examples of statutorily mandated programs would be, but are not limited to, Section 103 of PA 11-80 (i.e., anaerobic digester and combined heat and power pilot programs) and Public Act 15-194 (i.e., solar home renewable energy credit).

<sup>&</sup>lt;sup>46</sup> Examples of infrastructure projects include Section 26 of Public Act 05-01 (i.e., Project 100) which resulted in the Dominion Bridgeport Fuel Cell Park or Section 127 of Public Act 11-80 (i.e., 30 MW of grid tied renewable energy projects sited in Connecticut) which resulted in Colebrook Wind.

The combination of solar PV with renewable thermal technologies for water and space heating such as solar thermal hot water, air source heat pumps, and ground source heat pumps present a significant opportunity to support Connecticut's long-term greenhouse gas emission reductions policy. Solar PV can provide the electricity production needed to offset the additional electricity usage associated with deployment of renewable thermal technologies such as air source heat pumps, reducing overall energy usage and in particular, fossil fuel\_-based energy usage. A recent evaluation of the RSIP program further illustrates the opportunity to deploy solar PV in combination with energy efficiency measures including HVAC upgrades, as well as other emerging energy solutions.

The Cadmus Group has conducted two evaluations of RSIP<sup>47</sup>, the second of which focused specifically on the cost-effectiveness of RSIP through program step 7. The key findings from this study were:

- RSIP is cost-effective from the perspective of program participants, the Green Bank, from a total resource perspective, and for society as a whole.
- RSIP has increasingly made efficient use of program funds by reducing incentives while supporting market growth through financing, marketing, outreach and education.
- RSIP benefits sufficiently outweigh costs to allow for bundling of residential solar PV with emerging technologies such as energy storage and the latest generation of renewable thermal technologies, while maintaining cost-effectiveness.

The following table illustrates increasing benefit/cost ratios as incentives decrease over program steps 1 through 7, with respect to the PACT or program administrator cost test, while the PCT or participant cost test remains level, reflecting similar economics for the participant through all steps – see Table 6. Similarly, the Green Bank Objective Function (OF) reflects increasing benefits (kWh's generated) per program dollar invested.

<sup>&</sup>lt;sup>47</sup> Residential Solar Investment Program Evaluation (January 30, 2015) – <u>click here</u>
Cost-Effectiveness Assessment of the Residential Solar Investment Program (March 26, 2016) by Cadmus – <u>click here</u>

Table 6. Cost-Effectiveness of RSIP by Step

RSIP 2012- 2015	Installed Capacity (MW)	PACT Benefits	PACT Costs	Net PACT Benefits	Net Benefits/ MW	PACT Benefit/ Cost Ratio	PCT Benefit/ Cost Ratio	OF (kWh/\$ invested)
Steps 1 & 2	7.4	\$18,646,724	\$12,435,693	\$6,211,031	\$839,329	1.50	1.72	18.1
Step 3	13.3	\$32,714,259	\$15,784,621	\$16,929,638	\$1,272,905	2.07	1.80	25.7
Step 4	20.5	\$47,901,194	\$18,200,235	\$29,700,959	\$1,448,827	2.63	1.83	33-4
Step 5	14.8	\$33,822,171	\$9,467,372	\$24,354,799	\$1,645,594	3.57	1.80	45.3
Step 6	14	\$31,078,515	\$6,021,396	\$25,057,119	\$1,789,794	5.16	1.80	67.0
Step 7	21.4	\$46,247,561	\$7,148,375	\$39,099,186	\$1,827,065	6.47	1.80	83.9
Total	91.3	\$210,410,423	\$69,057,692	\$141,352,731	\$1,546,529	3.05	1.80	38.7

With the PACT benefit/cost ratio for RSIP Step 7 in the above table approaching 7, solar PV has sufficient extra benefits relative to costs by itself or in combination with utility-supported energy efficiency measures (which are also cost-effective) to support deployment of other technologies which may or may not be as cost-effective. For example, solar PV bundles well with renewable thermal technologies or with emerging technologies such as energy storage or smart meters to provide more comprehensive energy solutions and savings to participants while maintaining program and participant cost-effectiveness. Programs in Vermont already encourage participant adoption of energy storage in combination with solar PV, or solar PV along with energy efficiency measures and renewable thermal and other heating and cooling improvements. The Green Bank has been seeing the beginning of activity in the Connecticut market looking to incorporate energy storage solutions. The Green Bank currently supports bundling of solar PV with energy efficiency measures for residential customers through the Smart-E loan offer, and has recently included energy storage as an eligible measure for the Smart-E bundle in recognition of strong interest and developments in this market.

#### TAM and SAM

For the Infrastructure Sector, the Total Addressable Market (TAM), Serviceable Addressable Market (SAM) and Share of Market (SOM) scenarios with respect to residential solar PV and anaerobic digesters are presented below.

### Residential Solar PV

Per Public Act 15-194, the Green Bank is to structure and implement a residential solar investment program which shall result in no more than 300 megawatts of new residential solar photovoltaic installations located in Connecticut on or before December 31, 2022. In order to assess the market potential for residential solar PV to determine if the goal established by the legislature is achievable, the Green Bank worked with Geostellar<sup>48</sup> to use big-data geomatics to determine the technical and economic viability (i.e., TAM and SAM, respectively) and market penetration (i.e., SOM) in Connecticut (see Table 7).

<sup>&</sup>lt;sup>48</sup> www.geostellar.com, or click here for the report "The Addressable Solar Market in Connecticut" (December 6, 2013)

Table 7. Residential Solar PV Market in Connecticut and Market Penetration – By Capacity, Generation and Customers

Market Definition	Market Size (GW, 2015)	Market Size (MWh/yr.)	Market Size <sup>49</sup> (# of customers)	Penetration (MW, 2015)	Penetration (MWh/yr.)	Penetration <sup>50</sup> (# of customers)	% Market Penetration (based on MW)
Residential Sector Total	<del>12.7</del>	<del>14,462,760</del>	<del>1,454,651</del>	<del>129.6</del>	<del>147,588</del>	<del>17,128</del>	<del>1.0%</del>
Residential Technically Viable Rooftops	<del>6.51</del>	<del>7,413,588</del>	<del>659,312</del>	<del>129.6</del>	<del>147,588</del>	<del>17,128</del>	<del>2.0%</del>
Residential Economically Viable Rooftops	<del>3.89</del>	<del>4,429,932</del>	<del>506,714</del>	<del>129.6</del>	<del>147,588</del>	<del>17,128</del>	<del>3.3%</del>

Market Definition	Market Size (GW, 2015)	<b>Market Size</b> (MWh/yr.)	<b>Market Size⁵¹</b> (# of customers)	Penetration (MW, 2018)	Penetration (MWh/yr.)	Penetration <sup>52</sup> (# of customers)	<b>% Market Penetration</b> (based on MW)
Residential Sector Total	12.7	14,462,760	1,454,651	214.6	244,353	27,665	1.7%
Residential - Technically Viable Rooftops	6.51	7,413,588	659,312	214.6	244,353	27,665	3.3%
Residential - Economically Viable Rooftops	3.89	4,429,932	506,714	214.6	244,353	27,665	5.5%

Given the existing federal and state subsidies, according to Geostellar, more than 500,000 residential rooftops can carry solar panels that produce a net present value gain for the residences taking solar electricity off their own roofs. The potential market represents more than 40% of households in the state. - and more than 12 times the legislative target of 300 MW. At saturation, the total investment would be about \$12 billion and create about 70,000 to 100,000 job years within the state. Geostellar has also estimated that the size of the market will grow to 650,000 rooftops, as solar costs decline. These

<sup>&</sup>lt;sup>49</sup> The TAM and SAM calculated by Geostellar are both based on 659,312 customers whereas the market sizes in terms of installed capacity (GW) differ because the SAM is based on average, economically viable system sizes while the TAM maximizes system sizes based on technical viability.

<sup>&</sup>lt;sup>50</sup> As of the RSIP Market Watch report, May 6, 2016 June 30, 2018, 129.6214.6 MW or 17,12827,665 projects were completed, in progress or approved, not including an additional 2,0192,017 projects that were installed through the Green Bank's predecessor organization, the Connecticut Clean Energy Fund (CCEF), bringing total market penetration up to 19,14729,682 residential solar PV projects.

<sup>&</sup>lt;sup>51</sup> The TAM and SAM calculated by Geostellar are both based on 659,312 customers whereas the market sizes in terms of installed capacity (GW) differ because the SAM is based on average, economically viable system sizes while the TAM maximizes system sizes based on technical viability.

<sup>&</sup>lt;sup>52</sup> As of the RSIP Market Watch report, May 6, 2016 June 30, 2018, 129.6214.6 MW or 17,12827,665 projects were completed, in progress or approved, not including an additional 2,0192,017 projects that were installed through the Green Bank's predecessor organization, the Connecticut Clean Energy Fund (CCEF), bringing total market penetration up to 19,14729,682 residential solar PV projects.

rooftops would generate 6,599 GWh per year, equivalent to approximately 22% of total electricity consumption in the state, able to satisfy the state's Class I RPS.

It should be noted that the Green Bank support of the residential solar PV market through the RSIP is to deliver no more than 300 MW – or reach approximately 40,000 residential rooftops before the end of 2022. In its efforts to meet the public policy objective, the Green Bank will also work to help the residential solar PV market transition itself by making it efficient and effective to connect the homeowner or third party owner to the Class I RPS.

### Anaerobic Digesters

The three common types of AD projects that can readily be deployed in the state are: Source-Separated Organic Matter (primarily Food Waste); Waste Water Treatment Facility (WWTF) sludge; and Animal Waste (Farm). Because of the availability and economics of processing feedstock (i.e., food waste, sludge and animal waste), these projects take more time than other energy projects to develop.

The available food waste market assessment was based on information taken from the DEEP State-Wide Solid Waste Composition and Characterization Study and the DEEP Food Residual Generation Mapping Study (September 2001, updated for DEEP by US EPA in Spring 2012)<sup>53</sup> identifying all Connecticut large food waste generators. Per the source-separated organics recycling legislation (Public Act 11-217, as updated by Public Act 13-285, and codified at CGS 22a-26e) large commercial food waste generators are required to bring their source-separated organic materials to a recycling facility, unless there is not a suitable facility within a 20-mile radius of the generator. Large food waste generators subject to this requirement are identified as commercial food wholesalers or distributors, industrial food manufacturers or processors, supermarkets, resorts or conference centers that each generate an average projected volume of not less than one hundred four tons per year of sourceseparated organic materials (SSOM). The purpose of the law is to signal to investors and prospective facilities that a large volume of feedstock is quantified and available for composting and anaerobic digestion facilities. DEEP estimates the total food generation within Connecticut to be in excess of 320,000 tons/year, with additional tonnages of other SSOM available as well. If all the available food waste from the large generators was made available for waste to energy plants, it could support up to 9.6 MW of generation capacity.

For WWTF, the TAM and SAM are limited to the number of facilities in the State. A WWTF study assessment done by Fuss & O'Neill (F&O) for the Green Bank<sup>54</sup> identified a total of 84 WWTF throughout Connecticut. The total available market capacity of all the facilities is 551-million gallons of sludge per day (MGD). However, the serviceable market, based on F&O's assessment of what criteria WWTF use as their guide for acceptable paybacks for capital investments (between 5 and 10 years), identifies facilities with greater than 5 MGD as required to achieve these paybacks. This leaves the serviceable market size at 102 MGD which accounts for less than 20 of the 84 total WWTF. The market

<sup>&</sup>lt;sup>53</sup> Updated Mapping of Food Residual Generation in Connecticut by the Department of Energy and Environmental Protection (Spring 2012)

<sup>&</sup>lt;sup>54</sup> Report to CEFIA of Results of Anaerobic Digester Project by Fuss & O'Neill for the Connecticut Green Bank (January 21, 2014)

size in the table reflects the serviceable market size based on installed generation capacity of up to 2.7 MW.

Data used to determine the potential market size for animal waste, primarily cow manure, was estimated using information provided by the agriculture department at the University of Connecticut as well as the Department of Agriculture. The dairy cow population has not changed significantly in Connecticut since 2007. This TAM is directly correlated to the dairy cow population, which currently is estimated to be around 19,000. The market estimates below were based on information gathered in 2012 from several agricultural studies as well as recent information gathered from several site visits to operating farm AD systems both in Ohio and Massachusetts. Data gathered from these studies estimates that the manure from approximately 1,000 cows can provide enough methane to support a generator capacity of 250 kW. Determining the serviceable available market in Connecticut is a bit challenging because 60% of the dairy farms are either 100 cows or less. So in order for any of these farms to make an AD installation feasible, it would require partnering and aggregating feedstock with other neighboring farmers and/or co-digest using food waste or other organic feedstock.

Based on Connecticut's farm size numbers established in the studies there are only a handful of farms that are even large enough, 800 plus cows, to economically consider a small-scale AD project without supplementing (co-digesting) the feedstock with food waste or other organics. For the purpose of better estimating the total available market we will assume that the medium size CT dairy farms, with 400 to 800 cows, will co-digest with some percentage of food waste. There are also significant financial as well as performance benefits to co-digesting manure with food waste. Digester biogas quality and yields can be significantly improved by just adding small percentages of food waste to the farm digester feedstock recipes. Also, the economics of a farm-based AD project can be significantly enhanced with the addition of tipping fees from bringing in the food waste. The more accounted-for revenue, the fewer incentives farmers require to make these AD projects feasible. Medium sized dairy farms in this size range account for approximately 20% of the 159 operating dairy farms in CT.

Currently the USDA, DOE and EPA agencies are working to promote biogas utilization through their existing programs by aligning incentive programs, research plans and standards to support these efforts.

Connecticut Farm Energy has recently sent out surveys to all registered dairy farms in the state to gauge the level of interest for farm digesters. They are currently compiling the data as the surveys come in and are expecting to have the results by the end of June 2016. This information will also provide them with a better sense of the size of the farms that are interested in digesters.

Both food waste and waste sludge are dependent on the number of feedstock generators (see Table 8). The table below shows a preliminary estimate of the market by annual electricity generation for projects using the feedstock.

Table 8. Anaerobic Digester Market in Connecticut for Food Waste, Waste Water Treatment Sludge, and Animal Waste

Market Definition	<b>M</b> arket Capacity (MW)	<b>Market Size</b> (MWh)	Current Penetration
Food Waste (SSOM)	9.6	75,923	67%
WWTF Sludge	2.7	21,318	30%
Animal Waste (Farm)	5.9	46,516	0%
Total	18.2	143,757	

### **Product or Program Overview and Objectives**

The Infrastructure Sector has established the following program objectives for FY 2017 (see Table 9):

Table 9. Infrastructure Sector Fiscal Year 2017 Objectives

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
RSIP	8,500	\$282,302,000	64.6
AD	1	\$18,000,000	1.6
Total	8,501	\$300,302,000	66.2

Meeting these targets would generate 85,480 MWh of clean energy (or 291,445 MMBtu's) in the projects first year of generation and 2,137,002 MWh of clean energy (or 7,286,131 MMBtu's) over the life of the projects.

After gauging market performance, the Green Bank revised its Fiscal Year 2017 target in January 2017 to the following (see Table 10):

Table 10. Revised Infrastructure Sector Fiscal Year 2017 Objectives

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
RSIP	6,000	\$173,165,071	47.4
AD	1	\$18,000,000	1.6
Total	6,001	\$191,165,071	49.0

The Infrastructure Sector has established the following program objectives for FY 2018 (see Table 11):

Table 11. Infrastructure Sector Fiscal Year 2018 Objectives

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
RSIP	4,431	\$136,300,000	37.0
Anaerobic Digester	1	\$20,000,000	1.6
Strategic Investments	1	\$15,000,000	3.7
Total	4,433	\$171,300,000	42.3

After gauging market performance, including the legislative sweeps in FY 2018 and FY 2019, the Green Bank revised its Fiscal Year 2018 target in January 2018 to the following (see Table 12):

Table 12. Revised Infrastructure Sector Fiscal Year 2018 Objectives

<u>Program</u>	<u>Projects</u>	<u>Capital Deployed</u>	Clean Energy Deployed (MW)
RSIP	<u>4,431</u>	\$136,300,000	<u>37.0</u>
Strategic Investments	<u>1</u>	\$15,000,000	<u>3.7</u>
<u>Total</u>	4,432	\$151,300,000	40.7

The Infrastructure Sector has established the following program objectives for FY 2019 (see Table 13):

Table 13. Infrastructure Sector Fiscal Year 2019 Objectives

<u>Program</u>	<u>Projects</u>	Capital Deployed	Clean Energy Deployed (MW)
RSIP	<u>6,000</u>	<u>\$168,000,000</u>	<u>48.0</u>
Strategic Investments	<u>1</u>	\$15,000,000	<u>3.7</u>
<u>Total</u>	<u>6,001</u>	\$183,000,000	<u>51.7</u>

#### Residential Solar Investment Program

The RSIP requires that no more than 300 MW of new residential solar PV be installed in Connecticut on or before December 31, 2022, at a reasonable payback to the customer all the while developing a sustainable market for contractors. The RSIP provides to residential customers, via solar PV contractors, direct financial incentives in the form of expected performance-based buy-down incentives (EPBB) and performance-based incentives (PBI) for the purchase and/or lease of qualifying residential PV systems.

In an assessment conducted in December of 2014, it was identified that solar PV deployment in the low-to-moderate (LMI) household market segments were not performing as well as the non-LMI market segment. <sup>55</sup> Back then, the LMI market needed to deploy between 2 to 10 times more solar PV to be on par with the non-LMI market segment. Thus, the RSIP now includes an LMI PBI to provide additional incentive to support the growth of solar PV deployment in this underserved market segment.

Since December of 2014, progress has been made deploying solar PV in the LMI market segment (see Table  $14\frac{2}{2}$ ).

<sup>&</sup>lt;sup>55</sup> Market Analysis of Residential Solar Deployment and Housing Characteristics of CT's Low Income Sector (December 12, 2014) – <u>click here</u>

Table 142. Residential Rooftop Solar PV Distribution by Income-Banded Census Tract as of June 30, 20187

Income Level (AMI)	# of Census Tracts	Tract Pop.	<del>Tract</del> House- holds (HHs)	# of Projects	Installed Capacity (kW)	Projects per 1,000 People	Projects per 1,000 HHs	Watts/ Tract HHs
Less than 60%	<del>171</del>	<del>662,619</del>	<del>240,062</del>	<del>1,781</del>	<del>11,004</del>	<del>2.7</del>	<del>7.4</del>	<del>45.8</del>
<del>6o-8o%</del>	<del>109</del>	<del>493,43</del> 8	<del>193,791</del>	<del>2,635</del>	<del>17,953</del>	<del>5:3</del>	<del>13.6</del>	<del>92.6</del>
<del>80-100%</del>	<del>153</del>	<del>659,934</del>	<del>269,711</del>	<del>4,537</del>	<del>33,123</del>	<del>6.9</del>	<del>16.8</del>	<del>122.8</del>
<del>100-120%</del>	<del>140</del>	<del>625,478</del>	<del>237,488</del>	<del>5,617</del>	<del>42,914</del>	<del>9.0</del>	<del>23.7</del>	<del>180.7</del>
More than	<del>251</del>	<del>1,143,854</del>	<del>411,504</del>	<del>10,046</del>	<del>80,801</del>	8.8	<del>24.4</del>	<del>196.4</del>
<del>120%</del>								
<del>Total</del>	<del>827</del>	<del>3,5<sup>8</sup>5,323</del>	<del>1,352,556</del>	<del>24,642</del>	<del>186,016</del>	<del>6.9</del>	<del>18.2</del>	<del>137.5</del>

Income Level (AMI)	# of Census Tracts	Tract Pop.	Tract OO House- holds (HHs)	# of Projects	Installed Capacity (kW)	Projects per 1,000 People	Projects per 1,000 HHs	Watts/ Tract HHs
Less than 60%	<del>171</del>	<del>662,619</del>	<del>69,696</del>	<del>2,346</del>	<del>14,895</del>	<del>3.5</del>	<del>33.7</del>	<del>213.7</del>
<del>6o-8o%</del>	<del>109</del>	<del>493,43</del> 8	<del>107,367</del>	<del>3,583</del>	<del>24,821</del>	<del>7:3</del>	<del>33·4</del>	<del>231.2</del>
<del>80-100%</del>	<del>153</del>	<del>659,934</del>	<del>176,077</del>	<del>5,652</del>	<del>42,555</del>	<del>8.6</del>	<del>32.1</del>	<del>241.7</del>
<del>100-120%</del>	<del>140</del>	<del>625,478</del>	<del>194,921</del>	<del>6,778</del>	<del>52,569</del>	<del>10.8</del>	<del>34.8</del>	<del>269.7</del>
More than	<del>251</del>	<del>1,143,854</del>	<del>352,162</del>	<del>11,322</del>	93,096	<del>9.9</del>	<del>32.1</del>	<del>264.4</del>
<del>Total</del>	<del>827</del>	<del>3,5<sup>8</sup>5,323</del>	900,223	<del>29,681</del>	<del>227,937</del>	<del>8.3</del>	<del>33.0</del>	<del>253.2</del>

Income Level (AMI)	# of Census Tracts	Tract Pop.	Tract OO 1-4 Unit House- holds (HHs)	# of Projects	Installed Capacity (kW)	Projects per 1,000 People	Projects per 1,000 HHs	Watts/ Tract HHs
Less than 60%	171	662,619	60,769	2,346	14,895	3.5	38.6	245.1
60-80%	109	493,438	99,220	3,583	24,821	7.3	36.1	250.2
80-100%	153	659,934	165,331	5,652	42 <b>,</b> 555	8.6	34.2	257.4
100-120%	140	625,478	187,463	6,778	52,569	10.8	36.2	280.4
More than 120%	251	1,143,854	345,311	11,322	93,096	9.9	32.8	269.6
Total	827	3,585,323	858,094	29,681	227,937	8.3	34.6	265.6

### Benchmarks

Below are some of the Benchmarks to be used to compare the Residential Solar Investment Program with other states in the region (see Table 153). The below table reflects installed costs for homeowner-owned projects. Pricing for third party owned projects is structured differently and described in the next paragraph.

Table 153. State Benchmarks of Residential Solar PV Program Incentives for Homeowner Owned Projects, Q1 2017<sup>56</sup>

Benchmarks	СТ	MA	NJ	NY
Electric Retail Rate (\$/kWh)	\$0.193	\$0.196	\$0.158	\$0.173
Installed Cost of Homeowner Owned System (\$/W)	\$3.70	\$4.00	\$3.67	\$3.98
State Incentives (\$/W)	\$0.40	\$2.59	\$2.10	\$1.06
Federal Incentives (\$/W) <sup>57</sup>	\$0.99	\$0.42	\$0.47	\$0.88
Net Cost to Customer	\$2.31	\$0.99	\$1.10	\$2.05
Net Cost as % of Installed Cost	62%	25%	30%	51%
Installed Capacity in CY 2016 (MW)	59	165	165	206
Installed Capacity in CY 2016 per Capita (W)	16	24	18	10
Installed Capacity per State Incentives Invested (W/\$)	3	0.4	0.5	0.9
Energy Efficiency Requirement	energy audit required for all projects	energy audit required if using Mass Solar Loan	none	none

A third-party owner of a residential solar PV system retains state and federal incentives for these projects, including the 30% federal investment tax credit as well as the MACRS<sup>58</sup> depreciation benefit. The homeowner pays for electricity on a per kWh basis through a power purchase agreement (PPA) or will make a monthly lease payment for an estimated amount of electricity produced from their leased system. These per kWh rates and monthly payments vary among lease and PPA providers, and depend

<sup>&</sup>lt;sup>56</sup> Calculated by Statutory and Infrastructure Sector program staff in March 2017. Installed costs (\$/W) are for Q1 2017. CT cost data are from the RSIP dataset. MA data are from the Massachusetts Clean Energy Center (http://www.masscec.com/getclean-energy/production-tracking-system), the MA Solar Carve-Out Program (http://www.mass.gov/eea/energy-utilitiesclean-tech/renewable-energy/solar/rps-solar-carve-out/current-status-of-the-rps-solar-carve-out-program.html), and the Mass Solar Loan Program (http://www.masssolarloan.com/program-performance). NJ data are from the New Jersey Clean Energy Program (http://www.njcleanenergy.com/renewable-energy/project-activity-reports/project-activity-reports). NY data are from the NYSERDA NY Sun Program (https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Solar-Data ). CT and NY have direct incentives for which averages are provided in program installation data, and are also reflected on program web sites (http://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Megawatt-Block-Dashboards/Residential-Small-Commercial-MW-Block, http://www.energizect.com/your-home/solutions-list/residential-solar-investment-program, and http://www.gosolarct.com/). SREC prices for MA and NJ are as reported by SRECTrade, Flett Exchange, and the NJ Clean Energy Program for Q1 2017 (http://www.srectrade.com/, http://markets.flettexchange.com, and http://www.njcleanenergy.com/renewable-energy/project-activity-reports/srec-pricing/srec-pricing) taken on a net present value basis over 15 years for NJ and 10 years for MA, assuming a 5% aggregator fee and PV degradation rate of 0.5%. MA has a state tax credit of the lesser of \$1000 or 15% of system costs and NY has a state tax credit of 25% of system costs capped at \$5000 (http://www.mass.gov/dor/businesses/help-and-resources/legal-library/regulations/62-00-income-tax/830-cmr-6261residential-energy-credit.html, https://www.tax.ny.gov/pit/credits/solar energy system equipment credit.htm). All state incentives including SRECs were assumed to reduce the tax basis for the federal ITC for consistency and simplicity, though the tax treatment varies across states and is based on individual tax decisions. Installed Watts for 2016 are from SEIA/GTM, U.S. Solar Market Insight Full Report, 2016 Year in Review (http://www.seia.org/research-resources/solar-market-insight-report-2016-year-review). The electric retail rate is from EIA's Electric Power Monthly, Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, for January 2017, cents per kilowatthour (http://www.eia.gov/electricity/monthly/epm\_table\_grapher.cfm?t=epmt\_5\_6\_a). Population data is from Census Bureau, CY16 population estimate (https://www.census.gov/quickfacts/).

<sup>&</sup>lt;sup>57</sup> Includes 30% Federal Investment Tax Credit for homeowner-owned system, not MACRS (accelerated depreciation) which is only available to third party system owners.

<sup>&</sup>lt;sup>58</sup> MACRS (Modified Accelerated Cost Recovery System) is a Federal tax benefit that allows businesses to claim the depreciated value of solar assets as a tax deduction over a five-year period. For more information: <a href="http://www.seia.org/policy/finance-tax/depreciation-solar-energy-property-macrs">http://www.seia.org/policy/finance-tax/depreciation-solar-energy-property-macrs</a>.

on many factors including location, utility service territories (and associated electric retail rates), site characteristics, and the terms of the lease/PPA contracts. The below table provides a few benchmarks for comparison of homeowner owned and third party owned system costs and market penetration (see Table 164).

Table 164. State Benchmarks of Residential Solar PV Program Incentives for Third Party Owned Projects, Q1 201759

Benchmarks	СТ	MA	NJ	NY
Electric Retail Rate (\$/kWh)	\$0.193	\$0.196	\$0.158	\$0.173
Installed Cost of Homeowner Owned System (\$/W)	\$3.70	\$4.00	\$3.67	\$3.98
Installed Cost of Third Party Owned System (\$/W)	\$3.49	\$3.46	\$3.65	\$4.34
Installed Cost Overall - Weighted Average (\$/W)	\$3.53	\$3.61	\$3.65	\$4.19
State Incentives for Third Party Owned System (\$/W)	\$0.32	\$2.46	\$2.10	\$1.09
Percentage of Third Party Owned Projects (CY 2016)	81%	72%	85%	59%

### Performance Indicators

Below are several Performance Indicators that will be used to measure the success of the RSIP.

- Number of projects submitted, approved, and completed
- Total MW (name plate)
- First year and lifetime generation (MWh)
- Installed cost (\$/W)
- Incentive (\$/W) and percent of incentive as installed cost
- Investment Tax Credit (ITC) (\$/W) and percent of ITC as installed cost
- Ratio of ITC to incentive
- Net cost to the customer (\$/W)
- Aggregate levelized cost of energy to customer (\$/kWh)
- Aggregate payback to customer
- Aggregate internal rate of return to customer
- Percentage of third party owned versus homeowner-owned systems

#### Anaerobic Digester Program

Per Public Act 11-80 Section 103, the Green Bank is to develop a three-year pilot program for AD by setting aside \$2 million a year for three years – for a total of \$6 million. Funds to support the pilot programs can be used as grants, power purchase agreements or loans. There are to be no more than five (5) AD projects, each no more than 3 MW in size at a support for projects of no more than \$450 per kW on a grant basis.

To date, five AD projects have been approved or are seeking approval by the staff from the Green Bank Board of Directors for a total of 8.4 MW (five projects) and \$14 million (four projects) in sub-debt.

#### **Benchmarks**

AD using food waste and other organics is relatively new to the New England region. The Massachusetts Clean Energy Center (MassCEC) has recently awarded \$2.3 million in FY 2013 for Organic-to-Energy projects, studies, and services relating to the development of new AD facilities in an

<sup>&</sup>lt;sup>59</sup> Percentage of homeowner owned versus third party owned projects was estimated based on the program datasets referenced in the prior table.

effort to divert food waste from its landfills and incinerator facilities. Of the total amount awarded, \$1.75 million was awarded in grants to develop 5 new AD facilities throughout Massachusetts and remaining funds were awarded to 12 public entities and 1 non-profit for studies and other services leading up to the development of new AD facilities.

### Performance Indicators

Below are the Performance Indicators that will be used to measure the success of the AD pilot.

- Number of projects submitted, approved and completed
- Total MW (name plate)
- First year and lifetime clean energy generation
- Amount of food waste diverted from landfills and incinerators
- Installed cost (\$/kW)
- Loan to private capital ratio
- MWh's generated and/or saved per \$1 of ratepayer funds at risk

### Other Areas of Strategic Importance

### U.S. Department of Energy SunShot Initiative Rooftop Solar Challenge and SunShot Prize

The DOE's SunShot Initiative<sup>60</sup> goal is to achieve cost reductions for solar PV systems in the United States of 75% by 2020 to enable solar electricity to be cost-competitive with other forms of energy without subsidies. Two rounds of the SunShot Initiative's Rooftop Solar Challenge have supported progress in reducing the non-hardware or soft costs associated with rooftop solar energy systems through improved permitting, financing, zoning, net metering, and interconnection processes for residential and small commercial photovoltaic (PV) installations.<sup>61</sup> As overall solar PV costs continue to decline, and as subsidies are reduced and eliminated, reduction of soft costs will continue to be critical to improvement of solar PV economics and scaling of the market.

The Green Bank has applied for and won two Rooftop Solar Challenge funding awards totaling almost \$850,000. In FY 2013, the Green Bank led a collaborative Connecticut Rooftop Solar Challenge Round I team to analyze and document soft cost reduction opportunities in Connecticut, resulting in a Final Project Report and development of recommendations to improve permitting, planning and zoning, and interconnection processes for solar PV. <sup>62</sup> In FY 2014, the Green Bank partnered with four other New England states, under the leadership of the Clean Energy States Alliance (CESA), to continue soft cost reduction efforts under the Rooftop Solar Challenge II. In this second round of the program, the Green Bank has finished development and production of a Connecticut Rooftop Solar PV Permitting Guide<sup>63</sup> which completes and packages permitting recommendations and tools developed or begun in Round I.

FY 2015 and 2016 activities have focused on outreach to municipalities, solar PV installers and other stakeholders to implement the Permitting Guide and achieve soft cost reductions. Through these initiatives the Green Bank has trained over 400 Connecticut code officials and 700 fire officials on solar PV technologies, developed and released a solar PV permit application endorsed by the Office of the State Building Inspector, and supported the passage of legislation that requires municipal building

<sup>60</sup> http://energy.gov/eere/sunshot/sunshot-initiative

<sup>61</sup> http://energy.gov/eere/sunshot/rooftop-solar-challenge

<sup>&</sup>lt;sup>62</sup> Final Project Report is available for download at <u>www.energizect.com/sunrisene</u>.

<sup>&</sup>lt;sup>63</sup> See the Permitting Guide tab at www.energizect.com/sunrisene.

departments to incorporate residential solar PV into their municipal permit processes. <sup>64</sup> In FY16 the Green Bank contracted with Yale University's Environmental Performance Index to develop a municipal solar-friendly score card system for Connecticut. The score cards rate municipalities on their efforts to encourage residential solar PV adoption in their communities across five indicator categories, including the municipal solar permit process. The score cards, released in Q4 of FY 2016, encourage streamlined and efficient permitting practices for solar PV, and drive standardization in municipal permitting throughout the state.

In FY 2016 a team led by the Green Bank was accepted into the DOE's SunShot Prize *Race to 7-day Solar* competition<sup>65</sup>. This national competition challenges local governments, solar installers and utilities to collaborate towards improving the "going solar" experience, and reducing the total time it takes to complete solar PV installations. The Connecticut team includes the state's investor-owned utilities, seven solar contractors and 10 municipalities. The team will use a data-drive approach to further identify and implement soft-cost reduction strategies and reduce the total time taken to permit, install and interconnect solar PV projects in Connecticut. To date, the team has been awarded \$50,000 from the DOE through the competition. The team will continue to compete in the SunShot Prize until the competition concludes in March 2017.

The Green Bank's Solarize program has already contributed to soft cost reductions of about 20% through customer acquisition. Efforts to streamline permitting could result in an additional 5-10% or more in soft cost reductions in the near term, and significantly more in the long term, in addition to removing or reducing market barriers associated with permitting and planning and zoning processes and rules. Interconnection improvements implemented by Connecticut's utilities will further add to soft cost reductions. While DOE funding under the Rooftop Solar Challenge II program concludes in Quarter 1 of FY 2017, the Green Bank will continue to support municipalities and utilities in further improving processes to achieve soft cost reductions in FY 2017 and 2018.

### Emerging Technologies and Opportunities

As of 2016, the Green Bank anticipates emerging technology areas and approaches that offer growth opportunities with respect to market transformation for distributed generation and further aligning Green Bank efforts with state climate change reduction strategies as well as efforts to modernize the grid. Some of these opportunities are described here, though these developments in these technology areas are expected to continue to guickly evolve.

Based on the results of Cadmus' cost-effectiveness evaluation of RSIP and signs of an emerging market for energy storage, the Green Bank is looking at opportunities to support deployment of energy storage and other technologies that will provide comprehensive energy solutions for customers as well as contribute to utility and stakeholder efforts to improve and modernize the grid. These opportunities may include pilot projects with utilities to deploy solar PV, energy storage and other technologies at strategically beneficial locations. Developments in the area of smart meters and advanced metering infrastructure would also be beneficial in supporting clean energy deployment and better integrating distributed generation into the grid.

As previously noted, programs in Vermont are encouraging adoption of solar PV with energy efficiency, energy storage, and renewable thermal technologies. Deployment of solar PV along with renewable

<sup>64</sup> https://www.cga.ct.gov/2015/sum/2015SUM00194-R02HB-06838-SUM.htm

<sup>65</sup> http://energy.gov/eere/sunshot/sunshot-prize-race-7-day-solar

thermal technologies such as heat pump hot water heaters and air source heat pumps presents a particularly beneficial opportunity to reduce overall customer energy use and in particular fossil fuel use and move Connecticut further towards its climate change reduction goals.

The Green Bank is looking at opportunities to support deployment of alternative fuel vehicles and infrastructure as an emerging technology solution for reducing greenhouse gas emissions from fossil fuel combustion in the transportation sector. Electric vehicles are becoming more affordable and attractive to consumers and are on the cusp of wider-scale adoption. Solar PV will continue to be important to provide clean electricity to enable this shift towards zero emissions in the transportation sector.

The Green Bank participates in the ISO New England (NE) Distributed Generation (DG) Working Group that provides yearly forecasts of the penetration of distributed generation in the New England region, in particular solar PV which is anticipated to have the greatest impact on transmission and distribution planning. One of the findings is the need for smart inverter technologies as market penetration of solar PV increases. Smart inverters can provide grid stability by allowing solar PV to better "ride-through" events that would otherwise cause large-scale shut downs of solar PV. Another area of consideration is the "duck curve" phenomena whereby increasing penetration of solar PV shifts utility peaks to later in the day, also creating a steeper ramp-up to those peaks. Utilities in California are developing multiple approaches to ameliorate this effect, one possible solution being the installation of solar PV on west facing roofs to help meet loads occurring later in the day. A pilot project in Rhode Island is incentivizing west-facing deployment of solar PV. While these effects have not yet been closely examined in Connecticut, the Green Bank is staying abreast of these regional and national developments.

Membership and participation in activities led by the Clean Energy States Alliance (CESA) is important to the Green Bank's programs including in the area of residential solar PV. For example, CESA is taking leadership in areas such as consumer protection at a time when customers are still relatively new to financing as well as third party ownership models of solar adoption, and when incentives are decreasing and program oversight is lessening relative to increasingly higher volumes of solar PV deployment. CESA is also providing leadership on soft cost reduction strategies, such as through SunShot Rooftop Solar Challenge projects, has a strong research arm focused on advancing energy storage, and is active in many other areas of importance to the advancement of clean energy.

### 8. Residential Sector – At Home

The Residential Sector is focused on deployment of residential financial products for renewable energy, energy efficiency projects, and natural gas conversions serving residential 1-4 unit and multifamily (5 or more unit) dwellings, as well as programs and platforms that support the scaled growth of those instruments in order to provide cheaper, cleaner and more reliable sources of energy while creating jobs and supporting local economic development.

### Comprehensive Energy Strategy and Integrated Resource Plan

The Residential Sector programs support the implementation of the 2013 CES and 2015 IRP. Specifically, they support the implementation of the energy efficiency, electricity, and natural gas strategy recommendations in Chapters 1, 3 and 4 of the CES.

As identified in the CES, buildings constitute 58% of the state's energy use and 87% of its electricity, with residential buildings as a whole consuming 70% more than their commercial counterparts. Due to the lack of significant residential home construction in the state, the existing opportunity for energy improvements in the residential sector is in existing housing stock, 50% of which are heated by oil, and only one-third by natural gas. Further, while 322,000 state residents have participated in the HES and HES-IE program through April 2016 (23% of eligible customers statewide), approximately 28% of those who complete the HES audit in 2014-2015 time-period go on to install recommended deeper energy savings measures. A significant additional opportunity exists to maximize the program's gross impact through a strong call to action supported by low-cost financing.

DEEP's 2014 Integrated Resources Plan calls for the state's electricity sector to mitigate the impact of expected increases in Class I RPS costs beginning in 2017 and the potential for increases in peak demand for both summer and winter peaks, with winter peaks being a particular area of focus.

### Conservation and Load Management Plan

The 2016-2018 Conservation and Loan Management Plan highlights the following priorities that relate to the residential sector:

- Driving comprehensive and deeper savings;
- Scaling and broadening the reach of its programs to underserved markets;
- Expanding the impact of its funding including leveraging Green Bank financing;
- Continuing the transformation of the HES program to a market-based program that can drive more comprehensive upgrades;
- Reinforcing the connection between energy efficiency and renewables;
- Mainstreaming efficiency through supply channels and the broader marketplace, including working with the Green Bank; and
- Researching demand response and other new technologies.

With respect to financing, the C&LM plan notes the "key objective of the Companies' and Green Bank's financing programs is to provide attractive financing options to customers, while maximizing cost-effective energy efficiency and achieving more and deeper energy savings." It

further notes the "Companies expect that the Green Bank can identify and will secure the least cost sources of capital in order to provide sustainable and attractive customer financing options."

The Residential Sector team has established ongoing collaboration with the EEB, DEEP and utility staff, including the following:

- Monthly residential financing working group coordination meetings with DEEP, EEB
  consultants and members, electric and gas utility staff the primary forum for aligning
  products, marketing, and outreach across the various residential financing options;
- Quarterly reports on the Green Bank Residential Sector progress to the Residential Committee of the EEB; and
- Joint Committee of the Energy Efficiency Board and Green Bank and the Single-Family and Multifamily Working Groups of the committee.

The residential sector goals adopted by the Joint Committee are below.

### **Residential Sector: Single Family**

- 1. Per Public Act 11-80 Section Identify coordinated strategies for expanding comprehensive loans for the 2016-2018 period. Calibrate incentive and buy-down levels to achieve more comprehensive projects while reducing program costs.
- 2. Pursue all cost-effective energy efficiency in the residential sector, using financing and increasing the amount of private sector capital where effective (and a simplified approval process where possible and appropriate), to leverage up ratepayer funds and achieve more and deeper savings.
- 3. Increase financing in the HES/HPwES channel to meet needs and drive deeper energy savings and more projects.
  - a. Increase HES projects with completed follow-ons per the C&LM plan, using financing as one of the tools to increase completed follow-ons.
  - b. Increase the adoption of the Smart E-bundle and CHIF comprehensive loans

In addition to the above formally adopted goals, the single-family sector-level coordination document developed by the Single-Family Working Group of the Joint Committee contains additional areas of coordination that the Companies and the Green Bank are expected to work on over the 2016-2018 time period. These include, but are not limited to, the following:

- Exploring options to expand alternative underwriting and simplified approvals where possible
  and appropriate to reach more customers while reducing hassle and delays, including
  customers below 80% area median income and credit-challenged customers;
- Developing solutions that incorporate financing where effective and appropriate to address health and safety or other remediation issues; and
- Exploring and developing strategies for driving energy efficiency through the solar channel, and vice versa.

### Residential Sector: Multifamily

- 1. Reduce energy consumption and costs in multifamily properties consistent with goals in the Green Bank's plan and the Conservation and Load Management plan. (MMBTU's per unit).
- 2. Establish, align and fund financing programs to fill current unmet needs and gaps including projects driven by energy efficiency improvements where capital improvements are a subcomponent. Complete the tasks from the work plan from the May 2015 Lean event.
- 3. Fund and complete a market analysis of certain sectors to quantify and qualify this segment and identify gaps, opportunities and best ways to serve by the end of 2016. Hard to reach sectors include certain rural areas and non-subsidized, non-rent restricted multifamily housing that is privately owned and serving low-income tenants (also referred to as naturally occurring affordable properties).

### TAM and SAM

### Residential Housing Market

For the Residential Sector, a discussion of the TAM and SAM must first be grounded in a description of the housing and income characteristics of the state's residents. The diverse characteristics of housing and income across the state inform the types of upgrades that are needed and the range of financing solutions and strategies that are required to adequately address this market.

The Green Bank, working with the state's housing agencies and a variety of other stakeholders, has defined low income for its programs to be 80% of Area Median Income (AMI) or lower and low to moderate (LMI) income to be 100% of AMI or lower. These AMI cutoffs may either be at:

- a) the census tract level, for high level Green Bank reporting purposes;
- b) actual household income for Green Bank program reporting purposes where household income is collected (limited number of programs);
- c) the household level for program eligibility purposes, in which case household size and area of state is used (referencing Connecticut Department of Housing (DOH) income tables); or
- d) the multifamily property level, where a percent of residents and a certain AMI limit are used to determine program eligibility.

There are 3,592,000 residents in the state living in 1,356,000 housing units (see Table 175). Of these units, about 1,125,000 are single family, also known as residential 1-4 (i.e., approximately 83%), and 230,000 are multifamily, 5 or more units (i.e., approximately 17%).

Table 175. Estimate of the Distribution of Housing Units by Income and Ownership

Housing Units 1,360,000			
Non- LMI	LMI		
685,000			
(≥100% AMI)	(<100% AMI)		

	Moderate Income (80-100% AMI) Low Income		Moderate Income (80-100% AMI)		(<8o% AMI)
			230,000 34%		000 5%
Own	Rent	Own	Rent	Own	Rent
559,000	126,000	148,000	82,000	162,000	283,000
82%	18%	64%	36%	36%	64%

Figure 5 shows a breakdown of the 1,1250,000 single family housing units for each of the income groupings, categorized by owner occupied homes, owner-occupied 2-4 unit buildings, or 1-4 unit rental properties. These categories of single family housing are relevant for the types of financing that are typically available, particularly whether the property is owner occupied or not. Figure 6 shows a breakdown of the 240,000 multifamily housing units for each of the income groupings, categorized by the size of the rental properties, whether 5-9 units, 10-19 units, or 20 or more units. These categories of multifamily properties are relevant for the types of financing that work best for each.

Figure 5. Single Family Housing Type and Income Breakdowns

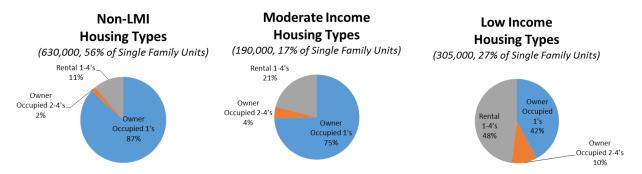
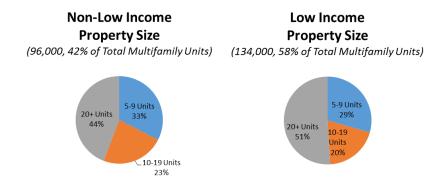


Figure 6. Multifamily Property Type and Income Breakdowns



Beyond the distribution of housing units in Connecticut, the Green Bank's December 2014 Housing Market Analysis provided several key insights into the overall challenges for our low income and multifamily market segments, shown in Figure 7.

Figure 7. Housing Market Insights and Characteristics

#### **Health & Safety Subsidized Large Multifamily Physical** Low Income Characteristics Issues **Households** Multifamily Geography Numerous Broadly •90,000 units are •90% of 20+ unit Old aging bldgs. housing stock in challengs in older dispersed around assistend/rent need of capital stock preventing restricted concentrated in state improvements energy upgrades •CHFA, Dept. of 38 municipalities •No longer urban •85% of units are •Estimates of 15or rural issue, Housing or HUD •~50% are in 5 more than 35 35% of units suburban too support core cities of years old impacted Stamford, Majority living in State supported Hartford, New •50% built Asbestos single family properties Haven, between 1940homes or small located in the •Lead Paint Bridgeport and 1979 rentals ring cities and Leaks and mold Waterbury rural/suburban •23% built before Suffer most from Knob and tube communities • High 1939 aging, poor wiring concentration of condition, health Many are Carbon **HUD** assisted & safety issues assisted living monoxide offunits in 5 cities serving elderly, Challenges in gasing campus style, targeting and Radon low-rise, owner serving this paid central market heating

For the single-family owner\_-occupied market segment, homeowners have many options for financing clean energy improvements (e.g., solar PV, natural gas conversions, energy efficiency, etc.) including cash, savings, credit cards, vendor/equipment financing, mortgages, and home equity loans or lines of credit. While estimates for a reasonable market share for energy financing programs vary, one suggested rule of thumb from one of the largest state energy programs to date for energy efficiency and natural gas conversions is Pennsylvania's Keystone HELP program, where about a third of customers doing energy upgrades in the state use cash or credit cards, another third use some other loan product (e.g., vendor, equipment, mortgage or home equity), and a third used the state's energy program. For solar PV financing in Connecticut, currently no less than 4 in 5 projects finance projects through a third-party owner through a lease or power purchase agreement.

### Solar PV – Single Family Owner Occupied Properties (1-4 Units)

For Solar, the TAM is calculated to be the total number of residences with rooftops that are economically viable (i.e., 506,714 households) for siting a solar array (see Table 4). Of the economically viable households for rooftop solar PV, over 17,000 have already installed clean energy systems leaving approximately 490,000 households – or the SAM. Assuming that the market potential follows the current make-up of third-party owned systems versus homeowner owned systems, then the potential for financing solar PV projects is substantial at greater than \$10 billion (see Table 186).

Table 186. SAM for Residential Solar PV Financing in Connecticut

	Homeowner Owned	Third-Party Owned	Total
% of the Current Market	20%	80%	100%
# of Households Left	98,000	392,000	490,000

Approximately 75% of Connecticut's residents meet the minimum credit requirements in order to qualify for Green Bank financing that was available through the middle of 2015. However, 2015 was a year of transition for solar financing options. Having graduated two products off the Green Bank balance sheet, CT Solar Lease and CT Solar Loan, the Green Bank was only focused on offering solar financing for purchases (currently through the Smart-E Loan program and potentially in the future through residential PACE), and for leasing through an LMI targeted offering with alternative underwriting (non-traditional credit requirements) that was launched in mid-2015 in partnership with PosiGen. With the addition of PosiGen's offering in the market we can now serve nearly 100% of Connecticut residents with a solar financing option.

From 2013 through March 30, 2016 the Green Bank financed 1,905 solar projects through one of its offerings, representing 0.38% of the TAM and 11.1% of the approximately 17,000 systems installed to date. From 2015 through April of 2016 there were 1,645 solar-owned/purchased systems and 164 were financed by the Green Bank representing 10.0% of the purchase market in that period.

Natural Gas Conversions – Single Family Owner Occupied Properties (1-4 Units)

The CES characterizes the state's market for natural gas conversions, dividing prospective residential end-users into three classifications, Segment A, B, and C. Prospective consumers in Segment A are comprised of residential – low use and residential – on main, while Segment B prospective consumers are comprised of residential – off main (see Table 197).

Table 197. Estimate of the Residential Natural Gas Conversion Market in Connecticut

Segment	Туре	Prospective Consumers
Α	Residential, Low Use	39,000
Α	Residential, On Main	161,000
В	Residential, Off Main	51,500
Total		251,500

Given the present payback economics, the TAM is limited to Segment A, 200,000 residences in total and with an average installed cost of \$7,500 for a conversion, the TAM requires \$1.5 billion of investment. Using the rule of thumb that one third of customers will use a state financing program and that 85% of customers can meet our credit criteria, the SAM represents 56,000 projects and \$420 million of investment. Providing households that seek to convert to natural gas with access to low-cost and long-term private capital will support the implementation of the CES and Natural Gas Expansion Plan. Based on Smart-E project data through February 29<sup>th</sup>, 2016, Green Bank financing has resulted in 72 natural gas conversions, or 0.13% of the SAM. The Green Bank's Smart-E financing for natural gas conversions currently competes against the gas companies' Energize CT Heating Loan product. DEEP's stated policy is that ratepayer-subsidized products should be positioned such that they do not

<sup>66</sup> Based on homeowner owned installed cost of \$3.88/W, third-party owners installed cost of \$3.27/W and assuming an average system size of 7 kW.

undermine products backed by private capital. This is an ongoing area of focus for DEEP, the Green Bank, the utilities and EEB.

### Deeper Energy Efficiency – Single Family Owner Occupied Properties (1-4 Units)

The CES and the C&LM Plan both call out the need for deeper energy efficiency measures to be undertaken in Connecticut homes. The Green Bank sees an opportunity to support high efficiency heating, cooling and hot water equipment upgrades. Additionally, there is a growing focus on whole home performance as an industry in the state. The TAM is 870,000 consumers (the approximate number of owner occupied 1-4 unit homes in the state) and \$7 billion of investment, assuming an average installed cost of \$8,000 per project. Industry estimates indicate that 1 in 7 homeowners pursue an upgrade or replacement that impacts energy consumption each year<sup>67</sup>, or approximately 124,000 homes per year in Connecticut. The SAM represents 35,000 homeowners and \$280 million of investment each year, assuming about one third of consumers will use state financing and 85% can credit qualify for Green Bank financing.

Based on Smart-E project data through February 2016, the Green Bank has financed 421 projects incorporating high efficiency heating, cooling, hot water equipment, insulation, windows and other efficiency measures. The Green Bank's share of the TAM is 0.05%, and 0.40% of the annual SAM on average over the last three years. The Green Bank's Smart-E financing for deeper residential energy efficiency projects currently competes against the EnergizeCT Heating Loan, and through June 2016 also competed against the Connecticut Housing Investment Fund's (CHIF) Residential Energy Efficiency and Energy Conservation Loan financing programs. Both are ratepayer-subsidized financing products, with the Heating Loan legislatively mandated through 2019; however, CHIF will be joining the Smart-E program in July 2016. DEEP's stated policy is that ratepayer-subsidized products should be positioned such that they do not undermine products backed by private capital. This is an ongoing area of focus for DEEP, the Green Bank, the utilities and EEB.

#### All Energy Upgrades – Multifamily Properties (5+ Units)

There are approximately 240,000 multifamily units in the state representing the TAM, about 150,000 of which are low income units. To date, the focus of the Residential Sector multifamily programs has been on the affordable assisted/rent restricted multifamily market, about 90,000 units (40,000 of these are financed by CHFA, with the remaining supported by DOH or HUD). The other area of focus has been on larger properties of 20 or more units, representing about 110,000 units.

The Green Bank has provided pre-development or technical assistance support on for 5 properties and 310 units through April 30, 2016, representing 0.13% of the total units. Additionally, the Green Bank has provided financing for 21 properties comprising 1,122 units, representing 0.47% of the total units.

### **Product or Program Overview and Objectives**

<sup>&</sup>lt;sup>67</sup> From Renovate America May 2016 presentation at ACEEE Finance Forum

Table <u>20</u>18 presents a breakdown of the single family and multifamily product and program objectives for FY 2017 of the Green Bank.

Table 2018. Residential Sector Fiscal Year 2017 Targets

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
Energize CT Smart-E Loan <sup>68</sup>	538	\$9,039,000	1.1
LMI Solar PV Leases and EE ESA's	500	\$15,250,000	3.4
Multifamily Term Loans	55	\$12,310,000	0.9
Multifamily Pre-Development Loans	36	\$570,000	N/A
Total (not including Pre-Development Loans)	1,093	\$36,599,000	5-4

After gauging market performance, the Green Bank revised its Fiscal Year 2017 target in January 2017 to the following (see Table 2119):

Table 2119. Revised Residential Sector Fiscal Year 2017 Targets

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
Energize CT Smart-E Loan <sup>69</sup>	254	\$5 <b>,</b> 873 <b>,</b> 447	1.1
LMI Solar PV Leases and EE ESA's	500	\$15,250,000	3.4
Multifamily Term Loans	17	\$11,140,000	0.9
Multifamily Pre-Development Loans	4	\$299 <b>,</b> 167	N/A
Total (not including Pre-Development Loans)	771	\$32,263,447	5-4

The following are Fiscal Year 2018 targets for the Residential Sector (see Table 220).

Table 220. Residential Sector Fiscal Year 2018 Targets

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
Energize CT Smart-E Loan <sup>70</sup>	440	\$8,153,050	1.3
LMI Solar PV Leases and EE ESA's	720	\$20,087,746	4.5
Multifamily Term Loans	16	\$7,550,000	0.6
Multifamily Pre-Development Loans	9	\$188,400	N/A
Total	1,185	\$35,979,196	6.4

<sup>&</sup>lt;sup>68</sup> Includes the new CHIF/HES channel (250 loans) and existing channels for solar PV (143 loans), and HVAC/energy efficiency upgrades (145 loans).

<sup>&</sup>lt;sup>69</sup> Includes the new CHIF/HES channel (250 loans) and existing channels for solar PV (143 loans), and HVAC/energy efficiency upgrades (145 loans).

<sup>&</sup>lt;sup>70</sup> Includes the new CHIF/HES channel (250 loans) and existing channels for solar PV (143 loans), and HVAC/energy efficiency upgrades (145 loans).

After gauging market performance, the Green Bank revised its Fiscal Year 2018 target in January 2018 to the following (see Table 23):

Table 23. Revised Residential Sector Fiscal Year 2018 Targets

<u>Program</u>	<u>Projects</u>	<u>Capital</u> <u>Deployed</u>	<u>Clean Energy</u> <u>Deployed</u> ( <u>MW)</u>
Energize CT Smart-E Loan	<u>1,352</u>	\$24,700,000	<u>2.6</u>
LMI Solar PV Leases and EE ESA's	<u>556</u>	<u>\$14,800,000</u>	<u>3.2</u>
Multifamily Term Loans	<u>12</u>	<u>\$7,550,000</u>	<u>0.4</u>
Multifamily Pre-Development Loans	<u>6</u>	<u>\$446,000</u>	<u>N/A</u>
<u>Total</u>	<u> 1,926</u>	<u>\$47,496,000</u>	<u>6.2</u>

The following are Fiscal Year 2019 targets for the Residential Sector (see Table 24).

Table 24. Residential Sector Fiscal Year 2019 Targets

<u>Program</u>	<u>Projects</u>	<u>Capital</u> <u>Deployed</u>	Clean Energy Deployed (MW)
Energize CT Smart-E Loan	<u>540</u>	<u>\$8,775,000</u>	<u>1.3</u>
LMI Solar PV Leases and EE ESA's	<u>586</u>	<u>\$15,565,855</u>	<u>3.6</u>
Multifamily Term Loans	<u>15</u>	<u>\$2,500,000</u>	<u>0.1</u>
Multifamily Pre-Development Loans	4	<u>\$70,000</u>	0.0
<u>Total</u>	1,145	<u>\$26,910,855</u>	<u>5.0</u>

The following is a breakdown of the single family and multifamily product and program overviews. These include options for both LMI and non-LMI housing.

#### **Energize CT Smart-E Loan**

In partnership with Connecticut's community banks, credit unions, and a local CDFI, homeowners, include those that are credit-challenged, are offered low-interest (between 4.49% to 6.99%) and long-term (5 to 12 year terms, and up to 15-20 years for qualified borrowers) unsecured financing for a range of credit quality consumers (580 FICO or above) through unsecured loans backed by a second loan loss reserve from the Green Bank. Financing is available for all measures that the CES supports (e.g., energy efficiency, renewable energy, natural gas conversions, alternative fuel vehicle infrastructure) as well as up to 25% of a loan can be used for healthy home measures (e.g., asbestos remediation, lead abatement) and other related improvements. A special "Smart-E Bundle" is being offered to support multi-measure and comprehensive renewable energy and energy efficiency projects by lowering the interest rate to 0.99-2.99% for eligible measures for the 5, 7 or 10 year terms. Another special offer is available for natural gas conversions for high efficiency heating or hot water equipment by lowering the interest rate to 0.99-2.99% for the 5, 7, or 10 year terms. The Smart-E Loan program uses \$7.8 million of repurposed ARRA-SEP funds and Green Bank funds for a second loan loss reserve and interest rate buydowns to attract nearly \$31 million of private capital.

### LMI Solar PV Lease and Energy Efficiency ESA – PosiGen

This program was launched in partnership with PosiGen Solar Solutions in mid-2015, supporting low-to-moderate income residents to go solar and install energy efficiency measures using an innovative solar lease and energy savings agreement financing model. The offer is open to households regardless of income or credit, utilizing alternative underwriting approaches that examine factors such as bill payment history and bad debt and bank databases. Green Bank support for PosiGen includes an initial \$5 million of subordinate debt (with an option for an additional \$5 million investment) and a higher level of solar incentive for income verified low-to-moderate income households. PosiGen is targeting an initial 1,000 installs in a \$27 million fund. Through a combination of a solar PV lease and energy efficiency energy savings agreement (ESA) financial product structure in the low-to-moderate income market segment, HES/HES-IE is also being conducted on 100% of projects<sup>71</sup> – and, in addition, 65% of projects are "going deeper" on energy efficiency by paying \$10 more per month to purchase an ESA that installs additional measures like insulation and thermostats. Customers who take the ESA option also get a savings quaranty.

### Low Income Multifamily Energy (LIME) Loan

Through a partnership with Capital for Change (formerly known as Connecticut Housing Investment Fund), the LIME loan provides up to 20 year terms for an unsecured low interest loan product geared towards mid-cycle energy improvements and serving properties where at least 60% of units serve renters at 80% or lower of Area Median Income. Projected energy savings are used to cover the debt service of the loan. The Green Bank supports LIME with a \$325,000 loan loss reserve and provided \$3.5 million to capitalize the initial \$5 million loan fund.

### **C-PACE** for Multifamily

C-PACE is available for multifamily properties where lender consent is available, typically market rate or naturally occurring affordable properties. The Green Bank was pleased to see HUD issue guidance in

<sup>&</sup>lt;sup>71</sup> Except for those homes that can't be served due to health and safety issues.

2017 that would allow C-PACE on HUD financed affordable multifamily properties. See the "At Work" section below for more information.

## Residential Property Assessed Clean Energy (R-PACE)

In 2016 the Green Bank – working with the Department of Banking – proposed a Residential Property Assessed Clean Energy program (R-PACE) that was not successful due to concerns regarding FHFA's stance on sales of mortgages to FNMA and FHLMC that have PACE liens. In light of pending guidance from HUD on treatment of R-PACE benefit assessment liens that are subordinated to first mortgages - and following from the success of the Green Bank's nation-leading Commercial PACE program – a proposal to update Connecticut's existing R-PACE statute will be a top state legislative priority in the 2017 legislative session. With a program expected to draw national players to Connecticut, and with longer terms (up to 20 years) and interest rates that are expected to affordably finance cash flow-positive energy improvements, R-PACE enablement could be a key strategy in achieving deeper energy upgrades in the residential 1-4 market. Furthermore, it can contribute to achieving more market uptake in the LMI sector, since underwriting is to the property (e.g. collateral based), as opposed to the consumer, based on credit.

An R-PACE policy in Connecticut would not only attract more private capital investment to support clean energy deployment, but it would also result in considerable jobs and local economic development.

### Solar-Only Financing for Multifamily

Solar financing is available for multifamily properties through the CT Solar Lease facility (both leases and power purchase agreements are supported). See the "At Work" section below for more information. Of particular note is a partnership with CHFA and their State Sponsored Housing Portfolio, a Solarize-style group purchasing model to drive down aggregate solar PV costs on housing authorities.

### Affordable Multifamily Catalyst Loan Fund

Through a partnership with Housing Development Fund and MacArthur Foundation, who has provided a \$5 million program related investment, and with additional support of \$1.5 million of Green Bank funds and \$1.5 million of DEEP Regional Greenhouse Gas Initiative Funds, a gap financing fund is available at concessionary rates to support energy projects that otherwise would not pencil out or that require remediation of health and safety upgrades. This fund is intended to be blended with other project financing to lower the overall rate for the project.

### Benchmark CT - Performance Measurement

This initiative is offered through a partnership with CHFA, where WegoWise will benchmark 1,600 multifamily properties and guide building owners through an analysis to identify opportunities. The first year of benchmarking is offered for free. An initial 500 properties were benchmarked in partnership with New Ecology, Inc. between 2014 and 2015. The Green Bank and CHFA will leverage the benchmarking results to identify the highest priority targets across the portfolio for either predevelopment or term financing.

### Multifamily Pre-Development Energy Loan Program

In a traditionally difficult sector to address, multifamily projects have a significant need for predevelopment financing, trusted technical support, and streamlined access to funding programs. In 2015, the Green Bank developed pre-development energy loan programs to support property owners in identifying high-quality technical assistance providers, and to fund the work needed to scope and secure financing for deeper, cost effective energy upgrades. There are two versions available — a high-touch version through partner New Ecology called the Sherpa Loan and an owner managed version called the Navigator Loan. The Green Bank is working to change the model of pre-development and technical assistance from one that is primarily grant-funded in the affordable housing space to one that is loan driven. Owners can petition for loan forgiveness, if for some reason a project is unable to proceed to implementation. This program is supported by a \$650,000 revolving loan fund for loans of 0.0% to 2.99% and up to two year terms. The affordable multifamily version of this program is housed at the Housing Development Fund, a local CDFI, and part of a \$5 million program related investment from MacArthur Foundation is being used to support the program.

### **Performance Indicators**

Below are the Performance Indicators that will be used to measure the success of the residential financing programs for FY 2017.

### Single Family

- Number of applications received
- Application approval rate
- Average FICO and DTI (where applicable)
- Average loan size, term and rate
- Performance stats (delinquency and default rate, scheduled to actual collected)
- Average energy savings/production per project
- Average system size (solar)
- Percent of projects with multiple measures (Smart-E)
- Number of eligible contractors
- Contractor engagement percent of eligible contractors bringing in applications/repeat applications
- Market penetration by income band/census tract and distressed community
- RSIP market penetration;
- Ratio of public to private capital deployed
- Successful innovation in marketing and outreach (ex: performance-based customer acquisition)

### **Multifamily**

- Number of applications received
- Application approval rate
- Average loan size, term and rate
- Performance stats (delinquency and default rate, scheduled to actual collected)
- Average energy savings/production per project
- Average dollar savings by unit
- Average system size (solar)
- Affordable vs. market rate breakdown
- Market penetration by income band/census tract and distressed community
- Ratio of public to private capital deployed

### Other Areas of Strategic Importance

### Energy Burden Reduction for Low to Moderate Income Communities

Our goals for our low to moderate income work are to:

- Reduce the clean energy affordability gap for low to moderate income residents, bringing their energy burden as a percent of household income in line with national targets for household energy spend and on par with what more affluent households spend in the state.
- 2. Ensure low to moderate income communities aren't left behind and have access to the same clean energy future that higher communities do.

The state's high energy prices have the greatest impact on our most vulnerable citizens. The energy affordability gap is the difference between how much a household actually spends on energy each year versus what is considered to be an affordable amount. National housing targets for an affordable rate of energy spend is 6% of household income. Lower-income households in Connecticut have a significantly higher energy burden than higher-income households do, ranging from an affordability gap of \$1,500 to \$2,500 per year over the past few years, based on the price of heating oil and natural gas in a given year<sup>72</sup>. This is money that could be spent on much needed medicine, or education, or paying other bills or building savings – residents are being forced to make tough decision around basic needs.

In developing strategies for the LMI market, the Green Bank seeks solutions that will improve the financial sustainability of low-to-moderate income families who are most susceptible to rising energy costs by reducing their energy consumption and assure that implemented measures deliver on the projected performance. We have taken a partnership-based approach to the development of solutions with partners including local CDFIs (HDF and CHIF), MacArthur Foundation (providing a program related investment), state and federal housing agencies (CHFA, DOH, HUD), the utilities, DEEP, Connecticut Housing Coalition, municipalities, and community-based organizations. These partners are organized around a common goal to achieve comprehensive, deeper energy improvements that help owners and tenants save energy, reduce costs, increase property values, and provider healthier and more comfortable housing.

Other Areas for Development

<sup>&</sup>lt;sup>72</sup> Operation Fuel conducts a study of the state's affordability gap periodically. The 2015 report can be found here.

While a solid foundation has been laid for making demonstrable progress in low-to-moderate income communities, we have already identified additional area that will need to be developed to reach all the segments that make up our LMI market. The following areas of product development will require further work and/or investigation:

- Credit-builder and "energy savings accounts" products for LMI consumers who finance energy upgrades and use their repayment experience to improve their credit and build wealth.
- Additional multifamily products including financing support for smaller properties (2-9 units) and project sizes, energy savings agreements, and a savings guaranty product.

The following areas of policy development will require further work:

- Clean energy upgrades as a "way in" to community development and neighborhood revitalization and/or stabilization, including exploration of integration of Green Bank programs with federal HOME and CDBG funds to weave housing and energy funding together. The excitement around solar is proving to be a powerful catalyst for driving interest in broader community investment that targets not just housing, but nonprofits, institutions and small businesses.
- Energy + Housing + Health nexus, covered in the next section.
- Community Solar moving beyond the pilots being run by DEEP through 2017 and towards a statewide policy. This will be a critical piece in the longer term to making the benefits of solar available to all LMI residents, especially renters and those who can't go solar given roof conditions or siting. It is an open question whether community solar is a better solution for the small rental market rather than direct installs.
- Sub-metering policy regulators have clarified rules around the sub-metering of tenants, establishing maximum allowable rates sub-metered tenants can be charged for access to renewable distributed generation.
- Modifications to utility allowances in subsidized multifamily properties at both the state and federal level to remove disincentives for owners to pursue energy upgrades when they are also seeking funding from state and federal housing programs.

### Energy + Health + Housing Nexus

Connecticut's housing stock is aging, with 83% of housing units built before 1980. Older housing stock is most prevalent within lower income communities, and suffers from decades of deferred maintenance. Numerous health and safety challenges in that older building stock prevent energy upgrades from moving forward. These include health-related items such as the presence of asbestos, lead paint, mold from leaks, radon, carbon monoxide off-gassing, safety issues such as knob and tube wiring, and lack of safety rails and ramps for an aging population. Estimates from the state's Home Energy Solutions program range from 15-35% of housing units can't even pursue a blower door test due to a health or safety issue.

### The Challenge

There is no sustainable, scalable funding source to address these health and safety issues – HUD's lead abatement and Healthy Homes programs, while still available, have had their funding cut by Congress in the last 20 years, and the Connecticut Department of Public Health (DPH) is not funded to provide remediation services. Furthermore, even when there are limited funds available for health and safety, they are not coordinated with energy and housing funding streams. *This is a preservation of affordable housing units issue*, for if nonprofit multifamily developers or homeowners can't afford holistic

upgrades, then private developers or investors come in and make improvements but in the process convert the units to market rate. The silos of funding available are illustrated below (see Figure 7).

Figure 7. Funding Silos - Energy, Housing, and Health and Safety

### **Energy**

Ratepayer-funded / federal WAP subsidies and incentives for efficiency upgrades

Green Bank financing programs for single/multifamily clean energy

#### Housing

Housing programs for capital improvements, acquisition/rehab, etc.

 State/federal programs, including community development and neighborhood revitalization

#### **Health and Safety**

# Limited federal funding (HUD)

- Needs include remediation for asbestos, lead, mold, radon, etc.
- Costs vary widely, and can often be as great as the energy upgrades themselves

### The Opportunity

By linking improved, greener and healthier housing to improved health outcomes in our low-income communities, it may be possible to tap into a whole new funding source in the public health sector to address these issues. Considerable research has been done on the link between energy upgrades and improved indoor air quality, for example, improved asthma outcomes are linked to improved air quality in the home. Improved health outcomes are also tied to higher income levels, as are energy upgrades and reduced household energy burdens.

The state's DPH Healthy Homes Initiative published the Connecticut Healthy Homes Data Book in July 2012<sup>73</sup>, shedding light on the most pressing health concerns tied to our homes:

- Asthma is costly to the state and concentrated:
  - \$112 million is spent for acute asthma care each year, 41% of this in the state's five largest cities, where the majority of low income residents live (Bridgeport, Hartford, New Haven, Stamford, Waterbury)
  - An additional \$80 million is spent on hospitalizations and \$32 million on emergency room visits associated with asthma events;
    - 75% of each of those occurs in the five largest cities and is paid for by Medicaid or Medicare
- Falls, largely among the elderly, led to 8,800 hospitalizations and 96,000 ER visits.

Our public health sector is going through a massive transformation with the passage of the Affordable Care Act (ACA). There is a huge focus on driving down the costs in our health care system, but figuring out who, exactly, is willing to pay for cost reductions is very complex. We need to figure out how to

<sup>&</sup>lt;sup>73</sup> The Connecticut Healthy Homes Data Book, July 2012 can be found <u>here</u> and the Healthy Connecticut 2020 State Health Improvement Plan (March 2014) can be found <u>here</u> (relevant sections include Lead, Healthy Homes, Asthma & Chronic Respiratory Disease, and Falls). The state's health performance dashboard can be found <u>here</u>.

engage the health sector as a funder – there is a case to be made for an integrated funding and service delivery model for green and healthy housing upgrades for low income communities, if we can figure out who to work with.

#### Required Research

The following research is needed around the opportunities that exist within the ACA:

- Nonprofit hospitals Community Health Needs Assessment required every 3 years. There is an IRS requirement to invest "profits" and as ACA covers more uninsured, more dollars become available for community benefits/community investment. Comprehensive housing upgrade programs in low income communities are a great community investment that also link to health outcomes.
- Medicaid Ability for doctors to prescribe things like energy/environmental assessments for respiratory illnesses through a waiver the state applies for from the federal government. Medicaid Healthy Home allows for coordinated care professionals (not just physical health) and gets additional Medicaid payments. Accountable Care Organizations are new in the Medicaid world and have a per capita payment based on health outcomes. The requirement that all children be tested for lead could be covered by Medicaid.
- Pay for Success Models Focused on population health management, reducing "frequent flyers", which insurers (and/or hospitals?) now get penalized for. There could be an opportunity to tie payments to reductions in emergency room visits/hospitalization for asthma/other respiratory illnesses, trips and falls for elderly, etc.

The Green Bank will pursue foundation funding to assist in this initiative. New York and Rhode Island are also working to address these challenges, providing an opportunity to explore regional approaches with funders.

#### Real Estate Ecosystem Support

An outreach initiative to realtors was begun in early 2015 in conjunction with DEEP and the utilities. The focus is on educating realtors about trends in energy improvements and available programs, rebates and financing, recent studies on how energy improvements contribute to home values, strategies for marketing energy improvements to potential buyers, and what to expect during a home sale or mortgage refinancing if there is leased or owned solar on the property. This outreach will be expanded to include appraisers, inspectors, and mortgage lenders. Mortgage lender outreach may also include exploring ways in which the Green Bank can support new energy mortgage products such as the FNMA HomeStyle Energy Mortgage.

# 9. Commercial, Industrial and Institutional Sector – At Work

The Commercial, Industrial and Institutional Sector is focused on the development and deployment of programs that support investments in energy efficiency and renewable energy projects in all commercial and industrial properties as well as institutional facilities, including schools, hospitals, houses of worship, and other non-profits in order to provide cheaper, cleaner and more reliable sources of energy while creating jobs and supporting local economic development.

### Comprehensive Energy Strategy and Integrated Resource Plan

The CES relies heavily on C-PACE financing to accomplish its goals for the Cl&I sector in Connecticut. The Executive Summary of the CES notes the goal to: "Leverage private capital through innovative financing mechanisms including Connecticut's first-in-the-nation Green Bank (the Clean Energy Finance and Investment Authority), standardized energy efficiency performance contracts, and the state's new Commercial Property-Assessed Clean Energy (C-PACE) program."

- In addition to referencing C-PACE financing as a way to meet the state's goals in the C&I sector around energy efficiency, the CES also notes several policy goals that would ramp up demand for C-PACE financing such as decoupling, benchmarking and energy efficiency standards.
- Throughout the CES, there is an expanded commitment to cost effective energy efficiency and a goal of deeper efficiency gains in heating, air conditioning, ventilation, insulation, windows, furnaces, boilers, etc. C-PACE enables these deeper projects, with the average C-PACE project becoming 45-55% more efficient.
- The CES notes that the development of financing programs is critical to moderate ratepayer costs of energy efficiency programs over time. To that end, the Green Bank is working closely with the EEB to optimize incentives and ensure that the rebates and incentives are leading customers to do larger projects, possibly financed by C-PACE.

The CES has been of great benefit to the Green Bank in its research on the building composition in Connecticut. According to the CES, residential and commercial buildings are the largest users of energy in Connecticut, collectively accounting for 58% of the State's energy usage and 87% of its electricity usage annually. In a business-as-usual scenario (which assumes modest energy efficiency savings per year), consumption is projected to grow to 550 trillion BTUs per year in 2050, nearly 20% higher than today's energy use of approximately 468 trillion BTUs. While buildings in Connecticut vary in their ownership and size, commercial and residential buildings consume energy in very similar ways. Over 60% of the energy used in buildings is for heating and cooling. The next highest uses are water heating in residential buildings and lighting in commercial buildings, representing about 15% of energy usage in each respective building type. Of the primary energy (that is, energy produced from raw fuels or otherwise found in nature) used by buildings today, 59% comes from electricity, 21% from oil, and 20% from natural gas. Electricity and natural gas use has increased while oil and biomass consumption has declined. Another common feature across building types is the prevalence of existing building stock (as opposed to new construction).

C-PACE, Lead-By-Example and other CI&I financing products are an important tool to help the state pursue several of the resource strategies outlined in the 2014 Integrated Resource Plan. The IRP recognizes the important benefits the Green Bank provides to Connecticut in pursuing its goal of a reliable, clean, and cost-effective energy supply. Among the several resource strategies outlined, the Green Bank will play a direct role in improving cost-effectiveness and increasing energy savings from C&LM program and state buildings, supporting increased deployment of CHP and Class I renewables, and procuring resources to address winter peak demand.

# Conservation and Load Management Plan

The 2016-2018 Conservation and Load Management Plan outlines several priorities that overlap with the Green Bank's Commercial, Industrial and Institutional (CI&I) goals and opportunities for collaboration. The plan shares the following top priorities with the CI&I sector:

- Delivering comprehensive and deeper savings for Commercial and Industrial customers.
   Through its financing products, the Green Bank provides an important tool to help customers pay for more comprehensive projects.
- Stretching and expanding the impact of funds from Commercial and Industrial customers.

The Green Bank will work with the C&LM programs to maximize the use of Green Bank financing products, which leverage ratepayer dollars to bring private capital into the Connecticut clean energy market. By accessing this funding, the C&LM programs expand the impact of their ratepayer dollars.

- Scaling and broadening the reach of programs to provide services to new or underserved markets.
  - The Green Bank's financing products can help overcome the cost barrier to efficiency for those in new or underserved markets. The Green Bank will work with the C&LM programs to refine its new and existing products to help penetrate these markets.
- Mainstreaming efficiency and continued shift toward changing the energy efficiency marketplace.

The Green Bank works to transform the clean energy marketplace toward greater use of private capital to finance improvements. By demonstrating the performance and benefits of energy efficiency as investments, and improving access to data for lenders, the Green Bank aims to shift the market and allow incentives and programs to continue to scale meet the shared goal of implementing state energy policy throughout all market segments and populations.

Working through the Joint Committee of the Connecticut Energy Efficiency Fund Board and the Green Bank board, the following joint goals for the CI&I sector were adopted to realize these priorities and ensure that the principles of leveraging ratepayer funds and continuously improving the customer experience are recognized in each organization:

#### Government

- 1) Improve the Customer Experience. Ensure seamless service delivery that is responsive to State and local governmental and institutional needs, including:
  - Integration of appropriate Green Bank and other related services, especially for those who aren't currently served by Lead By Example ("LBE")- Energy Savings Performance Contracts ("ESPC"); and
  - ii. Providing technical support and incentives from the Connecticut Energy Efficiency Fund and the Green Bank's capability to finance ESPC projects at scale. Establish and communicate a process for customers undertaking ESPCs to receive technical support through internal utility resources and contracted "owner's representative" services.
- 2) Establish Sustainable and Cost-Effective Financing Mechanisms. Develop sustainable and cost-effective funding mechanisms for both the preparatory and permanent project financing needs of government sector energy-saving projects.
- 3) Develop New Products to Fill Market Gaps. For example, develop a financing vehicle for the aggregation of small-scale, comprehensive energy-saving projects at municipal or other institutional facilities that are individually too big for the Small Business Energy Advantage ("SBEA") financing program, but too small to be standalone ESPC projects.

#### **Small Business**

- 1) Improve the Customer Experience. Ensure seamless service delivery between services of the Connecticut Energy Efficiency Fund and the Green Bank that is responsive to customers' needs, including integration of appropriate Green Bank and other allied small business services, especially for those that aren't currently served by the SBEA financing program.
- 2) Identify and Engage Alternative Capital Sources to Lower the Cost of and Increase Opportunities for Project Financing.
- **3)** Examine Ways to Couple SBEA and C-PACE (or Other Financing Offerings). Promote more comprehensive projects (especially among higher energy usage customers) and longer\_-term payback measures.

#### **Medium and Large Business**

- 1) Improve Understanding of Opportunities Within this Market for Deep Energy-Efficiency Improvements. Build on available knowledge and analysis to develop effective and sustainable incentive and financing strategies for stimulating deeper energy investments and that meet all cost-effective energy-efficiency goals.
- 2) Increase Customer Savings and Benefits from the C&I Programs. Drive more projects with deeper energy savings, supported with increased financing options (including C-PACE) to help ensure comprehensive investment and closure of financing gaps.

3) Cross-Leverage Connecticut Energy Efficiency Fund and Green Bank Programs. Develop and implement communication and marketing strategies to ensure maximum cross-leveraging of these opportunities to help achieve the state goals of acquiring all cost-effective energy efficiency and expanded renewable deployment through highly effective leveraging of customer funds

#### TAM and SAM

#### Commercial and Industrial

In 2013, the Green Bank contracted HR&A Advisors to do an analysis of the Commercial and Industrial (C&I) market in Connecticut. Table <u>17-25</u> outlines the TAM for the C&I sector as a whole.

For the Commercial Property Assessed Clean Energy (C-PACE) program, the TAM is defined as the square feet of C&I buildings in towns that have opted into the C-PACE program, outlined in table 21. 93% of the total C&I market is within the TAM of C-PACE and the Green Bank continues to expand the program into new towns with the goal of bringing 100% of Connecticut buildings into the C-PACE market.

Table 254. C&I and C-PACE TAM

	Hospitality	Industrial	Retail	Commercial Office	Total
C-PACE (Square Foot)	18,113,030	263,807,383	180,545,900	162,649,498	625,115,811
C-PACE (Percent of Square Foot)	97%	92%	91%	96%	93%
Total	18,724,855	287,180,874	197,739,420	169,989,282	673,634,431

#### Institutional

Estimates of the Total Addressable Market (TAM) are based on known and estimated data on the number of facilities, square footage, and estimated energy expenditures. Estimates of the Serviceable Available Market (SAM) are primarily based on market penetration studies for the energy savings performance contracting industry, as a proxy for comprehensive retrofits that would be undertaken under any financing mechanism that uses energy savings to finance investments in upgraded equipment. Market potential in terms of energy and dollars are based on percentage energy savings from comprehensive retrofits applied to estimates of energy use intensity per square foot.

To calculate the Institutional sector TAM (see Table 262), data that exist on various unit measures of the municipal, university, school and hospital (MUSH) market segments are used, including number of state buildings, population, and lists of facilities from trade associations for private colleges and schools and hospitals. However, robust square footage data varies and is not widely available.

Square footage of state buildings was quantified by OPM in the most recent State Building Inventory (March 2014). Square footage estimates for municipalities are based on average per capita square footage for some known Connecticut towns and cities, extrapolated to the entire Connecticut population. While preliminary, these estimates appear to be in line with available estimates of Level of Service Standards for municipalities in other parts of the country. Estimates for square footage of hospital facilities are based on national estimates of square footage per available hospital beds.

Estimates for private colleges and schools are based on average building square footage per student for some known schools in Connecticut, extrapolated to the total number of schools.

Overall, the institutional sector encompasses about 300 million square feet. At an average estimated energy cost of between \$2 and \$3 per square foot, the MUSH sector in Connecticut spends approximately \$550 million per year on energy.

Table 262. Institutional TAM

Market Segment	#	Units	Million ft²	Estimated Annual Energy Use (million MMBtu)	Estimated Annual Energy Expenditures (million \$)
State Facilities	3,200	Buildings	60.5	9	\$200
UCONN and State Colleges	23	Campuses	29.5	4.4	\$89
Municipal Facilities	169	Towns	104.5	15.5	\$314
Private K-12 Schools	97	Schools	30	4.5	\$90
Private Colleges and Universities	47	Schools	82	12.3	\$247
Hospitals	37	Hospitals	22	5	\$67
Total	3,550		300	46.6	\$917

Lawrence Berkeley National Laboratory (September 2013) issued a report on the current size and remaining market potential of the U.S. energy service company (ESCO) industry. Data on market penetration was obtained from surveys of ESCO companies (see Table 2719). Median values of market penetration (as a percentage of total floor area) that were reported for the Northeast are presented below. This data supports the Green Bank's assessment that traditional performance contracting, with associated debt commitments for bond or lease financing commonly used, has been most successful to the segments of the MUSH sector with good credit (i.e. state and local facilities including K-12 schools).

Table 273. Market Penetration

Market Segment	Median Estimate of ESCO Market Penetration Since 2003 (% of total market floor area)
K-12 Schools	45%
State and Local	39%
Universities and Colleges	25%
Health and Hospitals	10%

For purposes of estimating SAM, we assume that K-12 schools represent mostly public schools which were included in the TAM under the municipal facilities market segment. Further, we know that the standardized ESPC program in Connecticut was only recently developed, and that state facilities in Connecticut, including public colleges and universities, have not used performance contracting since 2003. Therefore, we have adapted LBNL's estimates of the market opportunity to estimate the SAM, based on square footage. To estimate the market potential in terms of lifetime MMBtu saved, we have assumed a 25% reduction in energy consumption over 15 years (see Table 248).

Table 284. Institutional SAM

Market Segment	Estimated TAM (million ft²)	Estimated Market Penetration	Estimated SAM (million ft²)	Estimated Lifetime Savings (million MMBtu)
State Facilities	60.5	ο%	60.5	34
Municipal Facilities	104.5	43%	59-5	59
Private K-12 Schools	30	25%	22.5	17
Private Higher Education	82	25%	61.5	46
Hospitals	22	10%	19.8	19
Total	300		224	175

# **Product or Program Overview and Objectives**

The Commercial, Industrial and Institutional Sector has established the goals outlined in table 295 for fiscal year 2017.

Table 295. Commercial, Industrial, and Institutional Fiscal Year 2017 Targets

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
C-PACE	79	\$45,550,000	11.1
CT Solar Lease	30	\$22,500,000	7.5
Total <sup>74</sup>	94	\$56,800,000	14.8

After gauging market activity, the Green Bank revised targets in January 2017 as follows (see Table 2630):

Table 3026. Revised Commercial, Industrial, and Institutional Fiscal Year 2017 Targets

Program	Projects	Capital Deployed	Clean Energy Deployed (MW)
C-PACE	66	\$35,430,000	9.8
CT Solar Lease	28	\$21,000,000	7.0
Total <sup>75</sup>	84	\$48,930,000	14.3

The following are Fiscal Year 2018 targets for the Commercial, Industrial, and Institutional Sector (see Table 3127).

Table 3127. Commercial, Industrial, and Institutional Fiscal Year 2018 Targets

7. Commercial, madaman, and materialian iscar real 2010 rangets					
Program	Projects	Capital Deployed	Clean Energy Deployed		
			(MW)		
C-PACE	51	\$24,000,000	6.4		

<sup>&</sup>lt;sup>74</sup> The C-PACE goals includes CT Solar Lease projects that are secured using C-PACE. They have been removed from the total to avoid double-counting.

<sup>&</sup>lt;sup>75</sup> The C-PACE goals includes CT Solar Lease projects that are secured using C-PACE. They have been removed from the total to avoid double-counting.

CT Solar Lease	25	\$15,000,000	6.3
Total of existing programs <sup>76</sup>	67	\$34,000,000	10.4
SBEA	1,600	\$28,000,000	n/a
Total with SBEA <sup>77</sup>	1,667	\$62,000,000	10.4

After gauging market activity, the Green Bank revised targets in January 2018 as follows (see Table 32):

Table 33. Revised Commercial, Industrial, and Institutional Fiscal Year 2018 Targets

<u>Program</u>	<u>Projects</u>	<u>Capital Deployed</u>	<u>Clean Energy</u> <u>Deployed</u> ( <u>MW)</u>
<u>C-PACE</u>	<u>51</u>	<u>\$24,000,000</u>	<u>6.4</u>
CT Solar Lease	<u>25</u>	<u>\$15,000,000</u>	<u>6.3</u>
Total of existing	<u>67</u>	<u>\$34,000,000</u>	10.4
<u>programs</u>			

The following are Fiscal Year 2019 targets for the Commercial, Industrial, and Institutional Sector (see Table 33).

Table 33. Commercial, Industrial, and Institutional Fiscal Year 2018 Targets

<u>Program</u>	<u>Projects</u>	<u>Capital Deployed</u>	<u>Clean Energy</u> <u>Deployed</u> <u>(MW)</u>
<u>C-PACE</u>	57	<u>\$24,082,500</u>	<u>6.4</u>
Solar PPA	<u>25</u>	<u>\$14,062,500</u>	<u>6.3</u>
Total of existing programs	73	<u>\$33,082,500</u>	<u>10.6</u>

As in the previous comprehensive plan, the program's focus will be the deployment of clean energy through its primary financing products, C-PACE and the CT Solar Lease. However, C-PACE is not a fit for all sectors or buildings. For instance, many public purpose buildings such as hospitals or universities have bond financing which makes consent for a C-PACE lien difficult. The CI&I program will continue to work on developing alternative products or options to expand the financing options available to the sector.

#### Commercial and Industrial Property Assessed Clean Energy (C-PACE)

C-PACE provides 100% upfront financing for up to 25 years for clean energy upgrades to commercial, industrial and non-profit buildings. The financing is then repaid as a benefit assessment to the building owner's property tax bill. Energy savings offset the financing payments over the life of the upgrades, unlocking positive cash flow for the building's owner and increasing the building's value. C-PACE financing is available for a wide range of clean energy and energy efficiency improvements, including new boilers and chillers, upgraded insulation, new windows or solar installations. Energy audits, appraisal fees, construction costs and ancillary non-energy-saving improvements, such as roof

<sup>&</sup>lt;sup>76</sup> The C-PACE goals includes CT Solar Lease projects that are secured using C-PACE. They have been removed from the total to avoid double-counting.

<sup>&</sup>lt;sup>77</sup> There remains some uncertainty with the Green Bank arranging financing for the SBEA program.

replacements, that are integral to deploying energy efficiency projects can also be financed through C-PACE.

Since the Green Bank introduced the program in January 2013, C-PACE has been a notable success in deploying clean energy throughout the state. 120 Connecticut municipalities, together accounting for over 90% of the state's commercial and industrial building stock, have signed onto the program. The Green Bank has closed financing agreements on 111 projects totaling \$73.6 million, partly financed by a warehouse facility using the Green Bank's balance sheet and working in concert with third-party capital providers. This has resulted in the deployment of 15.4 MW of clean energy and countless energy efficiency projects that will lead to an estimated 2.8 million MMBTU over the lifetime of the projects. Total avoided electric and fuel cost savings from these projects will exceed \$172 million in aggregate for the benefited property owners.

The program has garnered attention nationwide, with state and local governments taking the Green Bank's C-PACE model and emulating it in their communities. In its three years, the program has enjoyed several notable successes:

- Completed the first securitization of commercial energy efficiency loans in the country, issuing \$30 million in C-PACE backed bonds in 2014 which were purchased by Clean Fund, leveraging RGGI funding at a 4:1 ratio;
- Opened the C-PACE platform to allow capital providers to fund C-PACE projects directly in Connecticut. To date, two C-PACE private capital providers are active in the state;<sup>78</sup> and
- Negotiated a partnership with Hannon Armstrong to bring up to \$100 million in C-PACE financing to Connecticut, leveraging RGGI funding at a 9:1 ratio.

The Green Bank offers a pre-development loan for up to \$30,500 to building owners. This loan can be used to cover project development work, such as audits or feasibility studies, in advance of a C-PACE loan.

#### CT Solar Lease

The Green Bank launched the CT Solar Lease 2 program ("SL2") as a combined residential and commercial solar tax equity fund designed to provide low-cost, long-term PPAs and leases to Connecticut homeowners, municipalities, and commercial and nonprofit customers. SL2 has expanded opportunities for greater solar access by allowing local developers to serve an increasingly broad spectrum of customer credits. Specifically, for non-investment grade nonprofit and commercial customers, who traditionally have been excluded from the solar financing market, SL2 has opened the door to solar via by utilizing C-PACE as a security and collections mechanism. By the time that SL2 is fully subscribed (anticipated in Q1 of FY17), C-PACE-secured credits will make up nearly 25% of the fund, with over two dozen projects financed.

<sup>78</sup> Clean Fund and Greenworks Lending

Due to continuing demand for this kind of commercial-scale financing, the Green Bank expects to raise a new fund modeled on SL<sub>2</sub>. This "CT Solar Lease 3" ("SL<sub>3</sub>") program will aim to foster partnerships that will help achieve continued growth of the commercial solar market in Connecticut. In creating SL<sub>3</sub>, the Green Bank will build upon the success of SL<sub>2</sub> with a facility that will originate, develop through construction, and own commercial solar installations with (or without) Green Bank participation as an investor. In crafting SL<sub>3</sub>, the Green Bank will prioritize the following goals (1.) minimizing the overall cost of capital of the SL<sub>3</sub> fund, (2.) maximizing the flexibility of SL<sub>3</sub> to support various underlying commercial projects and credits, including the use of C-PACE for credit enhancement, (3.) maximizing the amount of private capital leveraged per dollar of Green Bank capital expended, and (4.) recapturing Green Bank programmatic and administrative costs.

#### **Performance Indicators**

Below are the Performance Indicators that will be used to measure the success of the commercial, industrial and institutional financing programs for FY 2017.

- Number of applications received
- Number of C-PACE towns opting in
- Application approval rate
- Size of the project and level of energy savings
- Ratio of public to private capital deployed
- Growth into new markets (e.g., multifamily)
- Successful innovation in marketing and outreach (e.g., relationship managers)
- Number of trained contractors
- Number of new contractors bringing in applications
- Number of jobs created and environmental emissions reduced
- Amount of dollars saved by building owners

#### Other Areas of Strategic Importance

#### Small Business Energy Advantage (SBEA)

The Small Business Energy Advantage program (SBEA) in Connecticut is a proven model for financing small-scale energy efficiency projects. While the program is well-matched, due to its four-year, zero interest financing that can be paid back on bill, to small commercial, industrial, non-profit, and municipal customers, there are opportunities to lower the cost of the program for ratepayers and capture increased energy efficiency for customers. The Green Bank is working with the EEB and our utility partners to develop solutions that decrease the cost of the program by sourcing lower-cost capital and provide new ways to encourage customers to implement more comprehensive clean energy projects thereby increasing the impact of this already successful program.

#### Alternative Commercial & Industrial Financing Product

The Green Bank continues to explore development of an additional financing solution for commercial, industrial and institutional customers for whom C-PACE is not an accessible solution. For example, despite great interest in implementing clean energy upgrades, the terms connected with existing debt

at "public-purpose facilities" such as education, healthcare, senior living, and recreation frequently present obstacles to successful completion of a C-PACE project.

The Green Bank is pursuing an alternative solution that retains key characteristics of C-PACE such as 100% upfront financing, off-balance-sheet treatment, and ability to finance capital-intensive deep energy retrofits. The Energy Services Agreement (ESA) is a model that offers promise for financing deep retrofits at facilities that are capital constrained, credit challenged, or both. While the 100% financing and off-balance sheet characteristics are achievable with standard ESAs today, there are challenges to packaging an ESA that is performance-based (i.e. the investment is paid for through energy savings) and can be used to invest in deep energy retrofits.

At the end of 2016, the Green Bank participated in a pilot Energy Services Agreement to finance clean the energy upgrades sought by a school in Bridgeport that previously was unable to finance such measures through C-PACE. The Green Bank is following closely the progress and performance of this pilot project and an earlier ESA investment through Campus Efficiency Now. Through these projects and ongoing engagement with building owners, ESA providers, contractors, regional lenders, and insurance providers, the Green Bank will determine the viability of a programmatic and scalable approach to ESAs for meeting the unmet financing need in the "public purpose" sector.

#### Clean Energy Storage

The market for energy storage in the United States grew 222% from \$134 million in 2014 to \$432 million in 2015. A leading analysis projects annual storage deployment to grow from 221MW in 2015 to more than 400MW in 2018 and nearly 1.7GW by 2020. Rapidly decreasing prices for lithium ion batteries, policies and incentives to encourage deployment, and the extension of extension of the federal Investment Tax Credit (ITC) for solar and Production Tax Credit (PTC) for wind are all significant factors driving projections for growth. When energy storage systems are paired with renewable generation like solar and wind, the ITC and PTC can be applied to the cost of the storage system at varying levels depending on the proportion of system charging that comes from renewable (with a minimum requirement of 75%).

In the face of changing tariff structures for small-mid-sized C&I customers that reduce net metering benefits and declining ZREC prices, deployment of storage alongside solar could help improve the long-term economics by enabling more strategic consumption of clean energy through peak demand shaving and time-of-use arbitrage. In 2015, the Green Bank worked with building owners with solar systems financed through C-PACE and leading storage providers to analyze interval load and solar production data and assess the economic potential for retrofitting energy storage to existing solar system to reduce energy costs and provide energy resiliency. The Green Bank will continue to monitor and work with current and prospective Green Bank customers, energy storage companies, and lenders to identify cost-effective approaches for incorporating storage at commercial, industrial, institutional and multifamily residential facilities.

<sup>&</sup>lt;sup>79</sup> GTM Research/Energy Storage Association, U.S. Energy Storage Monitor: 2015 Year in Review, www.greentechmedia.com/research/subscription/u.s.-energy-storage-monitor.

# 10. Research and Development

As the Green Bank implements its Comprehensive Plan, there will be a number of opportunities that arise that deserve further research and development (R&D) – think of these initiatives as catalytic investments. With the lessons being learned and best practices being discovered in financing, marketing, and other areas, the Green Bank's ability to deliver more societal benefits requires understanding potential opportunities and the development of pilot programs and initiatives to increase impact, for example:

- Could the creation of a CDFI or other affiliated entity serve the interests of scaling up clean energy investment in underserved market segments?
- Could the legislative broadening of its "clean energy" definition open up new market segments for confronting climate change and environmental protection through alternative fuel vehicles and infrastructure, renewable thermal technologies, and other areas of sustainability (e.g., food, resilience, waste, water, etc.)?

The Green Bank's R&D efforts are intended to open up new market channels for private investment in Connecticut's clean energy economy through studies, pilot projects, royalty arrangements, and other initiatives that have the potential for expanding the impact of the Green Bank. Below are just a few examples of the catalytic areas we are exploring.

# 10.1 Community Development Financial Institution (CDFI) or Other Affiliated Entity

A Community Development Financial Institution (CDFI) is a specialized financial company that invests and lends in target markets with community development as their primary mission. They can be banks, loan funds and even non-profits, but they must be certified as a CDFI by the CDFI Fund, a branch of the U.S. Treasury Department. In order to be certified as a CDFI a company must have a primary mission of promoting community development and must have 60% of its activities and 50% of its assets directed to low-income target markets. All CDFI's are private-sector organizations with no government affiliation. CDFI's attract capital from private (e.g., corporations, individuals, religious institutions, and private foundations) and public sources. CDFI's have helped banks reassess their initial perceptions of risk in underserved markets and help them enter niche markets, cultivate future customers, and deliver mainstream and alternative financial products and services to underserved communities.

Per C.G.S. Section 16-245n(d)(2)(A) the Green Bank may seek to qualify as a CDFI under Section 4702 of the United States Code. If approved as a CDFI, the Green Bank would be treated as a qualified community development entity for purposes of Section 45D and Section 1440N(m) of the Internal Revenue Code.

In an effort to expand its impact in underserved market segments (i.e., households and buildings in low income and distressed communities, credit-challenged consumers or owners with unrated credits), the Green Bank will undertake research as to whether it should create a CDFI or some other form of an affiliated entity for the purposes of providing greater access to clean energy upgrades, reducing energy burden, improving health (i.e., remediation of asbestos, mold, lead, radon, etc.) and safety (i.e., knob

and tube wiring, resiliency, safety rails and ramps for the elderly, etc.) of buildings in Connecticut, and if replicable and scalable, across the region.

# 10.2 Emerging Markets for Clean Energy

The following areas – Grid 2.0, alternative fuel vehicles and infrastructure, and renewable thermal technology – are "clean energy" resources that the Green Bank can support.

#### Grid 2.0 - Infrastructure Modernization

The Green Bank continues to empower Connecticut homeowners and business owners in adopting distributed energy resources (DERs) to reduce and shift their energy consumption through improved efficiency and demand response and energy generation technologies like solar PV, wind, small hydro, and combined heat and power. Deploying resources that also make energy more reliable requires innovation that gives consumers options not only for reducing energy consumption and choosing cleaner sources, but also controlling when they use that energy and improving the likelihood of that energy being available when most needed. These goals are one element of a broader transition of our energy grid — often referred to as Utility 2.0 — in which our homes and businesses are active participants on the grid. Buildings connected in a Grid 2.0 world can manage two-way flows of energy from the grid and out to it, and can communicate in real time with other participants and grid operators to optimize and balance use of available energy resources.

The Green Bank is successfully contributing to transformation of the grid in Connecticut into one characterized by increased deployment of DERs. We are poised to make important contributions in several areas that usher in a more interactive, efficient, and reliable grid.

#### Locational Value and the Value of Information

Collection, management, and sharing of real-time data is a key underpinning of realizing the Grid 2.0 vision of an internet for energy that appropriately values energy resources on the grid at a given time and location. The Green Bank's requirement to deploy revenue-grade meters with all Green Bank supported rooftop solar PV in Connecticut allows us access to real-time solar production data that in many instances exceeds what is available to the utility companies working to efficiently integrate those resources. To better understand the geographic and local implications of DER deployment, we are partnering with the innovative spatial and energy analytics firm Kevala to develop a publicly available platform that enables both Green Bank staff and the public to visualize on a map and analyze the impact of Green Bank supported projects across the state. The platform will also enable closer collaboration with the utilities in Connecticut in analyzing the Green Bank's activities relative to location-specific needs and opportunities on the grid as well as the locational value of DERs.

In the fall of 2015, the Connecticut DEEP announced a proceeding to solicit pilot concepts from the utilities for grid-side system enhancements to integrate DERs. In 2016, the Green Bank and SmartPower are partnering with AVANGRID to identify circuits in AVANGRID's territory to target for high level of penetrations of DERs such as solar PV, smart inverters, and energy efficiency and storage.

Goals for the pilot include optimizing the value of DERs by incorporating them into grid planning and operations and assessing the use of DERs to defer more traditional infrastructure investments.

#### <u>Competing for Federal and Philanthropic Resources</u>

The Green Bank's demonstrated ability to incubate new markets and scale clean energy investments in Connecticut makes us a sought-after partner and highly competitive contender for federal and philanthropic funding in the area of Grid 2.0 and resilient clean energy.

In the summer of 2016, the Green Bank was invited to join a funding proposal with researchers at major universities to develop a distribution network platform to enable integration of high levels of solar PV penetration. The proposal is in response to the U.S. Department of Energy's (DOE) Enabling Extreme Real-Time Grid Integration of Solar Energy (ENERGISE) funding opportunity. The Green Bank's role would be as a conceptual partner and a data provider, leveraging multiple years of robust rooftop solar PV energy production data available through our solar PV monitoring platform. With or without funding from DOE, the Green Bank is collaborating with Connecticut's universities and utilities to better understand the impacts and value of DER integration on the grid.

The Green Bank is applying to the Kresge Foundation for low-interest loan capital and a direct investment to accelerate deployment of resilient solar PV plus battery storage in affordable housing in Connecticut's urban and coastal communities. The proposed project will leverage the Green Bank's Solar Lease offering and programmatic strength in the multifamily sector to benefit Connecticut communities and achieve the Kresge Foundation's goal of strengthening energy resilience and delivering low-carbon energy to low-income populations.

#### Grid 2.0 Technology: Focus on Energy Storage

Approximately 226 MW of energy storage were deployed in the U.S. in 2015. Industry projections point to reaching 281 MW of deployment in 2016 and a market size of almost nine times that — 2,081 MW and approximately \$2.9 billion — in the year 2021. Since 2013, more than 90% of all energy storage deployments have occurred in California or the PJM service territory (not including New Jersey). Rapid growth of the energy storage market is attributable to several factors, including generous state-level incentives; opportunities to reduce electrical bills through peak-shaving, demand reduction and load shifting; and monetizing ancillary services such as providing frequency regulation to the grid.

During the last year, we have taken a close look at the technology and market landscape for behind-the-meter battery energy storage in Connecticut, where deployment has been limited, to understand what is restraining storage deployment and what challenges the Green Bank might address to accelerate deployment of storage in Connecticut. We have worked with commercial and industrial building owners and storage providers to assess the potential for deploying storage at facilities with existing solar PV systems. Fortunately, precipitous reductions in the cost of battery cells and energy

<sup>&</sup>lt;sup>80</sup> GTM Research/Energy Storage Association, U.S. Energy Storage Monitor: Q2 2016, <a href="https://www.energystoragemonitor.com">www.energystoragemonitor.com</a>.

storage systems hold the potential to improve the economics of energy storage in Connecticut and support greater deployment in the near term, possibly within the horizon of this Comprehensive Plan.

On the residential side, we recently completed a study in partnership with the Cadmus Group that suggests a technology bundling approach would allow for cost-effective deployment of small-scale, behind-the-meter energy storage in the residential sector in combination with solar PV and or energy efficiency measures. Such a bundled technology package could provide a more comprehensive energy solution for customers and offer added value to the grid.<sup>81</sup>

We remain continually engaged with Connecticut building owners, contractors, energy storage providers and the utilities to assess the demand for and value of energy storage in our state and explore the potential of the Green Bank to provide financing, create new approaches and work with stakeholders to accelerate energy storage deployment.

#### Our Future, Smarter Grid

The Green Bank is accelerating the arrival of Grid 2.0 through continued deployment of DERs across Connecticut. In the next two years, we will continue to explore new technologies and innovative approaches with a range of partners to ensure that the energy grid is transitioning to become smarter, more interactive, and more efficient. These efforts, combined with pursuit of first-class pilot and demonstration projects that lead to replicable and scalable solutions, will help deliver energy that is cleaner, cheaper and more reliable and sustainable.

#### Alternative Fuel Vehicles and Infrastructure

Connecticut's transportation sector is over-reliant on oil-based fuels, and accounted for 40% of the state's greenhouse gas emissions in 2014. The Global Warming Solutions Act of 2008 set a goal for the state to achieve an 80% reduction in greenhouse gas emissions below 2001 levels by 2050, and meeting these targets requires steep, economy-wide emissions reductions - particularly in the transportation sector. These reductions can be achieved by catalyzing greater deployment of alternative fuel vehicles and the associated infrastructure to support them.<sup>82</sup>

The Green Bank, having identified the need to cost-effectively support a cleaner and more efficient transportation system, is working with Atlas Public Policy, Cadmus Group, and DEEP to study the Alternative Fuel Vehicle space and provide guidance on potential high-impact areas of opportunity. Research commenced in the winter of 2015 and is expected to conclude in the summer-fall of 2016 on a six-to-nine-month contract. Phase I of the study has been completed, assessing the market potential for the use of alternative fuels<sup>83</sup> in on-road vehicles in Connecticut using four criteria (i.e., "cleaner, cheaper and more reliable, while creating jobs and supporting local economic development):

<sup>81</sup> Cost-Effectiveness Assessment of the Residential Solar Investment Program, The Cadmus Group, Inc., www.ctgreenbank.com/wp-content/uploads/2016/03/RSIP Evaluation | Final Report and cvr | Itr.pdf.

<sup>&</sup>lt;sup>82</sup> It should be noted that the definition of "clean energy" for the Green Bank includes "alternative fuel vehicles and infrastructure".

<sup>&</sup>lt;sup>83</sup> "Alternative fuels" are battery-electric; biodiesel from waste oils; renewable diesel; E85; landfill or wastewater gas; dairy biogas; propane; compressed natural gas; liquefied natural gas; and hydrogen.

- Near-term market feasibility;
- Environmental performance;
- Cost-effectiveness; and
- Local economic benefits

Passenger plug-in electric vehicles are seen through these criteria to be the most promising vehicle and fuel technology focus to help the state realistically and cost-effectively meet its statutory emissions targets. The lowest cost option for Connecticut drivers - when considering current federal and state incentives – would be an electric vehicle powered by solar PV. Hydrogen fuel cell vehicles are an attractive longer-term option if infrastructure is deployed and the costs of the fuel and vehicles decrease significantly.

Phase II of the study will generate policy recommendations for the Green Bank to consider and act upon to create dynamic, in-state markets supporting alternative fuel vehicles and infrastructure. This research will provide a regional assessment of deployment, policy developments, and regulatory standards and proposals, with emphasis on the New England States. Phase II will also review federal and state incentive mechanisms, and opportunities to leverage public funds to attract private capital investment – helping to "crowd-in" the market. Finally, it will assess industry preparedness and barriers to market entry, including barriers in the capital markets and access to financing. Based on all these analyses Atlas Public Policy will recommend next steps to advance the Green Bank's alternative fuel vehicles strategy.

Once complete, the study will allow for the Green Bank to understand where in the transportation sector it can meaningfully leverage its core strengths in developing public-private partnerships and experience in scaling nascent clean energy markets.

#### Renewable Thermal Technology

Over 60% of the energy used in residential and commercial buildings is for space heating and cooling. 84. Changing from fossil fuels to renewable thermal technologies (RTTs) in heating and cooling buildings, as well as heating industrial processes, has the potential of providing a valuable contribution to Connecticut's target of reducing greenhouse gas emissions to 80% below 2001 levels by 2050.

Renewable thermal technologies (RTTs) are technologies that provide heating and cooling services based on renewable energy resources – as opposed to fossil fuel sources coming from natural gas, heating oil, and through electricity. RTTs can deliver energy for thermal purposes; domestic hot water, process heating, heat and power, cooking, space heating and cooling. RTTs utilize a broad range of renewable energy sources which often have low alternative value. For the purpose of this project, RTTs include:

- Heat pumps such as Air Source Heat Pump and Ground Source Heat Pumps
- Solid biomass, such as wood chips, wood pellets and cord wood
- Liquid biomass such as biogas and biodiesel

84 2013 Connecticut comprehensive energy strategy: http://www.ct.gov/deep/lib/deep/energy/cep/2013\_ces\_final.pdf

- Solar thermal
- Waste heat technologies

RTTs can range from small domestic applications to large scale applications used in industrial processes and district heating and cooling networks. As RTTs often utilize locally available energy resources to meet the on-site heating and cooling demand of one or several buildings, customized solutions often are required.

The Green Bank's RTT efforts focus on Connecticut and the Northeast Region.

#### Connecticut

Working with Yale University's Center for Business and the Environment (CBEY), as well as DEEP, Eversource Energy, and Avangrid, we are assessing the potential deployment of RTT, to provide a realistic estimate of the contribution of RTTs to reduce Connecticut's greenhouse gas emissions by 2050, and to establish the necessary knowledge for qualified policy choices and strategies to advance RTT in Connecticut. This research project will focus on whether or not RTTs are "cleaner" than alternative heating and cooling technologies, whether or not RTTs are competitive or "cheaper" in various situations, and hence the potential for private capital investments, and to what extent they might improve energy security and "reliability" in the Connecticut energy system.

#### Northeast Region

States across the Northeast are currently at different stages in investigating the feasibility of RTTs and its potential role in achieving states' climate change efforts. A common theme in each investigation is the idea that RTTs can play an essential role in the mix of climate actions. Working with CBEY and New York State Energy Research and Development Authority (NYSERDA), the Green Bank is leading and cooperating in the development of a regional renewable thermal market through joint efforts and sharing of information between different public and private (e.g., utilities and developers) stakeholders in the Northeast, including those in New England and New York. In order to ensure that each state can learn from the experience of others in real time, an extended framework of a regional cooperation is being established as each state explores how RTTs fit into their energy system with a focus on standardization (i.e., contracts, definitions, etc.), EM&V and data, and innovation.

# 10.3 Sustainability

The Green Bank is demonstrating how the green bank model can be applied to increase private capital investment in and accelerate the deployment of clean energy in Connecticut. Can the green bank model go beyond clean energy on the customer side of the meter and be applied to utility scale clean energy deployment and infrastructure – or what about sustainability broadly (e.g., local food systems, efficient transportation, waste water treatment, waste reduction, etc.)?

There are examples where the green bank model is broader than just behind the meter clean energy deployment, including:

- Australian Clean Energy Finance Center has programs that provide affordable loans to corporate, government and non-profit fleet buyers to choose low emission and electric passenger and light commercial vehicles.
- <u>California Infrastructure and Economic Development Bank</u> has programs that provide financing to public agencies and non-profit corporations for streets and highways, water supply

and flood control, parks and recreational facilities, ports and public transit, and a number of other important infrastructure facilities.

- Rhode Island Infrastructure Bank has programs that use funds to make loans, issue bonds, and receive interest earnings or other capital from public and private sources to finance projects that clean water.
- <u>UK Green Investment Bank</u> has programs that leverage public funds to attract more private investment not only in utility scale renewable energy resources, but also waste reduction facilities from anaerobic digesters processing food waste to large scale waste to energy plants diverting large amounts of household waste from landfills to generate renewable energy.

Green Banks across the country and throughout the world are demonstrating how the smarter use of public resources can attract more private capital investment in the modernization of infrastructure that is providing the essential services we need every day in a manner that is environmentally and economically sustainable.

# 11. Budgets for FY 2017, and FY 2018, and FY 2019

# FY 2017

The fiscal year budget can be found at - <u>click here</u>. The financial statements for FY 2017 <u>will be available at the end of 2017</u>can be found at - <u>click here</u>.

#### **FY 2018**

The fiscal year budget can be found at – <u>click here</u>. <u>The financial statements for FY 2018 will be available at the end of 2018.</u>

# FY 2019

The fiscal year budget can be found at – click here. The financial statements for FY 2019 will be available at the end of 2019.

# 12. Key Definitions

#### Alternative Fuel Vehicles and Associated Infrastructure

Per Public Act14-136, an amendment to C.G.S. §4a-59 defines "clean alternative fuel" as natural gas, propane, electricity, or hydrogen when used as a motor vehicle fuel. C.G.S. §14-212(5) defines "motor vehicle" as all vehicles used on the public highways. "Associated infrastructure" is defined by the Green Bank as structures, machinery, and equipment necessary and integral to refuel an alternative fuel vehicle.

#### Class I Renewable Energy

Conn. Gen. Stat. §16-1(a)(26) defines "Class I renewable energy source" as: "(A) electricity derived from (i) solar power, (ii) wind power, (iii) a fuel cell, (iv) geothermal, (v) landfill methane gas, anaerobic digestion or other biogas derived from biological sources, (vi) thermal electric direct energy conversion from a certified Class I renewable energy source, (vii) ocean thermal power, (viii) wave or tidal power, (ix) low emission advanced renewable energy conversion technologies, (x) a run-of-the-river hydropower facility that began operation after July 1, 2003, and has a generating capacity of not more than thirty megawatts, provided a facility that applies for certification under this clause after January 1, 2013, shall not be based on a new dam or a dam identified by the commissioner as a candidate for removal, and shall meet applicable state and federal requirements, including applicable site-specific standards for water quality and fish passage, or (xi) a biomass facility that uses sustainable biomass fuel and has an average emission rate of equal to or less than .075 pounds of nitrogen oxides per million BTU of heat input for the previous calendar quarter, except that energy derived from a biomass facility with a capacity of less than five hundred kilowatts that began construction before July 1, 2003, may be considered a Class I renewable energy source, or (B) any electrical generation, including distributed generation, generated from a Class I renewable energy source, provided, on and after January 1, 2014, any megawatt hours of electricity from a renewable energy source described under this subparagraph that are claimed or counted by a load-serving entity, province or state toward compliance with renewable portfolio standards or renewable energy policy goals in another province or state, other than the state of Connecticut, shall not be eligible for compliance with the renewable portfolio standards established pursuant to section 16-245a."

#### Class II Renewable Energy

Conn. Gen. Stat. §16-1(a)(27) defines "Class II renewable energy source" as: "energy derived from a trash-to-energy facility, a biomass facility that began operation before July 1, 1998, provided the average emission rate for such facility is equal to or less than .2 pounds of nitrogen oxides per million BTU of heat input for the previous calendar quarter, or a run-of-the-river hydropower facility provided such facility has a generating capacity of not more than five megawatts, does not cause an appreciable change in the river flow, and began operation prior to July 1, 2003."

#### Class III Renewable Energy

Conn. Gen. Stat. §16-1(a)(44) defines "Class III source" as: "the electricity output from combined heat and power systems with an operating efficiency level of no less than fifty per cent that are part of customer-side distributed resources developed at commercial and industrial facilities in this state on or after January 1, 2006, a waste heat recovery system installed on or after April 1, 2007, that produces electrical or thermal energy by capturing preexisting waste heat or pressure from industrial or commercial processes, or the electricity savings created in this state from conservation and load management programs begun on or after January 1, 2006, provided on and after January 1, 2014, no

such programs supported by ratepayers, including programs overseen by the Energy Conservation Management Board or third-party programs pursuant to section 16-245m, shall be considered a Class III source, except that any demand-side management project awarded a contract pursuant to section 16-243m shall remain eligible as a Class III source for the term of such contract."

#### Clean Energy Fund (CEF)

A fund formed pursuant to Conn. Gen. Stat. 16-245n which is supported by a one mill per kilowatt hour charge to each end use customer of electric services in the state plus any federal funds as may become available to the state for clean energy investments. The fund is used by Green Bank to promote investment in clean energy in accordance with a comprehensive plan developed by Green Bank to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand for clean energy and deployment of clean energy sources that serve end use customers in this state and for the further purpose of supporting operational demonstration projects for advanced technologies that reduce energy use from traditional sources.

#### Comprehensive Energy Strategy (CES)

Pursuant to Conn. Gen. Stat. § 16a-3d, the comprehensive energy strategy is developed by DEEP every three years which assesses and plans for all energy needs in the state, including, but not limited to electricity, heating, cooling, and transportation, includes the findings of the IRP, C&LM Plan, CP, and Energy Assurance Plan.

#### Comprehensive Plan (CP)

Pursuant to Conn. Gen. Stat. § 16-245n, the comprehensive plan is developed by the Green Bank to foster the growth, development and commercialization of clean energy sources, related enterprises and stimulate demand for clean energy and deployment of clean energy sources that serve end use customers in the state as well as support operational demonstration projects for advanced technologies that reduce energy use from traditional sources.

#### Connecticut Energy Efficiency Fund (CEEF)

A fund formed pursuant to Conn. Gen. Stat. § 16-245m, supported by a charge of up to three mills per kWh on electric bills which is used to implement cost-effective energy conservation programs and market transformation initiatives in accordance with the Conservation and Load Management Plan approved by the Energy Efficiency Board and DEEP.

#### Connecticut Renewable Portfolio Standards (RPS)

Pursuant to Conn. Gen. Stat. § 16-245a, each electric supplier and electric distribution company is required to demonstrate by January 1, 2020 that not less than twenty per cent of the total output or services of any such supplier or distribution company shall be generated from Class I renewable energy sources and an additional three per cent of the total output or services shall be from Class I renewable energy sources.

#### **Critical Facilities**

Conn. Gen. Stat. § 16-243y(a)(2) defines "critical facility" as: "any hospital, police station, fire station, water treatment plant, sewage treatment plant, public shelter, correctional facility or production and transmission facility of a television or radio station, whether broadcast, cable or satellite, licensed by the Federal Communications Commission, any commercial area of a municipality, a municipal center, as identified by the chief elected official of any municipality, or any other facility or area identified by

the DEEP as critical." It should be noted that DEEP considers grocery stores and gas stations as "other critical facilities" as well as part of the micro grid initiative.

#### Distributed Energy Resources (DER)

Conn. Gen. Stat. § 16-1(a) (49) defines DERs as any (A) Class I renewable energy sources or Class III sources that can either be grid-tied or on the customer side of the meter, and (B) customer-side distributed resources that reduce demand for electricity through conservation and load management, customer-side energy storage systems, or resources connected to the distribution system or a microgrid.

#### **Economically Viable**

Economically viable means the costs are cheaper than the grid. For example, what makes solar viable?

- A large system with economies of scale resulting in a lower installed cost
- Panels must receive enough sun
- Installed cost must be low enough or the subsidy high enough
- Price of the alternative, grid-power, must be high enough.

#### **Energize Connecticut**

Energize Connecticut is an initiative of the Energy Efficiency Fund, the Clean Energy Finance and Investment Authority, the State and your local electric and gas utilities dedicated to empowering Connecticut citizens to make smart energy choices, now and in the future.

# **Green Connecticut Loan Guaranty Fund**

A fund formed by the Green Bank pursuant to Conn. Gen. Stat. § 16a-40e and Conn. Gen. Stat. § 16a-40f. The Green Connecticut Loan Guaranty Fund provides the Green Bank with access to \$18 million to attract lending institutions to participate in clean energy financing programs for individuals, non-profit organizations, and small businesses through a first loss credit enhancement. The program is to be designed in consultation with the ECMB and CHEFA.

#### Integrated Resources Plan (IRP)

Pursuant to Conn. Gen. Stat. § 16a-3a, the integrated resource plan is developed by the DEEP, in consultation with the electric distribution companies, for the procurement of energy resources, including, but not limited to, conventional and renewable generating facilities, energy efficiency, load management, demand response, combined heat and power facilities, distributed generation and other emerging energy technologies to meet the projected requirements of customers in a manner that minimizes the cost of all energy resources to customers over time and maximizes consumer benefits consistent with the state's environmental goals and standards.

#### Interest Rate Buydowns (IRB)

An IRB is a payment made to a lender on behalf of a borrower that lowers the borrower's interest rate. This can be structured to pay out at the same intervals as a borrower's payments to the lender.

#### Levelized Cost of Energy (LCOE)

Levelized cost of electricity (LCOE) is a summary measure of the overall competitiveness of different generating technologies. It represents the per-kilowatt hour cost (in real dollars) of building and operating a generating plant over an assumed financial life and duty cycle. Key inputs to calculating

LCOE include capital costs, fuel costs, fixed and variable operations and maintenance (O&M) costs, financing costs, and an assumed utilization rate for each plant type.

#### Loan Loss Reserves (LLR)

An LLR is a portion of cash or cash equivalents set aside to cover estimated potential losses in a loan portfolio.

#### Low Emission Renewable Energy Credit (LREC)

An LREC is a Class I Renewable Energy Credit from a low-emissions project as defined in Conn. Gen. Stat. § 16-244t. LREC-qualified projects are Connecticut generation projects that are located behind company customer meters, achieve commercial operation on or after July 1, 2011, and have emissions of no more than 0.07 pounds per megawatt-hour (MWh) of nitrogen oxides, 0.10 pounds per MWh of carbon monoxide, 0.02 pounds per MWh of volatile organic compounds, and one grain per 100 standard cubic feet. To qualify for the LREC/ZREC Program, LREC projects may not be larger than 2,000 kilowatts (kW).

#### Low to Moderate Income (LMI)

The Green Bank, working with the state's housing agencies and a variety of other stakeholders has defined low income for its programs to be 80% of Area Median Income (AMI) or lower and low to moderate (LMI) income to be 100% of AMI or lower. These AMI cutoffs may either be at the census tract level; actual household income where data is collected; household level for program eligibility purposes, in which case household size and area of state is used (referencing Connecticut Department of Housing (DOH) income tables); or the multifamily property level, where a percentage of residents and a certain AMI limit are used to determine program eligibility.

#### Micro Grid

Conn. Gen. Stat. § 16-243y(a)(5) defines "microgrid" as: "a group of interconnected loads and distributed energy resources within clearly defined electrical boundaries that acts as a single controllable entity with respect to the grid and that connects and disconnects from such grid to enable it to operate in both grid-connected or island mode."

#### Multifamily

Greater than or equal to 5 residential housing units.

#### **Net Metering**

Pursuant to Conn. Gen. Stat. § 16-243h net metering is the process by which electric suppliers and electric distribution companies are required to interconnect and give a credit for any electricity generated by customers from Class I renewable energy sources or hydropower facility of less than two megawatts. The amount of electricity the customer produces shall be deducted from the amount the customer uses in each monthly billing period and any excess generation shall be credited toward the next monthly billing period. At the end of each year, the electric distribution company or electric supplier shall compensate the customer-generator for any excess kilowatt-hours generated, at the avoided cost of wholesale power.

#### Renewable Energy and Efficient Energy Finance Account

The Renewable Energy and Efficient Energy Finance Account of \$8 million may support grants, investments, loans or other forms of financing assistance to clean energy projects. The program is to

be designed in consultation with the DEEP, DECD, and the Office of the Treasurer and priority shall be given to projects that use major system components manufactured or assembled in Connecticut.

#### Renewable Energy Credit (REC)

A REC represents the property rights to the environmental, social, and other nonpower qualities of renewable electricity generation. A REC, and its associated attributes and benefits, can be sold separately from the underlying physical electricity associated with a renewable-based generation source. Connecticut Statutory Framework - Pursuant to Conn. Gen. Stat. § 16-245a, RECs are used to satisfy the Class I, II, and III RPS obligations mandated by Conn. Gen. Stat. § 16-245; 16-243q. Electric suppliers may procure RECs by long-term contracting mechanisms, purchasing eligible certificates issued by the New England Power Pool Generation Information System or by purchasing eligible renewable electricity and associated attributes from residential customers who are net producers. Additionally, there are two subcategories of RECs.

#### Serviceable Addressable Market (SAM)

SAM is a market for which the technology makes economic sense. A SAM is a segment of the TAM that should be targeted and must meet select criteria of what makes the market serviceable. TAM and SAM are not static. In other words, what is technically possible or economically viable today will change in the future. TAM and SAM represent measurements at a point in time.

#### **Single Family**

Between 1 to 4 residential housing units.

#### Solar Home Renewable Energy Credit (SHREC)

SHREC means a Class I renewable energy credit created by the production of one megawatt hour of electricity generated by one or more qualifying residential solar photovoltaic systems with an approved incentive from the Green Bank on or after January 1, 2015.

#### Special Capital Reserve Fund (SCRF)

SCRF allows quasi-public agencies to issue bonds for self-supporting projects or programs that are backed by the State of Connecticut, lowering the cost of capital for the program. SCRF has historically been used to help launch new financing programs in Connecticut, including CDA, CHESLA, CHFA, CHEFA, CRRA, and UCONN student fees. Pursuant to Conn. Gen. Stat. § 16-245mm, the Green Bank received \$100 million in SCRF authorization, for self-sufficient financing for energy efficiency/clean energy programs.

#### Total Addressable Market (TAM)

TAM is maximum technical potential of a market. A TAM describes a goal in relation to a market. Focusing on a market permits identification of customers. Market definition permits comparison of financing goals. TAM helps the Green Bank understand how market size changes in relation to subsidy level, technology cost, and financing costs. The Green Bank uses the TAM data to make tailored financial offerings to each customer, listing terms and savings that demonstrate economic gains of clean energy.

#### Zero Emission Renewable Energy Credit (ZREC)

A ZREC is Class I Renewable Energy Credit from a zero emissions project as defined in Conn. Gen. Stat. § 16-244r. ZREC-qualified projects are Connecticut generation projects that are located behind

company customer meters, achieve commercial operation on or after July 1, 2011, and emit no pollutants. To qualify for the LREC/ZREC Program, ZREC projects may not be larger than 1,000 kW.

#### **CONNECTICUT GREEN BANK**

#### **VICE PRESIDENT OF FINANCE**

Position Grade: 19 Reports to: President & CEO Direct Reports: As assigned Wage Hour Class: Exempt

**Salary Range:** \$125,541 to \$200,866 **Hours Worked:** 40

Effective Date: October 20, 2017

#### **SUMMARY:**

The Connecticut Green Bank's (the "Green Bank") Vice President of Finance is responsible for assisting the President in managing the financial operations of the Green Bank. This position is accountable for managing the financial accounting, reporting (both internal and external), financial planning and analysis, as well as the day to day management of the accounting department of the Green Bank.

The Green Bank, a quasi-public authority, is the nation's first state "Green Bank," leveraging public and private funds to drive investment and scale up clean energy deployment in Connecticut. Working at the Green Bank means being part of a dynamic team of talented people who are passionate about implementing the new green bank model, stimulating the growth of clean energy in Connecticut, strengthening our economy, and protecting our environment.

#### **EXAMPLES OF DUTIES:**

- Supports the preparation of operating and investment budgets for review by senior management and approval by the Budget and Operations Committee and the Board.
- Develops and implements improvements to financial operations, and business practices and structures internal controls and accounting procedures to promote efficient and timely financial reporting.
- Analyzes and interprets accounting records and reports;
- Supervises financial reporting (both internal and external) financial planning and analysis as well as the day to day management of the accounting department and related administrative activities.
- Coordinates preparation of estimates and calculations of projected revenue and expense items and periodic reports for various company initiatives as requested by management.
- Supervises the preparation of accounting records and financial reporting for the Green Bank's various component units.
- Oversees the Green Bank's cash management function and the invoicing and the collection of customer receivables for both the Green Bank and its component units.

- Coordinates the production of project performance reports, as well as long term cash flow forecasting.
- Prepares and presents financial information and analysis as requested.
- Oversees the completion and publication of the Green Bank's annual Comprehensive Annual Financial Report (CAFR).
- Oversees external and internal financial and operational audits.
- Supports the development of policies, procedures, and their revisions for review by senior management and approval by the Budget and Operations Committee, the Audit Compliance and Governance Committee and the Deployment Committee of the Green Bank Board of Directors.
- Serves as staff liaison to the Auditors of Public Accounts and public accounting firms.
- · Performs other related duties as required.

# MINIMUM QUALIFICATIONS REQUIRED KNOWLEDGE, SKILL AND ABILITY:

Ability to address managerial matters with attention to detail, as well as the facility to keep in mind the larger framework. The ability to analyze and interpret financial statements, business

plans and other complex financial and legal concepts and documents. Requires considerable knowledge of business operations and general management and the ability to apply relevant State and federal laws, statutes and regulations. Requires considerable ability and willingness to function constructively as a leader of or a participant in one or more teams. Must possess considerable knowledge of and can apply management principles and techniques. Requires the ability to respond flexibly and adapt to changing circumstances. Requires considerable knowledge of the principles, procedures and applications of information systems. Considerable interpersonal skills which include oral and written communications skills, negotiating skills, strong portfolio valuation skills, and fluency with computer financial spreadsheet applications.

# **EXPERIENCE AND TRAINING:**

A Bachelor's degree in accounting and nine years' employment experience in a combination of fiscal/administrative functions (e.g. accounting, budget management, personnel, payroll, purchasing, or other relevant business or management disciplines).

#### Substitutions Allowed:

- **1.** A Masters Degree in accounting may be substituted for one (1) additional year of the General Experience.
- **2.** A certification as a Certified Public Accountant may be substituted for one (1) additional year of the General Experience.

#### **Physical Requirements:**

- 1. Frequent communications, verbal and written
- 2. Frequent use of math/calculations
- 3. Visually or otherwise identify, observe and assess
- 4. Repetitive use of hands and fingers -typing and/or writing

<u>Physical Demands</u>: The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is frequently required to sit; use hands to finger, handle, or feel; reach with hands and arms and talk or hear. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 20 pounds. Specific vision abilities required by this job include close vision.

<u>Work Environment</u>: The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.



# CONNECTICUT GREEN BANK MANAGING DIRECTOR OF OPERATIONS

Position Grade: 19 Reports to: President & CEO Direct Reports: As assigned Wage Hour Class: Exempt

Salary Range: \$125,541 - \$200,866 Hours Worked: 40 Effective Date:

#### **SUMMARY:**

The Connecticut Green Bank's Managing Director of Operations is responsible for managing, directing, and ensuring effective and efficient operations within the Connecticut Green Bank (CGB). The Managing Director of Operations reports to the President & CEO and serves as a key management team member responsible for ensuring that CGB's everyday activities run smoothly.

The Green Bank, a quasi-public authority, is the nation's first state "Green Bank," leveraging public and private funds to drive investment and scale up clean energy deployment in Connecticut. Working at the Green Bank means being part of a dynamic team of talented people who are passionate about implementing the new green bank model, stimulating the growth of clean energy in Connecticut, strengthening our economy, and protecting our environment.

The Managing Director is distinguished from lower level directors by either its oversight of multiple areas in large operational departments, or the management of program services with agency wide internal and/or significant external impact. The Managing Director is the most highly experienced and specialized within the Director career series. While the core duties may overlap significantly with lower level Directors, the Managing Director is an expert in their field and has full managerial and decision making responsibility on issues of significance and consequence (issues of significance and consequence are: 1. Issues involving the use of personnel (hire, terminate, progressive discipline, etc.); 2. Issues pertaining to the formulation, interpretation, or administration of policy and/or legislation affecting their program area; 3. Issues involving exceptions or deviations from policy or past practice; 4. significant input into issues involving the allocation of financial resources. In addition, a managing director has complete programmatic responsibility and is responsible for coordinating department wide resources (staff, consultants, budget, etc.) as part of overall responsibility for an entire program with significant internal and external impact.

#### **EXAMPLES OF DUTIES:**

- Operations
  - Administers and coordinates the activities of CGB staff with the focus of handling day to day operating matters;
  - Work with the General Counsel to ensure adequate control and compliance processes are established;
  - Work with the Finance and Investment department heads, respectively, to ensure adequate risk management and investment compliance processes are established and being implemented;
  - Coordinate with the Finance and the Investment department heads in preparation for and ensuring compliance with "green" standards for the issuance of revenue bonds;

- Works with staff, management team, and board members to develop, revise and implement policies and procedures and reviews administrative operations to ensure conforms to both statutory requirements and approved policies and procedures;
- Upgrade and implement an appropriate system of policies, internal controls, standards, and procedures that are consistent with the mission and goals of a green bank;
- Supervise the Administrative Coordinator and work together to ensure smooth and efficient function of the organization and that resources are allocated appropriately;
- Serves as the Human Resources Designee for the organization to:
  - Collaboratively identify and find solutions to HR issues, including performance assessment, progressive discipline and employee counseling;
  - Strategically recruit and retain resources;
  - Facilitate training;
  - Oversee compensation program and ensure compliance with our policy and procedures and competitive salary levels;
  - Recommend and maintain an organizational structure and staffing levels to accomplish company goals and objectives;
  - Drive annual review processes;
  - Manage and supervise all personnel functions such as payroll, time and attendance systems, workers' compensation and benefits;
  - Oversees external providers of HR operations and administration support (Connecticut Innovations staff) including but not limited to benefits, payroll, and compliance;
  - Evaluate organizational culture and effectiveness making recommendations to Sr. Staff for improvement.

## Planning, Budget, & Strategy

- Plan, develop, and implement a comprehensive operating and program budget with support from the President and the Finance department head for ultimate approval by the Board and ensure conformance to that budget;
- Contribute to the development of the Green Bank's strategic goals and objectives as well as the overall management of the organization;
- Lead the development and implementation of a Comprehensive Plan and work with the President to align resources towards the plan;
- o Facilitate the organization's regular brainstorming and strategic planning;
- Develop and assist in the implementation of new initiatives and strategic investments as appropriate;
- Advise the President and other key members of senior management on financial planning, budgeting, cash flow, investment priorities, and policy matters;
- Support the VP of Finance and the accounting team in monitoring revenues and expenses vs. budget for the organization and work with staff to identify cost savings.

#### Organizational Infrastructure

- Promote a culture of high performance and continuous improvement that values learning, commitment to quality, leadership and initiative;
- Ensure all operations and resources are aligned to support the work of Green Bank staff
  including facilities in Rocky Hill and Stamford, management of data systems and
  information technology and acts as a liaison with vendors in these areas to represent
  the best interests of the Green Bank;
- Ensures that there are operational systems (information technology and data storage) in place to manage the effective and efficient input of and access to information;
- Work with staff to identify tools, resources, and improvements needed to enhance efficiency.
- Evaluation, Measurement and Verification

- Drive and facilitate EMV efforts including studies, surveys, and evaluations across the organization;
- Identify and codify methodologies used for EMV;
- o In conjunction with the Marketing Department, develop materials and platforms that highlight the success and impact of specific programs or the organization as a whole;
- Supervise the Manager of Measurement, Evaluation and Verification and work together
  to ensure appropriate metrics are in place to evaluate programs and services and
  develop strategies to improve operations and structures for CGB program functions,
  including process and work flow procedures, program performance dashboards, and
  other mechanisms to support effective and efficient operations.
- Asset Management, Optimization, and Risk
  - Establish and maintain systems and processes for monitoring Green Bank Investments for performance in conjunction with the Finance, Program, and the Investment Departments;
  - Work with the program teams to ensure process integrity for Renewable Energy Certificate creation and revenue generation.

#### Other Duties

- Attends Board and committee meetings and may act as a liaison to the Board on any operations matters;
- Handles special projects as assigned;
- May supervise staff and operations of the Green Bank in the absence of the President and CEO:
- Provides such general management and operational functions and other duties as required.

# MINIMUM QUALIFICATIONS REQUIRED KNOWLEDGE, SKILL AND ABILITY:

- Ability to address managerial matters with attention to detail, as well as the facility to keep in mind the larger mission of the organization.
- Considerable knowledge of principles and practices of public administration with understanding of the clean energy industry.
- Extensive knowledge of operation's management, budgeting and planning.
- Experience with commercial banking set-up and operations is a plus, including data management and systems integration.
- Considerable knowledge of administrative and management principles and techniques.
- Excellent interpersonal skills.
- Considerable ability and willingness to function constructively as a leader of or a participant in one or more teams.
- Excellent oral and written communication skills.
- Ability to coordinate and implement a comprehensive plan.
- Ability to prepare and present effective reports and presentations.
- Considerable ability to exercise judgment, critical thinking and creativity, and to act on own initiative as appropriate.
- Ability to negotiate effectively and considerable ability to respond flexibly and adapt to changing circumstances.

### **EXPERIENCE AND TRAINING:**

General Experience:

A bachelor's degree from a recognized college or university granted in public administration, communications, political science or a related business field and ten (10) plus years professional experience in positions of increasing responsibility that involve organizational management. Administrative experience in the public or private sector preferred.

#### Special Experience:

Two (2) years of the general experience must have been at the director level (or comparable position) with responsibility for managing people, projects and/or budgets, and may include supervisory or professional experience with management-level responsibilities.

#### Substitutions Allowed:

1. A Master's degree in business administration or other related field may be substituted for one additional year of the general experience.

#### **Physical Requirements:**

- 1. Frequent communications, verbal and written
- 2. Frequent use of math/calculations
- 3. Visually or otherwise identify, observe and assess
- 4. Repetitive use of hands and fingers -typing and/or writing

<u>Physical Demands</u>: The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is frequently required to sit; use hands to finger, handle, or feel; reach with hands and arms and talk or hear. The employee is occasionally required to stand and walk. The employee must occasionally lift and/or move up to 20 pounds. Specific vision abilities required by this job include close vision.

<u>Work Environment</u>: The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. The noise level in the work environment is usually moderate.

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# Memo

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

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

**Governance Committee** 

**Date:** July 27, 2018

Re: Overview of Compliance Reporting and the Board of Directors and Committees for FY 2018

#### Overview

This memo provides a summary report of the FY 2018 governance as it pertains to the Board of Directors and its Committees. For an overview of the governance process, please see the Bylaws of the Connecticut Green Bank.

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

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

Table 1. Composition of the Board of Directors of the Connecticut Green Bank

Position	Name	Status	Voting
Commissioner of DECD (or designee)	Catherine Smith	Ex Officio	Yes
Commissioner of DEEP (or designee)	Rob Klee	Ex Officio	Yes
State Treasurer (or designee)	Bettina Bronisz	Ex Officio	Yes
Finance of Renewable Energy	Reed Hundt <sup>1</sup>	Resigned	Yes
Finance of Renewable Energy	Kevin Walsh	Appointed	Yes
Labor Organization	John Harrity	Appointed	Yes
R&D or Manufacturing	Gina McCarthy	Appointed	Yes
Investment Fund Management	Eric Brown <sup>2</sup>	Appointed	Yes
Environmental Organization	Matthew Ranelli	Appointed	Yes
Finance or Deployment	Tom Flynn	Appointed	Yes
Residential or Low Income	Betsy Crum	Appointed	Yes
President of the Green Bank	Bryan Garcia	Ex Officio	No

<sup>&</sup>lt;sup>1</sup> Last official board meeting for Reed Hundt was January 26, 2018. As of the date of this memo, he has not been replaced by a new appointment.

<sup>&</sup>lt;sup>2</sup> First official board meeting for Eric Brown was September 28, 2017. He replaces Norma Glover.

#### **Board of Directors**

The Board of Directors of the Connecticut Green Bank is comprised of eleven (11) ex officio and appointed voting members, and one (1) ex officio non-voting members. A quorum for a meeting of the Board of Directors is six (6) voting members at each meeting. The leadership of the Board of Directors, includes:

- <u>Chair</u> Catherine Smith, Commissioner of DECD (designated as the Chair of the Connecticut Green Bank by Governor Malloy)
- <u>Vice Chair</u> Rob Klee, Commissioner of DEEP (voted in by his peers of the Connecticut Green Bank Board of Directors)
- <u>Secretary</u> Matthew Ranelli, Partner at Shipman and Goodwin (voted in by his peers of the Connecticut Green Bank Board of Directors)
- <u>Staff Lead</u> Bryan Garcia, President and CEO

For FY 2018, as result of the sweeps by the State of Connecticut,<sup>3</sup> the Board of Directors of the Connecticut Green Bank met fifteen (15) times, including seven (8) regularly scheduled meetings and seven (7) special meetings (see Table 2).

Table 2. Summary of Board of Directors Meetings for FY 2018

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved <sup>4</sup>
July 21, 2017	Regular	8 / 80% <sup>5</sup>	6
September 28, 2017	Special	9 / 82% <sup>6</sup>	4
October 3, 2017	Special	8 / 73%	1
October 20,2017	Regular	10 / 91%	6
November 6, 2017	Special	9 / 82%	0
November 13, 2017	Special	9 / 82%	0
December 1, 2017	Special	8 / 73%	0
December 15, 2017	Regular	9 / 82%	4
January 26, 2018	Regular	10 / 91%	5
February 15, 2018	Special	7/70% <sup>7</sup>	0
April 3, 2018	Regular	8/80%	3
April 27, 2018	Regular	7/70%	8
May 25, 2018	Special	8/80%	0
June 13, 2018	Regular	8/80%	3
June 28, 2018	Regular	8/80%	2
Total	7 Special Meetings	7 / 77%	5
	8 Regular Meetings	9 / 82%	37
	15 Total Meetings	8 / 80%	42

<sup>&</sup>lt;sup>3</sup> On October 31, 2017, the State of Connecticut passed a budget that would sweep from the Connecticut Green Bank \$14.0 million from the Clean Energy Fund and \$2.3 million from the Regional Greenhouse Gas Initiative each year for FY 2018 and FY 2019.

<sup>&</sup>lt;sup>4</sup> Excludes approval of meeting minutes.

<sup>&</sup>lt;sup>5</sup> With resignation of Norma Glover (6/23/2017), 10 member board

<sup>&</sup>lt;sup>6</sup> With appointment of Eric Brown (8/3/2017), full 11 member board

<sup>&</sup>lt;sup>7</sup> With resignation of Reed Hundt (1/30/2018), 10 member board

Overall, the attendance for each meeting established a quorum – 6 of the 11(or 10) voting members present – in order to enable business decisions, and on average there were 8 of 11(or 10) members present at each meeting, of which 5 attended on average by phone.

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

#### Statement of Financial Interest

It is required by state ethics laws that senior-level staff (i.e., Director level and above) and members of the Board of Directors annually file a Statement of Financial Interest (SFI). With respect to the 2017 SFI filing – required by May 1, 2018 – the Connecticut Office of State Ethics received the following from the Connecticut Green Bank (see Table 3):

Table 3. Summary of State of Financial Interest Filings with the Office of State Ethics for CY 2017

	Number of SFIs Submitted	% Submitted on Time	
Senior Staff	9	100%	
Board of Directors	8	100%	

Of the 17 SFI filings by Senior Staff and the Board of Directors, all were filed online. On June 1, 2018, the Connecticut Green Bank received a letter from Carol Carson, Executive Director of the Office of State Ethics congratulating us for being one of only forty-three agencies to earn "the distinction of not only achieving 100% timely compliance but also had 100% submit filings electronically."

#### Audit, Compliance and Governance Committee

The Audit, Compliance and Governance Committee (ACG Committee) of the Connecticut Green Bank is comprised of three (3) ex officio and appointed voting members. A quorum for a meeting of the ACG Committee is two (2) voting members at each meeting. Note, that if there aren't enough voting members of the ACG Committee present at a meeting, then the Chair and/or Vice Chair of the Connecticut Green Bank can participate in the meeting to establish a quorum. The leadership of the ACG Committee, includes:

- <u>Chair</u> Matthew Ranelli, Partner and Shipman and Goodwin (designated as the Chair by Catherine Smith)
- Members<sup>8</sup> Tom Flynn and Gina McCarthy<sup>9</sup> (designated as a member of the Committee by Catherine Smith)
- Staff Lead Brian Farnen, CLO and General Counsel

For FY 2018, the ACG Committee of the Connecticut Green Bank met three (3) times, two (2) were regularly scheduled and one (1) was special (see Table 4).

Table 4. Summary of Audit, Compliance and Governance Committee Meetings for FY 2018

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
July 10, 2017	Regular	2 / 100%	1

<sup>&</sup>lt;sup>8</sup> Note – the Chair and/or Vice Chair of the Board of Directors of the Connecticut Green Bank can attend the Audit, Compliance, and Governance Committee meeting to establish a quorum

<sup>&</sup>lt;sup>9</sup> Gina McCarthy was designated by Commissioner Smith on January 24, 2018

October 11, 2017	Regular	2 / 100%	4
June 8, 2018	Special	3 / 100%	3
Total	2 Regular Meetings	2 / 100%	
	1 Special Meeting	3 / 100%	
	3 Total Meetings	3 / 100%	8

Overall, the attendance for each meeting established a quorum – 2 of the 2 or 3 voting members present – in order to enable business decisions, of which 100% attended on average by phone.

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

Review of Governance Documents and Statutory Reporting

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

- Annual review by the ACG Committee of the Governance Documents (i.e., Bylaws, Operating Procedures, and Statement of Purpose) completed on October 11, 2017.
- As a result of state auditor findings in FY 2014 and draft findings in FY 2017, we are tracking statutory responsibilities and reporting with a checklist attached hereto as Exhibit A for continuous reporting process improvement.

# **Budget and Operations Committee**

The Budget & Operations Committee (B&O Committee) of the Connecticut Green Bank is comprised of three (3) ex officio and appointed voting members. A quorum for a meeting of the B&O Committee is two (2) voting members at each meeting. Note, that if there aren't enough voting members of the B&O Committee present at a meeting, then the Chair and/or Vice Chair of the Connecticut Green Bank can participate in the meeting to establish a quorum. The leadership of the B&O Committee, includes:

- <u>Chair</u><sup>10</sup> Rob Klee, Commissioner of DEEP and John Harrity, Labor Union Representative (designated as the Chair by Catherine Smith)
- Members<sup>11</sup> –John Harrity, Rob Klee and Eric Brown<sup>12</sup> (designated as a member of the Committee by Catherine Smith)
- Staff Lead Eric Shrago, Director of Operations

For FY 2018, the B&O Committee of the Connecticut Green Bank met five (5) times, four (4) were regularly scheduled and one (1) was special (see Table 5).

Table 5. Summary of Budget and Operations Committee Meetings for FY 2018

Date	Regular or Special Meeting	Attendees / % Attendance	# of Resolutions Approved
August 24, 2017	Regular	2 / 100%	1
January 12, 2018	Regular	2 / 100%	1
May 15, 2018	Regular	3 / 100%	0

<sup>&</sup>lt;sup>10</sup> John Harrity was designated as Chair effective at the 5/15/18 meeting. Rob Klee remains on the committee as a member.

<sup>&</sup>lt;sup>11</sup> Note – the Chair and/or Vice Chair of the Board of Directors of the Connecticut Green Bank can attend the Audit, Compliance, and Governance Committee meeting to establish a quorum

<sup>&</sup>lt;sup>12</sup> Eric Brown was appointed to the Budget and Operations Committee on 1/24/18.

June 6, 2018	Regular	4 / 100%	0
June 19, 2018	Special	1 / 33%	0
Total	1 Special Meeting	1 / 33%	0
	4 Regular Meetings	2 / 100%	2
	5 Total Meetings	2 / 87%	2

Overall, the attendance for each meeting established a quorum -2 of the 2 or 3 voting members present - in order to enable business decisions, and on average there were 2 members present at each meeting, of which 9% attended by phone.

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

### **Deployment Committee**

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

- <u>Chair</u> Reed Hundt<sup>13</sup>, CEO of the Coalition for Green Capital; Rob Klee, Commissioner of DEEP (designated as the Chair by Catherine Smith)
- <u>Members<sup>14</sup></u> Bettina Bronisz (ex officio per bylaws), Matthew Ranelli, and Betsy Crum (designated as a member of the Committee by Catherine Smith)
- Staff Lead Bryan Garcia, President and CEO, and Bert Hunter, EVP and CIO

For FY 2018, the Deployment Committee of the Connecticut Green Bank met two (2) times, including two (2) regularly scheduled meetings (see Table 6).

Table 6. Summary of Deployment Committee Meetings for FY 2018

Date	Regular or	Attendees / %	# of Resolutions
	Special Meeting	Attendance	Approved
September 9, 2017	Regular	4 / 100%	1
May 9, 2018	Regular	3 / 75%	2
Total	2 Regular Meetings	3 / 88%	3
	2 Total Meetings	3 / 88%	3
	_		

Overall, the attendance for each meeting established a quorum -3 of the 4 voting members present - in order to enable business decisions, and on average there were 3 members present at each meeting, of which 90% attended by phone.

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

<sup>&</sup>lt;sup>13</sup> Reed Hundt resigned effective 1/30/2018. Rob Klee was appointed as Chair by Commissioner Smith on 2/5/18.

<sup>&</sup>lt;sup>14</sup> Note – the Chair and/or Vice Chair of the Board of Directors of the Connecticut Green Bank can attend the Deployment Committee meeting to establish a quorum

### Joint Committee of the EEB and the CGB

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

- <u>Chair</u> Eric Brown, Attorney with CBIA (voted in by his peers of the EEB and the Connecticut Green Bank)
- Vice Chair Diane Duva, DEEP (voted in by her peers of the EEB and the Connecticut Green Bank)
- <u>Secretary</u> Bryan Garcia, Connecticut Green Bank, and Craig Diamond, Connecticut Energy Efficiency Fund (voted in by their peers of the EEB and the Connecticut Green Bank)
- <u>Members</u><sup>15</sup> Bryan Garcia (non-voting), Bert Hunter (non-voting), and John Harrity (designated as members of the Committee by Catherine Smith)<sup>16</sup>
- Staff Lead Bryan Garcia, President and CEO of the Connecticut Green Bank

For FY 2018, the Joint Committee of the EEB and the Connecticut Green Bank met four (4) times, including four (4) regularly scheduled meetings (see Table 7).

Table 7. Summary of Joint Committee Meetings for FY 2018

Date	Regular or	Attende	es / % Attendance	# of Resolutions
	Special Meeting	Voting	Non-voting (CGB)	Approved
July 19, 2017	Regular	4 / 100%	3 / 75%	0
October 18, 2017	Regular	4 / 100%	4 / 100%	0
January 17, 2018	Regular	3 / 75%	4 / 100%	0
April 18, 2018	Regular	4 / 100%	3 / 75%	0
Total	4 Regular Meetings 4 Total Meetings	4 / 94%	3 / 87%	0

Overall, the attendance for each meeting established a quorum – 3 of the 5 (currently 4) voting members present – in order to enable business decisions, and on average there were 4 members present at each meeting, of which 15% attended on average by phone.

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

<sup>&</sup>lt;sup>15</sup> Note – these 3 members are representatives from the Connecticut Green Bank.

<sup>&</sup>lt;sup>16</sup> It should be noted that as of the date of this memo, a replacement for Norma Glover on the Joint Committee representing the Connecticut Green Bank has not yet occurred.

## Exhibit A

Accounting			Filing G. Bellas	Due date Submitted Date	9/30/2017	12/31/2017 2/28/2018	3/31/2018 5/17/2018	6/30/2018
	section(h)·	Quarterly Financial Cash	G. Dellas	Submitted Date	12/21/2017	2/20/2018	3/17/2018	
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<u>IR</u> - Section 1-123								
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845 Brook Street, Rocky Hill, CT 06067 T 860.563.0015 ctgreenbank.com



# Memo

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

From: Brian Farnen, Loyola French, and Bryan T. Garcia

**Date:** July 27, 2018

Re: Overview of Requests for Approvals for Professional Services Agreements

over \$75,000 for FY 2018 per Operating Procedures

#### Overview

This memo provides a summary report of the requested approvals for those Professional Services Agreement ("PSA") with a not-to-exceed amount of over \$75,000 in the 2018 fiscal year ("FY2018"). This approval process is outlined in Section IX (ii) of the Connecticut Green Bank Operating Procedures, as follows:

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

Green Bank staff requested a total of 18 PSAs, or amendments to existing PSAs, with not-to-exceed amounts over the \$75,000 threshold for FY2018, for a total amount of \$2,963,360. Approval for 10 of the 18 were requested, and subsequently granted, by Commissioner Smith, with the exception of the First Amendment to the Tronc (The Hartford Courant) PSA 5281 for an increase of \$107,165 which did not get approval (see Table 1). The others all gained approval of the full Board of Directors, as either a one-time approval or as strategic selections for FY 2018 at the 6/23/17 BOD meeting (see Table 2). This number is down from that of FY 2017 by \$378,813, when approval was sought for fifteen PSAs and/or amendments over \$75,000, for a total amount of \$3,342,173, with six being approved by direct request of Commissioner Smith and approval for the remaining nine being granted by the full Board. A breakdown of the agreements for FY2018 follows.

Table 1. FY 2018 PSAs over \$75,000 approved by Commissioner Smith

Date	Agreement	Division / Program	Amount
5/1/2017*	Hasting Read (dba Devere) PSA 5307	General Operations	\$125,000
7/1/2017	Opinion Dynamics PSA 5352	General Operations	\$ 75,000
7/1/2017	Opinion Dynamics PSA 5353	General Operations	\$ 50,000**
7/1/2017	Verse PSA 5334	Marketing	\$200,000
7/1/2017	Drink caffeine PSA 5335	Marketing	\$400,000
7/1/2017	AHS PSA 5359	Residential/Multifamily – Smart-E	\$145,000
	Strategic Environmental Associates PSA	General Operations	\$ 75,000***
8/11/2017	5239 – 2 <sup>nd</sup> Amendment		
	Tronc (Hartford Courant) PSA 5281 – 1st	Marketing	(\$107,165)****
9/14/2017	Amendment		
2/1/2018	DNV KEMA Renewables PSA 5403	S&I – RSIP (SHREC)	\$108,100
4/2/2018	ENCON PSA 5406	C&I – SL2 & SL3	\$158,000
		Total:	\$1,336,100

<sup>\*</sup> PSA Term through 12/31/2017

Table 2. FY 2018 PSAs over \$75,000 approved by Green Bank BOD

Date	Agreement	Division / Program	Amount
6/1/2017*	Adnet PSA 5331	General Operations	\$425,000
6/28/2017*	MREN (fka Metis Financial) PSA 5350	Resi/Multifamily Smart-E	\$220,000
7/25/2017	Clean Power Research PSA 5355	S&I – RSIP	\$300,025
7/25/2017	Locus Energy PSA 5356	S&I – RSIP	\$468,235
7/1/2017	CT Housing Coalition PSA 5365	Resi/Multifamily	\$134,000
			Extended
	Sustainable Real Estate Solutions PSA 5242 -	C&I – CPACE	term –
8/29/2017	1 <sup>st</sup> Amendment		12/31/17
9/14/2017	Cortland Capital Market PSA 5374	C&I CPACE	\$80,000
			Extended
	Sustainable Real Estate Solutions PSA 5242 -	C&I – CPACE	term –
2/5/2018	2 <sup>nd</sup> Amendment		6/30/18
		Total:	\$1,627,260

<sup>\*</sup> PSA term through 6/30/2018.

<sup>\*\*</sup> Combined with PSA 5352 (\$75K) exceeds the \$75K threshold.

<sup>\*\*\*</sup> Increases total PSA 5239 to \$150,000.

<sup>\*\*\*\*</sup> Amendment was not approved.



May 2018 Financial Package

# May 2018 Financial Package Index

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## Connecticut Green Bank Executive Summary May 2018

Overview

This financial package contains financial information for the Connecticut Green Bank (CGB) through May 2018 with comparisons to May 2017 and versus Budget for the Statement of Revenue and Expenditures. Schedules of unfunded commitments and loan guarantees are also presented.

### **Balance Sheet**

- ✓ CGB's current assets/cash increased by \$1m, and non-current assets increased by \$5m reflecting continued investment activity in our financing programs for renewable energy equipment installations and energy efficiency upgrades.
- ✓ The non-current asset increase of \$5m is driven by increases in CPACE loans of \$5m and advances to affiliates of \$4m, partially offset by decreases in Acumentrics, Solar Lease I promissory notes and restricted cash of \$1m each.
- ✓ We have booked a \$28m Payable to State of CT liability with an offsetting \$28m Deferred Outflow. When we pay Connecticut in June, we will reverse a portion of the reserve and deferred outflow, and recognize the reduction to earnings in the Statement of Revenues and Expenditures.
- ✓ The reserve for RSIP payments is \$47.2m, which represents no change for the fiscal year-to-date (EPBB +\$0.7m, PBI -\$0.3m, HOPBI -\$0.4m).

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

Fiscal YTD Net Revenues Under Expenses of \$0.4m are \$2.3m below prior year. Revenues and Expenses are \$1.3m and \$3.6m above prior year, respectively.

- ✓ Utility Customer Assessments are \$0.3m below prior year. Aug/Sep were \$0.8m below prior year, with remaining months \$0.5m above prior year.
- ✓ RGGI proceeds are \$0.9m below prior year due to a sweep to the general fund of \$1.7m in Auctions 38 and 39. Auction 40 held on June 13th will net CGB \$285k after satisfying the \$2.3m sweep.
- ✓ Grant Income is \$1.5m above prior year due to a DEEP grant for the Health and Safety Revolving Loan funding.
- ✓ Rec Sales are \$0.2m above prior year (SHREC +\$2.3m, Non-SHREC -\$2.1m). We will receive an additional \$0.3m in Non-SHREC recs in June.
- ✓ Compensation and Benefits are \$0.6m above prior year. See page 11 for a detailed compensation analysis.
- ✓ Program Incentives and Grants are \$1.1m above prior year. Higher RSIP incentive payments of \$4.3m (includes Solar City buyout of \$1.7m) are partially offset by lower grants of \$1.8m (CEBS \$1.0m, CEC \$0.8m) and a decrease in the RSIP reserve of \$1.4m.
- ✓ Realized Losses are \$0.4m above prior year due to the Mechatronic write-off. The Provision for Loan Losses is \$1.3m lower than prior year. ARRA IRBs are \$3.6m higher than prior year.

### Statement of Revenues and Expenditures vs. Budget

Fiscal YTD Net Revenues Under Expenses of \$0.4m are \$0.5m below budget. Revenues and Expenses are \$2.2m and \$2.7m above budget, respectively.

- $\checkmark\,$  Utility Customer Assessments are \$0.1m below budget.
- ✓ RGGI proceeds are on budget. Auction 40 held on June 13th will net CGB \$285k after satisfying the \$2.3m sweep.
- ✓ Rec Income is \$0.2m above budget due to higher SHREC sales of \$0.5m, partially offset by lower Non-SHREC sales of \$0.3m.
- ✓ Grant Income is \$1.5m above budget due to an unanticipated grant from DEEP to fund the Health and Safety Revolving Loan fund.
- ✓ Compensation and Benefits are \$0.1m above budget. See page 11 for a detailed compensation analysis.
- ✓ Program Development Costs are \$0.6m below budget due to lower PowerClerk subscription charges of \$0.3m and lower CPACE spending of \$0.3m.
- ✓ Program Incentives and Grants are \$1.0m above budget due to higher RSIP payments of \$1.3m, partially offset lower CGB grants of \$0.2m and IRBs of \$0.1m. Incentives include \$1.7m for the Solar City buyout payment and accruals of \$3.0m (17Q3 of \$0.1m, 17Q4 of \$0.1m, 18Q1 of \$1.3m,18Q2 of \$1.5m).
- ✓ ARRA Interest Rate Buydowns are \$2.6m higher than budget. Funding for these IRBs is in a restricted cash account.

### **Unfunded Commitments**

CGB has a total of \$70m in unfunded commitments, a decrease of \$12m for the Fiscal Year.

- ✓ The major program commitments are: 1. Solar PV programs at \$52m; 2. CPACE program at \$10m; and 3. Fuel Cell programs at \$5m.
- ✓ The decrease from the prior Fiscal Year is due to decreases in AD/CHP programs of \$18.5m and Multifamily/LMI programs of \$0.9m, partially offset by an increase in the CPACE program of \$7.4m.

1. Executive Summary - CGB Page 1

### **Balance Sheet**

As of May 31, 2018

	As of 05/31/2018	As of 05/31/2017	YOY \$ Change	As of 04/30/2018	MTD \$ Change
			<del>y onango</del>	0-1700/2010	<del> </del>
Assets					
Current Assets					
Cash and Cash Equivalents	4 704 004	F 200 047	(004.040)	4.055.070	000 004
Cash - Unrestricted	4,724,934	5,328,947	(604,012)	4,055,873	669,061
Total Cash and Cash Equivalents	4,724,934	5,328,947	(604,012)	4,055,873	669,061
Other Current Assets					
Accounts Receivable	3,438,625	2,275,646	1,162,978	3,654,975	(216,350)
Other Receivables	1,200,721	778,690	422,031	1,090,305	110,416
Prepaid Assets	60,129	69,337	(9,208)	72,739	(12,609)
Total Other Current Assets	4,699,475	3,123,673	1,575,801	4,818,019	(118,543)
Total Current Assets	9,424,409	8,452,620	971,789	8,873,892	550,518
Fixed Assets					
Furniture & Equipment, net	7,700	36,197	(28,497)	8,225	(527)
Computer Hardware & Software, net	43,202	62,440	(19,239)	45,707	(2,505)
Leasehold Improvements, net	62,261	91,961	(29,698)	64,168	(1,905)
L/H Improvements-Construction in Progress	10,415	7,032	3,382	5,175	5,240
Total Fixed Assets	123,578	197,630	(74,052)	123,275	303
Investment in/Advances to Affiliates	48,932,486	45,171,675	3,760,811	48,987,137	(54,652)
Other Assets			· · · · · · · · · · · · · · · · · · ·		
CPACE & Other Loans, net of reserves	37,962,247	33,606,206	4,356,041	38,443,128	(480,881)
CPACE Selldown Bonds and Notes	5,060,822	5,022,843	37,979	5,060,821	0
Solar Lease I Promissory Notes, net of reserves	7,396,783	8,272,499	(875,717)	7,469,962	(73,178)
Other Assets	654,768	1,812,771	(1,158,002)	654,768	0
Total Other Assets	51,074,620	48,714,319	2,360,301	51,628,679	(554,059)
Restricted Assets			· · · · · · · · · · · · · · · · · · ·		
Cash - Restricted - Energy Programs	32,245,269	32,780,558	(535,288)	32,173,753	71,517
Cash - Restricted - Escrow and Custodial Liabilities	687,458	762,379	(74,921)	693,676	(6,218)
Total Restricted Assets	32,932,727	33,542,937	(610,209)	32,867,429	65,299
Total Assets	\$ 142,487,820 \$	136,079,181	6,408,640	\$ 142,480,412	

## Balance Sheet As of May 31, 2018

	 As of 05/31/2018	As of 05/31/2017	YOY \$ Change	 As of 04/30/2018	 MTD \$ Change
Deferred Outflows of Resources					
Deferred Amount for Pensions	9,978,107	2,575,368	7,402,739	9,978,107	0
Deferred Payments to State of Connecticut	28,000,000	0	28,000,000	28,000,000	0
Total Deferred Outflows of Resources	\$ 37,978,107	2,575,368	\$ 35,402,739	\$ 37,978,107	\$ 0
Liabilities					
Current Liabilities					
Accounts Payable	697,876	258,769	439,107	252,498	445,378
Accrued Expenses	4,064,046	955,308	3,108,738	3,917,848	146,198
Custodial Liability	687,458	762,379	(74,921)	693,676	(6,218)
Other Current Liabilities	49,016	17,849	31,167	54,948	(5,932)
Total Current Liabilities	 5,498,396	1,994,305	 3,504,091	4,918,970	579,426
Other Liabilities	 				
Due to Affiliates					
Due to CT Solar Lease 2	389,818	424,961	(35,143)	325,640	64,178
Total Due to Affiliates	 389,818	424,961	(35,143)	325,640	64,178
Bonds Payable-CREBs	 12,006,283	2,957,971	9,048,312	12,006,283	0
Reserve for RSIP Payments	47,176,479	52,175,796	(4,999,317)	47,026,450	150,029
Pension Liability	25,245,439	16,096,113	9,149,326	25,245,439	0
Payable to State of Connecticut	28,000,000	0	28,000,000	28,000,000	0
Total Other Liabilities	 112,818,019	71,654,841	41,163,178	112,603,812	214,207
Total Liabilities	\$ 118,316,415	73,649,146	\$ 44,667,269	\$ 117,522,782	\$ 793,633
Net Position					
Investment in Capital Assets	123,578	197,630	(74,052)	123,275	303
Restricted-Energy Programs	32,932,728	33,542,937	(610,209)	32,867,429	65,299
Unrestricted Net Position	29,093,207	31,264,836	(2,171,629)	29,945,033	(851,826)
Total Net Position	\$ 62,149,513 \$	65,005,403	\$ (2,855,890)	\$ 62,935,737	\$ (786,224)

## Statement of Revenues and Expenditures

		07/01/2017	07/01/2016	
		Through	Through	
	05/31/2018	05/31/2018	05/31/2017	\$ Change
	Current Month	FY to Date	Prior FY to Date	Year over Year
Revenue				
Operating Income				
Utility Customer Assessments	1,811,998	23,936,116	24,267,910	(331,794)
RGGI Auction Proceeds-Renewables	0	965,534	1,857,874	(892,340)
CPACE Closing Fees	0	101,917	52,249	49,669
REC Sales	0	2,391,750	2,214,000	177,750
Grant Income-Federal Programs	0	56,953	67,843	(10,891)
Grant Income-Private Foundations	0	24,999	25,000	(1)
Grant Income-DEEP	0	1,500,000	0	1,500,000
PPA Income	0	38,412	0	38,412
LREC/ZREC Income	0	13,810	0	13,810
Total Operating Income	1,811,998	29,029,491	28,484,876	544,615
Interest Income	191,963	2,463,052	1,965,257	497,796
Interest Income, Capitalized	31,706	345,246	313,422	31,823
Other Income	725	383,761	148,560	235,201
Total Revenue \$	2,036,392	32,221,550	\$ 30,912,115	\$ 1,309,435
Operating Expenses				
Compensation and Benefits				
Employee Compensation	369,489	4,771,058	4,591,944	179,113
Employee Benefits	312,399	3,802,047	3,400,359	401,689
Total Compensation and Benefits	681,888	8,573,105	7,992,303	580,802
Program Development and Administration	52,010	2,038,230	2,385,249	(347,019)
Marketing Expense	12,742	1,170,803	1,477,044	(306,241)
EM&V	0	377,520	275,982	101,538
Consulting and Professional Fees				
Consulting/Advisory Fees	20,458	136,261	233,978	(97,717)
Accounting and Auditing Fees	6,300	33,140	25,041	8,098
Legal Fees & Related Expenses	5,934	225,900	276,428	(50,527)
Bond Issuance Costs	0	0	50,000	(50,000)
Total Consulting and Professional Fees	32,692	395,301	585,447	(190,146)
Research and Development	796	95,006	82,128	12,878
Rent and Location Related Expenses				
Rent/Utilities/Maintenance	29,336	317,285	307,693	9,592
Telephone/Communication	9,461	90,098	96,887	(6,790)
Depreciation & Amortization	4,937	99,148	123,180	(24,031)
Total-Rent and Location Related Expenses	43,734	506,531	527,760	(21,229)

## Statement of Revenues and Expenditures

				07/01/2017		07/01/2016		
		05/31/2018		Through 05/31/2018		Through 05/31/2017		\$ Change
		Current Month		FY to Date		Prior FY to Date		Year over Year
Office, Computer & Other Expenses								
Office Expense		5,049		93,154		100,987		(7,833)
Insurance		6,426		70,671		73,031		(2,360)
Subscriptions		375		63,688		64,660		(972)
Training & Education		3,070		54,769		56,012		(1,243)
IT Operations		41,272		309,911		227,442		82,469
Travel, Meeting & Related Expenses		8,881		78,037		107,597		(29,560)
Total-Office, Computer & Other Expenses		65,073		670,230		629,729		40,501
Structuring Fees		25,000		25,000		0		25,000
Total Operating Expenses	\$	913,935	\$	13,851,726	\$	13,955,642	\$	(103,916)
Program Incentives and Grants								
Financial Incentives-CGB Grants		0		0		1,856,486		(1,856,486)
Program Expenditures-Federal Grants		0		48,461		41,134		7,327
EPBB/PBI/HOPBI Incentives		1,680,147		13,498,681		9,198,854		4,299,827
Incr/(Decr) in Reserve for RSIP Payments		150,029		13,190		1,364,321		(1,351,131)
Interest Rate Buydowns-CGB		0		997		267		730
Total Program Incentives and Grants	\$	1,830,176	\$	13,561,329	\$	12,461,062	\$	1,100,267
Operating Income/(Loss)	<u>\$</u>	(707,718)	\$	4,808,495	\$	4,495,411	\$	313,083
Non-Operating Expenses								
Interest Expense		0		(25,130)		15,000		(40,130)
Realized (Gain) Loss		0		510,207		93,711		416,496
Provision for Loan Loss		78,506		615,632		1,914,128		(1,298,496)
Interest Rate Buydowns-ARRA		0		4,081,005		525,199		3,555,805
Total Non-Operating Expenses	\$	78,506	\$	5,181,714	\$	2,548,038	\$	2,633,675
Net Revenues Over (Under) Expenses	\$	(786,224)	\$	(373,219)	\$	1,947,373	\$	(2,320,592)
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## **Budget to Actual Financial Analysis**

	07/01/2017 Through 05/31/2018				FY Ended 06/30/2018
	Actual	Budget	\$ Variance	% Variance	Budget
Revenue					
Operating Income					
Utility Customer Assessments	23,936,116	24,077,700	(141,584)	(0.6) %	26,311,000
Payments to State of Connecticut	0	0	0	0.0 %	(14,000,000)
RGGI Auction Proceeds-Renewables	965,534	965,534	0	0.0 %	965,534
CPACE Closing Fees	101,917	91,667	10,251	11.2 %	100,000
REC Sales	2,391,750	2,223,293	168,457	7.6 %	3,203,562
Grant Income-Federal Programs	56,953	0	56,953	0.0 %	49,326
Grant Income-Private Foundations	24,999	0	24,999	0.0 %	0
Grant Income-DEEP	1,500,000	0	1,500,000	0.0 %	0
PPA Income	38,412	0	38,412	0.0 %	0
LREC/ZREC Income	13,810	0	13,810	0.0 %	0
Total Operating Income	29,029,491	27,358,194	1,671,298	6.1 %	16,629,422
Interest Income	2,463,052	2,078,987	384,064	18.5 %	2,347,644
Interest Income, Capitalized	345,246	379,770	(34,524)	(9.1) %	416,570
Other Income	383,761	207,089	176,672	85.3 %	272,346
Total Revenue	\$ 32,221,550 \$	30,024,040	2,197,510	7.3 %	19,665,982
Operating Expenses					
Compensation and Benefits					
Employee Compensation	4,771,058	4,823,174	(52,116)	(1.1) %	5,195,951
Employee Benefits	3,802,047	3,680,493	121,554	3.3 %	3,970,285
Total Compensation and Benefits	8,573,105	8,503,667	69,438	0.8 %	9,166,236
Program Development and Administration	2,038,230	2,600,551	(562,321)	(21.6) %	2,758,419
Marketing Expense	1,170,803	1,080,173	90,630	8.4 %	1,178,367
EM&V	377,520	390,600	(13,080)	(3.3) %	430,600
Consulting and Professional Fees	011,020	000,000	(10,000)	(0.0) 70	100,000
Consulting/Advisory Fees	136,261	197,124	(60,863)	(30.9) %	220,500
Accounting and Auditing Fees	33,140	35,700	(2,560)	(7.2) %	111,950
Legal Fees & Related Expenses	225,900	335,500	(109,600)	(32.7) %	366,000
Total Consulting and Professional Fees	395,301	568,324	(173,023)	(30.4) %	698,450
Research and Development	95,006	242,917	(147,911)	(60.9) %	265,000
Rent and Location Related Expenses	20,000	212,017	(117,011)	(00.0) 70	200,000
Rent/Utilities/Maintenance	317,285	340,009	(22,723)	(6.7) %	370,918
Telephone/Communication	90,098	98,908	(8,811)	(8.9) %	107,900
Depreciation & Amortization	99,148	137,500	(38,352)	(27.9) %	150,000
Total-Rent and Location Related Expenses	506,531	576,417	(69,886)	(12.1) %	628,818
The result and Education related Expended		370,717	(00,000)	(12.1) /0	320,010

## **Budget to Actual Financial Analysis**

		07/01/201	7 Thro	ough		FY Ended	
		05/31	/2018				06/30/2018
	 Actual	Budget		\$ Variance	% Variance		Budget
Office, Computer & Other Expenses							
Office Expense	93,154	91,667		1,487	1.6 %		100,000
Insurance	70,671	84,494		(13,823)	(16.4) %		92,175
Subscriptions	63,688	70,800		(7,112)	(10.0) %		71,500
Training & Education	54,769	75,336		(20,567)	(27.3) %		80,549
IT Operations	309,911	305,616		4,294	1.4 %		333,400
Travel, Meeting & Related Expenses	78,037	148,362		(70,324)	(47.4) %		161,850
Total-Office, Computer & Other Expenses	 670,230	 776,275		(106,045)	(13.7) %		839,474
Structuring Fees	25,000	0		25,000	0.0 %		0
Total Operating Expenses	\$ 13,851,726	\$ 14,738,924	\$	(887,198)	(6.0) %	\$	15,965,364
Program Incentives and Grants							
Financial Incentives-CGB Grants	0	207,499		(207,499)	(100.0) %		265,000
Program Expenditures-Federal Grants	48,461	0		48,461	0.0 %		0
EPBB/PBI/HOPBI Incentives	13,498,681	12,238,808		1,259,873	10.3 %		13,329,079
Incr/(Decr) in Reserve for RSIP Payments	13,190	0		13,190	0.0 %		0
Interest Rate Buydowns-CGB	997	91,666		(90,669)	(98.9) %		100,000
Total Program Incentives and Grants	\$ 13,561,329	\$ 12,537,973	\$	1,023,356	8.2 %	\$	13,694,079
Operating Income/(Loss)	\$ 4,808,495	\$ 2,747,142	\$	2,061,352	75.0 %	\$	(9,993,462)
Non-Operating Expenses							
Interest Expense	(25,130)	71,726		(96,856)	(135.0) %		71,726
Realized (Gain) Loss	510,207	0		510,207	0.0 %		0
Provision for Loan Loss	615,632	1,117,052		(501,420)	(44.9) %		1,195,560
Interest Rate Buydowns-ARRA	4,081,005	1,451,800		2,629,205	181.1 %		1,570,800
Total Non-Operating Expenses	\$ 5,181,714	\$ 2,640,578	\$	2,541,136	96.2 %	\$	2,838,086
Net Revenues Over (Under) Expenses	\$ (373,219)	\$ 106,564	\$	(479,784)	(450.2) %	\$	(12,831,548)

# Budget to Actual Financial Analysis - Investment Business

		07/01/2017 Through 05/31/2018									
	Actual	Budget	\$ Variance	% Variance	Budget						
Revenue											
Operating Income											
Utility Customer Assessments	23,936,116	24,077,700	(141,584)	(0.6) %	26,311,000						
Payments to State of Connecticut	0	0	, o	0.0 %	(14,000,000)						
RGGI Auction Proceeds-Renewables	965,534	965,534	0	0.0 %	965,534						
CPACE Closing Fees	101,917	91,667	10,251	11.2 %	100,000						
Grant Income-Federal Programs	56,953	0	56,953	0.0 %	49,326						
Grant Income-Private Foundations	24,999	0	24,999	0.0 %	0						
Grant Income-DEEP	1,500,000	0	1,500,000	0.0 %	0						
PPA Income	38,412	0	38,412	0.0 %	0						
LREC/ZREC Income	13,810	0	13,810	0.0 %	0						
Total Operating Income	26,637,741	25,134,901	1,502,841	6.0 %	13,425,860						
Interest Income	2,383,803	1,996,487	387,316	19.4 %	2,257,643						
Interest Income, Capitalized	345,246	379,770	(34,525)	(9.1) %	416,570						
Other Income	383,761	207,089	176,672	85.3 %	272,346						
Total Revenue	\$ 29,750,551	\$ 27,718,247	\$ 2,032,304	7.3 %	\$ 16,372,419						
Operating Expenses											
Compensation and Benefits											
Employee Compensation	3,907,424	3,929,596	(22,172)	(0.6) %	4,234,811						
Employee Benefits	3,125,647	3,001,297	124,350	4.1 %	3,238,389						
Total Compensation and Benefits	7,033,071	6,930,893	102,178	1.5 %	7,473,200						
Program Development and Administration	1,041,784	1,300,218	(258,434)	(19.9) %	1,418,419						
Marketing Expense	1,138,493	1,031,128	107,365	10.4 %	1,124,864						
EM&V	360,420	365,600	(5,180)	(1.4) %	405,600						
Consulting and Professional Fees		,	(=, ===)	(, ,,	,						
Consulting/Advisory Fees	129,274	197,124	(67,850)	(34.4) %	220,500						
Accounting and Auditing Fees	33,140	35,700	(2,560)	(7.2) %	111,950						
Legal Fees & Related Expenses	215,039	308,000	(92,961)	(30.2) %	336,000						
Total Consulting and Professional Fees	377,453	540,824	(163,371)	(30.2) %	668,450						
Research and Development	95,007	242,917	(147,910)	(60.9) %	265,000						
Rent and Location Related Expenses		_ :_,• : :	(***,***)	(5515) /5							
Rent/Utilities/Maintenance	260,557	277,243	(16,686)	(6.0) %	302,447						
Telephone/Communication	73,562	80,650	(7,088)	(8.8) %	87,982						
Depreciation & Amortization	81,473	112,117	(30,644)	(27.3) %	122,310						
Total-Rent and Location Related Expenses	415,592	470,010	(54,418)	(11.6) %	512,739						

# Budget to Actual Financial Analysis - Investment Business

		FY Ended					
	Δctual					% Variance	06/30/2018 Budget
	Actual		Duager		ψ Variance	/0 Variance	Duuget
					• • •	` '	81,540
	,		•		, ,	` '	92,175
	•		•		(4,612)	, ,	61,500
	53,226		70,753		(17,528)		75,549
	253,791		249,200		4,592	1.8 %	271,854
	72,178		139,195		(67,018)	(48.1) %	151,850
	577,764		679,187		(101,424)	(14.9) %	734,468
	25,000		0		25,000	0.0 %	0
\$	11,064,584	\$	11,560,777	\$	(496,194)	(4.3) %	12,602,740
	0		207,499		(207,499)	(100.0) %	265,000
	48,461		0		48,461	0.0 %	0
	997		91,666		(90,669)	(98.9) %	100,000
\$	49,458	\$	299,165	\$	(249,707)	(83.5) % \$	365,000
\$	18,636,510	\$	15,858,305	\$	2,778,205	17.5 % \$	3,404,679
	(25,130)		71,726		(96,856)	(135.0) %	71,726
	510,207		0		510,207	0.0 %	0
			1,117,052		(501,420)	(44.9) %	1,195,560
	4,081,005				• • •	` ,	1,570,800
\$	5,181,714	\$	2,640,578	\$	2,541,136	96.2 %	
\$	13,454,796	\$	13,217,727	\$	237,069	1.8 % \$	566,593
	\$	72,178 577,764 25,000 \$ 11,064,584  0 48,461 997 \$ 49,458 \$ 18,636,510  (25,130) 510,207 615,632 4,081,005 \$ 5,181,714	71,710 70,671 56,188 53,226 253,791 72,178 577,764 25,000 \$ 11,064,584 \$  0 48,461 997 \$ 49,458 \$  \$ (25,130) 510,207 615,632 4,081,005	Actual         Budget           71,710         74,745           70,671         84,494           56,188         60,800           53,226         70,753           253,791         249,200           72,178         139,195           577,764         679,187           25,000         0           \$ 11,064,584         \$ 11,560,777           0         207,499           48,461         0           997         91,666           \$ 49,458         \$ 299,165           \$ 15,858,305           (25,130)         71,726           510,207         0           615,632         1,117,052           4,081,005         1,451,800           \$ 5,181,714         \$ 2,640,578	Actual         Budget           71,710         74,745           70,671         84,494           56,188         60,800           53,226         70,753           253,791         249,200           72,178         139,195           577,764         679,187           25,000         0           \$ 11,064,584         \$ 11,560,777           \$ 49,458         \$ 299,165           \$ 49,458         \$ 299,165           \$ 18,636,510         \$ 15,858,305           \$ (25,130)         71,726           510,207         0           615,632         1,117,052           4,081,005         1,451,800           \$ 5,181,714         \$ 2,640,578	71,710	O5/31/2018           Actual         Budget         \$ Variance         % Variance           71,710         74,745         (3,035)         (4.1) %           70,671         84,494         (13,823)         (16.4) %           56,188         60,800         (4,612)         (7.6) %           53,226         70,753         (17,528)         (24.8) %           253,791         249,200         4,592         1.8 %           72,178         139,195         (67,018)         (48.1) %           577,764         679,187         (101,424)         (14.9) %           25,000         0         25,000         0.0 %           \$ 11,064,584         \$ 11,560,777         \$ (496,194)         (4.3) %           \$ 48,461         0         48,461         0.0 %           997         91,666         (90,669)         (98.9) %           \$ 49,458         \$ 299,165         \$ (249,707)         (83.5) %           \$ 18,636,510         \$ 15,858,305         \$ 2,778,205         17.5 %           \$ 510,207         0         510,207         0.0 %           615,632         1,117,052         (501,420)         (44.9) %           4,081,005         1,451,800

## Budget to Actual Financial Analysis - Incentive Business

		07/01/2017 Through 05/31/2018								
	-	Actual		Budget		\$ Variance	% Variance	Budget		
Revenue										
Operating Income										
REC Sales		2,391,750		2,223,293		168,457	7.6 %	3,203,562		
Total Operating Income		2,391,750		2,223,293		168,457	7.6 %	3,203,562		
Interest Income		79,249		82,500		(3,251)	(3.9) %	90,000		
Total Revenue	\$	2,470,999	\$	2,305,793	\$	165,206	7.2 %	3,293,562		
Operating Expenses										
Compensation and Benefits										
Employee Compensation		863,634		893,578		(29,944)	(3.4) %	961,140		
Employee Benefits		676,400		679,196		(2,796)	(0.4) %	731,895		
Total Compensation and Benefits		1,540,034		1,572,774		(32,740)	(2.1) %	1,693,035		
Program Development and Administration		996,446		1,300,333		(303,887)	(23.4) %	1,340,000		
Marketing Expense		32,310		49,045		(16,736)	(34.1) %	53,503		
EM&V		17,100		25,000		(7,900)	(31.6) %	25,000		
Consulting and Professional Fees										
Consulting/Advisory Fees		6,987		0		6,988	0.0 %	0		
Legal Fees & Related Expenses		10,861		27,500		(16,640)	(60.5) %	30,000		
Total Consulting and Professional Fees		17,848		27,500		(9,652)	(35.1) %	30,000		
Rent and Location Related Expenses										
Rent/Utilities/Maintenance		56,727		62,766		(6,038)	(9.6) %	68,472		
Telephone/Communication		16,536		18,258		(1,722)	(9.4) %	19,918		
Depreciation & Amortization		17,675		25,383		(7,708)	(30.4) %	27,690		
Total-Rent and Location Related Expenses		90,938		106,407		(15,468)	(14.5) %	116,080		
Office, Computer & Other Expenses										
Office Expense		21,444		16,921		4,522	26.7 %	18,460		
Subscriptions		7,500		10,000		(2,500)	(25.0) %	10,000		
Training & Education		1,543		4,583		(3,039)	(66.3) %	5,000		
IT Operations		56,120		56,417		(298)	(0.5) %	61,546		
Travel, Meeting & Related Expenses		5,860		9,167		(3,307)	(36.1) %	10,000		
Total-Office, Computer & Other Expenses		92,467		97,088		(4,622)	(4.8) %	105,006		
Total Operating Expenses	\$	2,787,143	\$	3,178,147	\$	(391,005)	(12.3) % \$	3,362,624		
Program Incentives and Grants										
EPBB/PBI/HOPBI Incentives		13,498,681		12,238,808		1,259,873	10.3 %	13,329,079		
Incr/(Decr) in Reserve for RSIP Payments		13,190		0		13,190	0.0 %	0		
Total Program Incentives and Grants	\$	13,511,871	\$	12,238,808	\$	1,273,063	10.4 % \$	13,329,079		
Net Revenues Over (Under) Expenses	\$	(13,828,015)	\$	(13,111,162)	\$	(716,853)	5.5 % \$	(13,398,141)		

# Connecticut Green Bank Analysis of Compensation and Benefits

For the Fiscal Year to Date May 31, 2018

		FY 201	18 YTD	Budget	FY 2017 YTD	Prior Year
		Actual	Budget	Variance	Actual	Variance
	Compensation:					
	Full Time Employees	\$ 4,638,432	\$ 4,706,274	\$ (67,842)	\$ 4,434,363	\$ 204,069
	Interns	114,671	96,000	18,671	108,746	5,925
	Temporary Employees	17,955	20,900	(2,945)	48,835	(30,880)
	Total Compensation	\$ 4,771,058	\$ 4,823,174	\$ (52,116)	\$ 4,591,944	\$ 179,113
FY 2018						
Budgeted						
% of						
Salary	Employee Benefits:					
54.0%	State Retirement Plan Contributions	\$ 2,783,193	\$ 2,588,451	\$ 194,743	\$ 2,400,457	\$ 382,736
14.7%	Medical Dental Rx Premiums	628,301	705,941	(77,640)	636,750	(8,449)
6.9%	Life & Disability& WC Premiums	328,002	329,627	(1,625)	311,958	16,044
1.2%	Payroll and Unemployment Taxes	62,552	56,475	6,076	51,194	11,358
76.8%	Total Employee Benefits	\$ 3,802,048	\$ 3,680,493	\$ 121,554	\$ 3,400,359	\$ 401,689
	Total Compensation and Benefits	\$ 8,573,105	\$ 8,503,667	\$ 69,438	\$ 7,992,303	\$ 580,802

### Actual vs. Budget

Employee compensation costs are \$52,116 less than budget. Actuals for full time employees are \$67,842 less than budget, while actuals for interns are \$18,671 greater than budget for a net amount of \$49,171 lower than budget. Actual benefits are 80.0% of full time/intern compensation compared to a budgeted percentage of 76.6%. Actual retirement benefit costs are running 5.0% more than budget due to budgeted retirement benefits not including an additional 3.0% employer matching contribution to the retiree health fund. Insurance premiums and payroll taxes are \$73,188 under budget.

### Actual vs. Prior Year

Compensation and benefit costs increased \$179,113 and \$401,689 respectively over the comparable prior period. Compensation costs for full time employees and interns rose \$204,069 and \$5,925, respectively. The increase in full time employee costs reflects the effect of FY2017 merit and promotion salary increases and separation payments of \$124,137. Actual benefit percentages increased over the prior period from 76.8% to 82.0% of full time employee compensation. Actual contributions to the State employee retirement plan increased from 54.2% to 60.0% of full time employee compensation.

5. Compensation and Benefits Page 11

## Budget to Actual - Compensation & Benefits by Department

		Emplo	-	e Compens 5/31/2018	ati	on		En	-	oyee Benef 05/31/2018	its			C	Con	npensation 05/31/20			
		Actual		Budget		Budget Diff	_	Actual		Budget		Budget Diff		Actual		Budget		Budget Diff	% Var
Program Expenses																			
Statutory & Infrastructure																			
51100-Res Solar PV Invest Prgm		863,634		893,578		(29,944)		676,400		679,196		(2,796)		1,540,034		1,572,774		(32,740)	(2.1) %
51200-Anaerobic Digester Pilot		232,640		149,008		83,632		171,776		116,227		55,549		404,416		265,235		139,181	52.5 %
51300-MicroGrid and CHP Pilot Prgs		111,100		78,073		33,027		85,562		60,896		24,666		196,662		138,969		57,693	41.5 %
51350-Other S&I Initiatives		70,925		133,863		(62,938)		56,185		104,414		(48,229)		127,110		238,277		(111,168)	(46.7) %
52600-SunShot		27,488		22,555		4,932		17,552		17,593		(41)		45,040		40,148		4,893	12.2 %
Total	\$	1,305,787	\$	1,277,077	\$		\$	1,007,475	\$	978,326	\$	29,149	\$	2,313,262	\$	2,255,403	\$	57,859	2.6 %
Commercial, Industrial & Institutional																			
51800-C&I CPACE		585,848		600,298		(14,449)		459,701		461,704		(2,003)		1,045,549		1,062,001		(16,452)	(1.5) %
51810-C&I New Product Develop.		193,367		205,931		(12,564)		147,285		160,626		(13,341)		340,652		366,558		(25,906)	(7.1) %
51820-SL2/SL3 Commercial		104,836		95,275		9,561		83,897		74,315		9,582		188,733		169,591		19,143	11.3 %
51930-Institutional ESA		61,526		72,135		(10,609)		48,733		56,265		(7,532)		110,259		128,399		(18,141)	(14.1) %
53002-SBEA		105,424		100,992		4,432		83,517		78,774		4,743		188,941		179,766		9,175	5.1 %
51830-Kresge		32,897		53,669		(20,772)		26,057		41,861		(15,804)		58,954		95,530		(36,576)	(38.3) %
Total	\$	1,083,898	\$	1,128,300	\$	(44,401)	\$	849,190	\$		\$	(24,355)	\$	1,933,088	\$	2,001,845	\$	(68,757)	(3.4) %
Residential	·	, ,		, ,		( , ,	Ċ	•	·	•		, , ,	·	, ,	·			( , ,	,
52100-Solar Loan I Pgm-Residential		17,509		17,670		(161)		13,869		13,783		86		31,378		31,453		(75)	(0.2) %
52101-Solar Lease II Pgm-Residential		73,440		64,652		8,788		58,172		50,429		7,743		131,612		115,081		16,531 <sup>°</sup>	14.4 %
52210 Smart-E Loans		317,174		293,995		23,179		244,117		218,049		26,068		561,292		512,044		49,248	9.6 %
52220-LMI Programs		251,144		234,312		16,832		198,914		182,764		16,151		450,057		417,075		32,982	7.9 %
52215-Resi New Products		12,096		12,171		(75)		9,581		9,493		87		21,676		21,665		11	0.1 %
Total	\$	671,363	\$	622,800	\$	48,563	\$	524,653	\$	474,518	\$	50,135	\$	1.196.015	\$	1,097,318	\$	98,697	9.0 %
Multifamily		,		,	·	•	Ċ	•	·	•		,	·		·	, ,		,	
52230-CHIF Multifamily PEL		62,498		65,003		(2,505)		49,501		50,703		(1,202)		112,000		115,706		(3,706)	(3.2) %
52250-Multifamily Programs		353,488		405,595		(52,106)		279,938		309,538		(29,600)		633,426		715,133		(81,707)	(11.4) %
Total	\$	415,986	\$	470,598	\$	(54,611)	\$		\$		\$	(30,802)	\$	745,426	\$	830,839	\$	(85,413)	(10.3) %
Clean Energy Finance	•	,	•	,	•	(,,	•	,	•	,	•	(,,	•	,	•	,	•	(,,	(1010) //
52200-Clean Energy Financing Pr		102,294		113,179		(10,885)		80,998		68,696		12,303		183,292		181,874		1,418	0.8 %
52303-Solar Lease 3		184,679		193,326		(8,648)		146,297		144,267		2,029		330,976		337,594		(6,618)	(2.0) %
52400-Lead by Example-State		54,239		30,208		24,030		42,959		23,562		19,397		97,198		53,770		43,428	80.8 %
52304-Onyx		60,201		91,973		(31,771)		47,689		71,739		(24,050)		107,890		163,711		(55,822)	(34.1) %
52305-CGB Meriden Hydro		42,877		43,116		(239)		33,962		33,630		332		76,839		76,747		93	0.1 %
Total	\$	444,290	\$	471,802	\$	(27,513)	\$	351,905	\$		\$	10,011	\$	796,195	\$	813,696	\$	(17,501)	(2.2) %
Total Program Expenses	\$		_		\$	(49,253)			\$		\$	34,138	\$	6,983,986	\$	6,999,101	_	(15,115)	(0.2) %
Administrative Expenses	<u>*</u>	849,734	_		\$	(2,863)	_	739,386	\$	651,969	\$	87,416	\$	1,589,119	\$	1,504,566	_	84,553	5.6 %
Total Program & Admin Expenses	\$		_	4,823,174	\$		_			3,680,493	\$	121,554	\$	8,573,105	<u> </u>		_	69,438	0.8 %
Total I Togram & Admin Expenses	Ψ	-,,,,,,,,,	Ψ	-,020,174	Ψ	(02,110)	Ψ	3,002,040	Ψ	3,000,400	Ψ	121,004	Ψ_	3,373,103	Ψ	3,000,007	<u>~</u>	00,700	J.U /0

## Statement of Cash Flows

		05/31/2018	07/01/2017 Through 05/31/2018	07/01/2016 Through 05/31/2017
		Current Month	FY to Date	Prior FY to Date
Cash Flows from Operating Activities:				
Net Income (Loss)	\$	(786,224) \$	(373,219) \$	1,947,373
Adjustments to reconcile net loss to net cash used in operating activities:	Ψ	(100,221) <b>V</b>	(0/0,2/0) ψ	1,017,070
Depreciation		4,937	93,298	83,409
Changes in Operating Assets and Liabilities:				
Changes in Net Accounts Receivable		216,350	(952,078)	1,647,236
Changes in Prepaid Expenses		12,610	11,539	32,508
Changes in Other Assets		(29,563)	25,356	2,270,453
Changes to Accounts Payable		445,378	(3,886,476)	(900,090)
Changes to Accrued Liabilities		146,198	753,907	(502,930)
Changes to Other Liabilities		137,879	(28,328)	51,628,682
Net cash provided by operating Activities		147,565	(4,356,001)	56,206,641
Cash Flows from Investing Activities:				
Capital Expenditures		(5,240)	(18,390)	(32,287)
Net sales (purchases) of ST investements		0	2,582,383	0
Purchase of long term investments and other assets		473,206	(2,751,273)	(5,229,359)
Investment in Subsidiary		0	0	(100)
Net cash provided by investing activities		467,966	(187,280)	(5,261,746)
Cash Flows from Financing Activities:				
Changes to Intercompany				
Changes to Intercompany Receivable		54,652	(3,754,752)	(4,107,297)
Changes to Intercompany Payable		64,177	(118,047)	424,961
Changes in Debt Proceeds		0	9,048,311	2,957,971
Net cash provided by financing activities		118,829	5,175,512	(724,365)
Net increase (decrease) in cash		734,360	632,231	50,220,530
Cash - Beginning of Period		36,923,302	37,025,431	39,462,829
Cash - End of Period	\$	37,657,662 \$	37,657,662 \$	38,871,883
Cash				
Cash - Unrestricted		4,724,934	4,724,934	5,328,947
Cash - Restricted		32,932,728	32,932,728	33,542,936
Total Cash	\$	37,657,662 \$	37,657,662 \$	38,871,883

## Connecticut Green Bank Summary of Unfunded Commitments

As of May 31, 2018 (in thousands)

						Non			
			PBI-Solar	HOPBI	CPACE	CPACE			
	EPBB	PBI	Lease 2	Program	Loans	Loans	All Projects		
	Balance	Balance	Increase /						
	05/31/2018	05/31/2018	05/31/2018	05/31/2018	05/31/2018	05/31/2018	05/31/2018	06/30/2017	(Decrease)
Solar - SHREC Eligible	3,301	31,130	2,015	165	0	0	36,610	33,208	3,402
Solar - Not SHREC Eligible	111	13,439	2,072	186	0	0	15,808	19,196	(3,387)
AD/CHP Programs	0	0	0	0	0	4	4	18,464	(18,462)
Multifamily/LMI Solar PV & EE	0	0	0	0	0	2,307	2,308	3,180	(871)
Fuel Cells	0	0	0	0	0	5,000	5,000	5,000	0
CPACE	0	0	0	0	9,534	0	9,534	2,089	7,445
Other Technologies	0	0	0	0	0	272	272	272	0
Education and Outreach	0	0	0	0	0	0	0	59	(59)
Total Unfunded Commitments	\$ 3,412	\$ 44,569	\$ 4,087	\$ 351	\$ 9,534	\$ 7,583	\$ 69,536	\$ 81,468	\$ (11,932)

# Connecticut Green Bank Schedule of Loan Guarantees

As of May 31, 2018

Guarantor	Issuer	Beneficiary of Guaranty	Relationship of guarantor to Issuer	Type of obligation guaranteed	Maximum amount of guaranty	Obligations guaranteed as of 06/30/2017	Obligations guaranteed as of 05/31/2018	Funds Deposited in Pledge Account
CGB	Owners of multifamily dwellings in Connecticut		Issuers participate in program administered by CGB and the Housing Development Fund to install energy upgrades in multifamily dwellings.	Commercial and consumer loan products with various terms	\$ 5,000,000	\$ 1,323,325	\$ 3,743,966	\$ -
CGB	Developers of clean energy projects in Connecticut	webster Bank	Issuers participate in programs administered by CGB to install energy equipment at residential and commercial sites.	Commercial loans with various terms	5,000,000	-	-	-
CGB	CT Solar Loan I LLC		Blended unit of primary government.	Non revolving term note	2,510,837	1,969,173	1,595,701	-
	CT Energy Efficiency Finance Company	Webster Bank	Issuer provides loans for the installation of energy efficiency measures in single family homes to credit challenged households to meet the goals outlined in CGB's Comprehensive Plan.	Guarantee limited to \$600,000 on revolving credit note of \$6,000,000	600,000	600,000	600,000	602,501
CGB	New England Hydropower Company	webster Bank	Issuer is the developer of hydropower project in Connecticut approved by the CGB Board of Directors.	Line of Credit	300,000	300,000	300,000	602,454
Holdings	CEFIA Solar Services Inc.	CT Housing Finance Authority (CHFA)	Holdings is the sole shareholder of Services and an affiliate of CGB.	Promissory Note for funds received from CHFA upon their issuance of Qualified Energy Conservation Bonds (QECBs) for State Sponsored Housing Projects (SSHP)	1,895,807	1,840,513	1,753,621	-
		1		,	\$15,306,644	\$ 6,033,011	\$ 7,993,288	\$ 1,204,955

8. Summary of Loan Guarantees Page 15

# Connecticut Green Bank Executive Summary - Affiliates May 2018

### Overview

This financial package contains financial information for the Connecticut Green Bank's affiliate companies through May 2018. These entities operate on a calendar year basis, with the exception of CGB Meriden Hydro which operates on CGB's fiscal year.

- The May 2018 Balance Sheets are compared to the balance sheet for the same period in the prior year.
- The May 2018 Profit and Loss Statements compare the current year operations to the same period in the prior year.

### **CEFIA Holdings LLC**

<u>Balance Sheet</u>: Total assets of \$18.8m decreased by \$2.3m from the prior year due decreases in commercial PPA projects of \$6.4m and advances to affiliates of \$0.7m, partially offset by an increase in cash of \$4.8m.

<u>Profit and Loss</u>: Net Income of \$339k is \$416k above the prior year due to higher project margins. The SL2 Commercial Lease program completed in Jun-17, and the SL3 Commercial Program began in Aug-17. Sales of Commercial systems worth \$1.6m are in line with the prior year. Gross Margin of 21.1% is 24.2pts above the prior year due to higher profit margins on recent SL3 projects and true-ups for Daughters of Mary.

### CT Solar Loan I LLC

<u>Balance Sheet</u>: Total assets of \$6.3m decreased by \$0.5m from the prior year due to a decrease in Residential Solar Loans.

Profit and Loss: Net Income of \$15k is consistent with the prior year.

### **CEFIA Solar Services, Inc.**

<u>Balance Sheet</u>: Total assets of \$38.6m increased by \$3.1m from the prior year. An increase the investment in CT Solar Lease 3 of \$7.4m is partially offset by decreases in receivables from CT Solar Lease 2 of \$2.5m, cash of \$1.4m and other receivables of \$0.4m.

<u>Profit and Loss</u>: The Net Loss of \$2k is \$56k below the prior year due to current year SL3 Commitment Fees.

#### CT Solar Lease 2 LLC

<u>Balance Sheet</u>: Total assets of \$78.6m decreased by \$6.9m from the prior year. Energy equipment decreased by \$2.5m; Commercial projects and Residential PV systems decreased by \$1.5m and \$1.0m, respectively. Cash decreased by \$4.5m and Current assets increased by \$0.2m.

<u>Profit and Loss</u>: The Net Loss of \$593k is \$13k below the prior year. Total revenue is \$12k above prior year due to higher LREC/ZREC income of \$139k and higher rental income of \$35k, partially offset by lower PPA income of \$94k and PBI income of \$65k. Total operating expenses are in line with prior year. Depreciation, Interest and Taxes are \$12k above prior year due to higher interest expense of \$43k, partially offset by lower depreciation/accretion expense of \$24k.

### **CT Solar Lease 3 LLC**

<u>Balance Sheet</u>: Total assets are \$12.1m. Commercial energy equipment is \$11.2m, the Asset Retirement Obligation is \$0.5m and Current Assets are \$0.4m. To date, four tranches of commercial projects have been sold to SL3.

<u>Profit and Loss</u>: The Net Loss is \$9k. Total income of \$162k is comprised of LREC/ZREC income of \$39k and PPA revenue of \$123k. Depreciation is \$148k.

### **CGB Meriden Hydro LLC**

Balance Sheet: Total Assets of \$3.8m represent the transfer of the Meriden Hanover Pond Hydroelectric facility to the LLC on 8/31.

<u>Profit and Loss</u>: The Net loss of \$0.2m represents depreciation of \$109k, O&M expenses of \$143k, Insurance of \$12k and legal fees of \$5k. We have billed \$38k for PPA payments retroactive to 3/7/17 in the CGB legal entity which were received in May-18.

9. Executive Summary - Affiliates Page 16

# CEFIA Holdings LLC

## **Balance Sheet**

As of May 31, 2018

	As of 05/31/2018		As of 05/31/2017		YOY \$ Change		As of 04/30/2018		MTD \$ Change
Assets									
Current Assets									
Cash and Cash Equivalents-Unrestricted	9,683,485		5,094,783		4,588,703		9,727,600		(44,115)
Other Current Assets	106,908		39,575		67,331		422,860		(315,952)
Total Current Assets	 9,790,393		5,134,358		4,656,034		10,150,460		(360,067)
Energy Equipment	 -,,	-		-	, ,				(,,
Commercial PPA Projects - Costs in Excess of Billings	325,968		6,712,519		(6,386,550)		189,592		136,376
Total Energy Equipment	 325,968		6,712,519		(6,386,550)		189,592		136,376
Other Assets	 ,				(,,,,		·		· · · · · · · · · · · · · · · · · · ·
Investment in/Advances to Affiliates	7,323,026		8,005,021		(681,995)		7,323,026		0
Performance Assurance Deposits	904		0		904		904		0
Solar Thermal Equipment	100,166		133,555		(33,389)		100,166		0
Restricted Assets									
Cash - Restricted - Escrow and Custodial Liabilities	 1,241,701		1,069,422		172,279		1,221,889		19,812
Total Restricted Assets	1,241,701		1,069,422		172,279		1,221,889		19,812
Total Other Assets	8,665,797		9,207,998		(542,201)		8,645,985		19,812
Total Assets	\$ 18,782,158	\$	21,054,875	\$	(2,272,717)	\$	18,986,037	\$	(203,879)
Liabilities						-		-	
Current Liabilities									
Accrued Expenses	4,750		4,750		0		4,750		0
Deferred Revenue	690,310		455,547		234,763		974,312		(284,002)
Custodial Liability	0		1,669		(1,669)		0		0
Other Current Liabilities	 1,237		0		1,237		0		1,237
Total Current Liabilities	696,297		461,966		234,331		979,062		(282,765)
Other Liabilities									
Due to Affiliates	7,265,344		10,365,344		(3,100,000)		7,265,344		0
Contractor Holdbacks	 1,241,701		1,069,422		172,279		1,221,889		19,812
Total Other Liabilities	8,507,045		11,434,766		(2,927,721)		8,487,233		19,812
Total Liabilities	\$ 9,203,342	\$	11,896,732	\$	(2,693,390)	\$	9,466,295	\$	(262,953)
Equity		'	_		_		_		_
Member Contributions									
CGB Capital Contributions	99,000		99,000		0		99,000		0
CI Capital Contributions	 1,000		1,000		0		1,000		0
Total Member Contributions	100,000		100,000		0		100,000		0
Members Equity - Prior Year	9,139,504		9,135,071		4,433		9,139,504		0
Net Income (Loss)	 339,312		(76,928)		416,240		280,238		59,074
Total Members Equity	\$ 9,578,816	\$	9,158,143	\$	420,673	\$	9,519,742	\$	59,074
Liabilities and Equity	\$ 18,782,158	\$	21,054,875	\$	(2,272,717)	\$	18,986,037	\$	(203,879)

10. CEFIA Holdings LLC Balance Sheet

# CEFIA Holdings LLC

## Profit & Loss Statement

Year to Date ended May 31, 2018

(Calendar Year Entity)

			01/01/2018	01/01/2017	
			Through	Through	
	 05/31/2018		05/31/2018	05/31/2017	\$ Change
	Current Month		Current Year to Date	 Prior Year to Date	 Year over Year
Sales					
Sales-Commercial PPA Projects	284,002		1,581,560	1,686,333	(104,773)
Total-Sales	\$ 284,002	\$	1,581,560	\$ 1,686,333	\$ (104,773)
Cost of Sales			_	 _	
Cost of Sales - Commercial PV Systems	226,420		1,248,418	1,738,928	(490,510)
Total Cost of Sales	\$ 226,420	\$	1,248,418	\$ 1,738,928	\$ (490,510)
Gross Profit	\$ 57,582	\$	333,142	\$ (52,595)	\$ 385,737
Expenses					
Operating Expenses					
Program Development and Administration					
Project Inspections	0		0	6,710	(6,710)
Total Program Development and Administration	 0		0	6,710	(6,710)
Lease Origination Services			_	 _	 
Lease Origination Fees	0		0	300	(300)
Monthly Bank/Servicing Fees	290		1,355	2,153	(798)
Total Lease Origination Services	290		1,355	2,453	(1,098)
Consulting and Professional Fees					
Consulting/Advisory Fees	0		1,667	18,990	(17,322)
Legal Fees & Related Expenses	0		0	1,134	(1,134)
Total Consulting and Professional Fees	0		1,667	20,124	(18,456)
Total Operating Expenses	290		3,022	29,287	(26,264)
Other (Income) Expense	(1,782)	_	(9,193)	(4,954)	(4,240)
Total Expenses	\$ (1,492)	\$	(6,171)	\$ 24,333	\$ (30,504)
Net Income (Loss)	\$ 59,074	\$	339,313	\$ (76,928)	\$ 416,240

# CT Solar Loan I LLC

# Balance Sheet

As of May 31, 2018

	 As of 05/31/2018	 As of 05/31/2017	YOY \$ Change	 As of 04/30/2018	 MTD \$ Change
Assets					
Current Assets					
Cash and Cash Equivalents-Unrestricted	3,185,462	3,085,079	100,383	3,139,299	46,164
Other Current Assets					
Other Receivables	 17,219	 21,146	 (3,927)	 16,117	 1,101
Total Other Current Assets	 17,219	 21,146	(3,927)	 16,117	 1,101
Total Current Assets	 3,202,681	 3,106,225	96,456	 3,155,416	 47,265
Other Assets					
Residential Solar Loans-Complete	2,750,239	3,339,069	(588,829)	2,816,162	(65,923)
Restricted Assets					
Cash - Restricted - Loan Loss Reserve	 300,000	 300,000	0	 300,000	 0
Total Restricted Assets	 300,000	 300,000	 0	 300,000	 0
Total Other Assets	 3,050,239	 3,639,069	 (588,829)	 3,116,162	(65,923)
Total Assets	\$ 6,252,920	\$ 6,745,294	\$ (492,373)	\$ 6,271,578	\$ (18,658)
Liabilities					
Current Liabilities					
Accounts Payable	0	0	0	2,174	(2,174)
Accrued Expenses and Other Current Liabilities	1,994	3,192	(1,198)	2,224	(230)
Total Current Liabilities	1,994	3,192	(1,198)	4,398	(2,404)
Other Liabilities					
Due to Affiliates					
Due to CGB	4,072,500	4,072,500	0	4,072,500	0
Total Due to Affiliates	 4,072,500	 4,072,500	 0	4,072,500	0
Notes Payable	 _		 _	_	
Note Payable-Solar Mosaic	377,801	524,295	(146,494)	393,968	(16,167)
Note Payable-Reinvestment Fund	1,595,701	1,976,697	(380,996)	1,602,435	(6,734)
Total Notes Payable	 1,973,502	 2,500,992	 (527,490)	1,996,403	(22,901)
Total Other Liabilities	 6,046,002	6,573,492	(527,490)	6,068,903	(22,901)
Total Liabilities	\$ 6,047,996	\$ 6,576,684	\$ (528,688)	\$ 6,073,301	\$ (25,305)
Equity					
Members Equity - Prior Year	189,767	155,085	34,683	189,767	0
Net Income (Loss)	15,157	13,525	1,631	8,510	6,647
Total Equity	\$ 204,924	\$ 168,610	\$ 36,314	\$ 198,277	\$ 6,647
Liabilities and Equity	\$ 6,252,920	\$ 6,745,294	\$ (492,373)	\$ 6,271,578	\$ (18,658)

12. CT Solar Loan I LLC Balance Sheet

## CT Solar Loan I LLC

## Profit & Loss Statement

Year to Date ended May 31, 2018

(Calendar Year Entity)

			01/01/2018	01/01/2017	
			Through	Through	
	05/31/2018		05/31/2018	 05/31/2017	\$ Change
	Current Month	С	Current Year to Date	Prior Year to Date	 Year over Year
Revenue					
Interest Income	16,664		80,703	96,307	(15,604)
Other Income	20		(12)	198	(209)
Total Revenue	\$ 16,684	\$	80,691	\$ 96,505	\$ (15,813)
Expenses					
Loan Origination Services					
Loan Origination Fees	(6)		2,649	3,159	(510)
Monthly Bank/Servicing Fees	34		9,493	11,660	(2,167)
Total Loan Origination Services	28		12,142	14,819	(2,677)
Depreciation, Amortization, Interest & Taxes	_		_	_	 _
Interest Expense	10,009		53,393	68,161	(14,768)
Total Depreciation, Amortization, Interest & Taxes	10,009		53,393	 68,161	(14,768)
Total Expenses	\$ 10,037	\$	65,535	\$ 82,980	\$ (17,445)
Operating Income/(Loss)	\$ 6,647	\$	15,157	\$ 13,525	\$ 1,632
Net Income (Loss)	\$ 6,647	\$	15,157	\$ 13,525	\$ 1,632

## CEFIA Solar Services Inc.

## **Balance Sheet**

As of May 31, 2018

	As of 05/31/2018		As of 1/2017	YOY \$ Change	As o 04/30/2018	
Assets						
Current Assets						
Cash and Cash Equivalents-Unrestricted	611,996	1,99	8,305	(1,386,310)	601,289	10,706
Other Current Assets	0	48	7,533	(487,533)	0	C
Total Current Assets	611,996	2,48	5,838	(1,873,843)	601,289	10,706
Other Assets						
Investment in/Advances to Affiliates						
Due From CT SL2 - SSHP Sub Debt	1,921,239	1,87	4,377	46,864	1,917,202	4,038
Due From CT SL2 - WC Advance	5,950,000	8,45	0,000	(2,500,000)	5,950,000	
Due From CT SL2 - Admin Fee	0		0	0	11,039	(11,038
Investment in CT Solar Lease 2 LLC	19,182,460		2,459	0	19,182,459	C
Investment in CT SL2 LLC - Non-ARRA Funds	3,500,000	3,50	0,000	0	3,500,000	
Investment in CT Solar Lease 3 LLC	7,422,382		0	7,422,382	7,422,382	
Total Investment in/Advances to Affiliates	37,976,081	33,00	6,836	4,969,246	37,983,082	(7,000
Total Other Assets	37,976,081	33,00	6,836	4,969,246	37,983,082	(7,000
Total Assets	\$ 38,588,077	\$ 35,49	2,674 \$	3,095,403	\$ 38,584,371	\$ 3,706
Liabilities						
Current Liabilities						
Accrued Expenses	19,834		8,601	11,233	14,135	5,699
Total Current Liabilities	19,834		8,601	11,233	14,135	5,699
Other Liabilities			<del></del> _	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
Due to Affiliates						
Due to CGB	33,266,325	30,16	6,325	3,100,000	33,266,325	C
Due to CEFIA Holdings	2,994,126	2,99	4,126	0	2,994,126	
Total Due to Affiliates	36,260,451	33,16	0,451	3,100,000	36,260,451	C
Notes Payable	1,753,621	1,84	8,411	(94,791)	1,761,520	(7,900
Total Other Liabilities	38,014,072	. <del></del>	8,862	3,005,209	38,021,971	(7,900
Total Liabilities	\$ 38,033,906	. <del></del>	7,463 \$			· <del></del>
Equity						
Common Stock	1		1	0	1	C
Additional Paid In Capital	99		99	0	99	C
Retained Earnings	552,400	41	7,442	134,958	552,400	-
Net Income (Loss)	1,672		7,669	(55,997)	(4,235	
Total Equity	\$ 554,172		5,211 \$			<u> </u>
Liabilities and Equity	\$ 38,588,077		2,674 \$		\$ 38,584,371	
			,, · · · · ·	-,,		

## CEFIA Solar Services Inc.

## Profit & Loss Statement

Year to Date ended May 31, 2018

(Calendar Year Entity)

			01/01/2018		01/01/2017		
			Through		Through		
	05/31/2018		05/31/2018	05/31/2017			\$ Change
	 Current Month	Cı	urrent Year to Date		Prior Year to Date		Year over Year
Revenue							
Administrative Services Fee	11,038		55,191		53,845		1,346
Interest Income	4,237		20,666		23,193		(2,526)
Total Revenue	\$ 15,275	\$	75,857	\$	77,038	\$	(1,180)
Expenses							
Operating Expenses							
Commitment Fees	5,715		55,804		0		55,804
Total Operating Expenses	5,715		55,804		0		55,804
Depreciation, Amortization, Interest & Taxes	 						
Interest Expense-CHFA Note	3,654		18,432		19,419		(987)
State Tax Filing Fees	0		(50)		(50)		0
Total Depreciation, Amortization, Interest & Taxes	3,654		18,382		19,369		(987)
Total Expenses	\$ 9,369	\$	74,186	\$	19,369	\$	54,817
Net Income (Loss)	\$ 5,906	\$	1,672	\$	57,669	\$	(55,997)

## CT Solar Lease 2 LLC

## **Balance Sheet**

As of May 31, 2018

		As of	YOY	As of	MTD
	05/31/2018	05/31/2017	\$ Change	04/30/2018	\$ Change
Assets				_	_
Current Assets					
Cash and Cash Equivalents-Unrestricted	1,742,872	6,211,995	(4,469,123)	1,576,918	165,954
Other Current Assets	1,1 12,012	0,211,000	(1,100,120)	1,010,010	100,001
Accounts Receivable	46,383	117,351	(70,969)	74,966	(28,584)
Other Receivables	566,511	329,307	237,205	608,462	(41,950)
Prepaid Assets	579,747	503,124	76,623	589,660	(9,913)
Total Other Current Assets	1,192,641	949,782	242,859	1,273,088	(80,447)
Total Current Assets	2,935,513	7,161,777	(4,226,264)	2,850,006	85,507
Energy Equipment	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
Residential PV Systems - In Service, net	39,388,762	40,845,494	(1,456,733)	39,510,156	(121,394)
Commercial Systems (PPA & PV) - In Service, net	28,531,465	29,313,097	(781,631)	28,616,601	(85,136)
Commercial Systems (PPA & PV) - In Construction	0	240,000	(240,000)	0	0
Total Energy Equipment	67,920,227	70,398,591	(2,478,364)	68,126,757	(206,530)
Other Assets					
Investment in/Advances to Affiliates					
Due From CGB - PBI	389,818	424,961	(35,143)	325,640	64,177
Total Investment in/Advances to Affiliates	389,818	424,961	(35,143)	325,640	64,177
Deferred Financing Fees, net	346,552	375,232	(28,680)	348,943	(2,390)
Performance Assurance Deposits	2,941	39,287	(36,346)	2,941	0
Asset Retirement Obligation, net	2,458,431	2,517,122	(58,691)	2,458,431	0
Restricted Assets					
Cash - Restricted - O&M Reserve	1,000,001	1,000,000	0	1,000,000	0
Cash - Restricted - Loan Loss Reserve	3,500,000	3,500,000	0	3,500,000	0
Total Restricted Assets	4,500,001	4,500,000	0	4,500,000	0
Total Other Assets	7,697,743	7,856,602	(158,860)	7,635,955	61,787
Total Assets	\$ 78,553,483	\$ 85,416,970	\$ (6,863,488)	\$ 78,612,718	(59,236)
Liabilities					
Current Liabilities					
Accounts Payable	2,497	0	2,497	0	2,497
Accrued Expenses	913,986	1,010,712	(96,726)	802,822	111,164
Deferred Revenue	826,712	875,804	(49,092)	830,804	(4,091)
Accrued Interest - CCB Note	295,297	232,442	62,855	289,948	5,348
Other Current Liabilities	803	62	741	(10,103)	10,906
Total Current Liabilities	2,039,295	2,119,020	(79,725)	1,913,471	125,824

# CT Solar Lease 2 LLC

## **Balance Sheet**

As of May 31, 2018

	As of	As of	:	YOY	As of	MTD
	 05/31/2018	 05/31/2017		\$ Change	 04/30/2018	 \$ Change
Other Liabilities						
Due to Affliates						
Due to CGB	10,932	235,064		(224,132)	10,933	0
Due to CEFIA Holdings	0	2,710,795		(2,710,795)	0	0
Due to CEFIA Solar Services	0	0		0	11,038	(11,038)
Due to Managing Member - WC Advances	5,950,000	8,450,000		(2,500,000)	5,950,000	0
Due to Managing Member - SSHP Sub Debt	1,921,240	1,874,377		46,863	1,917,202	4,037
Total Due to Affiliates	7,882,172	13,270,236		(5,388,064)	7,889,173	(7,001)
Notes Payable						
Note Payable-CGB	2,300,000	2,300,000		0	2,300,000	0
Note Payable-First Niagara	23,665,467	23,907,075		(241,608)	23,665,466	0
Total Notes Payable	25,965,467	26,207,075		(241,608)	25,965,466	0
Asset Retirement Obligation	3,042,096	2,946,613		95,483	 3,042,097	0
Total Other Liabilities	 36,889,735	42,423,924		(5,534,189)	 36,896,736	(7,001)
Total Liabilities	\$ 38,929,030	\$ 44,542,944	\$	(5,613,914)	\$ 38,810,207	\$ 118,823
Deferred Inflows of Resources						
Fair Value - Interest Rate Swap	299,459	573,448		(273,990)	299,459	0
Total Deferred Inflows of Resources	\$ 299,459	\$ 573,448	\$	(273,990)	\$ 299,459	\$ 0
Equity						
Member Contributions & Distributions						
Capital Contributions - Firstar Development	26,137,446	25,019,800		1,117,646	26,137,446	0
Capital Contributions - CEFIA Solar Services	19,182,459	19,182,459		0	19,182,459	0
Capital Contributions - CEFIA Solar Services-Non-ARRA	3,500,000	3,500,000		0	3,500,000	0
Priority Return-Firstar Development	(1,161,062)	(657,017)		(504,045)	(1,161,062)	0
Prepaid Priority Return-Firstar Development	(74,479)	(74,478)		0	(74,479)	0
Deferred Syndication Costs	(853,480)	(853,480)		0	(853,480)	0
Total Member Contributions, Net	46,730,884	46,117,284		613,601	 46,730,884	0
Members Equity - Prior Year	 (6,812,502)	 (5,236,431)		(1,576,072)	 (6,812,502)	 0
Net Income (Loss)	(593,388)	(580,275)		(13,113)	(415,329)	(178,059)
Total Members Equity	\$ 39,324,994	\$ 40,300,578	\$	(975,584)	\$ 39,503,053	\$ (178,059)

16. CT Solar Lease 2 Balance Sheet

## CT Solar Lease 2 LLC

## Profit & Loss Statement

Year to Date ended May 31, 2018

Calendar	V00"	[mtited	
Caleridar	rear		

				01/01/2018	01/01/2017			
				Through		Through		
		05/31/2018		05/31/2018		05/31/2017		\$ Change
		Current Month		Current Year to Date		Prior Year to Date		Year over Year
Revenue								
Rental Income		127,491		628,057		593,196		34,861
PBI Income		64,178		360,177		424,960		(64,783)
PPA Income		(49,170)		250,773		344,632		(93,859)
LREC/ZREC Income		44,593		324,593		185,168		139,425
Interest Income		1,873		6,718		10,117		(3,399)
Total Revenue	\$	188,965	\$	1,570,318	\$	1,558,073	\$	12,245
Expenses				_		_		
Operating Expenses								
Implementation Fees		0		1,531		359		1,172
Lease Origination Services		7,464		40,864		48,049		(7,185)
Consulting and Professional Fees		64		26,094		20,980		5,114
Insurance		23,811		119,056		99,126		19,930
Commitment Fees		0		0		8,467		(8,467)
Adminstrative Services Fee		11,038		55,191		53,845		1,346
Warranty Management		97,285		486,851		466,833		20,018
Other Expenses		0		0		18,513		(18,513)
Total Operating Expenses		139,662		729,587		716,172		13,415
Depreciation, Amortization, Interest & Taxes				_		_		
Depreciation-Energy Equipment		206,531		1,032,652		1,037,839		(5,188)
Accretion Expense-Energy Equipment		0		0		18,772		(18,771)
Amortization-Financing Fees		2,390		11,950		11,950		0
Interest Expense		18,376		388,952		345,479		43,473
Use Tax		65		565		8,136		(7,571)
Total Depreciation, Amortization, Interest & Taxes	-	227,362		1,434,119		1,422,176		11,943
Total Expenses	\$	367,024	\$	2,163,706	\$	2,138,348	\$	25,358
Net Income (Loss)	\$	(178,059)	\$	(593,388)	\$	(580,275)	\$	(13,113)

# CT Solar Lease 3 LLC

## **Balance Sheet**

As of May 31, 2018

	As of	As of	YOY	As of	MTD
	05/31/2018	05/31/2017	\$ Change	04/30/2018	\$ Change
Assets					
Current Assets					
Cash and Cash Equivalents-Unrestricted	185,375	0	185,375	135,845	49,529
Other Current Assets					
Accounts Receivable	90,078	0	90,078	81,059	9,020
Other Receivables	115,560	0	115,560	74,200	41,360
Prepaid Assets	2,322	0	2,322	2,902	(580)
Total Other Current Assets	207,960	0	207,960	158,161	49,800
Total Current Assets	393,335	0	393,335	294,006	99,329
Energy Equipment					
Commercial Systems (PPA & PV) - In Service, net	11,217,040	0	11,217,040	11,248,894	(31,854)
Total Energy Equipment	11,217,040	0	11,217,040	11,248,894	(31,854)
Other Assets	-	-		-	· · · · · · · · · · · · · · · · · · ·
Performance Assurance Deposits	4,055	0	4,055	5,936	(1,881)
Asset Retirement Obligation, net	455,575	0	455,575	455,575	0
Total Other Assets	459,630	0	459,630	461,511	(1,881)
Total Assets	\$ 12,070,005	\$ 0	\$ 12,070,005	\$ 12,004,411	\$ 65,594
Liabilities					
Current Liabilities					
Accounts Payable	13,665	0	13,665	0	13,665
Accrued Expenses	26,480	0	26,480	26,480	0
Deferred Revenue	136,421	0	136,421	136,420	0
Total Current Liabilities	176,566	0	176,566	162,900	13,665
Other Liabilities					
Due to Affiliates					
Due to CGB	1,000	0	1,000	1,000	0
Due to CEFIA Holdings	2,028,800	0	2,028,800	2,028,800	0
Total Due to Affiliates	2,029,800	0	2,029,800	2,029,800	
Asset Retirement Obligation	467,312	0	467,312	467,313	0
Total Other Liabilities	2,497,112	0	2,497,112	2,497,113	0
Total Liabilities	\$ 2,673,678		\$ 2,673,678		\$ 13,665

18. CT Solar Lease 3 Balance Sheet

# CT Solar Lease 3 LLC

# Balance Sheet

As of May 31, 2018

	As of	As of	YOY	As of	MTD
	05/31/2018	05/31/2017	\$ Change	04/30/2018	\$ Change
Equity					
Member Contributions & Distributions					
Capital Contributions - Firstar Development	2,374,799	0	2,374,799	2,374,799	0
Capital Contributions - CEFIA Solar Services	7,422,383	0	7,422,383	7,422,383	0
Priority Return-Firstar Development	(18,766)	0	(18,766)	(18,766)	0
Deferred Syndication Costs	(313,613)	0	(313,613)	(313,613)	0
Total Member Contributions, Net	9,464,803	0	9,464,803	9,464,803	0
Members Equity - Prior Year	(77,972)	0	(77,972)	(77,972)	0
Net Income (Loss)	9,496	0	9,496	(42,432)	51,929
Total Members Equity	<b>\$</b> 9,396,327 <b>\$</b>	0 \$	9,396,327	\$ 9,344,399	\$ 51,929

18. CT Solar Lease 3 Balance Sheet

## CT Solar Lease 3 LLC

## Profit & Loss Statement

Year to Date ended May 31, 2018

(Calendar Year Entity)

			01/01/2018	01/01/2017	
			Through	Through	
	05/31/2018		05/31/2018	05/31/2017	\$ Change
	<b>Current Month</b>	C	urrent Year to Date	Prior Year to Date	Year over Year
Revenue					
PPA Income	85,493		123,208	0	123,208
LREC/ZREC Income	(1,134)		38,865	0	38,865
Interest Income	14		15	0	15
Total Revenue	\$ 84,373	\$	162,088	\$ 0	\$ 162,088
Expenses					
Operating Expenses					
Lease Origination Services					
Monthly Bank/Servicing Fees	10		50	0	50
Total Lease Origination Services	10		50	0	50
Consulting and Professional Fees					
Consulting/Advisory Fees	0		0	0	0
Total Consulting and Professional Fees	0		0	0	0
Insurance	580		4,644	0	4,644
Total Operating Expenses	590	_	4,694	0	4,694
Depreciation, Amortization, Interest & Taxes					
Depreciation-Energy Equipment	31,854		147,897	0	147,897
Total Depreciation, Amortization, Interest & Taxes	31,854	_	147,897	 0	147,897
Total Expenses	\$ 32,444	\$	152,591	\$ 0	\$ 152,591
Net Income (Loss)	\$ 51,929	\$	9,497	\$ 0	\$ 9,497

# CGB Meriden Hydro LLC

## Balance Sheet As of May 31, 2018

		As of 05/31/2018	As of 05/31/2017	YOY \$ Change	As of 04/30/2018		MTD \$ Change
Assets							
Current Assets							
Cash and Cash Equivalents							
Cash - Unrestricted		943	888	55	943		0
Total Cash and Cash Equivalents		943	888	55	943	-	0
Total Current Assets		943	888	55	943		0
Fixed Assets						-	
Furniture & Equipment, net		3,803,047	0	3,803,047	3,813,913		(10,866)
Total Fixed Assets		3,803,047	0	3,803,047	3,813,913	-	(10,866)
Total Assets	\$	3,803,990	\$ 888	\$ 3,803,102	\$ 3,814,856	\$	(10,866)
Liabilities							
Current Liabilities							
Accrued Expenses		41,988	0	41,988	91,988		(50,000)
Total Current Liabilities		41,988	0	41,988	91,988	-	(50,000)
Other Liabilities							
Due to Affiliates							
Due to CGB		3,921,988	900	3,921,088	3,981,988		(60,000)
Total Due to Affiliates	<u>-</u>	3,921,988	900	3,921,088	3,981,988		(60,000)
Total Other Liabilities		3,921,988	900	3,921,088	3,981,988		(60,000)
Total Liabilities	\$	3,963,976	\$ 900	\$ 3,963,076	\$ 4,073,976	\$	(110,000)
Net Position							
Investment in Capital Assets		3,803,047	0	3,803,047	3,813,913		(10,866)
Unrestricted Net Position		(3,963,033)	(12)	(3,963,021)	(4,073,033)		110,000
Total Net Position	\$	(159,986)	\$ (12)	\$ (159,974)	\$ (259,120)	\$	99,134

# CGB Meriden Hydro LLC

# Profit & Loss Statement

For the Fiscal Year to Date ended May 31, 2018

		07/01/2017	07/01/2016	
		Through	Through	
	 05/31/2018	 05/31/2018	 05/31/2017	 \$ Change
	Current Month	FY to Date	Prior FY to Date	Year over Year
Revenue				
Other Income	110,000	110,000	0	110,000
Total Revenue	\$ 110,000	\$ 110,000	\$ 0	\$ 110,000
Operating Expenses				
Program Development and Administration	0	143,395	0	143,395
Consulting and Professional Fees				
Legal Fees & Related Expenses	0	5,180	0	5,180
Total Consulting and Professional Fees	0	 5,180	0	 5,180
Rent and Location Related Expenses		 _	 _	_
Depreciation & Amortization	10,866	108,658	0	108,658
Total-Rent and Location Related Expenses	10,866	108,658	 0	 108,658
Office, Computer & Other Expenses				
Office Expense	0	168	112	56
Insurance	0	12,496	0	12,496
Total-Office, Computer & Other Expenses	 0	12,664	 112	12,552
Operating Expenses	\$ 10,866	\$ 269,897	\$ 112	\$ 269,785
Net Income (Loss)	\$ 99,134	\$ (159,897)	\$ (112)	\$ (159,785)

# Connecticut Green Bank and Component Units

# **Consolidated Balance Sheet**

As of May 31, 2018

						-			Discre	te-Componer	nt Units			
		CGB		Total CGB +		CEFIA		Total CGB-	2.00.0	CT Solar			CGB	CGB
	Connecticut	Meriden		Single	CT Solar	Holdings		Primary	CT Solar	Lease 3	<b>CEFIA Solar</b>		Consolidated	Consolidated
	Green Bank	Hydro LLC	Eliminations	Member LLCs	Loan I LLC	LLC	Eliminations	Government	Lease 2 LLC	LLC	Services Inc.	Eliminations	05/31/2018	05/31/2017
Assets														
Current Assets														
Cash and Cash Equivalents	4,724,934	943	-	4,725,877	3,185,462	9,683,485	-	17,594,825	1,742,872	185,375	611,996	-	20,135,067	21,719,996
Accounts Receivable	1,244,203	-	-	1,244,203	-	46,521	-	1,290,724	46,382	90,078	-	-	1,427,184	199,151
Utility Remittance Receivable	2,194,422	-	-	2,194,422	-	-	-	2,194,422	-	-	-	-	2,194,422	2,208,423
Other Receivables	658,682	-	-	658,682	1,255	60,387	-	720,324	566,511	115,560	-	-	1,402,396	677,615
Due From Component Units	48,833,386	-	(3,921,987)	44,911,398	-	7,322,926	(11,337,844)	40,896,480	389,817	-	7,871,240	(49,157,537)	-	-
Prepaid Expenses and Other Assets	602,169	-	-	602,169	15,963	427,039	-	1,045,171	929,241	6,378	-	=	1,980,789	8,309,582
Total Current Assets	58,257,795	943	(3,921,987)	54,336,751	3,202,681	17,540,357	(11,337,844)	63,741,945	3,674,824	397,391	8,483,235	(49,157,537)	27,139,858	33,114,767
Noncurrent Assets														
Portfolio Investments	1	-	-	1	-	-	-	1	-	-	-	-	1	999,999
Bonds Receivable	3,328,530	-	-	3,328,530	-	-	-	3,328,530	-	-	-	-	3,328,530	3,328,530
Solar Lease I Promissory Notes, net of reserves	7,396,783	-	-	7,396,783	-	-	-	7,396,783	-	-	-	-	7,396,783	8,272,499
Program Loans, net of reserves	39,694,538	-	-	39,694,538	2,750,239	-	-	42,444,778	-	-	-	-	42,444,778	38,639,588
Renewable Energy Certificates	654,767	-	-	654,767	-	-	-	654,767	-	-	-	-	654,767	812,772
Investment in Component Units	99,100	-	(100)	99,000	-	100	(99,000)	100	-	-	30,104,842	(30,104,942)	-	-
Capital Assets, net	123,578	3,803,047	-	3,926,625	-	-	-	3,926,625	67,920,227	11,217,040	· · · · · -	(9,377,829)	73,686,063	61,720,207
Asset Retirement Obligation, net	-	-	-	-	-	-	-	-	2,458,431	455,575	-	-	2,914,006	2,517,122
Restricted Assets														
Cash and Cash Equivalents	32,932,728	-	-	32,932,728	300,000	1,241,701	-	34,474,428	4,500,000	-	-	-	38,974,428	39,412,359
Total Noncurrent Assets	84,230,025	3,803,047	(100)	88,032,972	3,050,239	1,241,801	(99,000)	92,226,012	74,878,658	11,672,615	30,104,842	(39,482,771)	169,399,357	155,703,076
Total Assets	142,487,820	3,803,990	(3,922,087)	142,369,723	6,252,920	18,782,158	(11,436,844)	155,967,957	78,553,483	12,070,005	38,588,077	(88,640,308)	196,539,215	188,817,843
Defermed Outflows of December			-									-		
Deferred Outflows of Resources	0.070.407			0.070.407				0.070.407					0.070.407	0.555.000
Deferred Amount for Pensions	9,978,107	-	-	9,978,107	-	-	-	9,978,107	-	-	-	-	9,978,107	2,575,368
Deferred Payments to State of Connecticut  Total Deferred Outflows of Resources	28,000,000 <b>37,978,107</b>			28,000,000 <b>37,978,107</b>				28,000,000 <b>37,978,107</b>					28,000,000 <b>37,978,107</b>	2,575,368
Total Deferred Outflows of Resources	37,976,107	-	-	37,970,107			-	37,976,107	-			-	37,970,107	2,575,300
Liabilities														
Current Liabilities														
Accounts Payable & Accrued Expenses	4,810,938	41,988	-	4,852,927	1,994	5,987	-	4,860,907	1,212,582	40,145	19,834	(295,297)	5,838,172	1,771,710
Due to Component Units	389,817	3,921,987	(3,921,987)	389,817	4,072,500	7,265,344	(11,337,844)	389,817	10,182,172	2,029,800	36,260,451	(48,862,240)	-	-
Custodial Liability	687,458	-	-	687,458	-	1,241,701	-	1,929,159	-	-	-	-	1,929,159	1,833,470
Deferred Revenue	-	-	-	-	-	690,310	-	690,310	826,713	136,420	-	-	1,653,443	1,331,352
Total Current Liabilities	5,888,214	3,963,976	(3,921,987)	5,930,202	4,074,494	9,203,342	(11,337,844)	7,870,194	12,221,467	2,206,366	36,280,285	(49,157,537)	9,420,774	4,936,532
Other Liabilities														
Asset Retirement Obligation	-	-	-	-	-	-	-	-	3,042,096	467,312	-	-	3,509,408	2,946,614
Notes Payable	-	-	-	-	1,973,502	-	-	1,973,502	23,665,467	-	1,753,621	-	27,392,590	28,256,478
Bonds Payable-CREBs	12,006,283	-	-	12,006,283	-	-	-	12,006,283	-	-	-	-	12,006,283	2,957,971
Fair Value - Interest Rate Swap	-	-	-	-	-	-	-	-	299,459	-	-	-	299,459	573,448
Pension Liability	25,245,439	-	-	25,245,439	-	-	-	25,245,439	-	-	-	-	25,245,439	16,096,113
Payable to State of Connecticut	28,000,000	-	-	28,000,000	-	-	-	28,000,000	-	-	-	-	28,000,000	-
Reserve for RSIP Payments	47,176,479	-	-	47,176,479	-	-	-	47,176,479	-	-	-	-	47,176,479	52,175,796
Total Other Liabilities	112,428,201	-	-	112,428,201	1,973,502	_	-	114,401,703	27,007,022	467,312	1,753,621	_	143,629,658	103,006,421
Total Liabilities	118,316,415	3,963,976	(3,921,987)	118,358,403	6,047,996	9,203,342	(11,337,844)	122,271,897	39,228,489	2,673,678	38,033,906	(49,157,537)	153,050,433	107,942,953
Not Position			,				•					,		
Net Position	100 570	0.000.0:=		0.000.00=				0.000.00=	07 000 007	44.047.040		(0.077.000)	70 000 000	04 700 007
Investment in Capital Assets	123,578	3,803,047	-	3,926,625	-	-	-	3,926,625	67,920,227	11,217,040	-	(9,377,829)	73,686,063	61,720,207
Restricted-Energy Programs	32,932,728	(0.000.005)	- (4.00)	32,932,728	300,000	1,241,701	- (00.000)	34,474,428	4,500,000	(4.000.71.7)	-	(00.401.015)	38,974,428	39,412,359
Unrestricted Net Position	29,093,207	(3,963,033)	(100)	25,130,074	(95,076)	8,337,115	(99,000)	33,273,114	(33,095,233)	(1,820,712)	554,172	(30,104,942)	(31,193,602)	(17,682,308)
Total Net Position	62,149,513	(159,986)	(100)	61,989,427	204,924	9,578,816	(99,000)	71,674,167	39,324,994	9,396,327	554,172	(39,482,771)	81,466,889	83,450,258

# Connecticut Green Bank and Component Units

# **Consolidated Statement of Revenues and Expenditures**

For the Fiscal Year to Date May 31, 2018 (All Entities are presented using CGB's Fiscal Year)

								_	Discrete-	Componen	t Units	_		
		CGB		Total CGB							CEFIA		CGB	CGB
		Meriden		+ Single	CT Solar	CEFIA		Total CGB-	CT Solar	CT Solar	Solar		Consolidated	
	Connecticut Green Bank	Hydro LLC	Eliminations	Member LLCs	Loan I LLC	Holdings LLC	Fliminations	Primary Government	Lease 2 LLC	Lease 3 LLC	Services Inc.	Eliminations	FYTD 05/31/2018	FYTD 05/31/2017
Operating Income (Loss)	Orcen Bank	LLU	Liminations	LLUJ	LLU	LLU	Liminations	Covernment	LLU		11101	Limitations	00/01/2010	00/01/2017
Operating Revenues														
Utility Remittances	23,936,116	_	_	23,936,116	_	-	_	23,936,116	_	_	_	_	23,936,116	24,267,910
Grant Revenue	1,581,952	_	_	1,581,952	_	-	_	1,581,952	_	_	_	_	1,581,952	92,844
RGGI Auction Proceeds	965,534	_	_	965,534	_	-	_	965,534	_	_	_	_	965,534	1,857,874
Energy System Sales	-	_	_	-	_	13,559,517	_	13,559,517	_	_	_	(10,777,111)	2,782,406	-
REC Sales	2,405,560	-	_	2,405,560	-	-	_	2,405,560	818,515	95,365	-	-	3,319,440	2,547,845
Other Income	524,091	110,000	-	634,091	319	-	-	634,409	2,915,684	165,873	121,419	(1,013,902)	2,823,483	2,263,130
Total Operating Revenues	29,413,252	110,000	-	29,523,252	319	13,559,517	-	43,083,088	3,734,199	261,238	121,419	(11,791,013)	35,408,931	31,029,603
Operating Expenses														
Cost of Goods Sold-Energy Systems	-	-	-	-	-	12,979,629	-	12,979,629	-	-	-	(9,981,831)	2,997,798	-
Grants and Incentive Payments	17,642,334	-	-	17,642,334	-	-	-	17,642,334	-	-	-	(892,483)	16,749,851	12,025,088
Program Administration Expenses	10,975,520	264,549	-	11,240,069	19,427	121,127	-	11,380,623	3,939,414	293,307	55,804	(297,792)	15,371,357	14,723,876
General and Administrative Expenses	2,896,650	5,348	-	2,901,998	5,631	7,855	-	2,915,485	303,454	36,421	4,600	(121,419)	3,138,540	3,169,477
Total Operating Expenses	31,514,504	269,897	-	31,784,401	25,058	13,108,611	-	44,918,071	4,242,868	329,729	60,404	(11,293,525)	38,257,546	29,918,441
Operating Income (Loss)	(2,101,252)	(159,897)	-	(2,261,149)	(24,740)	450,905	-	(1,834,983)	(508,668)	(68,491)	61,015	(497,488)	(2,848,615)	1,111,162
Nonoperating Revenue (Expenses)														
Interest Income-Promissory Notes	2,487,104	-	-	2,487,104	186,995	-	-	2,674,099	1,127	14	-	-	2,675,241	2,287,594
Interest Income-Short Term Cash Deposits	263,397	-	-	263,397	111	15,809	-	279,317	20,667	1	4,634	-	304,619	197,406
Interest Expense-LT Debt	45,575	-	-	45,575	(124,987)	-	-	(79,412)	(934,320)	-	(41,092)	-	(1,054,824)	(944,020)
Interest Income-Component Units	57,796	-	-	57,796	-	-	-	57,796	-	-	43,051	(100,847)	-	-
Interest Expense-Component Units	-	-	-	-	-	-	-	-	(100,847)	-	-	100,847	-	-
Distributions to Member	-	-	-	-	-	-	-	-	(382,377)	(18,765)	-	-	(401,143)	(314,784)
Realized Loss on Investments	(510,207)	-	-	(510,207)	-	-	-	(510,207)	-	-	-	-	(510,207)	(93,978)
Unrealized Gain (Loss) on Investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unrealized Gain (Loss) on Interest Rate Swap	-	-	-	-	-	-	-	-	241,418	-	-	-	241,418	1,054,416
Provision for Loan Losses	(615,632)	-	-	(615,632)	-	-	-	(615,632)		-	-	-	(615,632)	(1,832,706)
Total Nonoperating Revenue (Expenses)	1,728,033	-	-	1,728,033	62,119	15,809	-	1,805,961	(1,154,332)	(18,750)	6,593	-	639,472	353,927
Net Revenues Over (Under) Expenditures	(373,219)	(159,897)	_	(533,116)	37,380	466,714		(29,022)	(1,663,000)	(87,241)	67.608	(497,488)	(2,209,144)	1,465,090
Exponditures	(0.0,210)	1.00,001)		(000,110)	0.,000	700,117		(20,022)	1.,000,000	(01,=-71)	0.,000	(-131,-100)	(=,=00,144)	1,-100,000



# Memo

**To:** Board of Directors

From: George Bellas (VP Finance and Administration)

**Date:** July 16, 2018

**Re:** Review and proposed revisions to Internal Accounting Control Procedures

It is a best practice to review the Connecticut Green Bank ("CGB") 's internal accounting control procedures with the CGB Audit, Compliance and Governance ("ACG") Committee and changes, if necessary, to these procedures to reflect changes in the organization and its programs. I have included the following control procedure documents in your package for review and further discussion at our meeting:

CGB 101 - Purchasing and Accounts Payable

CGB 102 – Consulting and Advisory Services

CGB 103 - Credit Cards

CGB 104 - Mobile Devices

CGB 105 - Fixed Assets and Depreciation

We are proposing minor changes to procedures CGB 101, 102 and 103 which are reflected in the documents using the track changes feature of Word.

Staff is requesting that the following resolution be adopted by the Green Bank Board of Directors:

#### RESOLUTION

WHEREAS, the Audit, Compliance and Governance Committee recommended to the Board of Directors for approval the proposed revisions to Internal Accounting Control Procedures on June 8, 2018.

NOW, therefore be it:

RESOLVED, that the Connecticut Green Bank Board of Directors approve the proposed

revisions to Internal Accounting Control Procedures as presented.



CGB - 101 Revised June May 825, 20186

# **Purchasing and Accounts Payable Policies and Procedures**

**I. Purpose:** To provide procedures for procurement methods and completion of related documents.

II. Scope: This procedure applies to the purchase of supplies, materials, services, sponsorships, memberships, software and capital assets for all departments within the Connecticut Green Bank (CGB) as well as for all <a href="mailto:component unitsaffiliates">component unitsaffiliates</a> for which CGB provides accounting and financial reporting services, whether operating or programmatic in nature.

# **III. Responsibility:**

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

#### IV. Procedure:

#### A. ORDER PLACEMENT AND APPROVALS

- Office supplies and other goods and services used in the normal course of business are approved by the VP of Finance, Finance and Administration ("VPFF") or the Director of Operations ("DOO").
- 2. Office furniture, fixtures and equipment must be approved by the President & CEO or the DOO.
- 3. <u>Subscriptions and Reference Materials</u> Subscriptions to magazines, newspapers, on-line reference and search services, etc. must be approved by the <u>Managing Director of Marketing (MDM)</u>President and CEO or the DOO.

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

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

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

- Finance Assistance (as defined in A6 above) equal to or above \$25,000 – requires 2 signatures from Management, one of which must be the President & CEO or in his or her absence the VPFF.
- Consulting and Advisory Services See CGBEFIA 102
- Re-occurring charges for disbursements that occur on a regular basis (rents, equipment lease payments, etc. the VPFF must approve the invoice A second signature from a member of Management is not required.
- Transfers of funds between CGB and its <u>component</u> <u>unitsaffiliates</u> for working capital purposes transfers of funds between CGB and its <u>component unitsaffiliates</u> for working capital purposes will only require the approval of the VPFF at time of transfer. Documentation of the transfer will be forwarded to the President and CEO for review and sign off within 2 business days after transfer. All transfers will be executed by wire transfer which require approval and release by 2 authorized check signers.
- 2. Approval in the absence of the President &CEO If the President & CEO is unavailable for a period of time to approve invoices or purchases enumerated in section A above, he/she may delegate his/her authority to approve such purchases and invoices to the VPFF or in the absence of the VPFF, the DOO, Chief Investment Officer or Chief Legal Officer in writing. The VPFF or such other designee listed above must then submit all such items to the President & CEO upon his/her return to the office and obtain approval from the President & CEO at that time.

#### 3. Payment of invoices -

- a. Accounts Payable will process invoices for payment when all approvals are obtained by requestor.
- b. Payment of invoices will be made based on vendor terms.
- c. Check signing:
  - Invoice and all related documents are submitted to Accounts Payable.
  - Check amounts equal to or greater than \$5,000 require 2 signatures
  - The Board of Directors will authorize specific senior level positions to sign checks on behalf of the Company. This authorization will be documented in the Board meeting minutes.

#### 4. Check requests

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

# 5. Wire/ACH transfers

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



CGB – 102 -Revised <u>June May</u> 825,

201<u>8</u>6

# **Consulting and Advisory Services**

**I Purpose:** Pursuant to operating procedures initially adopted by the Board of

Directors of the Connecticut Green Bank (CGB) on December 16, 2011 as amended from time to time; CGB may contract for consulting and advisory

services as part of its operations and programs.

**II. Scope**: These services may include expertise or specialized advice, training,

research or analysis, special projects or other work where the (a) appropriate experience, skills or expertise is not then available among the

staff because of workload or other constraints, (b) the time duration, frequency of need or other nature of the services does not justify employing staff to provide such services, or (c) Board of Directors has determined that the use of such services is warranted and in the best

interest of CGB. These procedures also apply to all component

<u>units</u>affiliates of CGB for which CGB provides accounting and financial reporting services. CGB and its <u>component units</u>affiliates are collectively

referred to as the "Company" in these procedures.

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

procedure.

#### IV. Procedure:

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

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

# C. PSA duration and RFP requirements

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

# D. Recordkeeping

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

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



CGB – 103 Revised Junely <u>82</u>1, 201<u>8</u>7

# **Credit Card Policy and Procedures**

#### I. Purpose:

To provide procedures for the use of Connecticut Green Bank, ("CGB") owned credit cards by authorized employees of the CGB.

#### II. Policy/Scope:

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

### **III. Responsibility:**

The Vice President of Finance, Finance and Administration ("VPFF") shall be responsible for the administration of the CGB credit card account.

#### **IV. Procedures:**

- 1. The President and CEO ("CEO") and the Director of Operations ("DOO") are authorized purchasing agents of the CGB. The CEO shall provide the VPFF with a list of additional employees who are authorized purchasing agents for CGB. This list will be updated from time to time by the CEO as circumstances warrant. A credit card dollar limit will be approved by the CEO for each authorized purchasing agent.
- 2. The VPFF as administrator of the CGB credit card account will approve and submit an application to the credit card issuer requesting that a card be issued (with the authorized dollar limit) to the CGB purchasing agent.
- 3. Once the CGB credit card is issued to the authorized purchasing agent, the purchasing agent will be responsible for maintaining adequate documentation supporting all purchases made with the credit card. This documentation shall be attached to the monthly credit card invoice and submitted to the VPFF for review and approval. The VPFF will

review the documentation submitted to determine that the expenditure was for an appropriate business purpose. The credit card invoice will be approved by the VPFF and the Chief Legal Officer (CLO).

- 4. It is the purchasing agent's responsibility to monitor his or her account for unauthorized activity. All unauthorized activity should immediately be reported to the credit card issuer and VPFF for appropriate action.
- 5. Purchasing agents who have been issued a CGB owned card will be responsible for safeguarding the card at all times. The purchasing agent is responsible for immediately and properly reporting a lost or stolen card to the credit card issuer and the VPFF.
- 6. A copy of this policy will be provided to each purchasing agent. The purchasing agent will be required to acknowledge receipt of the policy.



CGB - 104

Revised July 21, 2017

# **Mobile Device Policy and Reimbursement Procedure**

#### Policy

The Connecticut Green Bank ("CGB") often must have immediate access to key employees. Accordingly, CGB will provide mobile devices with cell and internet access to an employee if the employee's responsibilities require the employee to be out of the office on Company business <u>and</u> the employee needs to be in contact with CGB staff or its partners during that time.

#### Procedure

Mobile device plans bundle "voice" minutes and "data" minutes for a monthly fee.

Employees can be reimbursed for the associated monthly voice and data charges by submitting an approved employee expense report with appropriate backup including dates of service to the accounting department on a monthly basis up to the limit established by the organization. If an employee's cell phone service is part of a "family" plan, the employee will only be reimbursed for the charges allocated to their cell phone number. Dollar limits will be reviewed and adjusted periodically by the President and CEO and the Director of Operations ("DOO"). Pre-Approval forms may be obtained from the accounting department. All requests for mobile communications devices and associated voice/data plans must be approved by the DOO. Charges incurred that were not pre-approved or above the pre-approved limit will be the responsibility of the employee.

Costs outside of this procedure will be reviewed on a case by case basis and should seek pre-approval whenever possible.



**CGB 105** 

Revised July 21, 2017

#### **Fixed Assets and Depreciation**

I. Purpose: To set policy and controls over the recording of fixed assets related deprecia
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- **II. Scope**: This policy applies to all purchases of furniture, equipment, software and leasehold improvements.
- **III. Responsibility:** The Controller is responsible monitoring and tracking fixed assets and related depreciation.

#### IV. Procedure:

- a. All computer hardware and software, office furniture and equipment, and leasehold improvement items purchased with a value greater than \$1,000 are capitalized and recorded as fixed assets.
- The Staff Accountant records the fixed asset vendor invoice to the appropriate fixed asset account. Invoices are approved using internal accounting control procedure CGB 101 – Purchasing and Accounts Payable
- c. The Senior Accountant reviews fixed asset purchases on a monthly basis and inputs the appropriate financial information in the Intacct business system using the following categories and useful lives:
  - i. Furniture and Equipment 5 years
  - ii. Computer Hardware 3 years
  - iii. Computer Software 3 or 2 years
  - iv. Leasehold Improvements 5 years or life of lease, whichever is less
- d. Depreciation is calculated by Intacct using the straight-line method on a yearly basis, and reconciled monthly.



# Memo

To: Board of Directors

From: Eric Shrago (Director of Operations)

**Date:** July 20, 2018

Re: Review and proposed revisions to the Green Bank Employee Handbook

It is a best practice to review the Connecticut Green Bank ("CGB") 's Employee Handbook with the CGB Audit, Compliance and Governance ("ACG") Committee and changes, if necessary, to this document to reflect changes in the organization and its programs. I have included the Employee Handbook in your package for review and further discussion at our meeting.

We are proposing minor changes to the Handbook to reflect the changes in staff and individuals' roles and responsibilities, broadening our justification for telecommuting to be inline with statute, clarifying the amount of vacation that can be carried over from year-to-year, clarifying our continuing education benefit, updating our safety procedures, and updating the document to reflect our current mobile communications policy. The handbook is included using the track changes feature of Word so that changes are clear.

Staff is requesting that the following resolution be adopted by the Green Bank Board of Directors:

#### **RESOLUTION**

WHEREAS, the Audit, Compliance and Governance Committee recommended to the Board of Directors for approval the proposed revisions to Employee Handbook on June 8, 2018.

NOW, therefore be it:

RESOLVED, that the Connecticut Green Bank Board of Directors approve the proposed revisions to Internal Accounting Control Procedures as presented.



# **Employee Handbook**

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**SECTION 1 INTRODUCTION** 

# **Employee Welcome**

Welcome to the Connecticut Green Bank (CGB)! We are pleased that you are joining our staff and embarking on an employment career with CGB. We are so pleased to welcome you as you begin this endeavor. CGB develops, invests in and promotes clean sustainable energy sources for the benefit of Connecticut ratepayers. Our most important resource in achieving that vision is you – the employee. The staff at CGB works together and depends upon one another to achieve our vision. We want you to know how much we appreciate the contribution you are making to the continued successful operation of our agency.

This handbook was developed to describe some of the expectations of our employees and to outline the policies, programs and benefits available to eligible employees. These policies and programs are general guidelines under continuous review and are subject to change or discontinuance at any time. Employees should familiarize themselves with the contents of the employee handbook as soon as possible, for it will answer many questions about employment at CGB.

Please read your handbook carefully and keep it for further reference. Please contact the Human Resources if you have any questions or concerns about the information set forth in this handbook. Again, welcome and we wish you the best in your career at CGB.

# **Agency Purpose and Structure**

CGB (formerly the Clean Energy and Finance Authority) was established by Connecticut's General Assembly on July 1, 2011 as a part of Public Act 11-80 and the name was changed to the Connecticut Green Bank in 2014. This new quasi-public agency supersedes the former Connecticut Clean Energy Fund. CGB's mission is The Green Bank 10 was established by the Governor and Connecticut's General Assembly on July 1, 2011 through Public Act 11-80 as a quasi-public agency that supersedes the former Connecticut Clean Energy Fund. As the nation's first state "Green Bank", the Green Bank leverages public and private funds to drive investment and scale-up clean energy deployment in Connecticut. The Green Bank's statutory purposes are:

- To develop programs to finance and otherwise support clean energy investment in residential, municipal, small business and larger commercial projects and such other programs as the Green Bank may determine;
- To support financing or other expenditures that promote investment in clean energy sources to foster the growth, development and commercialization of clean energy sources and related enterprises; and
- To stimulate demand for clean energy and the deployment of clean energy sources within the state that serves end-use customers in the state.

The Green Bank's purposes are codified in Section 16-245n(d)(1) of the General Statutes of Connecticut and restated in the Green Bank's Board approved Resolution of Purposes. 2.1

#### Vision

To lead the green bank movement by accelerating private capital investment in clean energy deployment for Connecticut to achieve economic prosperity, create jobs, promote energy security and address climate change. 2.2

#### Mission

To support the Governor's and Legislature's energy strategy to achieve cleaner, cheaper and more reliable sources of energy while creating jobs and supporting local economic development. 2.3

#### Goals

To achieve its vision and mission, the Green Bank has established the following four goals:

- 1. 1. To attract and deploy private capital investment to finance the clean energy policy goals for Connecticut.
- 2. 2. To leverage limited public funds to attract multiples of private capital investment while returning by reinvesting public funds in clean energy deployment over time.
- 3. 3. To develop and implement strategies that bring down the cost of clean energy in order to make it more accessible and affordable to customers.
- 4. To support affordable and healthy buildings in low-to moderate income and distressed communities by reducing the energy burden and addressing health and safety issues in their homes, businesses, and institutions.

These goals support the implementation of Connecticut's clean energy policies be they statutory (i.e., Public Act 15-194, Public Act 13-298), planning (i.e., Comprehensive Energy Strategy, Integrated Resources Plan), or regulatory in nature. 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. As the nation's first full-scale clean energy finance authority, CGB will leverage public and private funds to drive investment and scale-up clean energy deployment in Connecticut. For more information about CGB, please visit www.ctgreenbank.com.

# **Objectives and Scope**

This Employee Handbook has been prepared to acquaint you with policies and procedures relating to employment at CGB and to provide a reasonable understanding of expectations so that we may work together effectively. It is a guide to CGB's policies but it does not include every single policy. All employees are expected to be familiar with and abide by the policies in this Handbook.

This Handbook provides information concerning CGB benefits. Please note that CGB benefit plans are defined in legal documents such as insurance contracts and official plan texts. This means that if a question ever arises about the nature and extent of plan benefits or if there is conflicting language, the formal language of the plan documents governs over the informal wording of this Handbook. Plan documents are available for inspection.

This Handbook is not, nor is it intended to be, an express or implied contract of employment, an agreement for employment for any specified period of time, or a guarantee of benefits or working conditions between employee and CGB. CGB does not recognize any contract of employment unless it is reduced to writing and signed by the employee and the President. CGB reserves the right to unilaterally revise, delete, or add to the policies, procedures and benefits within this handbook at any time with or without advance notice. Revisions of policies, procedures and benefits may be made and applied immediately or prospectively, or if not prohibited by law, made effectively with a retroactive date. Additionally, CGB reserves the right to make exceptions or vary from any of the rules, benefits, or policies contained in this handbook in its managerial discretion.

#### At Will Statement

Employment with CGB is at will, which means that either party may terminate the relationship at any time and for any reason, with or without cause. No manager, supervisor or other agent of CGB has the authority to alter the at-will employment relationship by, for example, making a commitment, express or implied, of guaranteed or continued employment to any employee. An employee's at-will employment status can only be altered by a written contract of employment

that is specific as to all material terms and is signed by both the employee and the President of CGB.

# **Administration of Policy**

The President has overall responsibility for directing the implementation and administration of policies and procedures. On a day-to-day basis it is the responsibility of the <a href="Chief Operating Officer-Director of Operations">Chief Operating Officer-Director of Operations</a> and each supervisor to administer all policies and procedures in a manner consistent with the handbook.

**SECTION 2 EMPLOYMENT** 

#### Orientation

During your first few days of employment, you will participate in an orientation program conducted by Human Resources and various members of CGB, including your supervisor. During this program, you will receive important information regarding the performance requirements of your position, basic company policies, your compensation, and benefit programs. You will be asked to complete all necessary paperwork at this time, such as medical benefit plan enrollment forms, beneficiary designation forms and appropriate federal and state tax forms. You will be required to present CGB with information establishing your identity and your eligibility to work in the United States in accordance with applicable federal law. During your first few weeks, you may be asked to prepare a short bio and scheduled to have your photograph taken for inclusion on our Website and in our annual report.

Please use this orientation program to familiarize yourself with CGB and our policies and benefits. We encourage you to ask any questions you may have so that you will understand all the guidelines that affect and govern your employment relationship with us.

# **Status of Employment**

Employees of CGB are exempt from classified service as provided in Public Act 11-80 of the Connecticut General Statutes. Unlike employees in the classified service, CGB employees do not have tenure. Continued employment is predicated on satisfactory performance of duties, a satisfactory record of attendance, and appropriate conduct with the general public and other employees on the CGB staff as well as continued available work. All CGB employees are considered at will employees.

# **Conditions of Employment**

All new and rehired employees work on an introductory basis for the first six months after their date of hire. Any significant absence (in excess of five consecutive days) will automatically extend an introductory period by the length of the absence. During the six-month introductory period, if any employee's performance is not satisfactory, the employee may be terminated or may be required to serve an extended introductory period.

Acceptance as a regular employee of CGB is contingent upon successful completion of a six month introductory period, which is intended to provide the employee the opportunity to demonstrate his/her ability to achieve a satisfactory level of performance and to determine whether the new position meets his/her expectations. CGB uses this period to evaluate the capabilities, work habits, and overall performance of the new employee.

The existence of the introductory period as described above does not change an employee's atwill status. Employees and CGB may terminate the employment relationship at any time and for any reason during and after the introductory period.

Benefits, eligibility and employment status is not changed during a secondary introductory period that results from a promotion or transfer to a new position within CGB. However, the employee will be required to serve a six-month introductory period to assess his/her job performance in the new position.

#### **Staff Relations**

CGB's success depends on its employees' skills, abilities and the manner in which they are used to meet our goals. Our employees are our most important resource to help us succeed and to improve the way we do things. To take full advantage of this resource we need to communicate freely and openly. Usually, it is the employees performing the work who have the

most knowledge about the tasks and processes they use. We encourage employees to help us by taking every opportunity to make us aware of problems of any kind, and suggesting ways we can improve. Employees should feel free to discuss any concern or suggestions they have with their supervisor or any member of management. It is our intent that as a result of open communication, CGB and all of its employees will enjoy a mutually prosperous and satisfying relationship.

Our experience has shown that when employees deal openly and directly with supervisors, the work environment can be excellent, communications can be clear and attitudes can be positive. When you have a suggestion, question, problem or concern, your supervisor is in the best position to respond quickly and accurately, but you should feel free to discuss the issue with the staff in Human Resources.

The working environment at CGB is one that puts staff, supervisors, and administration in a close relationship of mutual respect. Attendance at and participation in group meetings and staff meetings are important. Employees are encouraged and expected to use these meetings as opportunities for raising issues to improve client services, program operation, and staff relations. It is generally during these meetings that most business-related matters are communicated. If an employee is absent from any of these meetings, it is his or her responsibility to catch up with business discussed.

#### **Customer Service Deliverables**

At CGB, customer service is a priority. We all have internal and external customers. To that end, we expect each one of our employees to be accountable for the following customer deliverables:

- To respond promptly to customer requests for information or assistance.
- To act as a member of the CGB team and pitch in and assist other staff members as requested.
- To provide a work product that is complete, well-organized and useful to the customer.

#### **Equal Employment Opportunity**

In order to provide equal employment and advancement opportunities to all individuals, employment decisions at CGB will be based on merit, qualifications, abilities in relation to the staffing requirements, and business needs. CGB is an equal opportunity employer and does not discriminate in employment opportunities or practices on the basis of race, color, religious creed, sex, marital status, national origin, age, ancestry, mental retardation, physical or learning disability, past or present history of mental disorder, sexual orientation, special disabled veterans or veterans of the Vietnam War status, or any other legally protected status, except in those cases where there is a legitimate, compelling and documented occupational qualification that precludes the hiring or promotion of individuals in any of these protected groups. CGB will make reasonable accommodations for qualified individuals with known disabilities unless doing so would result in an undue hardship to CGB. This equal opportunity policy extends to all aspects of the employment relationship, including recruitment, hiring, training, compensation, promotions/transfers, job assignments, discipline and termination. All other policies, such as employee benefits, are also administered based on fair and equal treatment.

Any employees with questions or concerns about any type of discrimination in the workplace are encouraged to bring these issues to the attention of their immediate supervisor. Employees can raise concerns and make reports without fear of reprisal, either verbally or through the grievance procedure. Anyone engaging in any type of unlawful discrimination will be subject to disciplinary action, up to and including termination of employment.

# **Disability Policy (ADA)**

As an employer, CGB will not discriminate against any employee or person seeking employment on the basis of a disability, in compliance with the spirit and regulations of the Americans with Disabilities Act (ADA) and all applicable Connecticut law. The purpose of the ADA is to assure that individuals with covered disabilities who are able to perform the essential duties of their job, with or without reasonable accommodation, are given equal opportunity and treatment by their employer and fellow employees. If a qualified employee or employee candidate has an ADA recognized disability; they cannot be denied equal opportunity for employment.

In accordance with the ADA, CGB does not discriminate on the basis of disability in the administration of or access to its programs, services or activities, and is committed to equal employment opportunity for employees and job applicants with disabilities. Employees who violate the ADA by discriminating against an individual with an ADA recognized disability would be subject to disciplinary action up to and including dismissal. Rumors and gossip regarding any employee who has an ADA recognized disease or is assumed to have an ADA recognized disease would not be tolerated under any circumstances. Employees who need a reasonable accommodation must request such accommodations through their supervisor. Employees may be required to submit medical documentation to support their request.

# **Immigration Law Compliance**

All job offers extended to successful candidates are contingent upon the receipt of the required documentation and completion of INS Form I-9.

Only those successful applicants who provide the required documentation and complete Form I-9 will be permitted to begin work.

Former employees who are rehired must also complete the form if they have not completed a Form I-9 with CGB within the past three years, or if their previous Form I-9 is no longer retained or valid.

#### **Conflict of Interest**

This policy establishes the general framework within which CGB wishes the business to operate.

Employees have an obligation to conduct business within guidelines that prohibit actual or potential conflicts of interest and should not have a financial interest in any client. A conflict of interest may exist when the interests or concerns of any director, officer, staff, client, or said person's relatives, or any party, group or organization in which said person has an interest or concern, may be seen as competing or conflicting with the interests or concerns of CGB. No "presumption of guilt" is created by the mere existence of a relationship with outside firms. The employee concerned must disclose any possible conflict of interest to the President. If it is not clear to the employee whether a particular situation or relationship constitutes a conflict of interest, the employee should contact the President.

When a conflict of interest exists regarding any matter requiring action by the Board of Directors, the President shall call it to the attention of the Board of Directors (or its committee).

# **Outside Employment**

Employees may hold a job with another company as long as he/she satisfactorily performs their job responsibilities with CGB. Employees who have additional outside employment for which they receive pay must keep their supervisor and the Human Resources Manager informed of such employment. This outside employment must not interfere with the employee's effectiveness in performing their job responsibilities, and must not conflict with CGB's public image. All employees will be judged by the same performance standards and will be subject to CGB scheduling demands, despite any existing outside work requirements.

If the President and/or his designee decides that an employee's outside work interferes with performance or the ability to meet the requirements of CGB as they are modified from time to time, the employee may be asked to terminate the outside employment if he or she wishes to remain with CGB. Inappropriate behavior believed to be a result of outside employment (abuse of sick time, refusal of overtime, unsatisfactory performance, etc.) will be addressed through normal performance management and/or disciplinary procedures.

Outside employment will present a conflict of interest if it has an adverse impact on CGB. Employees with outside employment must abide by the confidentiality standards that protect CGB's clients.

# **Employment of Relatives**

CGB is committed to the objective treatment of all employees based upon their job performance and the operational needs of CGB. The employment of relatives may cause serious conflicts and problems with favoritism and employee morale. In addition, real or apparent partiality in treatment at work and personal conflicts from outside the work environment can be carried into day-to-day working relationships. Therefore, it is the policy of CGB that relatives of employees will not be considered for employment.

If the relative relationship is established after employment, and there will be a direct reporting relationship or the related individuals will be working within the same department, the parties may be separated by reassignment or termination, if it is deemed necessary by the Human Resources Department and/or the President and/or his designee.

A relative is any person who is related by blood or marriage, or whose relationship with the employee is similar to that of persons who are related by blood or marriage.

#### **Confidential Nature of Work**

The protection of confidential information and trade secrets, as defined below, is vital to the interest and the success of CGB. The improper disclosure of confidential information would harm CGB and/or its employee or clients if such information were improperly disclosed to third parties. Accordingly, employees may not at any time during and after termination of employment with CGB, use for any purpose or disclose any confidential information to any third person or party, except as specifically authorized in the course of employment and required for carrying out job duties.

Confidential information includes, but is not limited to, the following examples:

- Any work performed by CGB employees for a client, portfolio company, or applicant.
- Any client, portfolio company or applicant information.
- Compensation data, including salary information.
- Personnel information.
- Financial information.
- Pending projects and proposals.
- Any other information not subject to the State Freedom of Information Act.

Confidential information should not be discussed with others (including family and friends), nor should employees discuss office matters or the affairs of clients, portfolio companies, or applicants generally with each other outside the office or any place where they might be overheard, e.g. on the street, in elevators or elevator lobbies, or at lunch counters. Except when they are certain that it is proper to do so, employees are cautioned against disclosing to callers anything being undertaken by CGB or its employees, clients, companies, or applicants. Likewise, it is important not to leave confidential information on desks at the end of the day or while a visitor is in the office which would allow easy unauthorized access to such information. Upon termination of employment with CGB or whenever requested by CGB, employees must promptly deliver to CGB all work product and all documents and other tangible embodiments of the confidential information and any copies thereof.

The best way to adhere to this policy is to not disclose any information if you are not sure whether such information is confidential information of CGB. Also, if you have any question as to whether certain information is considered confidential, please consult your department manager.

Violations of this policy may provide grounds for legal action against an employee and may result in disciplinary action up to and including termination, even if the employee does not actually benefit from the disclosed information.

#### **Categories of Employment**

It is the intent of CGB to clarify the definitions of employment classifications so those employees understand their employment status and benefit eligibility.

#### **Full-Time Regular Employees**

Employees who are not in a temporary or introductory status and who are regularly scheduled to work a minimum of 40 hours per week are considered full-time regular employees. Full-time regular employees are eligible for CGB benefits, subject to the terms, conditions, and limitations of each benefit program. Such employees must have successfully completed the six-month introductory period.

# **Part-Time Regular Employees**

Employees who are not assigned to a temporary or introductory status and who are regularly scheduled to work less than 40 hours per week are considered part-time regular employees. Part-time regular employees receive all legally mandated benefits (such as Social Security and Workers' Compensation Insurance), Part time employees who work at least 20 hours per week are generally eligible for other CGB benefit programs on a prorated basis, based on the ratio of their standard hours of work per week to the full time standard for that position. Such employees must have successfully completed the six-month introductory period.

## **Exempt Employees**

Exempt employees will not receive any overtime pay. Exempt employees may be granted compensatory time at the discretion of the President and/or his designee in accordance with the compensatory time policy outlined in Section 4.

# **Non-Exempt Employees**

Non-exempt employees are paid based on the number of hours actually worked and are eligible for overtime pay. Overtime pay will be paid at the rate of one and one-half times (1½) the non-exempt employee's regular rate of pay for all time worked in excess of 40 hours per week. Overtime pay is based on actual hours worked. Thus, if a non-exempt employee is absent during a week when overtime hours have occurred, the absent hours reported will not be considered hours worked in determining a time and one-half overtime payment. An accurate record of non-exempt regular and overtime hours must be maintained for purposes of pay. Time sheets are to be signed by the staff member and by their supervisor, then submitted to Human Resources for processing.

# **Introductory Employees**

Employees who work on an introductory basis as specified in the "Conditions of Employment" are considered introductory employees. Introductory employees who satisfactorily complete the six-month introductory period will be notified of their new employment classification. Any significant absence will automatically extend the introductory period by the length of the absence. If an employee changes jobs during the introductory period, a new six month introductory period shall begin.

# **Temporary Employees**

Employees who are hired as interim replacements to temporarily supplement the work force or to assist in the completion of a specific project are considered temporary employees. Temporary employees hired from temporary agencies for specific assignments are employees of their respective agencies and not CGB. Employment assignments in this category are of a limited duration. Employment beyond any initially stated period does not in any way imply a change in employment status.

#### Consultants

Those independent contractors who are on contract to provide services to CGB. Persons in this category are not CGB employees.

#### Selection Process, Interviewing and Hiring

The President and/or his designee must approve all new positions or changes to existing position descriptions. Vacant positions to be filled may be posted internally and if necessary posted externally. The immediate supervisor, the President, any manager or director within CGB and/or any person the President designates, may be involved in the interview selection

process. The President has the ultimate responsibility for appointing the candidate to the position.

CGB through the actions and approval of the President reserves the right to transfer or reclassify positions and employees within CGB and restructure their job duties and position without going through the above public process when in the best interest of CGB.

# **Promotion Policy**

CGB is committed to providing employees with opportunities for career advancement. Employees may apply for posted positions, for which they are qualified, provided any such position represents a promotion or advancement.

CGB is committed to implementing a fair and equitable "in-house" promotion policy that will aid in the development of staff to their fullest potential. Full and equal opportunity will be extended to all employees in accordance with CGB's affirmative action plan.

There is an established career path for most positions within CGB. The career path progression for each position can be found in the job description for that position. If an employee is being promoted within the established career path and within their department, such promotion can be made without posting the position. A current employee shall be eligible for reclassification or promotion to an existing or new position only if such employee has at least six (6) months of service with the Green Bank and meets the minimum qualifications for such position.

If the position is not within the established career path progression, the position will be posted and the selection process outlined above will be followed.

# **Employment Applications**

CGB relies upon the accuracy of information contained in the employment application, as well as the accuracy of other data presented through the hiring process and employment. Any misrepresentations, falsifications or material omissions in any of this information or data may result in CGB exclusion of the individual from further consideration for employment or, if the person has been hired, termination of employment.

# **Employment Reference Checks**

CGB wishes to ensure that applicants are qualified and have a strong potential to be productive and successful. It is the policy of the CGB to check the employment references of all applicants.

Human Resources will respond to all reference check inquiries from other employers only with the approval of the employee or past employee and in accordance with applicable law. No offer of employment can be made until Human Resources has received satisfactory reference checks.

#### **Performance Management and Review**

CGB has a performance management and review process. The objectives of this process are to:

- Provide clear communication between the supervisor and employee
- Identify the employee's work objectives and expected results
- Identify the employee's performance strengths and weaknesses
- · Assess the need for training
- Aid in decisions about future work assignments
- Determine the employee's suitability for continued employment

Determine the employee's eligibility to receive a merit compensation award

CGB believes that all employees should receive prompt, thorough feedback regarding their performance. Formal performance assessments for new hires and newly promoted employees are conducted at the completion of six (6) months. Once an employee has completed an introductory employment period of six months, formal written performance appraisals are conducted annually. Performance evaluations provide employees with the opportunity to express any concerns they have about their jobs, career aspirations, and future with CGB. If an employee is having difficulty in their job, interim evaluations may be conducted to help the employee understand what performance improvements are needed.

All performance assessments are reviewed by the appropriate department head, President and/or his designee and Human Resources.

### **Personnel Files**

CGB maintains a confidential personnel file on each employee. The personnel file includes such information as the employee's job application, resume, records of training, documentation of performance appraisals and salary increases, written warnings or reprimands, and written commendations.

Personnel files are the property of CGB, and access to the information they contain is restricted. Generally, only supervisors and management personnel of CGB who have a legitimate reason to review information in a file are allowed to do so unless otherwise required by law.

Employees will be notified when information is added to their personnel file.

Employees who wish to review their own files should contact Human Resources. With reasonable advance notice, employees may review their own personnel file in the Human Resources Office in the presence of a Human Resources employee.

# **Updating Personnel Records**

Employees must notify Human Resources of any changes in personal mailing addresses, telephone numbers, number and names of dependents, individuals to be contacted in the event of an emergency, etc.

It is the responsibility of each individual employee to promptly notify CGB of any such changes in personnel status.

It is also the responsibility of each individual employee to review bi-weekly payroll deductions (tax withholding, FICA, etc.) for accuracy and report any errors promptly to Human Resources.

**SECTION 3 WAGES AND SALARY ADMINISTRATION** 

## **General Policy**

It is the policy of CGB to maintain a fair compensation program that provides equitable payment for work performed, is competitive with the identified labor market, and ensures compliance with federal and state legislation.

A salary range has been assigned to each position. The compensation for each employee shall be within the minimum and maximum range established for the grade to which the position has been assigned. In rare instances, the President may approve a salary outside the range for which the position has been assigned. Periodically, CGB may revise job descriptions, evaluate individual jobs to ensure they are being compensated appropriately and review job specifications as business needs dictate. Salary ranges may also be adjusted for annual inflation at the discretion of the Board of Director's Budget and Operations Committee.

#### **Hours of Work**

The standard workweek for full-time regular employees is currently a minimum of 40 hours. Regular daily work hours are from 8:00 a.m. to 5:00 p.m. Monday through Friday. Where workload or schedules require, some departments may operate outside these regular hours. Supervisors should notify employees of their work schedule. Each employee is responsible for informing Human Resources of any permanent change in usual work hours.

#### Flexible Time

Under the flextime policy, an employee may be permitted to start and end the workday at times that differ from the standard hours of operation.

Flextime schedules are at the discretion of management, and must be approved in advance by the employee's supervisor and the Department Head.

Employees participating in flextime must have regular daily starting and quitting times that do not vary from day to day.

All full-time regular employees must be at work during the core hours of 9:00 a.m. to 3:30 p.m. No flextime schedules shall begin before 7:00 a.m., or end later than 6:00 p.m.

All employees participating in flextime must work their full scheduled hours per day and take at least a one half-hour lunch break.

### **Pay Periods**

Staff members are paid on a bi-weekly basis. Each paycheck will include earnings for all work performed through the end of the previous payroll. Thus a new employee can expect to receive his/her paycheck up to four weeks from the first day he/she commenced work for CGB. Employees may have pay directly deposited into their bank accounts if they provide advance written authorization. Direct deposit applications may be obtained from Human Resources. Employees will receive an itemized statement of wages.

For those employees not participating in Direct Deposit, paychecks will be distributed directly to the staff member after 3:00 p.m. every other Thursday. All paychecks not distributed by the end of the business day will be returned to human resources. If a staff member is absent from work and desires other arrangements, he/she will have to contact Human Resources directly to make such arrangements.

#### **Lunch Periods**

Employees are generally entitled to a one (1) hour lunch period. All employees must take a minimum of a half-hour for lunch. Scheduling of lunch periods is between the hours of 12:00 P.M. and 2:00 P.M. Lunch hours should be scheduled so that there is coverage at all times. Employees who work in tandem with other employees should schedule their lunch hours so there will always be coverage. If employees must attend to personal business during the workday, they should do so during their scheduled lunch break period. Employees should not work through their lunch period in order to leave early without prior authorization from their supervisor.

#### **Time Sheets**

CGB participates in self-service time reporting to the State of Connecticut's payroll system, CORE. Accurately recording time worked is the responsibility of every employee. Time worked is all the time actually spent on the job performing assigned duties. Time sheets must be accurately filled out in accordance with CORE time reporting guidelines and approved by the supervisor. Each employee shall personally record his or her own time, which includes the time they begin and end work and any time that is charged against their leave balances (personal time, vacation time, sick time, etc.). Altering, falsifying, tampering with time records, or recording time on another employee's time sheet may result in disciplinary action, up to and including termination of employment.

Employee time sheets for each two-week pay period must be completed in CORE by noon on the Friday after the pay period. All time sheets must be approved and initialed by the employee's supervisor, including any corrections and backup. Working time is logged in 15 minutes increments. Non-exempt employees, who report to work more than seven minutes late, but less than 15 minutes, must log their starting time at 15 minutes after the normal starting time. Time lost due to reporting to work late may not be made up by staying late at the end of the day or working through lunch periods, unless the employee obtains the prior authorization of his/her supervisor.

## **Attendance and Punctuality**

The ability of CGB to operate smoothly and efficiently depends on regular attendance and punctuality. Absenteeism and tardiness are disruptive and place a burden on other employees. To maintain a productive work environment, CGB expects employees to be consistently reliable and punctual in reporting for work.

In the rare instances when employees cannot avoid being late to work or are unable to work as scheduled, they should personally notify their supervisor before the anticipated tardiness or absence. If the supervisor is not available, employees should notify the Human Resources Manager so that he/she can arrange for coverage during the absence. Employees should also inform their supervisor or the Human Resources Manager of the reason for their tardiness or absence. In case of an emergency where advance notification is not possible, employees must report the absence or tardiness as soon as possible.

An employee's supervisor is responsible for monitoring an employee's attendance. The supervisor should deal with abuses of reporting time. Occurrences of abuse should result in counseling of the employee by the supervisor. Supervisors and Human Resources will monitor unscheduled occasions of absence and Human Resources will determine the action to be taken upon the accumulation of a certain number of unscheduled occasions of absence within a given time period, taking into consideration the following.

- Numbers of days taken;
- The number of unscheduled occasions of absence:

- The pattern of absences
- The employee's past records; and
- The reasons for the unscheduled occasions of absence.

# **Attendance and Punctuality, Continued**

Although the specific action taken in each instance will be determined by Human Resources in its discretion, the chart below illustrates the actions likely to be taken upon the accumulation of a certain number of unscheduled occasions of absence within a given time period.

Number of Occasions	Within this Time Period	Action Likely to Be Taken
3	3 months	Your attendance record will be reviewed with you to determine contributing problems and possible solutions.
5	6 months	Your attendance record will be reviewed with you to determine contributing problems and possible solutions AND this counseling session will be recorded in a written memo, a copy of which will be maintained in your personnel file.
9	12 months	Your attendance record will be reviewed with you to determine contributing problems and possible solutions AND this discussion will be documented and a copy will be maintained in your personnel file.  An "Unsatisfactory" or "Below Threshold" performance appraisal will be given to you for unsatisfactory attendance and dependability unless you give your supervisor documentation explaining the occasions to his/her satisfaction. You will also be notified that receiving two "Unsatisfactory" or "Below Threshold" performance appraisals in a row (for poor attendance or any other reason) is just cause for dismissal.

Poor attendance and excessive tardiness, including failing to report the same in a timely manner, may lead to disciplinary action, up to and including termination of employment. For example, an employee who does not report to work and who has not notified their supervisor of this absence may be terminated unless an acceptable explanation is provided for both the absence and the failure to report.

### **Absence from the Office**

If an employee must be out of the office for business or personal matters, the supervisor must be advised. The employee also should make every attempt to keep their schedule up to date on their Outlook Calendar. If the supervisor is not available, the appropriate department head or the President and/or his designee should be notified. Employees who are working outside the office at meetings or other events should leave a telephone number where they can be reached. These employees are also responsible for checking in and receiving messages.

#### Procedures for Absences from the office

- 1. Pre-schedule all vacation time use. Vacation leave shall be requested as far in advance as possible and is subject to CGB's operating needs.
- 2. Pre-schedule all absences, if possible. You should attempt to schedule all absences (including late arrivals and early departures) in advance with your supervisor. Pre-scheduled and approved use of sick and other types of leave, such as vacation, a doctor's visit or a funeral, will not be counted as an unscheduled occasion of absence.
- 3. Unscheduled absences. If it is not possible to pre-schedule an absence (including a late arrival or early departure), you must:
  - o notify your supervisor within a ½ hour of the start of the work day;
  - o give the reason for the absence; and
  - o give an estimate of how long the absence will be.

If the absence is continuous or lengthy, notify your supervisor on a daily basis, or as otherwise required by your supervisor.

- 4. Exhaustion of sick leave accruals. If you are absent because of illness or injury, but have exhausted your sick leave accruals, you must:
  - For each absence, have your physician complete a state medical certificate form explaining the reason for your absence, and submit the completed form to Human Resources.
  - o If you wish to use other accrued leave in place of your exhausted sick leave, you must make such a request in writing and submit it to your supervisor or to Human Resources with the completed medical certificate form.
  - o If you fail to follow this procedure, you will be charged with an unscheduled occasion of absence and unauthorized leave for the day.
  - If you have exhausted all other accrued leave time in addition to your sick leave time, you will be charged with unauthorized leave for the day.
- 5. Extended Leaves. If you will be absent for an extended period of time because you are sick or injured, you must
  - Obtain a medical certificate form from Human Resources
  - Have the form completed by the treating physician stating the reason for the absence and your anticipated return to work date; and
  - o Return the form to Human Resources at the time you return to work.

### **Telecommuting**

Telecommuting is a management option that allows an employee to work at home or an alternate work site; it is not an employee entitlement. The purpose of telecommuting as outlined in Connecticut General Statute 5-248i(a) is to: (1) Increase worker efficiency and productivity; (2) benefit the environment; and (3) reduce traffic congestion." Telecommuting does not change the hours of work. An employee may be considered for this option when the following minimum criteria are met:

- 1. In most instances, the employee must have completed their introductory period and have been performing his/her current job duties for at least 60 days.
- 2. The employee has requested to telecommute by filling out a telecommuting agreement which will outline the terms and conditions of their telecommuting arrangement.
- 3. CGB has determined that the employee's job can be readily and effectively completed at an alternate site.
- 4. CGB determines that the employee's absence from the office is not detrimental to office operations, overall productivity, the working conditions of other employees, or services to clients and customers.
- 5. The employee's performance has been satisfactory or better.
- 6. The employee agrees to abide by the guidelines of the Telecommuting Policy outlined in their telecommuting agreement.y.

The following guidelines for telecommuting are to be followed in accordance with each employee's individual telecommuting agreement:

- 1. Each employee must specify a regular telecommuting day on their telecommuting agreement including hours to be worked per day, start time, end time, breaks, lunch periods, and duration if this is implemented on a project basis.
- 2. If an employee would like to telecommute in the case of inclement weather, they must have a signed "inclement weather" telecommuting agreement on file.
- 3. Telecommuting is not an entitlement. If business needs dictate the employee's physical presence in the office, the employee is required to report to work.
- 4. In order to meet the business needs of the agency, an employee may request an adjustment to the telecommuting schedule outlined in this agreement. No adjustment may be made without prior supervisory approval

## **Overtime and Overtime Pay**

Under the federal Fair Labor Standards Act (FLSA), employees who are covered by FLSA shall be paid time-and-one-half for all hours worked in excess of 40 hours per week. Each position at CGB is determined to be exempt or non-exempt in consultation with the President, the Chief Operating Officer, the Manager, Human Resources, the Director of Operations and CGB's attorneys. Exempt employees will not receive any overtime pay. Non-exempt employees are paid based on the number of hours actually worked and are eligible for overtime pay. Overtime pay will be paid at the rate of one and one-half times (1½) the non-exempt employee's regular rate of pay for all time worked in excess of 40 hours per week. Overtime pay is based on actual hours worked. Thus, if a non-exempt employee is absent during a week when overtime hours have occurred, the absent hours reported will not be considered hours worked in determining a time and one-half overtime payment. An accurate record of non-exempt regular and overtime hours must be maintained for purposes of pay. Time sheets are to be signed by the staff member and by their supervisor and then submitted to Human Resources for processing.

### **Merit Compensation**

On an annual basis, the President may recommend for approval by the Board of Directors an allocation of funds for merit compensation increases for the staff. A maximum percentage salary increase will be set by the President for those employees with exceptional performance evaluations. Employees shall be compensated according to job performance as determined through the performance management process as administered by CGB.

**SECTION 4 TYPES OF LEAVE** 

## **Vacation Policy**

Vacation is not earned in any calendar month in which an employee is on leave of absence without pay more than five working days. Regular full-time employees will accrue and must use vacation time in accordance with the following schedule:

Years of Service	Vacation Earned	Must Use Annually
0 - 2 years	15 days per year	10 days
2 - 10 years	20 days per year	15 days
Over 10 years	25 days per year	20 days

The maximum number of vacation days an employee will be eligible to earn annually will be 25 days. Generally an employee may not take more than four (4) consecutive weeks at one time in one year. Under extraordinary circumstances, the President and/or his designee may grant exceptions.

All employees will be limited to a maximum carryover annually of 5 days (40 hours) of vacation time accrued during the calendar year. The maximum aggregate carryover permitted for employees hired after January 1, 1998, including the current years allowed shall be 30 days. In extraordinary circumstances, such as unusual work circumstances, deadlines, or demands, the President may increase the allowable annual carryover to ten (10) days. The additional time that is carried over must be used during the next calendar year, in addition to all other vacation time required to be used the employee will accrue during that calendar year as outlined in the grid above.

### **Maximum Aggregate Carryover**

The maximum aggregate vacation balance permitted to be carried into a new calendar year for employees hired after January 1, 1998, including all vacation hours previously accrued shall be 30 days (240 hours). With approval, the President/CEO may allow a one-time exception to carryover vacation in excel of 30 days (240 hours) into a new calendar year. If the exception is granted, the employee's vacation balance must be at 30 days (240 hours) by December 31<sup>st</sup> of the new calendar year. Vacation accruals above this amount will be authomatically automatically reduced to the maximum aggregate carryover of 30 days/240 hours and all unused vacation time over 30 days (240 hours) will be forefeitedforfeited.

Employees will be allowed to accrue more than this amount during a given year, however, the maximum aggregate accrual for which an employee will be compensated upon separation is 240 hours. In the event of an involuntary termination where the employee is not given the opportunity to utilize their vacation balance over 240 hours prior to separation, the effective date of the termination will be adjusted to incorporate the employee's unused vacation time over 240 hours and the employee will be paid out in a lump sum for the remaining balance of 240 hours.

In cases where vacation carryover in excess of 30 days is allowed with prior approval of the President, the employee's vacation balance will be automatically reduced to the maximum aggregate carryover of 30 days and all unused vacation time will be forfeited.

### Maximum Vacation Hours Paid Out Due To Termination/Resignation

The maximum number of vacation days/hours to be paid upon termination/resignation for employees hired after January 1, 1998 shall be 30 days/240 hours. The maximum for employees hired prior to January 1, 1998 shall be 120 days/960 hours.

### **Advancing Vacation Time**

Vacation time will not be advanced under any circumstances. If an employee wishes to take vacation time, but does not have accrued time available, they may request to take unpaid leave. Such leave may be granted at the discretion of the employee's supervisor and or/ the department head. Vacation time is paid at the employee's base pay rate and can be taken when earned. Vacation time earned is credited to an employee on a monthly basis based upon the schedule presented above.

\*Note – Once an employee is at the maximum vacation balance of 30 days, they must utilize all of their annual accruals or forfeit them.

#### **Accrual Period**

Vacation days are accrued on a monthly basis. Employees begin to accrue vacation days the first full month after their date of hire.

### **Scheduling**

To the extent possible, and with sufficient advance notice, vacations will be scheduled as requested by the employee provided that staffing requirements be met as determined by the supervisor. The supervisor will settle conflicts between employees with regard to desired vacation schedules.

A written or electronic request should be filled out by the employee and approved by the Supervisor. Whenever possible, if requesting less than one week of vacation, the request should be presented three days prior to the time requested and if requesting one week or more the request should be presented and approved at least three weeks prior to leave.

## **Compensatory Time**

The President and/or his designee may grant compensatory time for extra time worked by exempt employees, excluding members of the senior management team, for these unique situations provided it conforms to the following criteria:

- As a general rule, exempt employees at CGB work 40 hours per week. However, these
  employees are expected to work the number of hours necessary to get the job done.
  There are some occasions that require an exempt employee to work a significant
  number of extra hours in addition to the normal work schedule. This does <u>not</u> include the
  extra hour or two a manager might work to complete normal work assignments in a
  normally scheduled workday.
- 2. The exempt employee must receive written authorization in advance to work extra time by the President and/or his designee in order to record the extra hours as compensatory time. The authorization must include the employee's name and outline the reason(s) for compensatory time. Proof of advance authorization must be retained in the employee's personnel file ffor audit purposes.
- 3. The amount of extra time worked must be significant in terms of total and duration and occur on weekends or state holidays.
- 4. Extra time worked must be completed at an approved work location.
- 5. Compensatory time shall <u>not</u> accumulate by omitting lunch hours or other changes that do not extend the exempt employee's normal workday.
- 6. Compensatory time shall not accumulate for travel or commuting purposes.
- 7. The number of extra hours worked and the compensatory time taken must be recorded on the appropriate time sheet and maintained by CGB. In no case shall an exempt employee be permitted to take compensatory time before it is earned.
- 8. All compensatory time earned January 1 through June 30 will expire on December 31 of the same year, and compensatory time earned July 1 through December 31 will expire on June 30 of the following year. All compensatory time balances will be set to zero on these dates. Any time not used by these dates will not be available.
- 9. In no event will compensatory time be used as the basis for additional compensation and shall not be paid as a lump sum at termination of employment.
- 10. No more than 8 hours can be earned in a twenty-four hour period.

#### **Personal Leave**

All CGB full time employees are granted three days paid personal leave each calendar year for purposes not covered by vacation or sick leave. Personal days do not require prior approval of the employee's supervisor. Personal time may not be accumulated or carried over to the next calendar year. Employees will not be compensated for unused personal time upon termination of employment. Personal leave days for part time employees will be pro-rated.

### **General Leave of Absence**

Occasionally, an employee may request time off without pay for reasons not covered by any of the other policies. In these cases the employee should submit a written request for a leave of absence to their manager with a copy to the President and/or his designee. The request should clearly state the reason for the request and provide any supporting information to aid in the approval decision. The reason, and the requested length of the leave, will be considered by the President in his/her decision as to whether the employee's medical and other insurance benefits should continue during the leave, if approved. The decision will also be influenced by any limitations imposed by individual insurers.

#### **Bereavement Leave**

CGB will grant an employee up to five consecutive workdays off in the event his or her immediate family member dies. If a death occurs while the employee is on vacation, five days

absence with pay may be granted in lieu of the employee's vacation period. The immediate family is defined as an employee's spouse, parent, brother, sister, child, grandparent, grandchild, in-law, legal guardian or permanent resident of the employee's household. Additional time may be granted if approved by the supervisor, and charged against vacation or personal time. Employees should notify their supervisor as soon as possible if they have a need for bereavement leave.

#### **Sick Leave**

Full-time employees earn 10 sick leave days per year. Part time employees earn sick leave according to the same schedule as full-time employees, but prorated according to their standard part-time hours per week. Sick time is not earned in any calendar month in which an employee is on leave of absence without pay more than five working days.

Sick leave is intended for use in situations such as the following:

- Family illness the event of a critical illness or severe injury to a member of the employee's immediate family in which the assistance of the employee is required.
- Medical Appointments for medical, dental, eye examinations, or treatment for which arrangements cannot be made outside of working hours
- Other bereavement up to three days per calendar year to attend the funeral of persons other than those of the employees' immediate family.

Terminating employees will not be compensated for the balance of unused sick leave except in the case of retiring employees. Qualified retirees will receive payment for one-quarter of accumulated unused sick leave up to a maximum of 60 days.

### **Sick Leave - Medical Certification Or Examination**

CGB may require certification of illness from an employee's physician or a medical examination with another physician to verify the need for continued absence. To be certain that an employee's health permits his or her safe return to work, CGB may require medical certification or an examination by a physician regarding fitness for duty.

An acceptable medical certificate, signed by a licensed physician or other health care provider, will be required to substantiate time off if the medical/sick leave:

- Consists of more than five consecutive working days.
- Is to be applied contiguous to, or in lieu of time taken off as vacation.
- Recurs frequently or habitually, and the employee has been notified.
- When the employee's presence at work will expose others to a contagious disease.

#### **Sick Leave Bank**

The CGB Sick Leave Bank is a pool of sick days that has been established by employees of CGB who have made a donation of their accumulated sick days. The Bank is available to members to draw up to ten (10) eight- hour sick days per year in the unfortunate event that they experience a qualified illness or injury.

Sick Leave Bank members will receive benefits in the form of paid sick leave if all of the following requirements are met:

• the member has a medical condition that prevents them from working that has been verified by a Medical Certificate OR a member's immediate family member has a

medical condition that has been verified by a Medical Certificate and requires the Sick Leave Bank member's care;

- the member has been out on approved medical leave (paid or unpaid) as described above for at least two consecutive weeks;
- the member has exhausted all of their sick, personal leave and compensatory time and vacation time in excess of 30 days;
- the member has not been disciplined for an absence-related reason for the past 12 months; however a committee comprised of HR and Management may waive this requirement;
- the member has completed a Sick Leave Bank Withdrawal Request Form and it has been approved by human resources;

All requests for utilization of the sick leave bank must be in accordance with the Sick Leave Bank Policy. Please contact Human Resources for a complete copy of the sick leave bank policy.

# **Family Medical Leave**

### **Purpose**

This policy establishes guidelines for leave available to employees of CGB under the federal Family and Medical Leave Act of 1993 ("FMLA") and highlights relevant provisions of Connecticut law.

## **Eligibility**

Employees who have worked at CGB for at least twelve (12) months, and who have worked at least 1,250 actual work hours during the twelve (12) months immediately preceding the start of a leave, are eligible for unpaid leave under the FMLA. ("Hours worked" does <u>not</u> include time spent on paid or unpaid leave). Employees must have worked at CGB for at least six (6) months to be eligible for family/medical leave under Connecticut law.

### **Reasons for Leave**

Leaves under either the state family/medical leave or federal FMLA or a combination of the acts may be taken for the following reasons:

- The birth of employee's child or adoption of a child by the employee (both).
- The placement of a foster child with the employee (federal only).
- The "serious illness" (state) or "serious health condition" (federal) of a child, spouse or parent of an employee.
- The "serious illness" (state) or "serious health condition" (federal) of the employee.

### **Family Medical Leave Documentation Requirement**

The following documents must be submitted in support of an FMLA request:

- **Birth of child:** "Employee Request" (Form HR-1) and Medical Certificate (Form P-33A-Employee) indicating the pre-delivery disability period (if applicable), delivery date and post-partum disability period (if applicable).
- **Adoption:** (both state and federal) or foster care (federal only) of child: "Employee Request" (Form HR-1) and letter from the adoption/foster care agency confirming the event and its effective date.
- Serious illness/health condition of child, spouse or parent: "Employee Request" (Form HR-1) and Medical Certificate (Form P-33B-Caregiver).

• Serious illness/health condition of employee: "Employee Request" (Form HR-1) and Medical Certificate (Form P-33A-Employee) (only if employee is on paid or unpaid leave for more than five days).

# Length of Leave

Under federal FMLA, employees are entitled to 12 weeks of unpaid leave in a twelve-month period. Under state family/medical leave, employees are entitled to a maximum of twenty-four (24) weeks of unpaid leave within a two-year period. The state entitlement is applied <u>after</u> the employee has exhausted any sick leave accruals that may be applicable. The state policy allows the substitution of personal leave and vacation accruals; however, this will not extend the 24-week entitlement period.

The 12-month entitlement period for family or medical leave is measured from the initial date of an employee's first leave under this policy, until the end of the applicable 12 or 24-month period. For leaves eligible under both the FMLA and state family/medical leave, the entitlement periods will run concurrently.

### **Requests for Leave**

Requests for a family or medical leave must be submitted to Human Resources at least thirty (30) days before the leave is to commence, if possible. If thirty (30) days notice is not possible, please submit your request as soon as practicable under the circumstances. For leaves taken because of the employee's or a family member's serious health condition, the employee must submit a completed medical certification form before the leave begins, if possible. This form may be obtained from Human Resources. If advance certification is not possible, the employee must provide the medical certification within fifteen (15) calendar days of the employer's request for the medical certification. Failure to submit a certification, or submission of an incomplete certification, may delay the use of FMLA leaves, or result in denial of such leave.

### Requests for Leave

If an employee takes leave to care for his or her own serious health condition, immediately upon return to work the employee must provide medical certification that the health condition which created the need for the leave no longer renders the employee unable to perform the functions of the job. This certification must be submitted to Human Resources.

#### **Use of Paid Leave**

Employees have the option of substituting their accrued paid personal leave and accrued paid vacation for any unpaid portions of federal FMLA taken for any reason other than the employee's own serious health condition. However, where the leave is for the employee's own serious health condition, accrued paid sick leave shall be substituted for unpaid portions of federal FMLA prior to the employee electing the substitution of accrued paid personal and accrued paid vacation leave. The amount of unpaid leave entitlement is reduced by the amount of paid leave that is substituted.

#### **Medical Insurance and Other Benefits**

During approved FMLA and/or state family/medical leaves of absence, CGB will continue to pay its portion of medical insurance premiums for the period of unpaid family or medical leave. The employee must continue to pay their share of the premium and failure to do so may result in loss of coverage. If the employee does not return to work after expiration of FMLA leave, the employee will be required to reimburse CGB for payment of medical insurance premiums during the family or medical leave, unless the employee does not return because of a serious health condition or other circumstances beyond the employee's control.

Employees who have state-sponsored group life insurance will be billed directly for the same amount they contributed prior to the leave. In the case of any other deductions being made from paychecks (disability insurance, life insurance, deferred compensation, credit union loans, etc.), employees must deal directly with the appropriate vendor to discuss payment options.

During a leave, an employee shall not accrue employment benefits such as seniority, pension benefit credits, sick, or vacation leave. However, employment benefits accrued by the employee up to the day on which the leave begins, which remain unused at the end of the leave, will not be lost upon return to work. Leave taken under this policy does not constitute an absence under CGB's attendance policy.

#### Reinstatement

Except for circumstances unrelated to the taking of a family/medical leave, an employee who returns to work following the expiration of a family/medical leave is entitled to return to the job held prior to the leave or to an equivalent position with equivalent pay and benefits. In cases involving the serious health condition of an employee, CGB will require the employee to produce a fitness-for-duty report on which the physician has certified the employee is able to return to work. This requirement protects the employee, co-workers and the public from the negative consequences that can result when an individual returns to work before being medically ready to do so. Therefore, employees who are notified of the need for a fitness-for-duty certification will not be allowed to return to work without it.

## **Military Leave**

Military leave with pay for required military training is available to members of the National Guard or Reserve components of the Armed Forces. Required military leave must be verified through the submission of a copy of the appropriate military orders to Human Resources. A maximum of three (3) weeks per calendar year is allowed for annual field training.

When an employee is ordered to duty at the expiration of his/her field training, as evidenced by special orders, he/she shall receive additional time off with pay provided the period of absence in any calendar year shall not exceed thirty (30) days. No such employee shall be subjected, by reason of such absence, to any loss or reduction of vacation or holiday privileges.

## **Extended Military Leave (Induction)**

Any employee who shall enter the Armed Forces shall be entitled to a leave of absence without pay for the time served in such service, plus ninety (90) days. An employee who leaves employment for the purpose of entering the Armed Forces of the United States shall be reinstated to their former position and duties, providing he/she apply for return to employment within ninety (90) days after receiving a certificate of satisfactory service from the Armed Forces.

This section shall not apply to any employee who has been absent from his/her employment for a period of more than three (3) years in addition to war service or compulsory service and the ninety (90) day period provided for because of voluntary reenlistment.

### **Jury Duty**

CGB recognizes that every citizen has an obligation to perform jury duty when required. CGB encourages cooperation of its employees with this important civic duty.

If an employee is notified to appear in court to qualify to serve as a juror, the staff member must inform Human Resources by presenting the notice in advance of the court appearance date.

The employee will receive time off to serve and will receive his/her regular salary during the period of jury service.

Failure to provide such notice will result in CGB charging that time to either personal or vacation leave.

On any day during which the employee's attendance on the jury is not required, he/she shall report to work as usual. On any day in which the court releases jurors before 1:00 p.m., the employee is expected to report to work for the balance of the day.

## **Holidays**

Holiday time off will be granted to all full-time regular employees on the 12 holidays listed below. Part-time employees will be paid only if they are scheduled to work on the date that the holiday falls and their pay for the holiday shall be pro-rated based on their part-time schedule. Temporary employees after ninety (90) days will receive holiday pay if normally scheduled to work on the day of the week on which the holiday falls.

If a recognized holiday falls during an eligible employee's paid absence (e.g. vacation or sick leave), holiday pay will be provided instead of the paid time off benefit that would otherwise have applied.

Paid holidays at CGB are as follows:

New Year's Day
Martin Luther King's Birthday
Lincoln's Birthday
Washington's Birthday
Good Friday
Memorial Day

Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

### **Inclement Weather**

When traveling in snow presents a significant danger to staff and clients, cancellations and late openings for the State of Connecticut will be announced on WTIC-AM 1080 or on-line at the Connecticut Department of Emergency Management and Homeland Security website. The President and/or his designee will inform department managers about any early closing times established during the day.

On inclement weather mornings when no cancellation or late openings have been announced, all employees (except those with an approved inclement weather telecommuting agreement) are expected to make a reasonable effort to be at work on time. Any employee who is unable to get to work is expected to notify their supervisor promptly and will have to utilize their personal leave accruals. Failure to notify your supervisor will be treated as an unexcused absence. Those employees with an approved inclement weather telecommuting agreement shall be subject to the terms and conditions of that agreement.

In the event of a situation where our offices will be closed because of a power outage, the following steps will be taken:

- 1. We will notify the local media that our offices are closed so we can be added to the official "cancellation list" on television and radio.
- 2. We will implement a "telephone tree" where we will attempt to contact employees via telephone in the event our offices are closed unexpectedly.
- 3. We will send out an email to all CGB staff and advise them that our offices are closed. If necessary, we may communicate a conference call number and a time to call in for a teleconference. We will attempt to communicate this information via email if it is operationals or the "telephone tree". This conference call will be used to provide information to staff and to arrange continuity of operations in the event of a major emergency.

# **Community Service Days**

Each employee may take up to one paid workday per year to perform community service. Prior approval by the employee's supervisor is required. The community service must be for 501 c 3 or equivalent non-profit organizations. The purpose of this policy is to encourage a range of community service activities by CGB employees. This day with pay will not be charged against any leave balance of the employee. Prior to the date of community service, each employee must provide a written request to their supervisor. Human Resources will determine whether the proposed service and organization meets the intent of the policy. A letter from the organization will be required as documentation of participation.

**SECTION 5 EMPLOYEE BENEFITS** 

Employees of CGB are eligible to participate in the medical, dental and retirement benefits offered to employees of the State of Connecticut. In addition, there are certain benefits offered by CGB that are available to our employees. A summary of these benefits follows.

# Workers' Compensation

All employees are covered under the State of Connecticut Workers' Compensation insurance program. This program covers any injury or illness sustained in the course of employment that requires medical, surgical, or hospital treatment. CGB pays the full premium for this coverage. There is no cost to the employee.

Employees who sustain work-related injuries or illnesses should inform their supervisor immediately. No matter how minor an on the job injury may appear, it is important that it be reported immediately. Consistent with applicable state law, failure to report an injury within a reasonable period of time could jeopardize your claim. Supervisors are responsible for calling **MedInsights** at (800) 828-2717 toll-free as quickly as possible, to report any work-related injury sustained by an employee. Supervisors must provide **MedInsights** with the employee's name, home address, home telephone number, description of the injury, and the date and place the injury occurred. Supervisors should also notify Human Resources and the President as quickly as possible of any on the job injury sustained by an employee.

Neither CGB nor the insurance carrier will be liable for the payment of benefits for injuries sustained during an employee's voluntary participation in any recreational, social or athletic activity sponsored by CGB after normal working hours.

#### **Medical Insurance**

Employees become eligible for coverage in a comprehensive health insurance program on the first day of the first full month of employment. Enrollment is limited to the date of hire or open enrollment periods (normally the month of May) as outlined by the employer. The details of the plan options and their coverage will be explained by Human Resources and are listed in the explanatory booklets provided by the insurer. A portion of the cost of the medical insurance for dependents must be covered by employee contributions.

#### **Dental Insurance**

Employees become eligible for coverage in a dental insurance program on the first day of the first full month of employment. The details of this insurance coverage will be explained by Human Resources and are listed in the explanatory booklet provided by the insurer.

### **Deferred Compensation**

The Deferred Compensation Plan, created in accordance with Section 457 of the Internal Revenue Code, allows you to defer money earned during your peak earning years and receive its value later when you may be in a lower tax bracket. Amounts you elect to defer are before tax dollars and any interest earned or any gains on these dollars are allowed to accumulate without federal income tax obligations until you receive your money.

Participation in the Plan is voluntary. It is your decision, which should be made after considering all options, as well as your plans for the future. A Deferred Compensation Plan is not intended for savings and investments of a short-term nature since monies deferred are generally not available until you separate from State service. For more information regarding deferred compensation, contact Human Resources.

#### **Retirement Plan**

Employees of CGB are provided retirement benefits under the State of Connecticut Retirement Plan (SERS). The benefits provided by the plan are described in the Summary Plan Description given to all eligible employees.

# **Dependent Care Assistance Program**

CGB employees are eligible to participate in the State of Connecticut Dependent Care Assistance Program (DCAP). With DCAP you have the opportunity to deposit a portion of your pay into a Dependent Care Spending Account. These dollars are deducted on a pre-tax basis and are used to reimburse you for eligible dependent care expenses. These "pre-tax" dollars are exempt from federal and state income taxes.

When you contribute pre-tax dollars to a reimbursement account, you lower your taxable income; therefore, you pay fewer taxes and increase your spendable income. To receive more information, contact Human Resources.

### **Life Insurance**

Upon employment, CGB provides life insurance coverage at no cost to the employees that work at least 30 hours per week. In the event of an employee's death, life insurance benefits are payable to the person he/she has named as beneficiary. Other benefits such as dismemberment, loss of sight, continuation of insurance are explained in the group certificate. All eligible employees will receive a certificate showing the face value of the policy upon receipt of the application by the insurance company. The amount of coverage is equal to two times the employee's annual salary up to a maximum of \$150,000 worth of coverage.

## **Group Life Insurance**

Upon date of hire, employees can elect to participate in group life insurance offered by the State of Connecticut. Employees become eligible for coverage under the State of Connecticut group life insurance plan after six months of employment. The details of this coverage will be explained by Human Resources and are listed in the plan booklet provided by the insurer. The cost of this option is fully borne by the employee.

### **Supplemental Group Life Insurance**

The State of Connecticut also offers supplemental group life insurance to employees whose gross annual income is at least \$45,000. New employees are eligible for this insurance after six months of employment. This benefit is available for present employees to be initiated or increased during open enrollment, which is usually in May. The cost of this option is fully borne by the employee.

## Other Insurance

There are several options for insurance available to our employees through the State of Connecticut. Human Resources will provide updates on these options periodically. Please contact Human Resources for further information.

### **Disability Insurance**

CGB provides short-term and long-term disability insurance coverage for all full time employees. Disability coverage for new employees will commence on the first day of the second full month of employment. Please refer to your certificate booklet for full details, limitations and provisions of the plan.

## **Connecticut Higher Education Trust Program**

CGB employees are eligible to participate in the State of Connecticut's Higher Education Trust Program, Connecticut's 529 College Savings Program (CHET). With CHET, you have the opportunity to deposit a portion of your pay into a higher education savings account. These dollars are deducted on a pre-tax basis and are "pre-tax" dollars are exempt from federal and state income taxes. To receive more information, contact Human Resources.

## **Employee Assistance Program**

The Employee Assistance Program offers assistance to employees having problems of a personal nature that may affect job performance. Services are also available for family members. Some examples of such problems would be drug or alcohol abuse, marital or family difficulties, or other situations that might have an adverse effect on an employee's emotional health. Participation in the program is confidential and free. It will generally include private consultation with a trained counselor who will advise the employee on what services are appropriate to their need. The counselor will normally refer the employee to qualified providers of treatment or counseling, and advise the employee on what services are or are not covered by their health insurance. Any employee needing assistance should contact UCONN EAP at 860-679-2877 or toll-free (in CT) 800-852-4392. The UCONN EAP website is http://www.hr.uconn.edu/employee\_assistance.html

Participation in the EAP program does not excuse employees from complying with normal agency policies or from meeting normal job requirements during or after receiving EAP assistance. Nor will participation in the EAP prevent CGB from taking disciplinary action against any employee for performance problems that occur before or after the employee's seeking assistance through the EAP.

The EAP program is there for you and is totally confidential and voluntary.

### **Credit Union**

CGB employees may participate in the Connecticut State Employee's Credit Union. Payroll deductions may be arranged. For more information, telephone CSE Credit Union, Inc., 84 Wadsworth Street, Hartford, CT 06106, (860) 522-5388 (Savings) or (860) 522-7147 (Loans). An employee can open an account by completing an application card and a payroll deduction authorization form, which are available in Human Resources. A check or money order made payable to the Connecticut State Employee's Credit Union must accompany the application and the normal processing time is four (4) weeks.

A change in deduction form may be obtained from Human Resources for employees wishing to stop their deductions. This form must be submitted to CSECU, Inc. The change will take approximately four (4) weeks to become effective.

### **Other Payroll Deductions**

Payroll deductions may be made for U.S. Savings Bonds and the Connecticut State Employees Campaign for charitable giving. Automobile insurance and homeowner's insurance can also be arranged through payroll deduction utilizing a program established by the State of Connecticut. For more information, contact Human Resources.

### **Direct Deposit**

Direct deposit of paychecks to the banking institution of your choice is available. Forms are available from Human Resources. Upon termination of employment, a final paycheck will be issued and not deposited directly.

## **Benefits Continuation (Cobra)**

The federal Consolidated Omnibus Budget Reconciliation Act (COBRA) gives employees and their qualified beneficiaries the opportunity to continue health insurance coverage under CGB's health plan when a "qualifying event" would normally result in the loss of eligibility. Some common qualifying events are resignation, termination of employment, or death of an employee; a reduction in an employee's hours or a leave of absence; an employee's divorce or legal separation, and a dependent child no longer meeting eligibility requirements. Under COBRA, the employee beneficiary pays the full cost of coverage at CGB group rates plus an administrative fee. CGB will provide each employee with a written notice describing rights granted under COBRA when the employee becomes eligible for coverage under the health insurance plan.

# **Continuing Education Assistance**

Any full time regular employee who has satisfactorily completed six months of service (and receives a rating of "meets expectations" or higher as a result of their six month review) and is continuing his/her education in a job related area, or in an area that will assist the employee in upward mobility or promotional opportunities shall be eligible to receive tuition assistance as follows: For credit courses at accredited institutions of higher education, full-time employees will be reimbursed 100% of the cost of tuition and laboratory fees up to a maximum of \$400 per credit taken for undergraduate courses and \$750 per credit for graduate courses. There will be a maximum dollar limit of \$10,000 tuition assistance per employee per fiscal year. Part-time employees who work at least 20 hours per week will be eligible for continuing education assistance on a pro-rated basis based on their work schedule. The employee must maintain an overall rating of "meets expectations" during the annual review process in order to continue to be eligible for assistance under this program.

Requests for tuition assistance must be in writing and will be reviewed and approved by the employee's department head and the President and/or his designee based on individual merits. Management will consider the relevance of the program to the employee's current position, job responsibilities and promotional path prior to approval of the tuition assistance request. The employee must maintain a grade point average (GPA) of C for undergraduate courses and B for graduate courses to continue receiving tuition assistance under this program. If an employee's GPA falls below these minimums, further eligibility for tuition assistance will be suspended until the required GPA is achieved.

Employees interested in applying for tuition assistance under this program should obtain a "Continuing Education Assistance Form" from the Human Resources department and follow the steps below to assure prompt tuition assistance.

- 1. Complete the Continuing Education Assistance Form and submit it, along with a written request for tuition assistance to your immediate supervisor.
- 2. The request will be reviewed and if appropriate, approved by your department head and the President.
- 3. Once approved and subsequent to enrollment in the program, submit a copy of course registrations, invoices and any other related documents to the Human Resources

  Administrator Ddirector of Operations for review and payment approval.
- 4. Upon completion of the semester, The Human Resources Administrator the dDirector of oOperations will require a copy of all grades. Failure to do so may render you ineligible for tuition assistance for future course. Employees are financially responsible to reimburse CGB for payments made on their behalf under this program if they resign from their employment with CGB within (6) months of the signed date on the most recent consent authorization section of the Continuing Education Assistance Form.

5. Employee Tax Liability: CGB follows the current IRS guidelines pertaining to annual reporting of employee educational benefits. Employees should consult with their tax advisor regarding this matter.

## **Training**

All employees of CGB are encouraged to take advantage of any job-related training opportunities that will enhance their job performance. CGB will pay the cost of any training deemed necessary for its employees.

The following is the procedure for signing up for and attending training.

- 1. The supervisor and employee will work together to develop a training plan for the employee based on the requirements of the job and the employees specific training needs.
- 2. The employee initiates a training request form and forwards it to their supervisor for approval.
- 3. The supervisor determines if the training is necessary, job-related, and if there is adequate office coverage for the employee to attend the training.
- 4. The employee attends the training and receives a certificate or attendance confirmation.
- 5. Upon return to the office, the employee forwards a copy of that certificate or attendance confirmation to Human Resources to be added to the personnel file.
- The employee is responsible for sharing information learned at training that might be useful to other staff. The employee is also responsible for utilizing or practicing the subject material (i.e. computer training) and will be held accountable for the training material.

In addition, there are several training programs mandated for our employees by the State of Connecticut – sexual harassment prevention, diversity training, workplace violence prevention training and ethics training. Human Resources will work with employees to ensure they attend these mandatory training sessions.

**SECTION 6 TRAVEL AND ENTERTAINMENT POLICY** 

## **Travel and Entertainment Policy**

This policy provides guidelines and establishes procedures for employees incurring business travel and entertainment expenses on CGB 's behalf.

Our objective is to provide employees with a reasonable level of services and comfort while traveling on CGB business. In order to accomplish this objective all employees must have a clear understanding of the policies and procedures for business travel and entertainment.

## **Responsibility and Enforcement**

The employee is responsible for complying with the travel and entertainment policy. An expense report form must be completed by the employee within 30 days of incurring the expense to request reimbursement for travel and entertainment expenses.

The employee's supervisor is responsible for reviewing and approving expense reports prior to their submission.

CGB assumes no obligation to reimburse employees for expenses that are not in compliance with this policy or are not submitted within 30 days of incurring the expense.

# Who to Call About Travel Policy Questions

Any questions, concerns, or suggestions regarding this travel policy should be directed to the Finance Department.

#### **Airline Class of Service**

All domestic air travel must be in Coach class.

Employees are expected to use the lowest reasonable airfare available.

### **Upgrades for Domestic Air Travel**

Upgrades at the expense of CGB are **NOT** permitted. Upgrades are allowed at the employee's personal expense.

### **Unused/Voided Airline Tickets**

Unused airline tickets or flight coupons must never be discarded or destroyed as these documents may have a cash value. To expedite refunds, unused or partially used airline tickets must be returned immediately to the designated department employee. Do not send unused tickets to the airlines, or include them with expense reports.

### Lodging

Employees are entitled to stay in a single room with a private bath. Employees may accept room upgrades to suites or executive floor rooms if the upgrade does not result in additional cost to CGB.

### **Room Guarantee / Cancellation and Payment Procedures**

It is the responsibility of the employee to cancel the room prior to the deadline if business needs require a change in travel plans (cancellation deadlines are based on the local time of the property). Employees should request and record the cancellation number for potential billing disputes.

#### **Rental Car**

#### **Rental Car Guidelines**

- Employees may rent a car at their destination when:
- It is less expensive than other transportation modes such as taxis, <u>Uber, Lyft,</u> airport limousines and airport shuttles.
- Entertaining customers.
- Employees may reserve rental cars in advance if that is the most reasonable and cost effective means of transportation.

## **Rental Car Categories**

CGB reimburses the costs of Compact or Intermediate class rental cars. Employees may book a class of service one-level higher when:

- Entertaining customers.
- The employee can be upgraded at no extra cost to CGB.
- Transporting excess baggage such as booth displays.
- Pre-approved medical reasons preclude the use of smaller cars.

#### **Rental Car Insurance**

Employees should decline all insurance coverage when renting a car for CGB use as CGB has suitable coverage in our general liability policy to cover these situations.

#### RENTAL CAR CANCELLATION PROCEDURES

Employees are responsible for cancelling rental car reservations. Employees should request and record the cancellation number in case of billing disputes. Employees will be held responsible for unused car rentals that were not properly cancelled.

## **Returning Rental Cars**

Every reasonable effort must be made to return the rental car:

- To the original city unless pre-approved for a one-way rental.
- Undamaged (i.e., no bumps, scratches or mechanical failures).
- On time, to avoid additional hourly charges.
- With a full tank of gas.

# **Reimbursement for Personal Car Usage**

Employees will be reimbursed for business usage of personal cars on a fixed scale as determined by CGB's mileage allowance. The mileage allowance is updated once a year in January and follows the mileage allowance set by the Internal Revenue Service. When working out of the office or out of town, any commute time clocked which is less than your normal daily commute is not reimbursable. Employees will not be reimbursed for any repairs to their personal car even if these costs result from business travel. To be reimbursed for use of their personal car for business, employees must provide on their expense report:

- Purpose of the trip.
- Date and location.
- Receipts for tolls, parking.

## **Ground Transportation to and from Terminals**

The most economical mode of transportation should be used to and from airports and bus and rail terminals when the employee is not accompanying a customer. The following modes of transportation should be considered:

- Public transportation (buses, subways, taxis, <u>Uber, Lyft</u>).
- Hotel and airport shuttle services.
- Personal car.

#### Personal/Vacation Travel

## **Combining Personal With Business Travel**

Personal vacation travel may be combined with business travel provided there is no additional cost to CGB. Corporate credit cards must **NOT** be used to pay for personal/vacation travel.

# **Spouse / Companion Travel**

A spouse or other individual may accompany an employee on a business trip at the employee's expense. CGB will not reimburse travel and entertainment expenses incurred by a spouse or other individual accompanying an employee on business unless:

- There is a bona fide business purpose for taking the spouse or other individual.
- The expense incurred would otherwise be reimbursable; and
- There is prior approval from the President.

# **Telephone Usage**

#### **Business Phone Calls**

Employees will be reimbursed for using their personal cell phone or home phone for business phone calls that are reasonable and necessary for conducting business. Expenses must be substantiated with the original telephone bill. The finance department maintains a cell phone reimbursement policy. If you are contemplating using a cell phone for business purposes on a regular basis, contact the finance department to obtain a copy of the policy.

### **Airphone Usage**

Employees will be reimbursed for using an airphone only in an emergency or if critical business issues necessitate its use.

### **Travel Insurance Coverage**

Expenses for additional travel insurance coverage will not be reimbursed.

#### Meals and Entertainment

#### **Personal Meal Expenses**

Personal meals are defined as meal expenses incurred by the employee when dining alone on an out-of-town business trip. Employees will be reimbursed for personal meals according to actual and reasonable cost incurred.

## **Business Meal Expenses**

Business meals are defined as those taken with clients, prospects or associates during which a specific business discussion takes place. Employees will be reimbursed for business meal expenses according to actual and reasonable cost.

## **Business Meals Taken With Other Employees**

Employees will be reimbursed for business-related meals taken with other employees only in the following circumstances:

- When a client is present.
- When, for confidentiality reasons, business must be conducted off CGB premises.
- · When traveling together for business.

Meal costs for social occasions, such as employee birthdays; secretary's day, etc. are not classified as business meals or entertainment expenses.

## **Entertaining Customers**

Entertainment expenses include events that include business discussions, which take place during, immediately before or immediately after the event, are eligible for reimbursement for entertaining customers, with the prior approval from the President.

## **Tipping**

Tips included on meal receipts will be reimbursed. Any tips considered excessive will not be reimbursed. As a general rule, employees should not tip more than 15% to 20% of the cost of the meal.

Other types of tips for porters, maid service, etc. should be reasonable.

## **Payment for Meals and Entertainment**

When more than one employee is present at a business meal, the most senior level employee should pay and expense the bill.

### **Documentation Requirements**

A receipt must be submitted with the expense report for any individual meal or entertainment expense. If a receipt is lost or destroyed, the President or Vice President Finance and Administration must approve the expense. In addition, for business meals and entertainment expenses, the following documentation is required and must be recorded on the expense report:

- Names of individuals present, their titles and company name.
- Name and location of where the meal or event took place.
- Exact amount and date of the expense.
- Specific business topic discussed.
- In the case of entertainment events, the specific time the business discussion took place (i.e. before, during or after the event).

## **Corporate Charge Card**

The President and/or his designee must approve the issuance of a corporate charge card.

## Personal Use of Corporate Charge Card

Corporate charge cards are intended for business use. Corporate charge cards must **NOT** be used for personal expenses and use of the corporate charge card for personal expenses will result in termination of the card.

## Reporting Lost / Stolen Cards

A lost or stolen corporate charge card must be reported to the card issuer and the Vice President of Finance and Administration Ddirector of Operations as soon as the employee discovers it is missing. Statistics on stolen charge cards indicates that unauthorized use of stolen cards is greatest in the first few hours after the theft.

## **Expense Reporting**

An expense report form is required to be completed to request reimbursement for incurred eligible travel and entertainment expenses.

The expense report form is located under Templates in the Shared Drive. The form will automatically calculate mileage reimbursements, total expenses by day and by type and calculate the net amount due the employee.

The expense report is to be completed and submitted for reimbursement in a timely manner. Expense reports should be submitted within one week of incurring the expense. CGB will assume no obligation to reimburse employees for expenses that are not submitted within 30 days of incurring the expense.

The type of expense and dollar amount must be separated on a **daily basis**. For example: a hotel bill may include meals, lodging and telephone expenses. Each category must be split and entered in the appropriate space on the expense report form with expenses allocated for each travel day.

### **Approval / Authorization Process**

All expense reports must be approved by the employee's immediate supervisor and then forwarded to the Finance Department. The President's expense report will be approved by the Vice President Finance and Administration. -Individuals approving expense reports are responsible for ensuring:

- The correctness, reasonableness and legibility of entries.
- Applicable receipts are attached.
- Charges are consistent with policy and were incurred for business purposes.
- Expenses are adequately explained.
- The expense report is signed by the employee.

In accordance with present rules and guidelines, charges that are questionable should be discussed with the employee and resolved **before** the expense report is approved.

# **Expense Report Review**

The Finance Department will review each employee expense report for:

- Approval signatures.
- Business purpose.
- Correct totals.
- Supporting documentation and receipts.
- Policy compliance.

The Finance Department will not reimburse any expense that is not in compliance with CGB's travel and entertainment policy.

# **Examples of Acceptable Documentation:**

- Air/Rail original passenger coupon.
- Hotel hotel folio plus charge card receipt or other proof of payment.
- Car Rental rental car agreement plus charge card receipt or other proof of payment.
- Meals/Entertainment charge card receipt or cash register receipt.
- Receipts for all miscellaneous expenses over \$10.00.

Receipts must include the name of the vendor, location, date and dollar amount of the expense. When a receipt is not available, a full explanation of the expense and the reason for the missing receipt is required.

# Incorrect or Incomplete Expense Reports

Expense reports that are incorrect or incomplete will be returned to the employee for corrective action and may result in delay or non-reimbursement of specific items. Violating CGB policy or altering of receipts can result in disciplinary action up to and including termination.

## **Employees Will Not Be Reimbursed for the Following Items:**

- Airline club membership dues.
- Airline headsets.
- Airline drinks.
- Airline or personal insurance.
- Annual fees for personal credit card.
- · Barbers and hairdressers.
- Birthday lunches.
- Car washes.
- Cellular phone repairs., except for corporate cell phones (note that employees will be reimbursed for business use on their cellular phones pursuant to the CGB Mobile Communications Policy.
- Child care.
- Clothing (i.e. socks, pantyhose, etc.).
- Expenses for travel companions/family members.
- Expenses related to vacation or personal days while on a business trip.
- Flowers or gifts for employees or customers (unless approved by the President or a Vice President).
- Gum, candy or cigarettes.
- Health club facilities, saunas, massages.
- Hotel movies.
- Hotel room refrigerator items.

- Hotel laundry and valet services unless the trip exceeds five consecutive days.
- Interest or late fees incurred on a personal credit card.
- Loss/theft of cash advance money or Company-paid airline tickets.
- Loss/theft of personal funds or property.
- Magazines, books, newspapers, subscriptions.
- Mileage for travel between home and office/work site.
- "No show" charges for hotel or car service.
- Optional travel or baggage insurance.
- Parking or traffic tickets.
- Personal accident insurance.
- Personal entertainment, including sports events.
- Personal toiletries.
- Pet care.
- Postage costs, postcards (sent to fellow employees).
- Shoe shine.
- Short term airport parking (except for 1 day trips only
- Unexplained or excessive expenses which are not within the intent of CGB policy will not be reimbursed.

All employees must review this policy and sign the acknowledgement form found in the Appendix and return it to Human Resources.

**SECTION 7 GENERAL RULES OF CONDUCT** 

#### **General Rules of Conduct**

To ensure orderly operations and provide the best possible work environment, CGB expects employees to follow rules of conduct that will protect the interests and safety of all employees and the organization. Although it is not possible to list all the forms of behavior that are unacceptable, the following are examples of infractions that may result in disciplinary action, up to and including termination of employment:

- Theft or inappropriate removal or possession of property of CGB, clients or other employees.
- Dishonesty or misrepresenting, falsifying or providing misleading records including, but not limited to, employment applications or resumes, time keeping records, client records, expense requests, etc.
- Working under the influence of alcohol or illegal drugs.
- Possession, distribution, manufacturing, sale, transfer, or use of alcohol or illegal drugs in the work place, while on duty.
- Fighting, wrestling, horseplay, or threatening violence in the workplace.
- Insubordination or other disrespectful conduct including, but not limited to, refusal to perform assigned work.
- Refusal to do assigned work, use of obscene or vulgar language, or other disrespectful conduct.
- Taking any action detrimental to CGB, fellow employees, clients or visitors.
- Unsafe behavior and/or violation of safety or health rules.
- Sexual or other unlawful or unwelcome discrimination or harassment.
- Possession of dangerous or unauthorized materials, such as explosives or firearms, in the workplace.
- Excessive absenteeism, tardiness, or any absence without notices.
- Unauthorized use of telephones, mail system, or other employer-owned equipment for personal use or other unauthorized operation.
- Sleeping, loafing, failure to demonstrate a professional behavior in carrying out assigned tasks.
- Soliciting, gambling, taking orders, selling tickets, collecting or contributing money for any unauthorized cause.
- Engaging in outside business activities that conflict with CGB's interests or interfere with proper performance of job duties.
- Failure to report a work-related injury immediately.
- Unauthorized use or the willful damage, abuse or destruction of CGB property or the property of others.
- Violation of CGB's personnel policies and/or rules.
- Unsatisfactory work performance.

The examples listed above are not intended to cover all situations that may result in disciplinary action, but are only intended to be guidelines as to what are considered improper standards of work conduct. Also, this policy does not alter the at-will nature of an employee's employment with CGB.

If any employee's behavior or interactions jeopardize positive working relationships with clients, and render the employee unable to fulfill the responsibilities of his/her position, or place CGB at risk of liability, the employee will be subject to review and possible disciplinary actions. It is important for all employees to conduct themselves in a way that is fair to each other and to our common objective of delivering quality services.

## **Personal Appearance**

The nature of our business at CGB puts us in frequent contact with clients and the public. We enjoy an excellent reputation among the energy community in Connecticut. While there are many reasons for this reputation, one of the ways to help maintain it is for all staff to present a professional image to the community. It is important that they have confidence in the staff, and the staff members have confidence/pride in themselves when transacting business. To help present this image and foster public confidence, staff members must dress appropriately for their work assignments and use common sense and good judgment in their appearance. Employees with questions regarding what is deemed appropriate dress for his/her work assignments should discuss this with his/her supervisor. CGB reserves the right to determine individual compliance with the policy in all questionable cases.

## **Personal Appearance Guidelines**

Staff will wear clean and well-maintained attire appropriate to the type of work they do. Shoes are required and must also be well-maintained. Good grooming is required. Formal business attire may be expected for internal and external events such as board meetings, hearings, presentations, and meetings.

Business casual attire (ties are optional) is acceptable for all other occasions. In compliance with this policy, the following are examples of unacceptable attire:

- torn, patched/faded clothing
- athletic wear, e.g. sneakers, shorts, t-shirts, skorts, etc.
- halter tops
- tube tops
- rubber soled flip flops
- blue denim clothing (unless on a designated "Jeans for Charity" Day)
- shorts (any pant or slack that ends above the knee)
- shirts with slogans or large letter advertising

### **Freedom from Harassment**

CGB is committed to treating its employees with dignity and respect. All employees have a right to be free from racial or ethnic slurs, unwelcome sexual advances, or any other verbal or physical conduct that constitutes harassment. CGB is committed to providing a work environment that is free of discrimination and unlawful harassment.

Sexual harassment is unlawful under federal and state law. The CGB statement on Sexual Harassment and the Equal Employment Opportunity Commission "Guidelines on Discrimination Because of Sex" provide that unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment.
- Submission to or rejection of such conduct by an individual is used as the basis for employment decisions affecting that person.
- Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive working environment.

Actions, words, jokes, or comments based on an individual's sex, race, ethnicity, age, religion, or any other legally protected characteristics will not be tolerated. As an example, sexual harassment (both overt and subtle) is a form of employee misconduct that is demeaning to

another person, undermines the integrity of the employment relationship, and is strictly prohibited.

Sexual, racial, ethnic, or other unlawful harassment of employees by supervisory or non-supervisory employees of CGB, or by non-employees (including clients) will not be tolerated. All members of CGB management and supervision have the explicit responsibility to take immediate corrective action to prevent any sexual, racial, ethnic or other harassment.

Any employee who wishes to report an incident of unlawful harassment should promptly report the matter to his or her supervisor. If the supervisor is unavailable or the employee prefers to report the incident to someone other than the supervisor, he or she should immediately contact the Human Resources Administrator Ddesignee or any other available manager.

Anyone engaging in unlawful harassment will be subject to disciplinary action, up to and including termination of employment.

### **Sexual Harassment**

Title VII of the Civil Rights Act of 1964, which is a federal law and Connecticut law, prohibit sexual harassment. CGB will not tolerate sexual harassment in the workplace. No employee-either male or female-should be subject to unwelcome verbal or physical conduct that is sexual in nature or shows hostility to the employee because of the employee's gender. Sexual harassment does not refer to occasional compliments of a socially acceptable nature. It refers to behavior that is not welcome, that is personally offensive, that debilitates morale, and that, therefore, interferes with work effectiveness.

## **Management Responsibility**

Management at all levels of CGB is responsible for preventing sexual harassment in the workplace. This responsibility includes immediately reporting conduct by anyone, whether a coworker, supervisor, or non-employee, that may constitute sexual harassment, even if the conduct was sanctioned and regardless of how awareness of conduct was gained.

## **Prohibition Against Sexual Harassment**

CGB strictly enforces a prohibition against sexual harassment of any of its employees. Sexual harassment prohibited by state and federal law and by this policy includes the following conduct:

- Unwelcome verbal or physical conduct of a sexual nature when submission to such conduct is made either an explicit or implicit term or condition of any individual's employment (such as promotion, training, timekeeping, overtime assignments, leaves of absence); or
- Unwelcome verbal or physical conduct of a sexual nature when submission to or rejection of such conduct by an individual is used as the basis for employment decisions; or
- Unwelcome verbal or physical conduct of a sexual nature when the conduct has the purpose or effect of substantially interfering with an individual's work performance or creating an intimidating, hostile or offensive working environment; or
- Unwelcome verbal or physical non-sexual conduct that denigrates or shows hostility toward a person because of his or her gender when the conduct has the purpose or effect of substantially interfering with an individual's work performance, or creating an intimidating, hostile, or offensive work environment.
- Sexual harassment is a form of sexual discrimination, and neither sexual harassment nor discrimination will be tolerated.

# **Examples of Conduct Prohibited By This Policy Include:**

- Offering or implying an employment-related reward (such as a promotion or raise) in exchange for sexual favors or submission to sexual conduct;
- Threatening or taking a negative employment action (such as termination, demotion, denial of a leave of absence) if sexual conduct is rejected;
- Unwelcome sexual advances or repeated flirtations;
- Graphic verbal commentary about an individual's body, sexual prowess or sexual deficiencies;
- Sexually degrading or vulgar words to describe an individual;
- Leering, whistling, touching, pinching, brushing the body, assault, coerced sexual acts, or suggestive, insulting, or obscene comments or gestures;
- Asking unwelcome questions or making unwelcome comments about another person's sexual activities, dating, personal or intimate relationships, or appearance;
- Conduct or remarks that are sexually suggestive or that demean or show hostility to a person because of that person's gender (including jokes, pranks, teasing, obscenities, obscene or rude gestures or noises, slurs, epithets, taunts, negative stereotyping, threats, blocking of physical movement);
- Displaying or circulating pictures, objects, or written materials (including graffiti, cartoons, photographs, pinups, calendars, magazines, figurines, novelty items) that are sexually suggestive or that demean or show hostility to a person because of that person's gender;
- Retaliation against employees complaining about such behaviors;
- Harassment consistently targeted at only one sex, even if the content of the verbal abuse is not sexual;
- Sexually suggestive or flirtatious letters, notes, e-mail, or voice mail

This policy covers all employees. CGB will not tolerate, condone or allow sexual harassment whether engaged in by fellow employees, supervisors, and associates or by outside clients, opposing counsel, personnel or other non-employees who conduct business with this agency.

#### **General Harassment**

Actions, words, jokes or comments based on an individual's sex, race, ethnicity, age, religion or any other legally protected characteristic will not be tolerated. Such conduct can unreasonably interfere with work performance and create an intimidating, hostile and offensive work environment.

We expect all employees to consider at all times the effect your words and actions may have on those with whom you work. While you may feel that your behavior is harmless, it is the way your words and actions are perceived by others that counts.

Please do not assume that the agency is aware of a harassment situation. It is in your best interest and your responsibility to bring your complaints and concerns to management's attention so that the issue may be resolved.

#### **Complaint Process**

Should you ever experience any job harassment problem, please exercise the steps in our agency Grievance Procedure (outlined in Section 7 of this handbook), or at your option, you may directly contact Human Resources. You may expect prompt and concerned reaction to your problem. Any employee engaging in unlawful harassment will be subject to disciplinary action, up to and including termination.

## **Sanctions**

Any employee found to have engaged in sexual harassment or sexual discrimination will be subject to appropriate discipline, up to and including discharge.

## No Retaliation

This policy also prohibits retaliation against employees who bring sexual harassment charges or assist in investigating charges. Retaliation in violation of this policy may result in discipline up to and including termination. Any employee bringing a sexual harassment complaint or assisting in the investigation of such a complaint will not be adversely affected in terms and conditions of employment, nor discriminated against or discharged because of the complaint.

All employees must review this policy and sign the acknowledgement form found in the Appendix and return it to Human Resources.

## **Confidential Disclosure Policy**

Instructions: Please read this Confidential Disclosure Policy form carefully, then sign and return this form to Human Resources.

I understand that in connection with my work for CGB, I may be exposed to or given confidential or proprietary information belonging to CGB and others, including, but not limited to, information concerning trade secrets, business, products, finances, personnel information, and plans of CGB or CGB's clients, portfolio companies and applicants, (the Confidential Information). Without limitation, examples of Confidential Information are: drawings, manuals, notebooks, reports, models, inventions, formulas, processes, machines, compositions, computer programs, accounting methods, financial information, business and marketing plans and information systems.

Some of the Confidential Information may belong to or relate to "publicly held" companies and may include "inside information" which is not available to the public.

My employment by CGB creates a relationship of special confidence and trust between me and CGB with respect to the Confidential Information.

#### I agree as follows:

- 1. I will not, either during or subsequent to my employment by CGB, (1) publish or otherwise disclose Confidential Information except to persons who may from time to time be designated by CGB as proper recipients of such Confidential Information or (2) use the Confidential Information (including any inside information) either for the benefit of myself or for the benefit of anyone other than CGB. If I have any questions regarding whether any information is Confidential, I will ask my supervisor for instructions and will not disclose such information unless otherwise instructed by my supervisor.
- 2. The Confidential Information will remain at all times the property of CGB or the rightful owners thereof notwithstanding its disclosure to me.
- 3. I will promptly disclose to CGB all materials, innovations, studies, writings or other works created or developed by me as a result of tasks assigned to me by CGB or exposure to the confidential Information ("Work Product"). I agree that all ("Work Product") shall be the sole property of CGB and that CGB shall be the sole owner of all copyrights and other intellectual property rights related thereto. I hereby assign to CGB any and all rights which I may have or acquire in any Work Product and agree to assist CGB in every way (but at CGB's expense) to obtain or enforce copyrights and other interests in the Work Products as CGB may desire.
- 4. Upon termination of my employment with CGB or whenever requested by CGB, I will promptly deliver to CGB all Work Product and all documents and other tangible embodiments of the Confidential Information and any copies thereof.

## **Confidential Disclosure Policy**

This agreement supersedes and replaces any existing agreement between CGB and me relating generally to the same subject matter. It may not be modified or terminated, in whole or in part, except in writing signed by an authorized representative of CGB. Discharge of my undertakings in this agreement shall be an obligation of my executors, administrators, or other legal representatives or assigns.

All employees must review this policy and sign the acknowledgement form found in the Appendix and return it to Human Resources.

# **Computer Use Policy**

#### **Purpose**

Your computer is a CGB resource and is subject to the same rules as other CGB resources. The purpose of this policy is to ensure that employees understand the guidelines governing computer and other electronic communications (including tablet computers and mobile phone) use with regard to Internet access, email, other electronic communications, software licensing, security and personal use, in particular.

This policy cannot provide rules and guidance to cover every possible situation. Instead it is designed to express CGB's philosophy and set out the general principles that employees should apply when using company computers and technology. These policies apply to all CGB employees and staff (consultants, third-party contractors and administrators).

This policy does not cover health and safety issues.

Issues not directly addressed in this policy or in some other written form are to be decided by HR and/or CGB management should the need(s) and situation(s) arise. Further policy documents are forthcoming to cover specific areas of acceptable use as technology is deployed.

Unless otherwise stated, violation of these policies may result in disciplinary action, up to and including termination and/or legal action.

#### General

CGB provides employees and staff with personal computers (PCs), printers and other computer equipment as necessary to perform their job. Employees should not expect the latest hardware or software releases to be provided unless there is a business reason to do so.

CGB encourages the use of email, voicemail, online services, the Internet and Intranet as they can make communication more efficient and effective. In addition, they can provide valuable sources of information about vendors, customers, competitors, technology and new products and services. Pursuant to the Freedom of Information Act (FOIA), no employee shall have any expectation of privacy in any CGB work product.

Everyone connected with the organization should remember that electronic media and services provided by the company are company property and their purpose is to facilitate and support company business. Data stored and/or accessed on company equipment, regardless of origin, purpose, or design should also be considered to be within, at least, company purview, oversight and audit rights. The company reserves the right to access data of any sort, stored or located on company provided equipment.

The following are examples of **non-business** related activities that are prohibited:

- Streaming music or video.
- Shopping.
- Booking a vacation.
- Using instant messaging.
- Viewing personal pictures over the web.
- Downloading unauthorized computer software or pornographic materials.

#### E-Mail

All employees and staff are supplied with a company email address and the means by which to access their account. These details are provided by CGB as part of our IT orientation process. E-mail messages are considered public records and are subject to the Freedom of Information Act. Furthermore, e-mail, both incoming and outgoing, is not confidential and is monitored by the Information Technology Department. All e-mail correspondence is saved on the network backup solution and is easily retrievable. You should take great care to scrutinize what you include in an e-mail message. E-mail messages may exist on the system indefinitely and may be recoverable even after you have deleted the message.

All employees must create and use a business email signature, based on the approved template that is generated by the marketing department. Instructions and format of the signature are located under IT Tech Tips in public folders.

All non-company email services, such as Gmail, Hotmail, Yahoo, etc. are never to be used for company purposes. If third-party email services must be used, it will be provisionally and under direct supervision of the IT department department. Never is an employee or staff member to use a personal email account to correspond with clients.

Electronic media (email, web browsers, etc.) must not be used for knowingly transmitting, retrieving or storage of any communication that:

- Is discriminatory
- Is harassing or threatening
- · Is derogatory to any individual or group
- Is obscene or pornographic
- Is defamatory
- Is engaged in any purpose that is illegal or contrary to CGB's policy or business interests
- Contains unencrypted personal information
- Contains unencrypted intellectual property

Further, all forms of mass email (including 'virus warnings', 'good luck' and similar messages) are unacceptable unless for an approved business purpose.

The transmission of user names, passwords, or other information related to the security of CGB's computers is prohibited. If a password protected file absolutely must be emailed, the password should be sent in a separate email from the document or communicated in another manner.

Employees should avoid sending unnecessary informational emails to large parts or all of the organization. However, we recognize the business need for companywide emails, but there will be a strictly monitored and governed use of such behavior and practice. Failure to comply with these guidelines could result in disciplinary action.

#### **Email Disclaimer**

An email disclaimer is automatically added through our exchange server to the end of all email being sent outside the office. Do not add your own disclaimer to messages. The company disclaimer is as follows:

NOTICE TO RECIPIENT: This e-mail is (1) subject to the Connecticut Freedom of Information Act and (2) may be confidential and is for use only by the individual or entity to whom it is addressed. Any disclosure, copying or distribution of this e-mail or the taking of any action based on its contents, other than for its intended purpose, is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete it from your system.

## External email and participation in online forums

Employees should be aware that any messages or information sent using the company systems are statements identifiable and attributable to the company. Thus, an email carries the same weight in law as a letter written on company stationery.

Employees should note that even with a disclaimer, as described above, a connection with the company still exists and a statement could be imputed legally to CGB. Therefore, no one should rely on disclaimers as a way of insulating CGB from the comments and opinions that are contributed to forums or communicated in emails. Instead, discussions must be limited to matters of fact and expressions of opinion should be avoided while using company systems or a company-provided account. Communications must not reveal information about company processes, techniques, trade secrets, or confidential information and must not otherwise violate this or other company policies.

Employees should not send file attachments by email in situations where there is any potential for the compromise of company secrets or in relation to litigation. Be aware, files from many word processing packages, including Microsoft Word, retain information related to previous versions of the document that can later be retrieved.

#### Electronic calendars and voicemail

It is CGB policy that all employees keep their electronic calendars up to date (using Microsoft Outlook) and that calendars can be read by supervisors. When a meeting or event needs to be kept confidential, it should be marked as 'private' with the appropriate program functionality.

It is CGB policy that all employees with email and/or voicemail keep their "out of office assistant" or pre-recorded greetings up-to-date. In particular, during periods of absence from the office, these greetings should provide the individual with information indicating when the employee will receive a message or information about an alternative contact.

## My Documents

The "My Documents" folder is to be used as a work-in-progress location. This is the only place you are allowed to store documents on the PC. Once items in this folder are deemed completed they should be moved to the proper location within the department's folders on the server. Your my documents folder is located on the server, synchronized with your PC on logon and logout. The size of this folder is limited to 350 mb.

Creation of folders and files on your PC is prohibited, except within your "My Documents" folder.

## **Illegal & Prohibited Activities**

Use of your computer for an illegal purpose is prohibited. Illegal activities include violations of local, state and/or federal laws and regulations. Connecticut General Statutes, section 53a-251 establishes the crime of "Computer Crime." A person can be charged with a computer crime for such things as:

- Unauthorized access to a computer system.
- Theft of computer services.

- Interruption of computer services.
- Misuse of computer services.
- Destruction of computer equipment.

A computer crime violation can range from a Class B Felony (1 to 20 years in prison and up to \$20,000 fine) to a Class B Misdemeanor (up to 6 months in prison and up to \$1,000 fine) depending on the amount of money or damage involved.

CGB strives to maintain a workplace free of harassment and sensitive to the diversity of its employees. Therefore, CGB prohibits the use of any of its systems, including the computers and the e-mail system in ways that are disruptive, offensive to others, or harmful to morale. For example, the display or transmission of sexually explicit images, messages, and cartoons is not allowed. Other such misuse includes, but is not limited to, ethnic slurs, racial comments, off-color jokes, or anything that may be construed as harassment or showing disrespect for others.

It is recognized that employees do not have complete control over all incoming e-mail that is sent to CGB. However, it is the responsibility of every employee to monitor incoming e-mail and request cessation of inappropriate, voluminous, unprofessional or disruptive e-mail.

#### Software

It is CGB policy that only licensed software that is legally owned by the company may be used. All use of unlicensed software is expressly forbidden, unless written pre-approval by IT and management. However, you are not allowed to install any software on any company hardware. All software must be approved and installed in coordination with the dDirector of Operations by the Information Technology Department. As always, proper documentation of licensing is required.

In order to implement this policy, CGB maintains a central register containing physical licenses for the software install on its computers. Where no physical manifestation of a license exists, a written record of the license purchase is kept with a reference to the relevant invoice. It is the responsibility of the IT support organization to maintain this license repository.

Free or shareware programs should not be installed on company computers due to the risk of virus infection and other side effects without approval from IT. Where installed, they are only exempt from the central license recording provided the software clearly identifies itself as free.

#### Hardware

Employees issued portable (laptop, tablet) computers must take reasonable precautions. When out of the office the computer should always be under direct control of the employee or out of sight in a secure location. CGB may take other security measures including, but not limited to, computer tracking hardware/software, security cables, and/or hard drive encryption.

- Personal use of the company phone system should be kept to a minimum.
- Presentation laptops and LCD projectors must be reserved in the CI device calendars.
- All laptop users must carry their device in an adequately padded laptop case. Laptop sleeves, tote bags and any other uncushioned bags are unacceptable.
- Printers must be handled with care. If a jam or other issue occurs and you cannot quickly fix the issue, the IT Staff should be contacted to resolve the issue.

#### **Standard Configuration**

Standard hardware and software configurations are used wherever possible to provide the best levels of reliability for the company network and computers. Other benefits of the standard

configuration include the rapid replacement of faulty equipment with spare parts, the tracking of software licenses (as described in the preceding section) and the ability to plan for the implementation of new projects.

The configuration of company computers should not be changed in any way without the prior agreement of CGB management. In particular, new hardware devices, new software and upgrades to existing software should only be installed under the guidance of CGB's IT staff.

#### **Data Security**

All employees and staff (consultants, third-party contractors, and administrators) are assigned a network user name and password when they join the company. The network will force employees and staff to change their password at regular intervals, the interval being determined by the network administrator. The network administrator will also impose other restrictions, such as password length and complexity requirements.

Employees must select network passwords that cannot be easily guessed or that appear in a standard dictionary. If it is necessary to create a written record of a password, that record should never be stored near the employee's desk and never associated with the employee's user name. In general, passwords should be memorized and not recorded in writing.

Employees must password-protect all smartphones, tablets and other mobile devices that are paid for by CGB or contain sensitive or confidential business information.

#### **Privacy**

CGB respects your desire to work without the company being overbearing with respect to monitoring and control. However, detailed electronic records about your use of the PC, the network, email and Internet are created, but not routinely reviewed by the company.

While the company does routinely gather logs for most electronic activities, they will typically be used for the following purposes:

- Cost analysis
- Resource allocation
- Optimum technical management of information resources
- Production analysis
- Detecting patterns of use that indicate users may be violating company policies or engaging in illegal activity

CGB reserves the right, at its discretion, to review any electronic files, logs and messages to the extent necessary to ensure electronic media and services are being used in compliance with the law, this policy and other company policies. This includes the use of spot checks on Internet (Web) use, network files and email without prior notification or user interaction.

Software tools to identify possible breaches of this policy (e.g. highlighting access to websites with unacceptable content or emails containing abusive language) may be used. The results will be reported to the company management and thoroughly investigated where appropriate.

It should not be assumed that internal or external communications are totally private. Accordingly, particularly sensitive information should be transmitted by other means. Therefore, do not use the company network or mobile devices paid for by CGB for personal items that you would not want made public.

## **Encryption**

Only encryption software supplied by CGB for purposes of safeguarding sensitive or confidential business information may be used. People who use encryption files stored on a company computer must provide their manager with a sealed hard copy record (to be retained in a secure location) of all the passwords and/or encryption keys necessary to access the files.

Power-on passwords should not generally be used but if they are, they are required to be approved by IT.

Please note: this means that employees must inform their supervisor of any passwords used to protect individual documents.

#### File Storage

CGB creates backup images of all email, server and network file stores. These images are stored in a secure location and can be used in the event of:

- Accidental deletion of important material
- A "disaster" necessitating complete recovery of one or more of the company's systems

Data and other files created during the course of an employee's work should, therefore, be stored on the network.

#### **Personal Use**

Computers and associated equipment are provided by CGB for employee's and staff's business use. The activities on information technology platforms provided by or paid for CGB, including computers, networks, internet connections, smartphones, tablets and any mobile devices, may

be monitored with or without your knowledge. You should have no expectation of privacy regarding the contents contained within such technology or device.

Only limited, occasional and incidental use for personal, non-business purposes is permissible at the discretion of the President. However, please be mindful of prohibited activities as described above in General Guidelines (i.e. shopping, music streaming, etc.) Limited, occasional or incidental use is defined as use for less than 15 minutes during a workday.

Use of social networking sites (e.g. Facebook, Twitter, LinkedIn) at any time using company provided computers is prohibited, unless it is for company purposes and/or business. While at work, the impact to company resources can impact business operations, but also opens the device to possible security issues.

Personal laptops, cell phones and other internet-enabled items are permitted to be used; however reasonable restrictions of use may be exercised at HR/management discretion. CGB does not provide internet access for public/private use, except on an approved device/user basis. Please advise IT for further detailed instructions before attempting to connect any device to the CGB network.

Streaming media (internet Radio, YouTube, Hulu, Pandora, Spotify, etc.) uses significant resources and is prohibited for personal use. Please consider the impact of its use for business purposes only for all devices, including cell phones.

Company locations may provide a freely accessible public Wi-Fi connection that may be used by employees and staff, but CGB absolves itself of any and all damage, liability, etc. that arises from the use of third-party networks. It is the policy of CGB that if an employee chooses to use these third-party connections that they do so on their break, lunch, or after-hours and do not pursue personal activities during business hours.

#### Contract and freelance staff

CGB will provide agency/temporary, contract/freelance staff with access to computers and the company computer systems for the sole purpose of fulfilling their contractual role with CGB. No personal use by these staff of computer and communication facilities provided by CGB is permitted at any time.

#### Viruses/Spyware

All computer viruses/spyware must be reported immediately to IT. IT is responsible for verifying the updating of virus/spyware detection software from time to time and providing detailed guidelines in the event of a major problem. IT will also investigate any infection and must receive the full cooperation of all staff in attempting to identify the source. Any attempt to introduce viruses/spyware to the network through malice or negligence will be thoroughly investigated and will be dealt with according to HR guidelines and procedures.

#### **Mobile Devices**

It is CGB policy that representatives of our organization who are issued a cellular phone understand that phones are issued for business use. It is anticipated that personal as well as business use will occur, however it is your responsibility to remember its intended use. Company-paid phones with data plans must be first approved by your supervisor and proper paperwork filed with Finance. Once this process is complete, the IT department will configure the device to connect to the server to retrieve mail, contacts and your calendar. Levels of reimbursement will be set forth in accordance with CGB's Mobile Communications policy.

It is your responsibility to take care of the device and ensure its safety. If your device is lost or stolen, you must contact IT immediately so it can be remotely wiped of company data.

CGB has a zero tolerance policy regarding using a cell phone and other mobile devices while driving. For the safety of our employees and others it is imperative that you pull over and stop at a safe location to dial, receive, text or converse on the cell phone in any way. Please consider the use of hands-free devices as allowed by Connecticut State Law.

Mobile devices equipped with cameras require special attention. No photography should occur where confidential information exists, nor where client information is stored. Areas where personal privacy exists (bathrooms, etc.) should be avoided with such devices entirely. Under no circumstances should photography occur at a client location without their permission.

#### **Tablets**

Those who own such devices must have management approval to use them for company business and e-mail synchronization, just as for smartphones. Just as for synchronized phones, IT needs to be informed if your device has been lost or put into the wrong hands or if you are getting rid of the device as they need to wipe it of company data.

# **Company Data**

The Information Technology department is responsible for protecting company data. This includes all data on the servers, as well as on other devices such as laptops, desktops, mobile devices and multifunction printers. The IT department backs up all data on the servers on a daily, weekly, and monthly schedule and retains this data under the company-approved Backup Policy.

The following are not permitted:

- Backing up company data on your own.
- Having company data on your personal equipment, this includes the following:
  - o Personal PCs laptops or desktops, tablets, smartphones or other mobile devices.
  - Personal USB devices, such as memory sticks, MP3 players, hard drives or other recording devices.
- Sending company data via e-mail to your or another CGB employee's personal email account.
- Accessing another employee's hardware, computer files or email without prior permission from employee or appropriate manager.
- Sharing your logon password with anyone except the IT staff.
  - The system will ask to reset your password every 90 days.

If you telecommute, all work must be done on company equipment. If you are not using a company-owned laptop, a loaner PC can be arranged through the IT department with proper advanced notice to accommodate your needs. No personal devices may be attached to company hardware without prior approval by the IT department (i.e. printers, hard drives, etc.).

It is permissible to transfer items such as presentations and documents to a recording device for the sole purpose of collaboration with approved clients or customers pertaining to company business.

Access to the Internet at CGB is a resource, and use thereof is subject to the same rules as other CGB resources. It is the responsibility of the user to make sure that all use of the Internet is authorized, appropriate and to the benefit of CGB. Each

individual with access to the Internet is responsible for controlling its use. The use of the Internet is a privilege, not a right, which can be revoked at any time.

#### **Social Media**

These guidelines apply to CGB employees, temporary employees and contractors who create or contribute to blogs, wikis, social networks, virtual worlds or any other kind of social media for both professional and personal use.

#### Overview

Social networks are fundamentally changing the way people communicate, conduct research and make purchasing decisions. As an organization, CGB is engaged in these communities as they are appropriate and relevant to our clients and the marketing department has developed a strategy for our Social Media Platform. We encourage you to learn how you can use social media to help us share the exciting things we are doing with our clients, uncover new opportunities and strengthen the perception of CGB's staff as innovative professionals—people who work for a company that our clients trust and want to do business with.

Marketing does not exist in a vacuum within the marketing department; every interaction our clients, prospective clients and partners have with us can strengthen or harm our brand. Therefore, social media should not be thought of just as a marketing tool. While it can be a vehicle for organizations to publish content, it can also be a way for the people who make up those organizations to build and maintain relationships with clients and business partners.

You might be thinking "I already know how to use social media. What else do I need to know?" As the lines between personal and business communications become increasingly blurred, there are a few important points we would like you to consider when using social media in the capacity of your job.

1. You don't have to participate if you don't want to.

Unless you are in marketing, using social media is not likely to be an official part of your job role. We respect that some people prefer not to participate in social networking, or are unsure if they want to mix personal and professional networks. Don't worry, there's no pressure to participate.

2. Be honest and transparent about your role.

If you publish something or respond to something about CGB, make sure to include your real name and it is understood that you are a CGB employee so there is no conflict of interest. There are several easy ways to do this, such as listing CGB as your place of employment on your profile, or starting your comment with something like" "Disclaimer: I work for CGB", but regardless of your method, your audience will appreciate your transparency.

3. Know what the official lines of communication are and when to defer to them.

There is a significant difference between speaking *about* CGB and speaking *on behalf* of CGB has official means to publish information when it needs to and only a few people are authorized to do so via social media, the press, or any other venue. On your own blogs or social profiles, you can use simple statements such as "The postings on this site are my own and don't necessarily represent CGB's positions, strategies or opinions" to make it clear you are not speaking on behalf of CGB.

If you are not authorized to speak on behalf of CGB and receive requests for official comments, or are unsure if you should respond to an inquiry, defer to the marketing department.

Social media can be a forum for customers to share negative comments about an organization. CGB monitors our social profiles daily and has official means of diffusing and responding to these situations. Our policy is to respond promptly and openly and to take the conversations offline. If you see a negative comment or a situation that concerns you, do not respond directly, but report it to your supervisor and/or marketing and it will be addressed quickly and professionally.

4. Remember our core values and follow our general code of conduct.

You should use your best judgment and consider CGB's values of integrity, accountability and professionalism as a guide for your conduct in online communities, just as they are a guide for other professional behavior You are personally responsible for the content you post on any social network. These forums are public, are often searched and indexed and should be treated as though they will be available for public viewing forever. If you aren't sure whether certain content should be published or discussed, ask before you post.

Know and follow our Code of Conduct, respect all copyright, fair use and financial disclosure laws and never share any confidential or proprietary information belonging to CGB or any other organization. Never comment on anything related to legal matters, litigation, or any parties CGB may be in litigation with. Postings must respect copyright, privacy, fair use, financial disclosure, and other applicable laws. Only marketing may post or authorize the posting of pictures, videos, and other media produced on the business premises or outside events. CGB reserves the right to request that certain subjects be avoided, withdraw certain posts, and remove inappropriate comments. If such employee denies or does not comply, proper legal action will be taken. When in doubt, feel free to run by marketing or human resources.

#### 5. Think before you post.

Use common sense when it comes to verbiage and tone in written online content. While social media is in some cases less formal than traditional business communications, CGB uses social media as a professional extension of our business. Do not use ethnic slurs, insults or otherwise inappropriate and unprofessional language that would not be acceptable in the workplace. Respect the privacy of others and avoid potentially inflammatory topics.

Above all else, seek to add value in your participation. Our clients are looking for your information, insight and expert perspective. Bashing competitors and posting negative comments about work, our clients or our partners violates our Code of Conduct and adds nothing positive to an online dialogue. Think before you post and ask yourself if you are making a situation better or worse by doing so. Answering questions, sharing resources and talking about your experiences are a great way to add value.

6. Online activities should not interfere with your job.

Social media, like, the Internet, can quickly change from a worthwhile tool to a distraction. Make sure your online activities do not interfere with your job or your commitments to our clients. In addition, social media sites may not be accessed on company hardware for personal reasons.

All employees must review these policies and sign the Information Technologies Policies acknowledgement form found in the Appendix and return it to Human Resources.

#### **Solicitation and Distribution**

All CGB employees are entitled to the opportunity to perform their work without being bothered or disturbed. Accordingly, we have adopted the following solicitation and distribution rule.

## Non-Employees

Anyone who is not an employee of CGB is prohibited from soliciting or distributing literature on CGB premises at any time.

# **Employees**

The CGB Solicitation and Distribution policy as it relates to current employees is as follows:

- Employees may not engage in solicitation or distribution of literature during working time.
   "Working time" means actual working time during the workday and includes both the working times of an employee doing the soliciting or of an employee being solicited.
   Working time does not include lunch periods, work breaks, or any other period in which employees are not on duty.
- Employees may not distribute literature concerning matters other than those directly related to CGB business in work areas at any time.
- Employees may not engage in verbal solicitation or distribution of literature at any time in those areas normally frequented by clients carrying on CGB business.

#### **Bulletin Boards**

Bulletin boards are important as communications tools to alert you to CGB programs and activities. The posting of written solicitations of any kind on bulletin boards is restricted. Only notices relating to CGB sponsored activities may be posted on bulletin boards. These bulletin boards display important information, and employees should consult them frequently for:

- Employee announcements.
- Internal memoranda.
- Job openings.
- Organization announcements.
- Workplace Violence Policy Memorandum

## VIOLENCE IN THE WORKPLACE PREVENTION POLICY SUMMARY

Below is CGB's policy concerning workplace violence and prohibiting weapons and dangerous instruments in the workplace.

The policy is consistent with what has been called a "Zero Tolerance" approach. Violence or the threat of violence by or against any employee of the State of Connecticut, including CGB, is unacceptable and will subject the perpetrator to serious disciplinary action and possible criminal charges.

CGB is committed to providing its employees a safe and healthy work environment, free from intimidation, harassment, threats and/or violent acts.

The worksite is any location, either permanent or temporary, where an employee performs any work-related duty. This includes but is not limited to the building and the surrounding perimeter, including the parking lot. It includes all state-owned and leased space, including vehicles and any location where state business is conducted.

According to the National Institute for Occupational Safety and Health (NIOSH), workplace violence is defined as:

"any physical assault, threatening behavior or verbal abuse occurring in the work setting. It includes, but is not limited to beatings, stabbings, suicides, shootings, rapes, near suicides, psychological traumas such as threats, obscene phone calls, an intimidating presence, and harassment of any nature such as being followed, sworn at, or shouted at."

There is no such thing as a "joke" when dealing with this subject. It is not funny when employees speak about "going postal", "getting" another employee or anything remotely similar.

Do not ignore violent, threatening, harassing, intimidating, or other disruptive behavior. If you observe or experience such behavior by anyone on Authority premises, whether he or she is a CGB employee or not, report it immediately to a supervisor or manager.

The cooperation of all CGB staff is needed to implement this policy effectively and maintain a safe working environment.

## **CGB**

#### VIOLENCE IN THE WORKPLACE PREVENTION POLICY

The State of Connecticut has adopted a statewide zero tolerance policy for workplace violence. Connecticut Innovations fully supports this policy and recognizes the right of its employees to work in a safe and secure environment that is characterized by respect and professionalism.

#### **Prohibited Conduct**

Except as may be required as a condition of employment:

No employee shall bring into any state worksite any weapon or dangerous instrument as defined herein.

No employee shall use, attempt to use, or threaten to use any such weapon or dangerous instrument in a state worksite.

No employee shall cause or threaten to cause death or physical injury to any individual in a state worksite.

In addition, Connecticut Innovations prohibits all conduct, either verbal or physical, that is abusive, threatening, intimidating or demeaning.

#### **Definitions**

"Weapon" means any firearm, including a BB gun, whether loaded or unloaded, any knife (excluding a small pen or pocket knife), including a switchblade or other knife having an automatic spring release device, a stiletto, any police baton or nightstick or any martial arts weapon or electronic defense weapon.

"Dangerous instrument" means any instrument, article, or substance that, under the circumstances, is capable of causing death or serious physical injury.

## **Confiscation of Weapons and Dangerous Instruments**

Any weapon or dangerous instrument at the worksite will be confiscated and there is no reasonable expectation of privacy with respect to such items in the workplace.

#### **Reporting Procedures**

**Emergency Situations:** Any employee who believes that there is a serious threat to his/her safety or the safety of others that requires immediate attention should contact **911**. The employee must also contact his/her **immediate supervisor** or the **Human Resources** at extension 356 or (860) 258-7861.

Please note that when 911 is dialed from a hard line, the local police authority will respond. When dialing from a cell phone, 911 will connect you directly to the nearest State Police Troop.

**Non-Emergency Situations:** any employee who feels subjected to or witnesses violent, threatening, harassing, or intimidating behavior in the workplace should immediately report the incident or statement to his/her supervisor or manager or Human Resources.

**Supervisors/Managers Responsibilities:** Any manager or supervisor who receives a report of violent, threatening, harassing, or intimidating behavior shall immediately contact the Human Resources Office so that office may evaluate, investigate, and take appropriate action.

# **Investigation and Corrective Action**

CGB will promptly investigate all reports or alleged incidents of violent, threatening, harassing or intimidating behavior.

All employees are expected to cooperate fully in all such investigations.

Any employee suspected of violating this policy may be placed immediately on administrative leave pending the results of the investigation.

If the claims of violent, threatening, harassing or intimidating conduct are substantiated, or if it is found that the employee has otherwise violated this policy, the employee will be dealt with through the appropriate disciplinary process, and may be subject to discipline up to and including dismissal from CGB.

Where the situation warrants, CGB will request that the appropriate law enforcement agencies become involved in the investigation of the matter, and CGB may seek prosecution of conduct that violates the law.

#### **Enforcement of the Policy**

This policy will be prominently posted for all agency employees.

President & CEO

# **Disciplinary Procedure**

CGB believes each employee should be treated and respected as an individual. Therefore, employee misconduct is approached in a case-by-case manner. Some infractions are more serious than others are and an employee's lengths of service, work record and prior conduct are all important in determining the proper disciplinary action. It is our general practice to use progressive disciplinary counseling procedures between the employee and their immediate supervisor in which the supervisor will explain the charges and allow the employee to explain their position. In all phases of the disciplinary procedure, CGB will make reasonable efforts to give the employee the opportunity to make their position clear, orally or in writing. Some serious incidents of misconduct may require immediate discharge from employment, but whenever possible, misconduct will be approached with counseling before termination of employment is considered. The primary purpose of discipline is remedial, not punitive. When possible and appropriate the steps of progressive discipline will be as follows:

- 1. A verbal (oral) warning giving clear guidelines for corrective action and potential consequences.
- 2. A written warning with the infraction and required corrective action specified.
- 3. A written reprimand is issued when the employee has been warned and the problem behavior has not been corrected.
- 4. A suspension without pay serves as the last resort prior to discharge.
- 5. A demotion results when an employee is willing but unable to perform assigned duties.
- 6. A termination of employment usually follows prior disciplinary steps or for a serious rule violation.

When disciplinary action is required upon the recommendation of the Supervisor, the President and/or his designee may elect a written reprimand, suspension without pay demotion, disciplinary probation, or dismissal. The President and/or his designee may take any such disciplinary action after the evaluation process determines that an employee's performance and/or conduct is unacceptable, taking any mitigating circumstances into account. A record of the written reprimand or documentation of other disciplinary action will be made a permanent part of the employee's personnel file.

Management reserves the right to enter into any level of disciplinary action or termination based upon the severity of the offense requiring discipline and the employee's past work record. This policy in no way alters the at-will employment policy; the employee or CGB may terminate the employment relationship at any time and for any reason.

# **Employment Termination**

Termination of employment is an inevitable part of personnel activity within any organization, and many of the reasons for termination are routine. Below are examples of some of the most common circumstances under which employment is terminated:

#### Resignation

Employment termination initiated by an employee who chooses to leave CGB voluntarily.

## Discharge

Employment termination initiated by CGB.

#### Layoff

Involuntary employment termination initiated by CGB for non-disciplinary reasons.

#### Retirement

Voluntary retirement from active employment status initiated by the employee.

#### **Exit Interview**

CGB will generally schedule exit interviews at the time of employment termination. The exit interview will afford an opportunity to discuss such issues as employee benefits, conversion privileges, repayment of outstanding debts to CGB, return of CI-owned property, and assuring that necessary assignments are completed. Suggestions, complaints, and questions can also be voiced.

Employee benefits will be affected by employment termination in the following manner. All accrued, vested benefits that are due and payable at termination will be paid. Some benefits may be continued at the employee's expense if the employee so chooses. The employee will be notified in writing of the benefits that may be continued and of the terms, conditions, and limitations of such continuance

#### **Grievance Procedure**

Supervisors are responsible for being accessible and for regularly discussing working conditions, job performance, or any other concern an employee has about his/her job at CGB making reasonable efforts to address problems and concerns. Our success depends upon maintaining clear and open communication with employees. It is of utmost importance to respond to complaints, problems, or anything employees deem unfair or unacceptable. Each employee should feel free to discuss any complaint or problem with their immediate supervisor. This initial step in the grievance procedure is informal to encourage a quick resolution. No employee will be penalized or discriminated against for bringing up a problem or registering a grievance regardless of the nature of the complaint.

# **Grievances Not Involving Discrimination Or Sexual Harassment**

If an employee has a grievance that remains unresolved in informal discussions with their supervisor, they should make a scheduled, recorded appointment with their supervisor to discuss the problem. The employee and supervisor should keep a written record of this discussion.

If a settlement satisfactory to both parties cannot be reached, the employee and their supervisor should submit the grievance in writing to the President and/or his designee, attaching their written records of the meeting. The President and/or his designee will schedule a meeting with the employee and the supervisor within five (5) working days of receipt of the grievance. A written record of this meeting will also be kept, and the President and/or his designee will render a decision within three (3) working days after the meeting.

In the event the employee is not satisfied with the decision of the President and/or his designee, they may request a hearing before the Board of Director's Budget and Operations Committee. The decision of the Budget and Operations Committee shall be final.

## **Grievances Involving Discrimination Or Sexual Harassment**

Any employee who feels they would like counseling about possible violations of CGB affirmative action or anti-harassment policies, or any state or federal statutes related to Equal Employment Opportunity (EEO), Affirmative Action (AA), or Sexual Harassment should contact Human Resources. This counseling will be kept confidential and no related information will be released except upon signed consent of the employee or as necessary for CGB to comply or fulfill its obligations under federal or state law. Human Resources will provide information on state, federal agencies and CGB resources available to employees who wish to pursue a grievance regarding discrimination.

If a grievance involves sexual harassment by the employee's supervisor, or if there are other circumstances that make it impossible for the employee to initially address a grievance directly to the supervisor, he/she may schedule the initial meeting with the President and/or his designee. If the employee's supervisor is the President and/or his designee, the grievance may be directed to the Budget and Operations Committee.

### **Grievance Procedure Contacts**

**CHRO and EEOC** 

Separate and independent from the above process, the complainant may file written complaints of discrimination with:

The Connecticut Commission on Human Rights and Opportunities (CHRO) 21 Grand St, Hartford, CT 06106 Phone: (860) 541-3400

The Equal Employment Opportunity Commission (EEOC) 150 Causeway St, Boston, MA. 02114 Phone (617) 565-3214

Department of Justice (DOJ)
Office on the Americans with Disabilities Act
Civil Rights Division, P.O. Box 66118, Washington, D.C. 20507
Phone (202) 514-0301.

Employees may also file complaints with any other agencies, state, federal or local, including the United States Department of Labor, Wage and Hour Division, that enforce laws concerning discrimination in employment. Employees should be aware that there are statutes of limitations that require complaints be filed by a certain time period or the employee may forfeit his or her rights. Employees may inquire further with the respective agency.

No individual who files a complaint, or who cooperates or testifies in the investigation of a complaint, shall be unlawfully retaliated against for the exercising of their legal rights.

Any person having knowledge of corruption, unethical practices, violation of state laws or regulations, mismanagement, gross waste of funds, abuse of authority, or danger to the public safety occurring within CGB or in a related contract with CGB may disclose such matter to any member of the Audit Compliance and Governance Committee of CGB or the state Auditors of Public Accounts. A person disclosing such information is known in lay terms as a "whistleblower." A whistleblower should feel free to report such information without fear of retaliation.

No CGB officer or employee, may take or threaten to take any personnel action against  $\underline{a}$  whistleblower who is an employee of CGB in retaliation for disclosing such information. Whistleblowers protection applies to any CGB employee who discloses such information:

- (1) to any employee of the Auditors or of the Attorney General;
- (2) To any member of the Audit, Compliance and Governance committee of CGB;
- (3) to an employee of the state or quasi-public agency that employs the person who retaliated or threatened retaliation;
- (4) to an employee of a state agency pursuant to a mandated reporter statute; or,
- (5) in the case of a large state contractor, to an employee of the contracting state agency concerning information about a large state contract.

A CGB employee who believes he or she is the subject of retaliation for "whistleblowing" may file a "whistleblower retaliation complaint" with the Chief Human Rights Referee at the CHRO's Office of Public Hearings not later than thirty (30) days after the employee learns of the specific incident giving rise to the claim (i.e., the personnel action threatened or taken against him/her). An employee who believes that he or she has been retaliated against should contact a private attorney to discuss his/her rights. The Attorney General cannot provide legal advice or counsel.

CGB's guidelines for making whistleblower complaints are set forth below.

- File a written complaint or verbal complaint with the CEO and/or the Ethics Officer, and or the CGB Audit, Compliance, and Governance Committee. Employees may also choose file a written complaint or make a telephone complaint with the Auditors of Public Accounts. All complaints should be filed in writing with the Auditors of Public Accounts, 210 Capitol Avenue, Hartford, CT 06106, or by telephone: Toll Free within Connecticut: (800) 797-1702 or Locally: (860) 240-5305. If the employee wishes to remain anonymous, they may.
- Whistleblower complaints will be referred to the CGB Audit, Compliance, and Governance Committee for review. That committee will serve as the primary contact between CGB and the Auditors of Public Accounts.

Employees can visit <u>Auditors of Public Accounts</u> website for more information about filing a complaint. In addition, employees may visit the <u>Commission on Human Rights and Opportunities</u> website for information regarding the processes and procedures in the administration of whistleblower retaliation complaints.

**SECTION 8 HEALTH AND SAFETY** 

# **Health and Safety**

Each employee is expected to share our commitment to a safe workplace. This obligation means that safe working habits and principles must be followed. All employees are expected to exercise common sense and good housekeeping practices. For the sake of all our employees and clients, safety concerns must be taken seriously. Every employee is expected to take a proactive role in providing a safe workplace. Horseplay or other unsafe activity is prohibited. Every employee must report any injury, no matter how slight, immediately to his or her supervisor. Such reports are necessary to initiate any necessary emergency procedures, to comply with workers compensation laws, and to initiate insurance and workers compensation benefits procedures.

**First-aid kits containing items needed for most minor first-aid situations are maintained throughout the building.** All employees should make a note of their locations. Each employee is expected to exercise safe working habits and reasonable caution in all work activities. Any unsafe condition must be reported immediately to the appropriate supervisor. Employees who violate safety standards, who cause hazardous or dangerous situations, or who fail to report, or where appropriate, remedy such situations, may be subject to disciplinary action.

# **Policy On Life-Threatening and Communicable Diseases**

This policy provides guidance for dealing with work situations involving employees, who have life-threatening and communicable diseases, including but not limited to:

- Acquired Immune Deficiency Syndrome (AIDS);
- Human Immunodeficiency Virus (HIV) infection;
- HIV-related illness as defined by the Connecticut General Statutes Section I9a-58 1; or
- Any other life-threatening and communicable disease.

#### **Non-Discrimination**

CGB does not unlawfully discriminate against qualified individuals with life-threatening and communicable diseases in any terms or conditions of employment.

It is our policy that individuals with life-threatening and communicable diseases will be treated with the same compassion and consideration given to any employee with a health problem. No person will be treated differently in the workplace as a result of having or being perceived as having such a disease.

## No H.I.V. Or Aids Testing

Present or prospective employees will not be required to submit to an AIDS or HIV-related test as a condition of hiring or continued employment.

## **Ability To Work**

CGB recognizes that employees with life-threatening and communicable diseases may require a reasonable accommodation to perform their job duties. It is CGB's policy to accommodate these employees by allowing them to work as long as they are able to perform their essential job functions, with or without reasonable accommodation, provided that medical evidence indicates that their conditions do not pose a direct threat to themselves or others.

# **Employee Health and Safety**

CGB also recognizes its obligation to provide a safe and healthy work environment for all employees. Therefore, CGB may obtain appropriate medical direction, when necessary, to ensure that an employee's condition does not pose a significant risk of substantial harm to him/herself or to other employees or customers of the Agency.

According to the best medical evidence available to date, casual workplace contact with employees who have AIDS or who have been exposed to HIV will not result in transmission to others. Employees are expected to work with co-workers and any other individuals who have these conditions that do not pose a significant risk of harm. Employees who have unwarranted fears of exposure will not be allowed to refuse to work with individuals affected by HIV/AIDS or any other communicable disease. In addition, it is unacceptable for employees to spread rumors regarding situations involving HIV/AIDS or any other life-threatening and communicable disease where such rumors may affect the privacy, dignity and well-being of others. Behavior of this nature will not be tolerated at CGB.

# Confidentiality

All employee records or information regarding life-threatening and communicable diseases will be confidentially maintained in the Human Resources Office in a secure area, apart from the employee's personnel file.

## Information Specific To H.I.V./Aids

The identity of any employee with HIV or AIDS will remain confidential. HIV and AIDS-related information will not be disclosed without the written consent of the employee. Any unauthorized disclosure by an employee is strictly prohibited by the Connecticut General Statutes and may result in disciplinary action. This policy is intended to be consistent with the Connecticut HIV/AIDS Testing and Confidentiality Law of 1989 (C.G.S. §§ 19a-585 through 19a-592).

# **Drug and Alcohol Policy**

CGB is committed to maintaining a substance-free, healthful, and safe work environment. To promote this goal employees are required to report to work in appropriate mental and physical condition to perform their jobs in a satisfactory manner. Employees are forbidden to use, possess, consume, manufacture, distribute, purchase, sell, or be under the influence of alcohol, illegal drugs, or controlled substances during working hours, whether on the premises, or representing or conducting the business of CGB elsewhere. Reporting to work under the influence of alcohol or illegal drugs, or being in possession of alcoholic beverages or illegal drugs on CGB's premises will not be tolerated. Such conduct is also prohibited during nonworking time to the extent that, in CGB's opinion, it impairs an employee's ability to perform on the job or threatens the reputation or integrity of CGB.

The legal use of physician prescribed, or legal over-the-counter drugs is permitted on the job if it does not impair an employee's ability to perform the essential functions of the job effectively and in a safe manner that does not endanger other employees or clients. Any employee taking any legal or prescribed drugs known to have possible side effects that affect or impair judgment, coordination, or other senses, or that might adversely affect the employee's ability to perform normal work in a safe and productive manner, must notify his or her supervisor or other manager before commencing work. Information provided by the employee concerning the use of medication will be treated in a confidential manner. If CGB has reasonable cause to believe an employee is adversely affected by the use of a drug or medication such that a threat is posed to the safety of the employee, other persons, or to property, the employee may be denied permission to continue working pending further investigation. The investigation will be

conducted expeditiously, with the resulting information treated confidentially to the extent possible.

An employee whose job performance has deteriorated through the use of alcohol and/or drugs to the extent that termination of employment is being considered may opt to enter an approved treatment facility of their choice. Upon successful completion of treatment, the employee may be permitted to resume normal employment.

Employees must give notification in writing to Human Resources within five (5) calendar days of any drug conviction for violation of a criminal drug statute if the violation occurred in the workplace. Employees who have substance abuse problems are encouraged to participate in a rehabilitation program prior to any disciplinary action. If an employee chooses not to undergo rehabilitation, CGB will take disciplinary action consistent with state law and regulation within 30 calendar days of receiving notice of the conviction. A conviction means a finding of guilt including a plea of nolo contendere, or the imposition of a sentence by a judge or jury in any federal or state court.

Violations of any part of this policy may lead to disciplinary action, up to and including immediate termination of employment. Such violations may also have legal consequences.

## **Smoking Policy**

The health and well-being of staff and visitors to CGB are primary concerns of management. The Environmental Protection Agency has released a report officially concluding that second hand smoke is a Class A human carcinogen. It is also known that second hand smoke causes respiratory illness and is suspected to be even more dangerous in its link with heart problems. In order to protect the health of those who use our building, smoking or other use of tobacco products is prohibited in any offices or work areas within CGB. Smoking is permitted only out-of-doors.

# **Emergency Procedures Manual**

Emergencies can occur at any time, and we need to be prepared to handle such situations to minimize injury and damage. The following information is designed to assist you in preparing for and handling an emergency.

# **Emergency Phone Numbers**

Rocky Hill Police 911 or 258-7640 (Routine calls) Rocky Hill Fire 911 or 258-7603 (Routine calls)

Health Emergencies 911 or dial 500 to page and assemble the first responders team to the announced area.

#### Medical

## **Medical Emergency Procedures for Staff**

Page the Response Team by:

- Picking up the hand set
- <u>Dial 9104, Wait for tone.</u> Press the paging button on the bottom row, last button. (this is marked Paging)
- Press any # key three times and SPEAK LOUD AND CLEAR AND SAY:

"Attention, Response Team, Emergency in (location)". "Attention, Response Team, Emergency in (location)". (Give location and repeat the announcement twice).

If the person is unconscious, not responsive, seriously injured or in apparent serious distress, immediately after paging response team, dial 9-911.

(This will always be a personal judgment call and do not worry about calling unnecessarily). Please use the **house phone (not cell)** if possible as this triggers an in-house and police alert.

Paging button is FOR EMERGENCIES ONLY.

## Response Team Actions (fyi)

Always know that if YOU are in distress and call 911 an immediate alert goes to the reception area, IT and the police. Do not hesitate to use this in an emergency.

- 1. Response Team Members will go directly to code red location. Follow trained response.
- 2. All team members of the **RESPONSE TEAM** respond to the location immediately.
- 3. In route to location, pick-up **AED unit --portable 1**st **Aid Kit** --notebook and Emergency Bag. All found next to the mailboxes and in file cabinet under AED unit.
- 4. If 911 has not yet been called, CGB trained staff will decide whether or not to call 911 directly or ask someone to do so and report the nature of the emergency and location. (Best to call in the presence of the victim if at all possible so information can be relayed to EMTs.)

One or two Response Team members will assess the situation and take the lead in providing necessary response. Remaining team members will provide the following:

- 1. Set up AED for use, if needed. Bring notebook in drawer and Emergency Bag.
- 2. Prepare for CPR relief, if needed. 3-to 5 minutes is desired.
- 3. Provide Privacy/Crowd Control, request non-response team personnel to evacuate the area until all is clear.
- 4. Meet and Direct medical personnel to emergency location.
- 5. Once the Emergency Medical Team (EMT) has arrived the duties and responsibilities will be transferred to them. They may take AED with them.
- 6. Provide necessary information and any other support needed by the EMT.
- 7. Contact necessary family member(s) of victim. (List at AED location)
- 8. See that victim is accompanied to ER when applicable.
- 9. Provide follow up report to Human Resources <u>Designee</u>.

# **Medical Emergency Procedure for Front Desk Personnel**

Should you receive a call for medical assistance from any staff member, please use the following procedure:

- Page the Response Team by dialing 500 which enacts the paging system "Attention, all response team personnel, there is a code RED in \_\_\_\_\_\_"
   (Give location and repeat the announcement twice).
- Response team members will go directly to red code location and follow trained response instructions. If possible while in route to location, pick-up AED unit and portable First Aid Kit located by the mailboxes next to the front lobby.
- 3. Response team evaluates situation and does one or all of the following:
  - a. Call 911
  - b. Call Front Desk
  - c. Team will activate procedure for 911.
- 4. Keep lines open for further communication.
- 5. Have a list of all family emergency numbers for staff available.
- 6. Notify Human Resources Designee that there is an emergency.

#### **Fire**

In order to minimize property damage and possible loss of life, familiarize yourself with the building's fire prevention system. Know the location of fire alarm pull stations and fire extinguishers. In addition familiarize yourself with the instructions on the extinguishers.

#### WHEN THE FIRE ALARM IS HEARD:

- EVERYONE SHOULD IMMEDIATELY STOP WHAT THEY ARE DOING.
- EVACUATE THE BUILDING IN A CALM, ORDERLY MANNER TO A CENTRAL LOCATION AT LEAST 300 FEET FROM THE BUILDING.
- Do Not Stop to Gather Belongings.
- Follow Emergency Exit Signs to Exit Building.
- Check offices and cubicles as you leave your area.
- Sign-in roster should be picked up and taken to company gathering place.
- ALL DEPARTMENTS AND TENANTS GATHER DIRECTLY AT THE FAR RIGHT SIDE OF THE PARKING LOT (CLOSEST TO BROOK STREET). IF FRONT EXIT IS BLOCKED AND YOU MUST EXIT FROM THE REAR OF THE BUILDING, TRAVEL AROUND THE BUILDING AND HEAD TO THAT AREA. PLEASE REMAIN IN A GROUP. FIRE MARSHALL NEEDS HEAD COUNT IMMEDIATELY.
- DEPARTMENT SUPERVISORS TAKE A HEAD COUNT WHEN ALL CLEAR SIGNAL RECEIVED FROM FIRE MARSHALL SUPERVISORS WILL GIVE INSTRUCTIONS TO REENTER BUILDING.

Note: When moving into exit areas in an emergency situation, before going through the door, put your hand against it to feel for heat—there could be a fire on the other side. If the door feels cool proceed with caution. If the door feels hot, use an alternate escape route.

## Fire procedures

If you should spot a fire follow these suggested guidelines:

- 1. If the fire is minor (wastebasket, ashtray, etc.) extinguish if possible. However, do not take risks! Your personal safety comes first!
- 2. If the fire cannot be immediately brought under control without personal risk, isolate or contain if possible by closing the door to the fire area.
- 3. Call the Fire Department at 9-911 or 258-7603
  - a. Give building name: CGB.
  - b. Give building address and intersection: 845 Brook Street, Rocky Hill.
  - c. Give CGB telephone number (860) 563-0015.
  - d. Give location and extent of fire.
- 4. Pull the fire alarm pull station so that evacuation can begin.
- 5. If trapped by flame or heat:
  - a. If possible, telephone the fire department and request immediate assistance.
  - b. Close doors separating you from the source of heat or flame.
  - c. Break glass window if necessary in order to escape.
  - d. Remember that both **heat and smoke rise**—air near the floor will be cleaner and cooler. Crouch down or crawl to exits.

#### Fire drills

Fire drills need to be conducted once a year according to town codes. The fire department will be directly involved so that they can test the fire alarm system and see if fire evacuation procedures are being followed.

Supervisors will be designated as the fire safety captains for their area.

## Fire safety captains

There is a Fire Safety Captain and will help coordinate evacuation efforts. The captains' responsibilities include:

- 1. An awareness of employees in their area/office who are present that day so that all are accounted for after evacuating.
- 2. Knowledge of any employees with handicaps or disabilities which should be considered in an emergency.
- 3. Awareness of an up-to-date evacuation route from their area or office.
- 4. Checking of restrooms, conference rooms, smoking rooms or other areas which are not immediately visible to ensure that they are also evacuated.
- 5. Reporting any problems or special circumstances to Fire Warden.
- 6. Ensuring that people are exiting from the building in a calm and orderly fashion.

IN THE EVENT OF AN EMERGENCY, THE FIRE SAFETY CAPTAIN WILL IMMEDIATELY NOTIFY CGB 'S PRESIDENT, CHIEF OPERATING OFFICER AND/OR SENIOR MANAGEMENT TEAM.

# Housekeeping

Please inspect your space regularly and remove any items that could start or contribute to a fire or be a safety hazard. The following guidelines should be adhered to:

- Do not allow accumulation of trash or waste material that is flammable.
- 2. Flammable materials or chemicals should not be stored within five feet of exit doors.
- 3. The wall and ceiling space around emergency and exit light fixtures should be kept clear.
- 4. The area surrounding electrical equipment should be free of clutter to provide for adequate air circulation.
- 5. Coffee makers and oven units are potential sources of fire. The last person leaving the building should check to be sure that they are turned off.

#### **Gas Leaks**

Due to the proximity of the office park to the Connecticut Natural Gas Storage Facility on the Rocky Hill/Cromwell line, we have occasionally found that a gas odor permeates the area when they are purging their lines. However, if at any time you detect a gas odor, it is important to assume that it's a potential leak and to take proper precautions as follows:

- 1. **DO NOT** turn on or adjust anything electrical in nature or anything which could cause a spark or flame (light switches, thermostats, lighters, etc.)
- 2. Call the facilities manager.
- 3. Evacuate the premises.

# **How To Handle Anthrax and Other Biological Agent Threats**

Many facilities in communities around the country have received anthrax threat letters. Most were empty envelopes; some have contained powdery substances. The purpose of these guidelines is to recommend procedures for handling such incidents.

## **Do Not Panic**

- Anthrax organisms can cause infection in the skin, gastrointestinal system, or the lungs.
  To do so, the organism must be rubbed into abraded skin, swallowed, or inhaled as a
  fine, aerosolized mist. Disease can be prevented after exposure to the anthrax spores by
  early treatment with the appropriate antibiotics. Anthrax is not spread from one person to
  another person.
- 2. For anthrax to be effective as a covert agent, it must be aerosolized into very small particles. This is difficult to do, and requires a great deal of technical skill and special equipment. If these small particles are inhaled, life-threatening lung infection can occur, but prompt recognition and treatment are effective.

# How to handle a suspicious unopened letter or package marked with threatening message such as "anthrax":

- 1. Do not shake or empty the contents of any suspicious envelope or package.
- 2. **PLACE** the envelope or package in a plastic bag or some other type of container to prevent leakage of contents. Plastic bags and/or containers are available in the kitchen.
- 3. If you do not have a container, then **COVER** the envelope or package with anything (e.g., clothing, paper, trashcan, etc.) and do not remove this cover.
- 4. **LEAVE** the room and **CLOSE** the door, or section off the area to prevent others from entering. Keep others away.
- 5. WASH your hands with soap and water to prevent spreading any powder to your face.
- 6. Contact **Human Resources.** They will take the necessary steps to report the incident to the proper authorities.

7. LIST all persons who were in the room or area when this suspicious letter or package was recognized. This list will be given to both the local public health authorities and law enforcement officials for follow-up investigations and advice.

# How to handle an envelope with powder and powder spills out onto surface:

- 1. **DO NOT** try to **CLEAN Up** the powder. **COVER** the spilled contents immediately with anything (e.g., clothing, paper, trashcan, etc.) and do not remove this cover!
- 2. Then **LEAVE** the room and **CLOSE** the door, or section off the area to prevent others from entering. Keep others away.
- 3. **WASH** your hands with **soap and water** to prevent spreading any powder to your face.
- 4. Contact **Human Resources.** They will report the incident to the proper authorities.
- REMOVE contaminated clothing as soon as possible and place in a plastic bag, or some other container that can be sealed. This clothing bag should be given to the emergency responders for proper handling. Plastic bags and/or containers are available in the kitchen.
- SHOWER with soap and water as soon as possible. DO NOT USE BLEACH OR OTHER DISINFECTANT ON YOUR SKIN.
- 7. **LIST** all persons who were in the room or area, especially those who had actual contact with the powder. This will be given to both the local public health authorities so that proper instructions can be given for medical follow-up, and to law enforcement officials for further investigation.

# What to do if you suspect a room has been contaminated by aerosolization-

(For example: a small device was triggered, a warning was received that the airhandling system is contaminated, or a warning was received that a biological agent was released in a public space.)

- 1. Turn off local fans or ventilation units in the area.
- LEAVE area immediately.
- 3. **CLOSE** the door, or section off the area to prevent others from entering. Keep others away.
- 4. Contact **Human Resources**. They will then report the incident to the proper authorities.
- 5. **SHUT** down air handling system in the building, if possible.
- 6. **LIST** all persons who were in the room or area. This list will be given to both the local public health authorities so that proper instructions can be given for medical follow-up, and to law enforcement officials for further investigation.

## How to identify suspicious packages and letters:

Some characteristics of suspicious packages and letters include the following:

- Excessive Postage
- Handwritten or poorly typed addresses
- Incorrect titles
- Title, but no name
- Misspellings of common words
- · Oily stains, discoloration or odor
- No return address
- Excessive weight
- Lopsided or uneven envelope

## How to identify suspicious packages and letters continued:

- Protruding wires or aluminum foil
- Excessive security material such as masking tape, string, etc.
- Ticking sound
- Marked with restrictive endorsements, such as "Personal" or "Confidential"
- Shows a city or state in the postmark that does not match the return address

## **Bomb Threats**

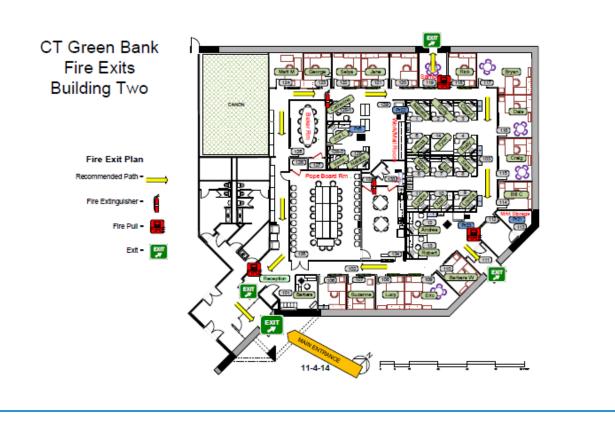
In the event of a bomb threat, evacuating people from the potential danger area is the highest priority. In the event of the receipt of a bomb threat, try to remember as many of the following details as possible:

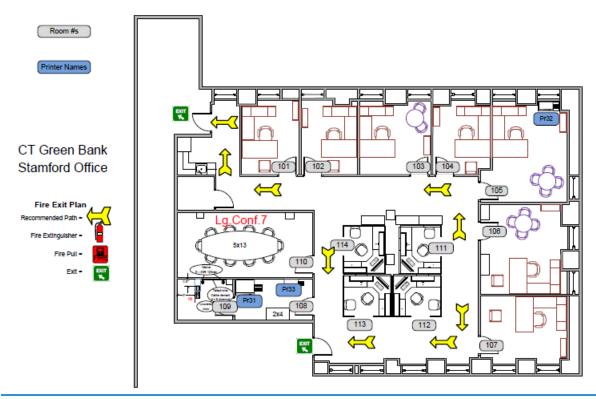
- 1. Time call received
- 2. Time call terminated
- 3. Exact words of caller
- 4. Time to explode
- 5. Location of bomb (if given)
- 6. Description/type of bomb (if given)
- 7. Why was it placed?
- 8. Description of voice (male, female, deep, high, accents, etc.)
- 9. Background sounds (traffic, machinery, music, voices, etc.)

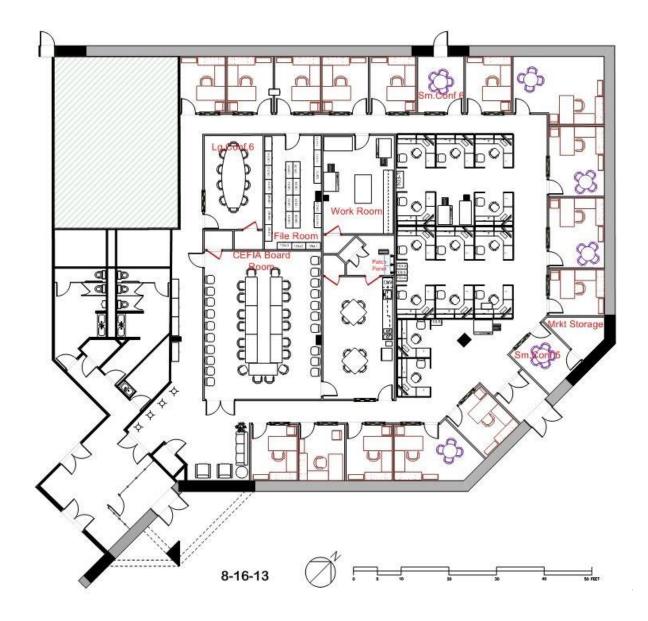
Then immediately call: Police (911 or 258-7640); Fire Department (911 or 258-7603). Immediately call **Administrative Services ext. 391 IT ext. 365**. Explosives can be concealed in any type of container and in any location. Any suspicious item must not be touched and should be considered dangerous. Alert police of anything out of the ordinary, and do not turn on or adjust anything electrical in nature (i.e. - thermostats, light switches, radios, etc.)

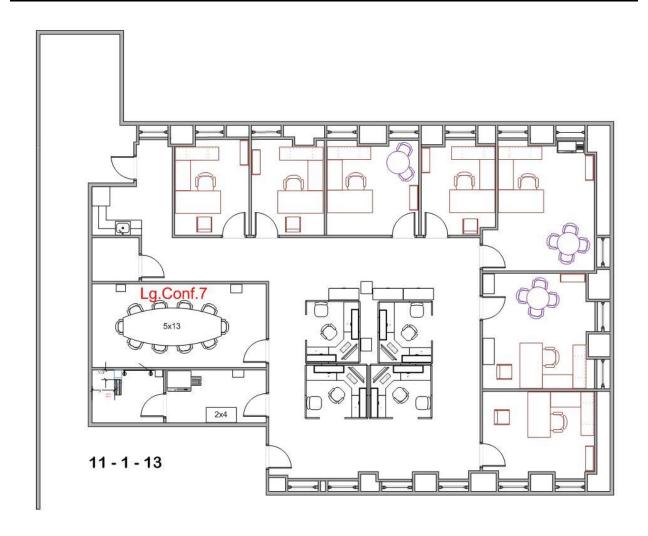
It is policy that everyone evacuates the building immediately!

# **CGB Fire Exits**









# In Case of Emergency: Questions and Answers for Employees

## What happens if I can't reenter the building?

The Emergency Operations Team (correct name) including the President when available will assess the immediate damage and will inform the President or designee of what to expect. You may be asked to assemble at a nearby building for further instruction.

## How will I know when and where to go back to work?

CGB has designated a Team Leader (George Bellas – Vice President Finance and Administration) for implementing its Business Continuation Plan. This team leader will contact you at home and let you know when and where to return for work. If the business disruption is a serious one, it may take up to 30 days for all staff to return. A small number of employees who handle critical business functions may be asked to report to work immediately in a different office location.

#### What should I do if a reporter approaches me?

If a member of the press approaches you, please refrain from commenting about the incident or your personal reaction to what has occurred. It is natural that any business – disrupting incident may result in press coverage, and the <a href="Director of Government and External Relations">Director of Government and External Relations</a> Marketing Staff is the designated CGB representative to keep the news media informed and answer questions. Please refer any such inquiries to that designee.

The signature page for CGB's Emergency Procedures is in the Appendix. All employees must review and sign the policy in the Appendix and return it to Human Resources.

**APPENDIX AND FORMS** 

#### **Employee Acknowledgement form**

The Employee Handbook describes important information about CGB, and I understand that I should consult my supervisor or the Manager, Human Resources Designee regarding any questions not answered in the Handbook.

Since the information, policies, and benefits described here are necessarily subject to change, I acknowledge that revisions to the Handbook may occur. All such changes will be communicated through official notices and I understand that revised information may supersede, modify, or eliminate existing policies.

Furthermore, I acknowledge that this Handbook is neither a contract of employment nor a legal document. It is understood that nothing in this Handbook or any other policy or communication changes the fact that employment is at will for an indefinite period unless terminated at any time by CGB or me. Accordingly, either CGB or I can terminate the relationship at any time and for any reason.

I have received the Handbook and understand that it is my responsibility to read and comply with the policies contained in this Handbook and any revisions made to it. Should the content of this Handbook be changed, I understand that CGB may require a written acknowledgement from me that I have received and understand the change.

I understand that this signed statement of acknowledgement will be retained in my personn file.	el

Employee's Signature	Date
Print Employee Name	

# **Harassment Policy**

I hereby acknowledge that I have reviewed the Sexual Employee Handbook. I hereby acknowledge that I have signing below, I agree to abide by this Policy. I also a in disciplinary action, up to and including termination.	ave read and understand this policy. By acknowledge that any infractions will result
Employee's Signature	Date
Print Employee Name	

# Travel and Entertainment Policy

I hereby acknowledge that I have reviewed the Travel and Entertainment Policy in Section 6 of the Employee Handbook. I hereby acknowledge that I have read and understand this policy. By signing below, I agree to abide by this Policy. I also acknowledge that any infractions will result in disciplinary action, up to and including termination.				
Employee's Signature	Date			
Print Employee Name	-			

# **State of Connecticut Workplace Violence Prevention Policy**

Policy in Section 7 of the Employee handbook. By signing below, I agree to abide by the Policy. I also acknowledge that any infractions will result in disciplinary action, up to and including termination.				
Employee's Signature	Date			
Print Employee Name				

# **CGB's Emergency Procedure Signature Page**

Section 8 of the Employee handbook. By signing below, I agree to abide by the Policy. I also acknowledge that any infractions will result in disciplinary action, up to and including termination.				
Employee's Signature	Date			
Print Employee Name	-			

#### **Confidential Disclosure Policy**

I hereby acknowledge that I have read and understand the Confidential Disclosure Policy in Section 7 of the Employee handbook. By signing below, I agree to abide by the Policy. I also acknowledge that any infractions will result in disciplinary action, up to and including termination.

This agreement supersedes and replaces any existing agreement between CGB and me relating generally to the same subject matter. It may not be modified or terminated, in whole or in part, except in writing signed by an authorized representative of CGB. Discharge of my undertakings in this agreement shall be an obligation of my executors, administrators, or other legal representatives or assigns.

Employee's Signature	Date
Print Employee Name	

# **Information Technologies Policies**

Section 7 of the Employee handbook. By signing below, I agree to abide by the Policies. I also acknowledge that any infractions will result in disciplinary action, up to and including termination.					
Employee's Signature	Date				
Print Employee Name					

# **CGB** Request for Training

Name
Class Requested
Date of Class
Location of Class
Class is being offered by:
Dominata da Ciamatuma
Requestor's Signature
Supervisor's Approval
Today's Date
Signature

Suzanne Kaswan Vice President, Human Resources

# APPLICATION FOR PARTICIPATION IN THE CGB SICK LEAVE BANK

I understand that as a permanent employee of CGB that has completed my introductory period, I may elect to choose to participate in a sick leave bank that is outlined in CGB Sick Leave Bank Policy. I understand that if I do not elect to participate within 30 days of completing my introductory period, I may only elect to participate during the annual open enrollment period.

I understand that if I elect to participate in the Sick Leave Bank, I will contribute the hourly equivalent of one day towards the Sick Leave Bank, and if the Sick Leave Bank falls below an adequate number of hours, I may be required to make an additional contribution to the Bank at a later date.

Employee Name:
Telephone:
Title:
Qualifying Event
I completed by introductory period on
I am enrolling during open enrollment on
***************************************
I elect participation in the Connecticut Innovations Sick Leave Bank.
I reject participation in the Connecticut Innovations Sick Leave Bank.
Signature:
Date:

### <u>CGB</u>. <u>Continuing Education Assistance Policy Form</u>

1. Identification			
Name		_ SS #	
Home Address:			
Current Title:		Current Dept:	
2. Educational Information	1		
School	Semeste	rYear	
Degree: Certificate	_ Assoc Bach	Grad	
Program:	Expected		
Course Name:	Course No.	HR Dept Use: Date Reimbursed:	Grade
(Attach supporting documer 3. Consent and Authorizat	,		
I consent to the reporting of date of this application, I hereb of not less than six months folloterminate my employment with reimbursement, I will repay CG months.  I also understand that any a responsibility and that CGB shares.	y signify my intention to be signify my intention to be significant to the six me is any funds extended additional tax liability re	remain an employee of ( urse(s). I further agree that onth period and I have red to me under this program lated to these courses wil	CGB for a period at if I voluntarily ceived over the past six
Signature	·	•	_
4. Approvals			
The employee identified above Under this authorization, CGB its Continuing Education Assist	will reimburse the empl		
Supervisor		Date	
Executive Director		Date	

## **CGB**

# **Telecommuting Agreement**

work incle Reso it me On-s can I	at an alternate ment weather) ources. The a sets the busines site workspace of be arranged.	must have a signe	Jular basis. All em d and approved To es effective on anization. Either p the returning emples that telecommutir	ployees that te elecommuting (date) arty can termir oyee as soon g is not an opt	elecommute, even Agreement on file and will remain the Agreement as appropriate a siling for some job	n occasionally (i.e. le with Human in place as long as ent at any time. ccommodations is – there are
agre	ement, you sho	ould discuss with yo	our supervisor whe	ther your job o	luties can be per	rformed remotely.
i t	meet the busing telecommuting orior supervise	employees must hes needs of the schedule outline ory approval. The ormance and/or b	agency, an emploed in this agreemones agreemones	oyee may req ent. No adjus	uest an adjustn tment may be r	nent to the nade without
		communication, the breaks, lunch per				
	Monday	Tuesday	Wednesday	Thursday	Friday	Inclement Weather and/or As Needed Basis*
	*Inclement ' occurrence	Weather and/or As	Needed Basis red	quires individua	al supervisory ap	proval for each
	supervisor i	nting may also be p f a valid business i ing agreement on	need exists for the	agency. The		
		site information:				
-   	Phone # Cell Phone #	Fax # _	E	-mail		

	liability for job-related accidents will continue during the understood and approved telecommuting hours. The employee will maintain a designated workspace. Workers' Compensation coverage is limited to this workspace as opposed to adjacent areas, e.g. other areas of the home.
4.	Duties and assignments authorized to be performed at the telecommuting site are the following:
	Management will establish with the employee the means of assessing the quality and quantity of work
	performed at the telecommuting site, integrating these into established performance objectives. Management reserves the right to assign work as necessary at either the regular or the telecommuting site.
5.	Identify any aspects of your current role that will not be able to be performed at the telecommuting site. Describe how you plan to compensate for these duties/responsibilities (e.g. faxes, phone coverage, etc.)
6.	Recognizing that effective communication is essential for a telecommuting arrangement to be successful, the following methods and times of communicating are agreed upon. Specify how such communication will occur, including items such as backup & emergency contacts, time frames, phone, fax, beeper, email, face-to-face etc. In addition, employees shall forward their company phones to their home telephones or cell phones while telecommuting.

3. Salary, job responsibilities, benefits, work status, and the amount of time worked per day or pay period will not change while telecommuting unless otherwise specified in writing. Since the

employee's telecommuting space is considered an extension of CGB's workspace, the company's

- 7. The employee agrees to remain accessible during designated work hours, and understands that management retains the right to require that the employee come into the regular work-site when a business need arises. Employees must indicate their telecommuting days on their Outlook calendar. Advance notice will be given whenever possible. In addition, employee will report to the traditional worksite for regularly scheduled meetings and time-periods pre-determined by management for purposes of education, communication, etc. In the event of equipment failure, loss of remote access capability or other system problems, employee will report to the traditional work site until the problem is resolved unless otherwise directed.
- 8. Describe your proposed telecommuting location:
  - A. The physical location in your home where your work space will be located
  - B. When choosing your workspace please ensure the following:
    - a. Adequate electrical power and power outlets, workspace and access pathways
    - b. Ergonomic lighting, seating work surfaces, and other work related resources
    - c. Power cord, work-related tools, filing equipment, office equipment and items stored in overhead shelves or bins are safely arranged and secured.
    - d. Reasonable in-place safeguards to prevent family members from getting hurt within the telecommuters work's area; prevent loss or theft of the employer's proprietary data and equipment and protect the confidentiality of matters related to the telecommuter's work.

- 9. Also, make a detailed inventory of employer owned equipment that you will be utilizing in your telecommuting workspace. Regarding space and equipment set-up and maintenance, the following is agreed upon: Specify purchase source e.g. purchase/lease/loan, set-up, maintenance, provision of supplies, insurance arrangements, etc. for each piece of equipment, furniture, phone, etc.
- 10. Employee will not subcontract or perform non-company work using its equipment, materials, information or anything else made available for the express purpose of performing work as defined in this Agreement.
- 11. Any hardware or software purchased by CGB remains its property and will be returned at the conclusion of the telecommuting arrangement. Employee agrees to protect all company equipment against unauthorized or accidental access, use, modification, destruction, or disclosure. Employee agrees to report to management instances of loss, damage, or unauthorized access immediately. Company-owned software is not to be duplicated except as formally authorized. Company information, whether stored electronically or as hard copy, remains the property of CGB; all work produced and products developed while telecommuting, remain the property of the company. CGB equipment at the telecommuting site will not be used for personal purposes or by anyone else at the telecommuting site. Employees may check email via webmail on home computers, but may not edit any attachments on any computer that is not issued by CI. Management reserves the right to make unscheduled inspections of the telecommuting premises, equipment and software to ensure compliance with all aspects of policies, procedures and agreements.

Employee agrees to maintain a safe, ergonomically correct, and secure work environment, and agrees to allow management access to telecommuting site to assess safety and security, upon reasonable notice.

- 12. Employee agrees to report work-related injuries to the supervisor and appropriate departments immediately. Employee agrees to hold the company harmless for injury to any non-employee at the telecommuting site.
- 13. Employee accepts responsibility for tax consequences, if any, of this arrangement, and for conformance to any local zoning regulations.
- 14. Employee agrees that dependent care responsibilities during agreed-upon telecommuting time periods, or other times as required by business need, will in no way impact work performance, quality, or attainment of goals and objectives.
- 15. Viewing or sharing in any way of company information, documentation or work product by any unauthorized person (e.g. family member, neighbor, etc.) will be cause for disciplinary action, up to and including termination.
- 16. Employee understands that all obligations, responsibilities, terms and conditions of employment with *CGB* remain unchanged, except those obligations and responsibilities specifically addressed in this Agreement.

I hereby affirm by my signature that I have read this *Telecommuting Agreement*, and understand and agree to all of the provisions found in it. The *Telecommuting Agreement* itself is not a contract of employment and may not be construed as one. I understand that I am accountable to all previous confidentiality agreements, policies and procedures of the company. The *Telecommuting Agreement* does not create an express or implied contract or promise of employment for a definite term. Telecommuters, as all *CGB* employees, are employed 'at will' and as such may be terminated at any time and for any reason, with or without notice.

	/		/
Employee	Date	Manager	Date

	/	
Chief Operating Officer		Date

# THE CONNECTICUT GREEN BANK ETHICAL CONDUCT POLICY

#### I. <u>Introduction</u>

Ethical conduct is a core value of The Connecticut Green Bank (CGB) and all employees and officials of CGB are expected to maintain the highest professional standards in the conduct of their duties. In particular, each person is responsible for, and should become familiar with, the Code of Ethics for Public Officials. A copy of the "Guide to the Code of Ethics for Public Officials" is attached here. You may also access both the Code and the guide on the Office of State Ethics website at <a href="https://www.ct.gov/ethics">www.ct.gov/ethics</a> by clicking on "Public Information".

#### II. Code of Ethics Compliance

Principle provisions of the Code of Ethics for Public Officials include:

- **GIFTS** In general, state employees are prohibited from accepting gifts from anyone doing business with, seeking to do business with, or directly regulated by the state employee's agency or department or from persons known to be a registered lobbyist or lobbyist's representative. There are also restrictions on gifts between state employees in certain circumstances. (See the "Guide to the Code of Ethics for Public Officials" and Statutory References below, Sections 1-79(e) and 1-84(m).)
- FINANCIAL BENEFIT A state employee is prohibited from using his/her office or non-public information obtained in state service for the financial benefit of the individual, certain family members, or that of an associated business.
- **OUTSIDE EMPLOYMENT** A state employee may not accept outside employment which will impair his/her independence of judgment as to official state duties or which would induce the disclosure of confidential information. Generally, outside employment is barred if the private employer can benefit from the state employee's official actions.
- **FINANCIAL DISCLOSURE** Certain state employees are required to file a financial disclosure statement with the State Ethics Commission. This statement will be considered public information.
- RECUSAL OR REPORTING IN CASE OF POTENTIAL CONFLICTS The Code of Ethics requires that public officials and state employees avoid potential conflicts of interest. If a public official or state employee would be required to take official action that would affect a financial interest of such public official or state employee, certain family members or a business with which they are associated, they must excuse themselves from the matter or prepare and file a sworn written statement explaining why continued involvement in the matter would be on an objective basis and in the public interest despite the potential conflict. (See Statutory References below, Section 1-86(a).)

#### III. Additional CGB Policies

CGB expects that, in addition to complying with all provisions of the Code of Ethics for Public officials, employees and officials will:

- Protect the confidential information to which CGB has access;
- Avoid actual or potential conflicts of interest;

- Neither interfere with nor solicit contracts on behalf of any person;
- Avoid, in the case of employees, outside employment which may compromise or interfere with the ability to perform duties for CGB; and
- For those employees subject to the requirements of C.G.S. 1-83(a), submit the Statement of Financial Interests disclosure documents to the Office of State Ethics in a timely manner.

For the same reasons, and in order to maintain public confidence and avoid even an appearance of impropriety

- CGB employees and members of their immediate families are prohibited from investing in companies that receive financial assistance from CGB; and
- If an application for financial assistance from CGB is received from a business with which a CGB employee is associated, or in which such employee or an immediate family member has a direct financial interest, such employee, whether or not he or she expects to be involved in the processing or consideration of such application, shall notify the President of such business association or financial interest and such employee shall be sequestered from all information, discussions, actions and other activities related to such application. For this purpose, a business with which such employee is associated has the same meaning assigned in Section 1-79 of the Code of Ethics to the phrase "business with which he is associated". (See Statutory References below, Section 1-79(b).)

For these purposes, CGB may post a "restricted list" of companies in which employees may not invest and may require employees to disclose outside business interests. The rules of conduct in these matters may also be covered in more detail in the CGB Handbook.

#### IV. <u>Post-State Employment Restrictions</u>

Employees leaving The Connecticut Green Bank are required to comply with the Code of Ethics provisions pertaining to post-state employment, which are commonly known as the "revolving door" provisions. For example, there are restrictions on accepting employment with a party to certain contracts (which would include contracts relating to investments or other financial assistance) if the employee or official were involved in the negotiation or award of the contract, and restrictions on representing other parties before CGB during the one-year period following departure from state service. Employees should familiarize themselves with the statutes pertaining to post-state employment. They can be found at C.G.S. Section 1-84a and 1-84b. (See Statutory References below.) You may access these statutes on the Office of State Ethics website at <a href="www.ct.gov/ethics">www.ct.gov/ethics</a> by clicking on "Statutes and Regulations". A summary of these requirements is included in the "Guide to the Code of Ethics for Public Officials and State Employees" attached to this ethics policy.

Before an employee leaves the employment of The Connecticut Green Bank, an exit interview will be conducted by our Ethics Liaison Officer. The purpose of this exit interview will be to individually review potential issues relating to post-Connecticut Green Bank employment.

#### V. Other Matters

The Board of The Connecticut Green Bank continues to have well justified faith in the integrity of and ethical conduct of employees and officials of The Connecticut Green Bank. It is understood however, that breaches of this ethics policy may require disciplinary action, including but not

limited to dismissal from CGB, in addition to sanctions provided by state law. Such sanctions are to be applied as appropriate with the approval of the Connecticut Green Bank Board of Directors.

It is the responsibility of each employee and official to inquire of the Ethics Liaison Officer or the Office of State Ethics at 860.566.4472 should any question arise concerning his or her conduct.

#### VI. Statutory References

- Sec. 1-79. <u>Definitions</u>. The following terms, when used in this part, shall have the following meanings unless the context otherwise requires:
- (b) "Business with which he is associated" means any sole proprietorship, partnership, firm, corporation, trust or other entity through which business for profit or not for profit is conducted in which the public official or state employee or member of his immediate family is a director, officer, owner, limited or general partner, beneficiary of a trust or holder of stock constituting five per cent or more of the total outstanding stock of any class, provided, a public official or state employee, or member of his immediate family, shall not be deemed to be associated with a not for profit entity solely by virtue of the fact that the public official or state employee or member of his immediate family is an unpaid director or officer of the not for profit entity. "Officer" refers only to the president, executive or senior vice president or treasurer of such business.
- (e) "Gift" means anything of value, which is directly and personally received, unless consideration of equal or greater value is given in return. "Gift" shall not include:
- (1) A political contribution otherwise reported as required by law or a donation or payment as described in subdivision (9) or (10) of subsection (b) of section 9-601a;
- (2) Services provided by persons volunteering their time, if provided to aid or promote the success or defeat of any political party, any candidate or candidates for public office or the position of convention delegate or town committee member or any referendum question;
- (3) A commercially reasonable loan made on terms not more favorable than loans made in the ordinary course of business;
- (4) A gift received from (A) an individual's spouse, fiancé or fiancée, (B) the parent, brother or sister of such spouse or such individual, or (C) the child of such individual or the spouse of such child;
- (5) Goods or services (A) which are provided to a state agency or quasi-public agency (i) for use on state or quasi-public agency property, or (ii) that support an event, and (B) which facilitate state or quasi-public agency action or functions. As used in this subdivision, "state property" means (i) property owned by the state or a quasi-public agency, or (ii) property leased to a state agency or quasi-public agency:
  - (6) A certificate, plaque or other ceremonial award costing less than one hundred dollars;
  - (7) A rebate, discount or promotional item available to the general public;
  - (8) Printed or recorded informational material germane to state action or functions;
  - (9) Food or beverage or both, costing less than fifty dollars in the aggregate per recipient in a

calendar year, and consumed on an occasion or occasions at which the person paying, directly or indirectly, for the food or beverage, or his representative, is in attendance;

- (10) Food or beverage or both, costing less than fifty dollars per person and consumed at a publicly noticed legislative reception to which all members of the General Assembly are invited and which is hosted not more than once in any calendar year by a lobbyist or business organization. For the purposes of such limit, (A) a reception hosted by a lobbyist who is an individual shall be deemed to have also been hosted by the business organization which he owns or is employed by, and (B) a reception hosted by a business organization shall be deemed to have also been hosted by all owners and employees of the business organization who are lobbyists. In making the calculation for the purposes of such fifty-dollar limit, the donor shall divide the amount spent on food and beverage by the number of persons whom the donor reasonably expects to attend the reception;
- (11) Food or beverage or both, costing less than fifty dollars per person and consumed at a publicly noticed reception to which all members of the General Assembly from a region of the state are invited and which is hosted not more than once in any calendar year by a lobbyist or business organization. For the purposes of such limit, (A) a reception hosted by a lobbyist who is an individual shall be deemed to have also been hosted by the business organization which he owns or is employed by, and (B) a reception hosted by a business organization shall be deemed to have also been hosted by all owners and employees of the business organization who are lobbyists. In making the calculation for the purposes of such fifty-dollar limit, the donor shall divide the amount spent on food and beverage by the number of persons whom the donor reasonably expects to attend the reception. As used in this subdivision, "region of the state" means the established geographic service area of the organization hosting the reception;
- (12) A gift, including but not limited to, food or beverage or both, provided by an individual for the celebration of a major life event [Not an available exception; see Section 1-84(m) below]:
- (13) Gifts costing less than one hundred dollars in the aggregate or food or beverage provided at a hospitality suite at a meeting or conference of an interstate legislative association, by a person who is not a registrant or is not doing business with the state of Connecticut;
- (14) Admission to a charitable or civic event, including food and beverage provided at such event, but excluding lodging or travel expenses, at which a public official or state employee participates in his official capacity, provided such admission is provided by the primary sponsoring entity;
- (15) Anything of value provided by an employer of (A) a public official, (B) a state employee, or (C) a spouse of a public official or state employee, to such official, employee or spouse, provided such benefits are customarily and ordinarily provided to others in similar circumstances;
- (16) Anything having a value of not more than ten dollars, provided the aggregate value of all things provided by a donor to a recipient under this subdivision in any calendar year shall not exceed fifty dollars; or
- (17) Training that is provided by a vendor for a product purchased by a state or quasi-public agency which is offered to all customers of such vendor.

#### Section 1-84 Prohibited Activities

(m) No public official or state employee shall knowingly accept, directly or indirectly, any gift, as defined in subsection (e) of section 1-79, from any person the official or employee knows or has reason to know: (1) Is doing business with or seeking to do business with the department or agency in which the official or employee is employed; (2) is engaged in activities which are directly regulated by such department or agency; or (3) is prequalified under section 4a-100. No person shall knowingly give, directly or indirectly, any gift or gifts in violation of this provision. For the purposes of this subsection, the exclusion to the term "gift" in subdivision (12) of subsection (e) of section 1-79 for a gift for the celebration of a major life event shall not apply. Any person prohibited from making a gift under this subsection shall report to the State Ethics Commission any solicitation of a gift from such person by a state employee or public official.

#### Section 1-84a. Disclosure or use of confidential information by former official or employee

No former executive or legislative branch or quasi-public agency public official or state employee shall disclose or use confidential information acquired in the course of and by reason of his official duties, for financial gain for himself or another person.

#### Sec. 1-84b. Certain activities restricted after leaving public office or employment

- (a) No former executive branch or quasi-public agency public official or state employee shall represent anyone other than the state, concerning any particular matter (1) in which he participated personally and substantially while in state service, and (2) in which the state has a substantial interest.
- (b) No former executive branch or quasi-public agency public official or state employee shall, for one year after leaving state service, represent anyone, other than the state, for compensation before the department, agency, board, commission, council or office in which he served at the time of his termination of service, concerning any matter in which the state has a substantial interest. The provisions of this subsection shall not apply to an attorney who is a former employee of the Division of Criminal Justice, with respect to any representation in a matter under the jurisdiction of a court.
- (f) No former public official or state employee (1) who participated substantially in the negotiation or award of (A) a state contract valued at an amount of fifty thousand dollars or more, or (B) a written agreement for the approval of a payroll deduction slot described in section 3-123g, or (2) who supervised the negotiation or award of such a contract or agreement, shall accept employment with a party to the contract or agreement other than the state for a period of one year after his resignation from his state office or position if his resignation occurs less than one year after the contract or agreement is signed.
- (g) No member or director of a quasi-public agency who participates substantially in the negotiation or award of a contract valued at an amount of fifty thousand dollars or more, or who supervised the negotiation or award of such a contract, shall seek, accept, or hold employment with a party to the contract for a period of one year after the signing of the contract.

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



# Memo

**To:** Budget & Operations Committee

**From:** George Bellas (Vice President of Finance and Administration), Brian Farnen (General Counsel and CLO), Bryan Garcia (President and CEO), Bert Hunter (EVP and CIO), and Eric Shrago (Director of Operations)

Mackey Dykes (Vice President of CI&I Programs and Officer), Ben Healey (Director of Clean Energy Finance), Dale Hedman (MD of Infrastructure Programs), and Kerry O'Neill (VP of Residential Programs)

**Date:** July 6, 2018

**Re:** Final Questions and Answers (Addendum) – Connecticut Green Bank Sustainability Plan and the Nonprofit

#### **Summary**

As a follow-up to the June 28, 2018 memo entitled "Final Questions and Answers – Connecticut Green Bank Sustainability Plan and the Nonprofit" distributed to the Board of Directors, the following is an addendum to the memo answering the outstanding questions. Given the nature of the questions, the staff felt the Budget & Operations Committee should review and approve their substance and presentation. The responses to these questions, following review by the Budget & Operations Committee, will be provided to Lamont Financial Services Corporation (Lamont Financial), to provide an independent assessment and determination.

#### **Financial Position**

Proforma – what are the 5-year proforma statements of the Connecticut Green Bank with and without the Nonprofit?

The 5-year proforma statements for the Green Bank with and without the Nonprofit have been provided – see attachments.

In general, as discussed in the FY 2019 target and budget process, the inclusion of the Nonprofit within the Sustainability Plan will both (1) reduce operating expenses (i.e., personnel and non-personnel related expenses) for the Investment Business of the Green Bank by about \$1.5 million over the 5-years reducing the time and cost to breakeven (see Table 1), and (2) allow private capital investment to come into Connecticut to support green energy deployment in underserved market segments (e.g., LMI single-family and multifamily households).

Table 1. Breakeven Analysis for Investment Business – Sustainability Plan vs. Proforma Cash Flow with Nonprofit vs. Proforma Cash Flow without Nonprofit

Scenario	FY 2019 Operating Expenses (\$ MM's)	Years to Breakeven	Year of Breakeven	Cumulative Cash Flow Prior to Breakeven (\$MM's)
Sustainability Plan	(\$11.87)	4	2022	(\$14.3)
Proforma Cash Flow with Nonprofit	(\$11.20)	4	2022	(\$10.9)
Proforma Cash Flow without Nonprofit	(\$11.54)	4	2022	(\$12.1)

The key assumptions used in the 5-year proforma analysis include:

- Sweeps the sweeps by the State of Connecticut for FY 2018 and FY 2019 of the Clean Energy Fund and Regional Greenhouse Gas Initiative aren't continued after FY 2019;
- DEEP Investment the DEEP investment of \$5 million to support financing programs in low-to-moderate income single family and multifamily households is not included as available capital for investment by the Green Bank in the "without Nonprofit" scenario. The DEEP investment, per the executed contracts, is to support the Nonprofit attract private investment into the LMI market segment a challenge that the Green Bank will have doing for itself in the near-term as a result of the sweeps.<sup>1</sup>
- Operational Expenses for Investment Business the reduction in operating expenses from employee compensation and benefits in years 1 through 3 and then years 4 through 6 are nullified in the "without Nonprofit" scenario (i.e., those Green Bank staff members that would transition to the Nonprofit). The savings the Green Bank's Investment Business would have achieved, as a result of lower overhead costs, is no longer achievable with staff remaining at the Green Bank instead of at the Nonprofit.
- Operational Expenses for Incentive Business the reduction in operating expenses for employee compensation and benefits and other program-related expenses (e.g., program development and administration, marketing, EM&V, etc.) are significantly reduced in FY 2023. Given the current rate, it is expected that the 300 MW target for the Residential Solar Investment Program (RSIP) will be achieved at the end of 2019 (i.e., in the middle of FY 2020) however the policy concludes at the end of 2022 (i.e., in the middle of FY 2022). We anticipate a full "ramp down" of the RSIP operating expenses beginning in FY 2023.
- RSIP Expenses and SHREC Revenues as part of our ongoing process to improve
  the forecasting precision needed for the investors in the SHREC securitization and for
  the Green Bank as it administers the expenses (e.g., incentives, administration, timing
  and amount of SHREC warehouse funding and securitization bonding, costs associated
  with these activities (bond issuance, legal costs, interest expense, etc.)) and revenues

<sup>&</sup>lt;sup>1</sup> It should be noted that in the 2018 legislative session, the "non-impairment" provisions within the Green Bank statute were strengthened. This improvement should help the Green Bank reestablish its ability to engage private capital investors over time.

(e.g., SHREC and non-SHREC REC quantity and prices) of the Incentive Business, we have improved various cash flow line items to reflect these improvements. Details on these improvements can be seen in the proforma statements.

- Growth Rate operating expense increases of 2% are assumed across the following areas each year after FY 2019:
  - Compensation
  - o Benefits (i.e., pension, insurance, payroll tax, etc.)
  - Program development and administration
  - Marketing
  - EM&V
  - Consulting
  - o R&D
  - o Professional fees
  - Rent
  - Office computers

Included in the 5-year proformas for the Green Bank with and without the Nonprofit are proforma Income Statements, Balance Sheets, and Cash Flow Statements, including presentations for the Investment and Incentive Businesses – see the attached.

The senior staff believes that these 5-year proformas, both with and without the Nonprofit, are a reasonable representation of the Green Bank based on what we know today.

#### **Special Capital Reserve Fund**

SCRF Obligations – what do the Connecticut Green Bank cash flow projections look like with respect to the Special Capital Reserve Fund (SCRF) obligations over the next 20 years?

Under the structure for both the Meriden hydro and CSCU solar projects that are secured by SCRF, the Green Bank has put in place a Project Support Agreement to ensure the SCRF reserve account is never drawn upon.

Green Bank's expected obligation under the Project Support Agreement for each of the projects over the next 20 years is as follows:

- Meriden Hydro Green Bank expects to contribute approximately \$1.1 million over the 20-year period (\$54,400 on average, annually). These are expected to be recovered from additional power purchase agreement revenues over the following 10-year period (i.e., Years 21-30 of the project).
- CSCU Solar Green Bank only expects to contribute \$150,000 equivalent to the "Initial Project Support Contribution" (as defined in the Project Support Agreement) to pay for debt service in the first year as the solar PV systems are being installed. Other than this initial contribution, all of the project's operating costs and debt service for the project are covered by the project's revenues during the 20-year term of the bonds. Once the bonds are retired, the Green Bank's investment will be recuperated through the revenue

from the power purchase agreement for a period of 5 years (i.e., Years 21-25 of the project).

Parent Support Agreement – Does the Connecticut Green Bank creation of a Nonprofit adversely impact the (1) Meriden hydro and (2) CSCU bond and SCRF transactions?

With the "Proforma" and "SCRF Obligations" questions answered, and reviewed and approved by the Budget & Operations Committee, these materials will be provided to Lamont Financial for assessment of their reasonableness and an independent determination as to whether or not the Green Bank creation of a Nonprofit adversely impacts the (1) Meriden hydro, and (2) CSCU solar bond and SCRF transactions.

See attached Statement of Work for Lamont Financial.

#### Conclusion

Given their representation on the Board of Directors of the Connecticut Green Bank, the Office of the Treasurer requested that the staff of the Green Bank provide answers to the above remaining questions, along with an independent review by Lamont Financial, to ensure that the Green Bank creation of the Nonprofit will not have an adverse impact on the Special Capital Reserve Fund applied to several bond transactions (i.e., Meriden hydro and CSCU solar). The answers to these questions will be provided to Lamont Financial for their assessment and determination.

#### Resolution

**RESOLVED**, that the Budget & Operations Committee has reviewed and approved for a third party outside assessment and determination to be conducted by Lamont Financial Services Corporation (Lamont Financial), answers assembled by the staff of the Connecticut Green Bank in a memorandum on July 6, 2018 to Board of Director questions involving:

- the 5-year proformas of the Green Bank with and without the Nonprofit, and
- determinations on whether or not the Special Capital Reserve Fund being used by the Green Bank for the Meriden hydro and Connecticut State College and University solar projects, will be adversely impacted as a result of the Green Bank enabling such nonprofit.

### **Financial Services Corporation**

New Jersev N California

July 23, 2018

Mr. Bert Hunter EVP and Chief Investment Officer Connecticut Green Bank 845 Brook Street Rocky Hill, CT 06067

Bert,

Lamont Financial Services is serving as financial advisor to the Connecticut Green Bank ("CGB") and has reviewed the financial documents and financial analysis in connection with the creation of a non-profit entity pursuant to 16-245n(d)(1)(D)(ix) to expand the ability of the CGB to implement energy saving or alternative energy programs. The purpose of creating the non-profit entity is to expand the capital base for programs that would be part of the CGB mission that could be implemented with additional capital resources for Connecticut, as well as on a broader geographical footprint than CGB could do otherwise.

Lamont has reviewed various materials provided by the CGB regarding Inclusive Prosperity Capital ("IPC"). IPC will be independently governed, with minority board control by the CGB, and will initially be funded from foundations and grants provided by DEEP, as well as CGB. It is reasonable to expect that the availability of the foundation and DEEP funding will enable IPC to acquire earning assets sufficient to support the staff effort at IPC after an initial start-up period which is supported by contractual payments by CGB to IPC in return for programmatic and other services by IPC for CGB. Further, Lamont believes that IPC should be self supporting with the expected business activity which the foundation capital will support. Based on the information available, IPC will not require any further Green Bank/state support after the start up period.

The assumptions in the business plan seem to be reasonable, since they represent a level of activity that is less than is currently occurring at the CGB with the same personnel. As such, the proforma P&L statements seem reasonable and achievable for the initial five year period. The achievement of the business plan's goals will require continued monitoring by the Board of IPC, once constituted. As noted above, there are also to be operating agreements between CGB and IPC to insure that IPC will not compete with CGB. This effort may have to be expanded to include other potential partners within Connecticut. IPC expects to improve margins on its lending business, which should assist it in further funding its activities without CGB support in the future.

The investment by the CGB into IPC should not interfere with the obligations of the CGB to support the Meriden Hydro project and CSCU passive solar projects. The Meriden Hydro project has approximately \$2.9 million of debt associated with it and the CSCU projects will cost approximately \$9.1 million. While there is technology risk associated with the Meriden Hydro project, the CSCU passive solar project has weather related risk but little technology risk. As a result of the outside investment in IPC, Lamont does not anticipate any increase in the risk of a demand on the SCRF. However, the CGB should continue to monitor its portfolio and, to the extent necessary, make arrangements for the payment of its debt obligations pursuant to each project's existing Project Support Agreement.

Yours truly.

Robert A. Lamb

President

#### MEMORANDUM OF UNDERSTANDING

#### BY AND BETWEEN

#### CONNECTICUT GREEN BANK AND INCLUSIVE PROSPERITY CAPITAL, INC.

This Memorandum of Understanding (<u>MOU</u>) by and between Connecticut Green Bank (<u>Green Bank</u>) and Inclusive Prosperity Capital, Inc. (<u>Nonprofit</u>) is effective as of the date set forth below. Green Bank and Nonprofit may collectively be referred to as the "Parties" or individually as a "Party."

#### **Background**

- A. Despite the Green Bank mobilizing nearly \$1.1 billion of investment into Connecticut's economy from 2012 through 2017 by using \$175 million of public funds to attract \$915 million of private investment, creating over 13,000 new jobs, reducing the burden of energy costs on nearly 25,000 families and businesses, and winning the "Innovations in American Government Awards," the State of Connecticut on October 31, 2017 swept \$32.6 million of funds from the Clean Energy Fund and the Regional Greenhouse Gas Initiative in fiscal years 2018 and 2019 to the General Fund. As a result, the Green Bank had to adjust its strategy and implement a Sustainability Plan approved by its Board of Directors on December 15, 2017 to manage within more limited resources to fund operations and investments. In order to continue its efforts to advance green energy deployment in underserved market segments (e.g., low-to-moderate income households and underserved credits), the Green Bank is supporting the creation of a mission-aligned independent Nonprofit to efficiently deliver capital.
- B. The Green Bank has participated in the formation of the Nonprofit, and is entering into this MOU, in the exercise of powers granted in subdivisions (ii) and (ix) of subsection (D) of Section 16-245n(d)(1) of the Connecticut General Statutes.
- C. In exercising such powers, the Board of Directors of the Green Bank has determined that the public purposes of the Green Bank will be furthered by the formation and activities of the Nonprofit conducted in accordance with its organizational documents, including through its ability to seek and accept foundation grants, charitable contributions or other public or private support in order to continue the operation of certain Green Bank clean energy programs that might otherwise have to be discontinued as a result of a reduction of state funding available to the Green Bank.
- D. Such programs include those to be administrated by the Nonprofit on behalf of the Green Bank pursuant to, and with the funding provided under, various Professional Services Agreements entered into or that may be entered into between the Green Bank and the Nonprofit (PSAs).
- E. It is recognized that the Nonprofit is newly formed and does not yet have the office space or administrative support structure necessary for such activities and programs, and the Parties are therefore entering into this MOU to set forth the terms on which the Green Bank is willing to provide such space and administrative support on a transitional basis, as part of its participation in the formation and initial operations of the Nonprofit.

#### 1. Advisory Opinion

1.1. <u>Advisory Opinion</u>. The Parties acknowledge that the formation and certain activities of the Nonprofit, including particularly the transition in employment of certain Green Bank employees to the Nonprofit, have been addressed in Advisory Opinion No. 2018-2 from the Citizens Ethics Advisory Board of the State of Connecticut attached hereto as <u>Exhibit A</u> (<u>Advisory Opinion</u>).

#### 2. Common Principles

- 2.1. Operations. It is the intention of the Parties that the services provided in this MOU and the interactions of the Parties hereunder shall all be in accordance and consistent with the terms of the Advisory Opinion. If there is a conflict between the terms of this MOU, the PSAs and the Advisory Opinion, the Advisory Opinion shall prevail, and a Party shall be excused from preforming any term of this MOU (each, a "Nonconforming Activity") if it would conflict with the Advisory Opinion; provided, however, that with respect to such Nonconforming Activity, the Parties will act in good faith to modify such Nonconforming Activity to be consistent with the terms of the Advisory Opinion to achieve as practically as possible the goals intended by this MOU and the PSAs.
- 2.2. <u>Out-of-state</u>. "Out-of-state" refers to all activities that take place outside of the borders of and without the primary benefit for the ratepayers of Connecticut.
- 2.3. Force Majeure Event. Means any act or event that directly delays or prevents a Party from timely performing obligations under this Agreement or from complying with conditions required under this Agreement if such act or event, despite the exercise of reasonable efforts, cannot be avoided by, and is beyond the reasonable control of and without the fault or negligence of, the Party relying thereon as justification for such delay, nonperformance, or noncompliance, which includes, without limitation, statutory changes to the Green Bank (including legislative sweeps of funding), an act of God or the elements, extreme or severe weather conditions, explosion, fire, epidemic, landslide, mudslide, sabotage, terrorism, lightning, earthquake, flood, volcanic eruption or similar cataclysmic event, an act of the public enemy, war, blockade, civil insurrection, riot, civil disturbance, or strike or other labor difficulty caused or suffered by a Party or any third party beyond the reasonable control of such Party, or an extended grid power failure. However, financial cost or failure to secure adequate labor or any necessary materials or equipment alone or as the principal factor shall not constitute grounds for a claim of Force Majeure.

#### 3. Effective Date and Term

- 3.1. Effective Date. The Nonprofit was incorporated on June 6, 2018 and has entered into four PSAs with the Green Bank effective as of August 3, 2018 with respect to multifamily suite of products; investment management including those targeting low-to-moderate communities; Smart-E Loan Program; and a solar fund for underserved commercial, industrial, and institutional customers. The Parties therefore agree that, consistent with the PSAs, the effective date of this MOU shall be August 3, 2018 (Effective Date).
- 3.2. <u>Term.</u> This MOU shall be effective from the Effective Date through June 30, 2024 unless earlier terminated as provided herein; provided that certain services provided pursuant to this MOU shall be for shorter durations as set forth herein. This MOU may be extended by mutual written consent of the Parties.
- 3.3. <u>Termination of Particular Services</u>. On at least 30 days' prior written notice to the Green Bank, the Nonprofit may terminate any particular service provided by the Green Bank under this MOU when the Nonprofit is no longer in need of such service. If amounts are owing by the Nonprofit for such service, it shall pay Green Bank all amounts then accrued but not yet paid for such service upon such termination.
- 3.4. Amendment of MOU. Upon (a) the termination of the Nonprofit as the administrator of one or more programs by the Green Bank, (b) the relocation of the Green Bank or the Nonprofit to physical space not currently covered by this MOU, (c) a change in the business model, sustainability plan or that changes the mission of the Green Bank, and (d) a Force Majeure Event, the Parties will amend this MOU accordingly.
- 3.5. <u>Termination for Default</u>. This MOU may be terminated by a non-breaching Party upon giving prior written notice to the breaching Party of breach of this MOU, or of the promissory note evidencing the Line of Credit (defined in Section 4.1), or of a PSA with an opportunity to cure (which shall be not less than ninety days after formal notice by the non-breaching Party).

#### 4. Start-up Funding

- 4.1. <u>Line of Credit.</u> The Green Bank will make available to the Nonprofit a revolving line of credit in an amount not to exceed \$150,000 (<u>Line of Credit</u>) to cover its initial startup costs, including but not limited to the development of its information technology and telecommunications infrastructure, the implementation of its own accounting software, performance of its own audit and tax filings, the purchase of insurance, and the development of its own branding, among other costs.
- 4.2. <u>Advances</u>. The Nonprofit may request advances in writing not more than twice a month, specifying the use of such advances, and the Green Bank shall fund such advances in its reasonable discretion to an account designated by the Nonprofit by wire transfer.
- 4.3. <u>Promissory Note</u>. The Nonprofit shall execute a promissory note substantially in the form attached hereto as <u>Exhibit B</u> evidencing the Line of Credit.

#### 5. Services Provided by the Green Bank

The Green Bank will provide the following services (<u>Services</u>) to the Nonprofit for the durations and costs set forth below.

5.1. <u>Costs for Services</u>. <u>Exhibit C</u> sets forth the charges (if any) applicable to the Services provided under this MOU, and the frequency of the payment thereof by the Nonprofit to the Green Bank shall be monthly unless otherwise noted.

#### 5.2. Office Space, Supplies and Accommodation of Nonprofit Meetings

- 5.2.1. Office Space. The Green Bank shall, without charge, provide office and/or cubicle space necessary for the employees of the Nonprofit that are supporting the PSAs.
- 5.2.2. <u>Safety and Security; General Use</u>. All Nonprofit employees on Green Bank premises agree to adhere to Green Bank policies and procedures relative to occupying Green Bank office space and agree to adhere to the dress code otherwise applicable to Green Bank employees. Two employees from the Nonprofit may attend and participate in the Green Bank Safety Committee meetings as a means of communicating and expressing the Nonprofit viewpoint.
- 5.2.3. General Supplies. The Green Bank shall provide the Nonprofit with general office supplies (general items usually maintained on hand such as pens, paper, staples, etc.), photocopying and other general administrative services. All such materials and services shall only be used in support of the PSAs. During the first year of this MOU, the Green Bank shall provide such materials and services without charge. Thereafter, the Nonprofit agrees to pay the Green Bank a monthly flat fee of \$50 for such materials and services.
- 5.2.4. <u>Special Requests.</u> If there are requests by the Nonprofit for specific administrative services or supplies that are outside of those normally procured by the Green Bank for its own operations, the Green Bank will provide such services and supplies to the Nonprofit; provided that the Nonprofit reimburses the Green Bank therefor at cost.
- 5.2.5. Costs of Supplies. Costs of all other general office services, materials and supplies (except Information Technology resources or other services explicitly stated in this MOU) shall be shared at cost between the Green Bank and the Nonprofit and on a "per head count" basis or such other basis as the President of Green Bank and an officer of the Nonprofit may from time to time determine to be fair and equitable in the circumstances.
- 5.2.6. Nonprofit Board and Committee Meetings. The Green Bank shall make its "board room" and other suitable conference rooms available for meetings of the Nonprofit Board of Directors, committees of the Nonprofit Board of Directors, and Nonprofit advisory committees, subject to reasonable rules regarding availability and advance booking of such spaces. In connection with such meetings, the Green Bank shall provide any necessary staff and administrative support for meeting set-up, audio-visual requirements, conference telephone and video-conference arrangements.

- 5.2.7. Other Nonprofit Meetings. The Green Bank will also make available to the Nonprofit for its use in connection with staff meetings, meetings with applicants, and other business purposes of the Nonprofit, the "board room" and other available conference rooms, subject to reasonable rules regarding the availability and advance booking of such spaces. In connection with such meetings, the Green Bank shall provide any necessary staff and administrative support for meeting set-up, audio-visual requirements, conference telephone and video-conference arrangements.
- 5.2.8. Meeting Costs. There will be no separate cost reimbursement to the Green Bank for the use of such office space or conference facilities and any Green Bank staff support pursuant to this Section 5.2, but any out-of-pocket costs incurred by the Green Bank in connection with the hosting of such meetings shall be promptly reimbursed by the Nonprofit to the Green Bank at cost.

#### 5.3. <u>Information Technology Functions</u>

- 5.3.1. Computer Access and Use Generally. The Green Bank shall, without charge, provide to the Nonprofit employees access to and use of the Green Bank's computer network, internet access, software applications, files and databases for purposes of Nonprofit operations, subject to (a) such "firewalls" and password protection as may be appropriate to limit access (i) of Green Bank employees to non-public documents and information received or maintained by the Nonprofit, and (ii) of Nonprofit employees to non-public documents and information received or maintained by Green Bank and (b) compliance by all employees of the Nonprofit with all rules, regulations, protocols and any license requirements of the Green Bank or its hardware or software providers in respect of such network access and services.
  - 5.3.1.1. <u>Hardware.</u> The Green Bank shall sell to the Nonprofit at current value computers needed to support the PSAs. The Nonprofit agrees to allow for the machines to be maintained and supported as if they were Green Bank-owned machines.
  - 5.3.1.2. <u>Software</u>. The Green Bank shall provide to the Nonprofit employees access to and use of software in support of the PSAs, as well as access to Microsoft Office or similar successor software then used by the Green Bank. The Nonprofit agrees not to use Green Bank-supplied software in support of programs, projects and services that are not contracted by the Green Bank under a PSA.
  - 5.3.1.3. Email. The Nonprofit will establish its own email addresses that do not use "Green Bank" or a confusingly similar domain name. Where the Nonprofit conducts business on behalf of the Green Bank and administers the Green Bank programs under a PSA, employees of the Nonprofit will have and use Green Bank email addresses to conduct Green Bank business. The continuation of this use of Green Bank email will continue at the discretion of the Green Bank.
  - 5.3.1.4. <u>Special Development</u>. The Green Bank will prioritize, support, and cover the reasonable costs of requested system enhancements and developments by the Nonprofit in support of the PSAs.

- 5.3.1.4.1. <u>Technology Investment.</u> The Green Bank may finance and invest in the development of technology for the administration and operation of its programs by the Nonprofit. The Green Bank will reserve its right to a prorata share in the proceeds of income earned in the future. Details of such investments shall be established and governed by the PSA's for specific programs.
- 5.3.2. <u>Proprietary Infrastructure for the Nonprofit</u>. Notwithstanding Section 5.3.1, the Nonprofit shall establish its own information technology infrastructure to support its businesses including hardware, software, document storage/sharing/management.
- 5.3.3. <u>Telecommunications</u>. The Green Bank shall provide to the Nonprofit employees access to telecommunications equipment, services and support, including voicemail, on the same basis and as part of the same telecommunications system as installed and maintained for the use of Green Bank employees. Similarly, the Green Bank will provide the Nonprofit access to a teleconferencing service (such as Skype for business or Go-To-meeting). During the first year of this MOU, the Green Bank shall provide the above telecommunication services and support without charge. Thereafter, the Nonprofit agrees to pay the Green Bank a monthly fee to be mutually agreed upon.
- 5.3.4. <u>Remote Access</u>. The Green Bank shall provide the Nonprofit employees designated by the Nonprofit with remote access and remote access support for the computer and telecommunications systems to which such employees otherwise have access in the office during normal business hours (including while telecommuting) and with similar functionality and service level afforded employees of the Green Bank.

#### 5.4. Accounting Functions

- 5.4.1. Accounting Services Generally. The Green Bank shall, without charge, provide to the Nonprofit all accounting services necessary to prepare financial statements, in accordance with applicable accounting principles, for the financial position, operations and activities, and cash flows of the Nonprofit related to the time period(s) from the inception of the Nonprofit through June 30, 2019. Notwithstanding the foregoing, while the Green Bank will provide accounting support to the best of its abilities, it shall not be responsible for the accuracy of accounting records provided to it by the Nonprofit. The Nonprofit shall be solely responsible for financial control and oversight and providing accurate and timely information to the Green Bank.
- 5.4.2. <u>Accounting Principles</u>. All calculations, accounting entries and other cost accounting matters pursuant to or arising under this MOU shall be consistent with applicable generally accepted accounting principles.
- 5.4.3. <u>Accounting Systems</u>. During the first year of this MOU, the Green Bank shall provide to the Nonprofit access to and use of accounting software.
- 5.4.4. <u>Audits</u>. Notwithstanding Section 5.4.1, the Nonprofit shall be solely responsible for obtaining and paying for any audits.

- 5.4.5. <u>Taxes</u>. The Nonprofit is solely responsible for the timely preparation and filing of all applicable tax returns and payment of any taxes due.
- 5.4.6. <u>Insurance</u>. The Nonprofit shall obtain and pay for all insurance as required by law or is customarily carried by businesses similarly situated, such as workers' compensation insurance, directors and officers liability insurance, general liability insurance, automobile liability insurance, and property and casualty insurance.
- 5.4.7. <u>Loan Servicing</u>. If provided in a PSA, the Green Bank shall retain the loan servicing function necessary for the Green Bank programs covered thereunder under the terms provided in such PSA. For all other Nonprofit loans, the Parties will mutually agree to terms and pricing for any additional loan servicing functions, or the Nonprofit will procure such service independently.
- 5.4.8. <u>Asset Management</u>. If provided in a PSA, the Green Bank shall retain the asset management function necessary for the Green Bank programs covered thereunder, with support from staff at the Nonprofit, under the terms provided in such PSA. For all other Nonprofit asset management functions, the Parties will mutually agree to terms and pricing for any additional asset management functions, or the Nonprofit will procure such service independently.
- 5.4.9. Other Back Office Support. If provided in a PSA, the Green Bank shall retain the other back office support functions necessary for the Green Bank programs covered thereunder, such as regulatory filings, customer service and support, and reserve calculations. For all other Nonprofit back office support functions, the Parties will mutually agree to terms and pricing for any additional back office support functions, or the Nonprofit will procure such service independently.
- 5.4.10. <u>Bank Account Management Functions</u>. Any accounts maintained at financial institutions by the Green Bank related to the programs covered in the PSAs shall continue as Green Bank accounts. The Green Bank will support the Nonprofit in its establishment of new accounts at financial institutions for its operations.
- 5.5. <u>Legal Functions</u>. The Nonprofit shall retain its own legal advisors at its own expense; provided that the Green Bank shall retain all legal functions necessary for the continued Green Bank programs. For all other Nonprofit programs, accounts and investments, the Nonprofit will procure such service independently.
- 5.6. <u>Human Resources Administration</u>. The Nonprofit shall be responsible for all hiring decisions related to its employees and for all employee benefits provided thereto; provided that the Green Bank will provide initial assistance to the Nonprofit to establish benefits and payroll services for the Nonprofit with a third-party payroll provider (at the cost of the Nonprofit).

#### 5.7. Marketing Services

5.7.1. <u>Marketing Services; Program and Product Marketing</u>. The Green Bank will, without charge, provide to the Nonprofit marketing staff time in support of the PSAs. Marketing services provided by the Green Bank can include the following: creating

- marketing plans, collateral development and support, digital and traditional media planning, monitoring and reporting, public relations and media relations, event planning, website support, email marketing, and social media management.
- 5.7.2. Organizational Marketing, Brand Development, and Management. The Green Bank shall provide support to the Nonprofit with regard to organizational communications strategy, brand strategy, etc. During the first year of this MOU, the Green Bank shall provide such organizational marketing support without charge, except that the Nonprofit shall reimburse the Green Bank for its out-of-pocket costs in connection therewith. Thereafter, the Nonprofit agrees to pay the Green Bank a monthly fee equal to the Green Bank's cost for staff time used for the organizational marketing and communications of the Nonprofit.
- 5.7.3. Marketing Service Cost. The Green Bank will provide marketing to support the Nonprofit itself and the programs managed on behalf of the Green Bank. Such support is included as part of the PSA arrangement for the continued Green Bank programs. For any Out-of-state marketing support that aligns with the continued Green Bank Programs, a fee based on the hourly rate of the Green Bank employee with an overhead rate consistent with the rate applicable to the Green Bank as a quasi-public state entity.

#### 5.8. Shared Resources, Data, and Professional Services

- 5.8.1. Shared Information and Resources. The Green Bank will provide the Nonprofit with access to the Green Bank's proprietarily developed methodologies, models, collateral, and other materials as it assists the Nonprofit in establishing its operations. The Nonprofit will provide the Green Bank with access to the Nonprofit's proprietarily developed methodologies, models, collateral, and other materials that pertain to any Green Bank programs under the PSAs.
- 5.8.2. Other Data and resources. The Green Bank will provide the Nonprofit with access to specific resources (websites, market studies, data sets, etc.) necessary for the implementation of the Green Bank's programs under the PSAs. The Nonprofit will provide the Green Bank with access to specific resources (websites, market studies, data sets, etc.) it acquires or develops in respect of the Green Bank's programs under the PSAs.
- 5.8.3. Shared Professional Resources. In circumstances where, as a matter of time, cost or convenience, it is desirable to make use of the services of professionals already selected and engaged by either Party or for either Party to engage professionals to provide services to both the Green Bank and the Nonprofit, and there is no disqualifying conflict of interest, with the approval of the President of the Green Bank and the CEO of the Nonprofit, the services of such professionals may be made available to or for the benefit of Green Bank and/or the Nonprofit, with the costs of services provided shared equitably between the Parties.

#### 6. Other Terms

- 6.1. <u>Program, Project, and Investment Management</u>. The Nonprofit shall first and foremost manage specific programs, projects, and investments on behalf of and in the best interests of the Green Bank. These obligations shall be governed by the PSAs. In case of any conflict between this MOU and any PSA, with the exception of Section 2.1 hereof, the applicable PSA shall control.
  - 6.1.1. <u>Data Collection and Maintenance</u>. In conjunction with the PSAs managed on behalf of the Green Bank, the Nonprofit shall provide to the Green Bank in a format and manner consistent with what is currently performed, the project level data for each program managed.
    - 6.1.1.1. <u>Data Maintenance</u>. Green Bank program data are to be maintained on a regular and timely basis as set forth in the PSAs. Such data shall be maintained in the same systems they currently are unless expressly agreed by the Green Bank's Director of Operations.
    - 6.1.1.2. <u>Privacy</u>. The Nonprofit will strictly abide by all privacy policies established by the Green Bank related to the Green Bank program data. Any breach of policy must be promptly reported to the Green Bank.
- 6.2. Rights of First Refusal. During the term of this MOU, before the Nonprofit may offer to parties other than the Green Bank investments in a project it is developing or into a fund it manages or will manage, and provided at least a portion of such project or fund has a nexus within the State of Connecticut, the Nonprofit shall first offer the opportunity to invest in writing to the Green Bank before offering to such other parties. The Nonprofit shall describe the opportunity, the capital needs, proposed rate of return, and proposed capital structure, which shall be sent to the Chief Executive Officer and the Chief Investment Officer of the Green Bank via email with the subject: "MOU RIGHT OF FIRST REFUSAL PROPOSED OPPORTUNITY". The Green Bank shall have 10 business days during which to accept such offer. If the Green Bank does not accept the offer within such 10 businessday period, the Nonprofit shall be free to offer such investment opportunity to one or more third parties on terms not more favorable than those offered to the Green Bank. If the Nonprofit does not enter into an agreement with a third party on said terms and conditions and develops a revised offer with different terms and conditions that it once again offers to multiple potential capital providers, the Nonprofit's right to accept investment from any third party shall not be applicable to this new offering and the procedure described in this Section shall again be applicable.
- 6.3. Consideration: Annually, the Green Bank and the Nonprofit will review the financials of the Nonprofit during which review it will be determined if there have been any savings achieved through efficiencies and scale of the Nonprofit's programs, including an examination of the ratio of costs borne by the Green Bank versus other parties contracting with the Nonprofit for such program services. If such savings can be identified or if the ratio of costs allocated to the Green Bank versus other parties contracting with the Nonprofit for such program services is out of proportion to the Nonprofit's contracted deliverables due to the Green Bank, a portion will be passed on to the Green Bank in the form of a fee reduction. Specifics will be set forth in the individual PSA's.

- 6.4. Non-Compete. During the term of this MOU, the Nonprofit shall not introduce any product, service or program within the State of Connecticut or for the benefit of the ratepayers in the State of Connecticut that directly competes with any Green Bank product, service or program (including those covered by the PSAs) without the prior written consent of the Green Bank, which consent shall not be unreasonably withheld. For a period of one year after the termination of this MOU, the Nonprofit shall not offer any product, service or program within the State of Connecticut or for the benefit of the ratepayers in the State of Connecticut if such product, service or program directly competes with any then existing Green Bank product, service or program. The Nonprofit acknowledges that this Section 6.4 imposes reasonable restrictions on the Nonprofit and acknowledges that a remedy at law for any breach or threatened breach by the Nonprofit of the provisions of this Section 6.4 may be inadequate; therefore, the Nonprofit agrees that, in addition to, and not in limitation of, any other remedies available to the Green Bank, the Green Bank shall be entitled to injunctive relief in a court of competent jurisdiction in case of any such breach or threatened breach, without the necessity of the proof of actual damages or the posting of a bond or other security.
- 6.5. <u>State Contracting Requirements</u>. To the extent applicable, the Nonprofit shall agree to and be bound by the state contracting requirements set forth in <u>Exhibit D</u> in the performance of the services to be provided to Green Bank and references therein to the "contractor" shall be deemed to mean the Nonprofit and references therein to the "contract" shall be deemed to mean this MOU.
- 6.6. <u>Indemnification</u>. The Parties agree to indemnify the non-breaching Party and its officers, directors, employees, agents and affiliates (the "<u>Indemnified Parties</u>") against, and defend and hold each of them harmless from, any liability, obligation, loss, cost, damage or expense (including attorneys' fees) suffered or incurred by any of them as a result of, arising out of, and/or relating to this MOU, other than resulting from the negligence or willful misconduct of an Indemnified Party.
- 6.7. Relationship of the Parties. Each Party is an independent contractor, and has and hereby retains the right to exercise full control of and supervision over its own performance of its obligations under this MOU and retains full control over the employment, direction, compensation and discharge of its employees assisting in the performance of such obligations. Nothing contained herein shall constitute the Parties as joint venturers, partners, employees or agents of one another, and neither Party shall have the right or power to bind or obligate the other. Nothing herein will be construed as making either Party responsible or liable for the obligations and undertakings of the other Party. Nothing in this MOU shall constitute a Party as a legal representative or agent of the other Party, nor shall a Party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party.
- 6.8. <u>Notice</u>. Whenever this MOU requires or permits any notice, approval, request or demand from one Party to another, the notice, approval, request or demand must be in writing and addressed to the Party to be notified at the following address (or at such other address as may have been designated by written notice of such Party to the other Party) and delivered in person, by certified mail return receipt requested or by overnight courier service (or by

email where specified in this MOU) and shall be deemed given when actually received or delivery is refused:

If to the Green Bank: Connecticut Green Bank

845 Brook Street

Rocky Hill, CT 06067 Attn: General Counsel

If to the Nonprofit Inclusive Prosperity Capital, Inc.

845 Brook Street Rocky Hill, CT 06067

Attn: Chief Executive Officer

- 6.9. <u>Assignment</u>: This MOU is not assignable by either Party without the prior written consent of the other Party, and any assignment without such consent shall be null and void.
- 6.10. <u>Governing Law</u>. This MOU shall be governed by and construed and enforced in accordance with the laws of the State of Connecticut, without regard to its principles relating to conflicts of laws.
- 6.11. <u>Waiver</u>: The waiver by either Party of a breach of a provision of this MOU shall not operate or be construed to invalidate the balance of the provisions contained in this MOU, which shall continue to remain in effect.
- 6.12. Severability. In the event that any one or more of the provisions contained in this MOU shall be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability shall not affect any other provisions of this MOU, and all other provisions shall remain in full force and effect.
- 6.13. Entire Agreement. This MOU, including all of the attachments hereto, the PSAs, a Grant Agreement between the Parties of even date herewith and a License Agreement between the Parties of even date herewith constitute the entire agreement of the Parties hereto related to the subject matter hereof, and supersede any previous agreement or understanding related to the subject matter hereof. This MOU may not be modified or extended except in writing executed by the Parties.
- 6.14. <u>Counterparts</u>. This MOU may be executed in any number of counterparts (including those delivered by facsimile or other electronic means), each of which shall be deemed to be an original and all of which taken together shall be deemed to be one and the same agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed this Memorandum of Understanding as of the date first set forth above.

## INCLUSIVE PROSPERITY CAPITAL, INC.

By:	_
Name:	
Title:	
CONNECTICUT GREEN BANK	
By:	_
Name:	
TT: 1	

# EXHIBIT A

# **ADVISORY OPINION**

[attached]

# **EXHIBIT B**

# FORM OF PROMISSORY NOTE

[attached]

# EXHIBIT C

# **COST MATRIX**

[attached]

### **EXHIBIT D**

### **STATE CONTRACTING REQUIREMENTS**

# Sec. 4a-60. (Formerly Sec. 4-114a). Nondiscrimination and affirmative action provisions in awarding agency, municipal public works and quasi-public agency project contracts.

- (a) Every contract to which an awarding agency is a party, every quasi-public agency project contract and every municipal public works contract 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, gender identity or expression, intellectual disability, 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, gender identity or expression, intellectual disability, 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 on Human Rights and Opportunities;
- (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 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;
- (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, 46a-68f and 46a-86; 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.
- (b) If the contract is a public works contract, municipal public works contract or contract for a quasi-public agency project, the contractor agrees and warrants that he or she will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works or quasi-public agency project.

- (c) (1) Any contractor who has one or more contracts with an awarding agency or who is a party to a municipal public works contract or a contract for a quasi-public agency project, where any such contract is valued at less than fifty thousand dollars for each year of the contract, shall provide the awarding agency, or in the case of a municipal public works or quasi-public agency project contract, the Commission on Human Rights and Opportunities, with a written or electronic representation that complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section, provided if there is any change in such representation, the contractor shall provide the updated representation to the awarding agency or commission not later than thirty days after such change.
- (2) Any contractor who has one or more contracts with an awarding agency or who is a party to a municipal public works contract or a contract for a quasi-public agency project, where any such contract is valued at fifty thousand dollars or more for any year of the contract, shall provide the awarding agency, or in the case of a municipal public works or quasi-public agency project contract, the Commission on Human Rights and Opportunities, with any one of the following:
- (A) Documentation in the form of a company or corporate policy adopted by resolution of the board of directors, shareholders, managers, members or other governing body of such contractor that complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section;
- (B) Documentation in the form of a company or corporate policy adopted by a prior resolution of the board of directors, shareholders, managers, members or other governing body of such contractor if (i) the prior resolution is certified by a duly authorized corporate officer of such contractor to be in effect on the date the documentation is submitted, and (ii) the head of the awarding agency, or a designee, or in the case of a municipal public works or quasi-public agency project contract, the executive director of the Commission on Human Rights and Opportunities or a designee, certifies that the prior resolution complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section; or
- (C) Documentation in the form of an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson or other corporate officer duly authorized to adopt company or corporate policy that certifies that the company or corporate policy of the contractor complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section and is in effect on the date the affidavit is signed.
- (3) No awarding agency, or in the case of a municipal public works contract, no municipality, or in the case of a quasi-public agency project contract, no entity, shall award a contract to a contractor who has not provided the representation or documentation required under subdivisions (1) and (2) of this subsection, as applicable. After the initial submission of such representation or documentation, the contractor shall not be required to resubmit such representation or documentation unless there is a change in the information contained in such representation or documentation. If there is any change in the information contained in the most recently filed representation or updated documentation, the contractor shall submit an updated representation or documentation, as applicable, either (A) not later than thirty days after the effective date of such change, or (B) upon the execution of a new contract with the awarding agency, municipality or

entity, as applicable, whichever is earlier. Such contractor shall also certify, in accordance with subparagraph (B) or (C) of subdivision (2) of this subsection, to the awarding agency or commission, as applicable, not later than fourteen days after the twelve-month anniversary of the most recently filed representation, documentation or updated representation or documentation, that the representation on file with the awarding agency or commission, as applicable, is current and accurate.

- (d) For the purposes of this section, "contract" includes any extension or modification of the contract, "contractor" includes any successors or assigns of the contractor, "marital status" means being single, married as recognized by the state of Connecticut, widowed, separated or divorced, and "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders. For the purposes of this section, "contract" does not include a contract where each contractor is (1) a political subdivision of the state, including, but not limited to, a municipality, unless the contract is a municipal public works contract or quasi-public agency project contract, (2) any other state, as defined in section 1-267, (3) the federal government, (4) a foreign government, or (5) an agency of a subdivision, state or government described in subdivision (1), (2), (3) or (4) of this subsection.
- (e) For the purposes of this section, "minority business enterprise" means any small contractor or supplier of materials fifty-one per cent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) Who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of section 32-9n; and "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements.
- (f) Determination of the contractor's good faith efforts shall include, but shall not be limited to, the following factors: The contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission on Human Rights and Opportunities may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.
- (g) The contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission on Human Rights and Opportunities, of its good faith efforts.
- (h) The contractor shall include the provisions of subsections (a) and (b) of this section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the state, and in every subcontract entered into in order to fulfill any obligation of a municipal public works contract or contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer, unless exempted by regulations or orders of the Commission on Human Rights and Opportunities. The contractor shall take such action with respect

to any such subcontract or purchase order as the commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with section 46a-56; provided, if such contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the commission regarding a state contract, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

# Sec. 4a-60a. Provisions re nondiscrimination on the basis of sexual orientation required in awarding agency, municipal public works and quasi-public agency project contracts.

- (a) Every contract to which an awarding agency is a party, every contract for a quasi-public agency project and every municipal public works contract 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.
- (b) (1) Any contractor who has one or more contracts with an awarding agency or who is a party to a municipal public works contract or a contract for a quasi-public agency project, where any such contract is valued at less than fifty thousand dollars for each year of the contract, shall provide the awarding agency, or in the case of a municipal public works or quasi-public agency project contract, the Commission on Human Rights and Opportunities, with a written representation that complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section.
- (2) Any contractor who has one or more contracts with an awarding agency or who is a party to a municipal public works contract or a contract for a quasi-public agency project, where any such contract is valued at fifty thousand dollars or more for any year of the contract, shall provide such awarding agency, or in the case of a municipal public works or quasi-public agency project contract, the Commission on Human Rights and Opportunities, with any of the following:

- (A) Documentation in the form of a company or corporate policy adopted by resolution of the board of directors, shareholders, managers, members or other governing body of such contractor that complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section;
- (B) Documentation in the form of a company or corporate policy adopted by a prior resolution of the board of directors, shareholders, managers, members or other governing body of such contractor if (i) the prior resolution is certified by a duly authorized corporate officer of such contractor to be in effect on the date the documentation is submitted, and (ii) the head of the awarding agency, or a designee, or in the case of a municipal public works or quasi-public agency project contract, the executive director of the Commission on Human Rights and Opportunities or a designee, certifies that the prior resolution complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section; or
- (C) Documentation in the form of an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson or other corporate officer duly authorized to adopt company or corporate policy that certifies that the company or corporate policy of the contractor complies with the nondiscrimination agreement and warranty under subdivision (1) of subsection (a) of this section and is in effect on the date the affidavit is signed.
- (3) No awarding agency, or in the case of a municipal public works contract, no municipality, or in the case of a quasi-public agency project contract, no entity, shall award a contract to a contractor who has not provided the representation or documentation required under subdivisions (1) and (2) of this subsection, as applicable. After the initial submission of such representation or documentation, the contractor shall not be required to resubmit such representation or documentation unless there is a change in the information contained in such representation or documentation. If there is any change in the information contained in the most recently filed representation or updated documentation, the contractor shall submit an updated representation or documentation, as applicable, either (A) not later than thirty days after the effective date of such change, or (B) upon the execution of a new contract with the awarding agency, municipality, or entity, as applicable, whichever is earlier. Such contractor shall also certify, in accordance with subparagraph (B) or (C) of subdivision (2) of this subsection, to the awarding agency or commission, as applicable, not later than fourteen days after the twelve-month anniversary of the most recently filed representation, documentation or updated representation or documentation, that the representation on file with the awarding agency or commission, as applicable, is current and accurate.
- (4) For the purposes of this section, "contract" includes any extension or modification of the contract, and "contractor" includes any successors or assigns of the contractor. For the purposes of this section, "contract" does not include a contract where each contractor is (A) a political subdivision of the state, including, but not limited to, a municipality, unless the contract is a municipal public works contract or quasi-public agency project contract, (B) any other state, as defined in section 1-267, (C) the federal government, (D) a foreign government, or (E) an agency of a subdivision, state or government described in subparagraph (A), (B), (C) or (D) of this subdivision.

(c) The contractor shall include the provisions of subsection (a) of this section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the state, and in every subcontract entered into in order to fulfill any obligation of a municipal public works contractor contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission on Human Rights and Opportunities. The contractor shall take such action with respect to any such subcontract or purchase order as the commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with section 46a-56; provided, if such contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the commission regarding a state contract, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

Executive Orders. This contract may be subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices; Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings; Executive Order No. Sixteen of Governor John G. Rowland, promulgated August 4, 1999, concerning violence in the workplace, Executive Order 7C of Governor M. Jodi Rell, promulgated July 13, 2006, concerning contracting reforms and Executive Order 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services, in accordance with their respective terms and conditions; all of which are incorporated into and made a part of the contract as if they had been fully set forth in it. At the contractor's request, the Green Bank shall provide a copy of these Executive Orders to the contractor.

Certification Regarding Occupational Safety and Health Act Compliance (Conn. Gen. Stat. § 31-57b). By executing the contract to which this Attachment A is attached, the Grant Recipient certifies that it has not (1) 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 bid/RFP/solicitation, 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) 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 bid/RFP/solicitation.

# STATE OF CONNECTICUT OFFICE OF STATE ETHICS

# Advisory Opinion No. 2018-2

April 19, 2018

### Questions Presented:

The petitioner asks (1) whether the involvement of seven Connecticut Green Bank ("CGB") employees in the formation of a non-governmental organization ("NGO") and their subsequent transition to it would be violation of General Statutes § 1-84 (2) whether those employees may begin employment with the NGO immediately after leaving state service with CGB without violating General Statutes § 1-84b and (3) whether transitioning employees may have contact with CGB immediately upon leaving state service under the technical implementation of an existing contract exception General Statutes § 1-84b (b).

### Brief Answer:

We conclude that (1) the employees who transition to the NGO will not be in violation of § 1-84 (c); (2) the employees may begin employment with the NGO immediately after leaving state service without violating § 1-84b (f); and may have contact with CGB immediately upon leaving state service under

the technical implementation of an existing contract exception to General Statutes § 1-84b (b).

At its March 2018 regular meeting, the Citizen's Ethics Advisory Board granted the petition for an advisory opinion submitted by Attorney Scott L. Murphy of Shipman & Goodwin, LLP, on behalf of the Connecticut Green Bank, a quasi-public agency of the state of Connecticut. The Board now issues this advisory opinion, which interprets the Code of Ethics for Public Officials¹ ("Ethics Code"), is binding on the Board concerning the person who requested it and who acted in good-faith reliance thereon, and is based on the facts provided by the petitioner.

### **Facts**

The following facts, as set forth by the petitioner, are relevant to this opinion:

The Connecticut Green Bank ("CGB") is a quasi-public agency created by Section 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

<sup>&</sup>lt;sup>1</sup>Chapter 10, part I, of the General Statutes.

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 independent an organization's status as 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 forty-seven (47) 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, 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.

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 Ethics Code, 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 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 (Section 1-84b(b)).

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The formation of the NGO is a strategic initiative conceived, directed and controlled by members of senior management CGB (who will remain at CGB), and not any of the transitioning employees, and is subject to CGB board approval.

The proposed initiative will serve public purpose – the continuation of CGB programs that might otherwise be discontinued.

The involvement of seven employees in the initiative is necessary in order to satisfy the conditions of the DEEP grant and support the continued CGB programs at the NGO.

Because 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 the senior management, 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 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.

In order to avoid even an appearance of misuse of official position, it is proposed 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.

It is also 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.

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.

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, or seek other discretionary action by CGB for the benefit of the NGO, or be involved in any dispute between CGB and the NGO.

### **Analysis**

Under the facts presented, the first issue raised by the Petitioner is whether the involvement of seven CGB employees in the formation of an NGO and their subsequent transition to it would be a violation of General Statutes § 1-84 (c).

With regard to the first issue, the Petitioner references Advisory Opinion No. 1997-1, which involved the creation of a private employment opportunity by a state employee in the course of state service that was later filled by that state employee. In that opinion, the former State Ethics Commission ("former Commission") was asked whether a University of Connecticut professor, who in his state position was "instrumental in creating, privatizing and funding" a non-profit corporation, could provide paid consultation services to

that entity.<sup>2</sup> The former Commission ruled that in a situation where a state employee wants to fill an outside position which he was substantially involved in creating, "[the] use of office for financial gain in violation of § 1-84 (c) is inherent and unavoidable."<sup>3</sup>

Here, the transfer of seven employees from the CGB to the NGO As the Petitioner notes, the transitioning is distinguishable. employees are not the decision-makers creating a post-state employment opportunity for themselves. Rather, they are CGB staff members who are willing to participate in the implementation of a strategic initiative that will be managed by the officers of CGB and approved by its board, and which has an identified public purpose, i.e., the continuation of CGB programs that might otherwise have to be discontinued. Further, the Petitioner proposes that in order to avoid even an appearance of misuse of official position, the total value of compensation (salary and benefits) for each of the transitioning employees will be no greater during the first year than it was at CGB.4 Based on the foregoing, we conclude that the involvement of seven CGB employees in the formation of the NGO and their subsequent transition to it will not violate § 1-84 (c).

The second issue raised by the Petitioner is whether the transitioning employees may begin employment with the NGO immediately after leaving state service with CGB without violating General Statutes § 1-84b (f) even if they provided technical input for terms and conditions to be incorporated in the contracts between CGB and the NGO.

Under § 1-84b (f), a state employee who was substantially involved in the negotiation or award of a state contract valued at \$50,000 or more is prohibited from accepting employment with a party to the contract for one year after leaving state service, if the contract was signed within one year prior to the employee's departure from state service. For purposes of § 1-84b (f), the term "employment" has been

<sup>&</sup>lt;sup>2</sup>Advisory Opinion No. 1997-1, Connecticut Law Journal, Vol. 58, No. 35, p. 3E (February 25, 1997).

<sup>&</sup>lt;sup>3</sup>Id.
<sup>4</sup>Cf. Advisory Opinion No. 2003-3, Connecticut Law Journal, Vol. 64, No. 36, p. 5D (March 4, 2003) ("Within that first year, a former state employee may negotiate an independent contract for personal services with his former agency only if his hourly rate is no greater than the rate he was receiving when he left state service, plus the pro-rated value of his state benefits.").

defined broadly and includes "any work or endeavor, whatever its form, undertaken in order to obtain financial gain (e.g., employee of a business, sole practitioner, independent contractor, investor, etc.)." Further, "substantial participation" is participation that is "direct, extensive and substantive, not peripheral, clerical or ministerial."

As the former Commission noted, in Advisory Opinion No. 87-8, the prohibition in § 1-84b (f) applies to state employees and officials who "have discretionary power to affect the terms of a contract—the specifications, for example"; "who review proposals and make recommendations, other than clerical or perfunctory ones, as to bids to be considered or accepted"; "whose responsibilities require them to become involved to a significant, material degree in the evaluation or decisional processes leading to the award of a contract"; "who have such a major responsibility for awarding the contract—such as final approval—that it is unlikely that a person did not become involved personally and substantially in the contract award"; and "who in fact exercise supervisory authority in the negotiation or award of a contract, although not specifically required to do so."<sup>7</sup>

In other words, the application of § 1-84b (f) is not limited to final approval; rather, it includes all substantive involvement that leads to the final approval. For example, making material suggestions that affect the subsequent decision-making process, making recommendations to one's supervisors, or otherwise providing substantive input will trigger the § 1-84b (f) prohibition.

Here, if the CGB senior management and the board rely on the transitioning employees' review and input to form their own judgment and opinion whether to approve the contracts between CGB and the NGO, then the transitioning employees' involvement will be considered significant and the employees will be subject to the § 1-84b (f) restriction for one year following their departure from state service, if such contracts are signed within one year prior to the employees' departure from state service.

<sup>&</sup>lt;sup>5</sup>Regs., Conn. State Agencies § 1-81-39.

<sup>&</sup>lt;sup>6</sup>Regs., Conn. State Agencies § 1-81-38 (a).

<sup>&</sup>lt;sup>7</sup>Advisory Opinion No. 87-8, Connecticut Law Journal, Vol. 49, No. 4, p. 1C (July 28, 1987).

Although the CGB board will authorize and approve the contracts prior to the departure of the transitioning employees, the contracts will not be signed by the state until after the transitioning employees commence their post-state employment with the NGO. The former Commission noted that, "by its terms, §1-84b (f)'s operation is explicitly premised on the date the contract . . . is signed," and that a contract is not considered "signed" until the necessary signature on behalf of the state has been obtained. Thus, from a technical standpoint, the transitioning employees will not be in violation of § 1-84b (f).

Finally, the third issue raised by the Petitioner is whether the transitioning employees may have contact with CGB during the first year after leaving state service under the technical implementation of an existing contract exception to General Statutes § 1-84b (b).

Under § 1-84b (b), a former state employee may not represent anyone for compensation before his or her former state agency for a period of one year after leaving state service, concerning any matter in which the state has a substantial interest. The word "represent" has been defined broadly to include any activity regarding a matter at issue, or potentially at issue, that alerts "the state agency in question to the relationship between its former employee and the party 'represented,' including attending meetings at which a current agency employee is also in attendance, submitting documents that contain the former employee's name or making phone calls to the agency to check on the status of a pending matter." The rationale underlying § 1-84b (b) is to prevent former executive branch officials and employees from using contacts and influence gained during state service to obtain an improper advantage in their subsequent compensated dealings with their former agency."

There is a narrow exception to § 1-84b (b). Under this exception, a former state employee who is not prohibited by § 1-84b (f) from

<sup>&</sup>lt;sup>8</sup>Internal quotation marks omitted. Advisory Opinion No. 2003-11, Connecticut Law Journal, Vol. 65, No. 7, p. 5D (August 12, 2003).

<sup>&</sup>lt;sup>9</sup>See Advisory Opinion No. 1993-16, Connecticut Law Journal, Vol. 55, No. 6, p. 6C (August 10, 1993).

<sup>&</sup>lt;sup>10</sup>Advisory Opinion No. 2003-16, Connecticut Law Journal, Vol. 65, No. 24, p. 3C (December 9, 2003).

<sup>&</sup>lt;sup>11</sup>Advisory Opinion No. 88-13, Connecticut Law Journal, Vol. 50, No. 8, p. 4C (August 23, 1988).

pursuing private employment within one year of leaving state service and who has been and will continue to perform only technical duties that involve no matters of actual or potential dispute between his new employer and the state agency, may accept employment with such

employer to work on implementation of the existing contract, without violating § 1-84b (b).<sup>12</sup>

The foregoing technical implementation of an existing contract exception to § 1-84b (b) prohibition will be available to the transitioning employees provided that the employees were not involved in the negotiation or award of the contracts entered into by CGB and the NGO. As acknowledged by the Petitioner, 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. For the proscribed one-year period under § 1-84b (b), the transitioning employees must not be involved in any 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.

### Conclusion

Based on the foregoing, we conclude that (1) the involvement of seven CGB employees in the formation of the NGO and their subsequent transition to it will not be in violation of § 1-84 (c); (2) the employees may begin employment with the NGO immediately after leaving state service without violating § 1-84b (f); and may have contact with CGB during the first year after leaving state service under the technical implementation of an existing contract exception to General Statutes § 1-84b (b).

<sup>&</sup>lt;sup>12</sup>See Advisory Opinion No. 2001-26, Connecticut Law Journal, Vol. 63, No. 19, p. 6D (November 6, 2001), ("it is not necessary or appropriate to apply [the § 1-84b (b)] restriction[] to a former state employee performing only technical duties, such as contract implementation, which involve no matter at issue between the State, or any other party, and [his] private employer").

A.O. 2018-2

# OFFICE OF STATE ETHICS

April 19, 2018

Page 11 of 11

By order of the Board,

Dated 4/19/18

Chairperson / Vice Chairperson

### **PROMISSORY NOTE**

\$150,000 July 2, 2018

FOR VALUE RECEIVED, Inclusive Prosperity Capital, Inc. (the "Maker") promises to pay to the order of Connecticut Green Bank (the "Holder"), having its principal office and place of business at 845 Brook Street, Rocky Hill, Connecticut 06067, or at such other address as the Holder may designate from time to time, the principal sum of up to ONE HUNDRED FIFTY THOUSAND DOLLARS (\$150,000), or such lesser amount as then remains unpaid, and to pay interest from the date hereof on the whole amount of said principal sum remaining from time to time unpaid based on the prior month's average daily outstanding principal at the per annum rate equal to the short term investment fund (STIF) annualized daily rate, quoted on the website of the State of Connecticut Office of the Treasurer calculated as a simple average of such rates for the prior month or a comparable rate determined in the sole discretion of the Holder if such STIF rate is no longer quoted, payable as follows:

Interest only shall be payable in arrears on the first day of each month, beginning with the first month immediately following the first advance hereunder to the Maker. The entire outstanding principal amount of this Note, together with all accrued and unpaid interest thereon, shall be due and payable on June 30, 2021 or earlier as provided in the Memorandum of Understanding of even date herewith between the Maker and the Holder (the "MOU").

Advances shall be made in accordance with the MOU. The aggregate amount from time to time outstanding hereunder, and each payment of principal with respect thereto, shall be recorded on the books and records of the Holder, and prior to transfer hereof, endorsed on the grid attached hereto which is part of this Note. The aggregate amount reflected on such books and records as outstanding at any time, including any entries by the Holder on the attached grid, shall be prima facie evidence of the aggregate amount owing and unpaid hereunder as of such time.

The Maker waives presentment, demand, notice, protest, and all other demands or notices in connection with the delivery, performance, default or enforcement of this Note. In the event of default hereunder, the Maker shall, in addition to other sums due hereunder, pay all costs and attorneys' fees incurred in any action to collect this Note.

The Maker may prepay all or any part of the amounts outstanding under this Note at any time and from time to time without premium or penalty and may reborrow the same (up to the maximum amount of this Note) until the maturity date hereof.

Payments hereunder shall be made in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

There shall be an event of default if the Maker fails to make any payment due hereunder within five (5) business days after the same is due, and such failure remains unremedied for thirty (30) days after the Maker's receipt of written notice of such failure to pay from the Holder. Upon the occurrence of an event of default, the entire outstanding principal amount of this Note, together

with any accrued and unpaid interest thereon, shall, at the option of the Holder, become immediately due and payable. Notwithstanding the foregoing, this Note shall become immediately due and payable if the Maker fails to pay its debts generally as they become due, makes an assignment for the benefit of creditors or seeks relief under any bankruptcy, insolvency or similar law or is involved in any involuntary proceeding under such laws.

THE MAKER ACKNOWLEDGES THAT THE TRANSACTION OF WHICH THIS NOTE IS A PART IS A COMMERCIAL TRANSACTION, AND TO THE EXTENT ALLOWED UNDER CONNECTICUT GENERAL STATUTES SECTION 52-278a TO 52-278g, INCLUSIVE, OR BY OTHER APPLICABLE LAW, HEREBY WAIVES ITS RIGHTS TO NOTICE AND HEARING WITH RESPECT TO ANY PREJUDGMENT REMEDY WHICH THE HOLDER MAY DESIRE TO USE.

It is the intention of the parties to conform strictly to the usury laws, whether state or federal, that are applicable to this Note. All agreements between the Maker and the Holder, whether now existing or hereafter arising and whether oral or written, are hereby expressly limited so that in no contingency or event whatsoever, whether by acceleration of maturity or otherwise, shall the amount paid or agreed to be paid to the Holder, or collected by the Holder, for the use, forbearance or detention of the money to be loaned hereunder or otherwise, or for the payment or performance of any covenant or obligation contained herein, exceed the maximum amount permissible under applicable federal or state usury laws. If under any circumstances whatsoever fulfillment of any provision hereof, at the time performance of such provision shall be due, shall involve exceeding the limit of such validity prescribed by law, then the obligation to be fulfilled shall be reduced to the limit of such validity; and if under any circumstances the Holder shall ever receive an amount deemed interest by applicable law, which would exceed the highest lawful rate, such amount that would be excessive interest under applicable usury laws shall be applied to the reduction of the principal amount owing hereunder and not to the payment of interest, or if such excessive interest exceeds the unpaid balance of principal, the excess shall be deemed to have been a payment made by mistake and shall be refunded to the Maker or to any other person making such payment on the Maker's behalf.

All references to the "Holder" or the "Maker" shall apply to their respective successors and assigns.

This Note shall be governed by and construed and enforced in accordance with laws of the State of Connecticut without regard to its conflicts of laws principles.

IN WITNESS WHEREOF, the Maker has caused this Note to be signed on the day and year first above written.

### **INCLUSIVE PROSPERITY CAPITAL, INC.**

By:			
Name: _			
Title:			

## ADVANCES AND PAYMENTS OF PRINCIPAL

		Amount		
	Amount	of	Outstanding	Notation
	of	Principal	Principal	Made
Date	Advance	Paid	Balance	By

Service	Year 1	Year 2	Year 3			
Office Space	Green Bank Supplied Without Charge					
Office Supplies (General)	Green Bank Supplied Without Charge	\$50/ month for standard supplies				
Office Supplies (Special Requests)	Responsibility of Nonprofit					
Hardware	Gr	een Bank Supplied Without Charge				
MS Office	Gr	een Bank Supplied Without Charge				
Program Specific Tech	Gr	een Bank Supplied Without Charge				
General IT Infrastructure	Gr	een Bank Supplied Without Charge				
Telecommunications	Green Bank Supplied Without Charge	Fee To be Agreed upon				
Accounting Services	Green Bank Supplied Without Charge	Responsibility of	Nonprofit			
Accounting Platform	Green Bank Supplied Without Charge	Responsibility of Nonprofit				
Taxes		Responsibility of Nonprofit				
Insurance		Responsibility of Nonprofit				
Loan Servicing		Fee for servicing Nonprofit Loans not covered by PSAs TBD				
Asset Management		Fee for servicing Nonprofit Loans not covered by PSAs TBD				
Other Back Office	Fee for servicing Nonprofit Loans not covered by PSAs TBD					
Bank Account Management	Fee for servicing Nonprofit Loans not covered by PSAs TBD					
Legal		Responsibility of Nonprofit				
Human Resources		Responsibility of Nonprofit				
	Green Bank Supplied Without Charge,					
	except Nonprofit responsible for 3rd party					
Marketing (In Connecticut)	expenses only	Fee For Service based on staff time at	cost, plus 3rd pa			
Marketing (Outside Connecticut)		Cost plus Overhead				

#### **GRANT AGREEMENT**

This Grant Agreement (this "<u>Agreement</u>") is made as of July 2, 2018 by and between Inclusive Prosperity Capital, Inc. (the "<u>Grant Recipient</u>") and Connecticut Green Bank (the "<u>Green Bank</u>").

### **Background**

- A. The Green Bank has participated in the formation of the Grant Recipient, and is entering into this Agreement, in the exercise of powers granted in subdivisions (ii) and (ix) of subsection (D) of Section 16-245n(d)(1) of the Connecticut General Statutes.
- B. In exercising such powers, the Board of Directors of the Green Bank has determined that the public purposes of the Green Bank will be furthered by the formation and activities of the Grant Recipient conducted in accordance with its organizational documents, including through its ability to seek and accept foundation grants, charitable contributions or other public support in order to continue the operation of certain Green Bank clean energy programs that might otherwise have to be discontinued as a result of reduced state funding available to the Green Bank.
- C. Such programs include those to be administrated by the Grant Recipient on behalf of the Green Bank pursuant to, and with the funding provided under, various Professional Services Agreements ("<u>PSAs</u>") to be entered into between the Green Bank and the Grant Recipient.
- D. In furtherance of the activities of the Grant Recipient, the Green Bank has been awarded a grant from the Connecticut Department of Energy and Environmental Protection ("<u>DEEP</u>") designated as DEEP Projects DEPA00003095038, DEPA00003094006, and DEPA0003097002 attached as <u>Exhibit A</u> in an amount not to exceed \$5,000,000 (the "<u>DEEP Grant</u>").
- E. With the consent of DEEP, the Green Bank desires to assign the DEEP Grant to the Grant Recipient, including the terms and conditions thereof and the Scope of Work related thereto, all as set forth in Exhibit A (the "DEEP Agreement").

NOW, THEREFORE, in consideration of the mutual promises set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

### 1. Financial Assistance; Conditions.

(a) As and when received by the Green Bank, the Green Bank will provide the grant proceeds from the DEEP Grant to the Grant Recipient payable by check or wire transfer to an account designated by the Grant Recipient; provided that (i) both DEEP and the Board of Directors of the Green Bank have approved the Grant Recipient's business plan (the "Business Plan") that has been submitted to them before the date hereof, and (ii) the Grant Recipient has

provided the Green Bank with a certificate of legal existence from the Secretary of State of the State of Connecticut.

- (b) The Grant Recipient shall use the DEEP Grant for the purposes set forth in the DEEP Agreement; provided that the Grant Recipient shall not use more than \$100,000 of the DEEP Grant for expenses related to its establishment, formation and initial start-up expenses; provided further that, in each case, such expenses shall have been approved by the Green Bank in writing, such approval not to be unreasonably withheld.
- (c) The Grant Recipient shall comply with all provisions of the DEEP Agreement as if it were the "Contractor" thereunder, including all state contracting requirements and state standard terms and conditions set forth therein, and the Grant Recipient's execution of this Agreement shall constitute its certification and agreement to all of such state contracting requirements and state standard terms and conditions. For avoidance of doubt, the Grant Recipient shall provide DEEP with all project summaries and reports required by the DEEP Agreement and provide copies thereof to the Green Bank at the time of submission thereof to DEEP.
- (d) The total amount of the grant funding under this Agreement shall be dependent upon the total amount of the DEEP Grant provided by DEEP. The Grant Recipient shall be required to return to DEEP any grant proceeds required to be returned by the terms of the DEEP Agreement.
- (e) Notwithstanding anything to the contrary contained in this Agreement, the Green Bank shall not be obligated to provide financial assistance pursuant to this Agreement from its own funds, the only source of financing hereunder being the DEEP Grant.
- (f) The Green Bank may terminate this Agreement upon written notice to the Grant Recipient of a breach of this Agreement if the Grant Recipient fails to cure such breach within 10 days of such notice. Upon termination for the Grant Recipient's breach, the Green Bank may require the return of all or a portion of the grant proceeds.
- (g) The Green Bank may terminate this Agreement upon written notice to the Grant Recipient if the Internal Revenue Service fails to determine that the Grant Recipient is a tax-exempt organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code"), within 18 months of this Agreement. Upon such termination, the Green Bank may require the return of all or a portion of the grant proceeds.
- 2. <u>Representations and Warranties</u>. The Grant Recipient represents, warrants and covenants as follows:
- (a) The Grant Recipient is a Connecticut non-stock corporation duly organized and validly existing under the laws of the State of Connecticut and is organized and shall be operated exclusively for the charitable and educational purposes within the meaning of Section 501(c)(3) of the Code. Further, the Grant Recipient will preserve and maintain its existence as a duly organized entity, validly existing, and in good standing under the laws of Connecticut.

- (b) The Grant Recipient has all franchises, permits, licenses, and other similar authorizations necessary for the conduct of its business as now being conducted by it, and it is not aware of any state of facts that would make it impossible or impractical to obtain any similar authorization necessary for the conduct of its business as planned to be conducted. The Grant Recipient is not in violation, nor will the transactions contemplated by the Agreement cause a violation, of the terms or provisions of any such franchise, permit, license, or similar authorization.
- (c) The execution and delivery of this Agreement by the Grant Recipient, and the performance of its obligations hereunder, are within its power, have been duly authorized by all necessary action on its part, and are not in contravention of law nor in contravention of its organizational documents, including its certificate of incorporation or bylaws, or of the provisions of any indenture, agreement, or undertaking to which it is a party or by which it is bound.
- (d) There is no pending or, to the Grant Recipient's knowledge, threatened litigation, bankruptcy or insolvency, injunction, order or claim with respect to the Grant Recipient or any of the transactions contemplated hereby.
- (e) The Grant Recipient has filed or will file within the time prescribed by law (including extensions of time approved by any appropriate taxing authority) all tax returns and reports required to be filed with the United States Internal Revenue Service or with the State of Connecticut or any political subdivision thereof and (except to the extent that the failure to file would not have a material adverse effect on the condition or operations of the Company) with all other jurisdictions where such filing is required by law, and the Grant Recipient has paid all taxes, interest, penalties, assessments or deficiencies due in connection therewith.
- (f) The Grant Recipient certifies that it has not (1) 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 this 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) received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the date of this Agreement.

### 3. Indemnification; Limitation of Liability.

(a) The Grant Recipient agrees to indemnify the Green Bank and its officers, directors, employees, agents and affiliates (the "<u>Indemnified Parties</u>") against, and defend and hold each of them harmless from, any liability, obligation, loss, cost, damage or expense (including attorneys' fees) suffered or incurred by any of them as a result of, arising out of, and/or relating to this Agreement, other than resulting from the negligence or willful misconduct of an Indemnified Party.

- (b) Except in connection with the Grant Recipient's indemnification for third party claims set forth above, neither party shall be liable to the other party for indirect, incidental, punitive, special, or consequential damages arising out of this Agreement, even if the party has been informed of the possibility of such damages, including but not limited to, loss of profits, loss of revenues, failure to realize expected savings, loss of data, loss of business opportunity, or similar losses of any kind. However, this limitation shall not apply to damages of any kind related to criminal, intentional, reckless, or grossly negligent conduct or omissions on the part of either party.
  - (c) The provisions of this Section 3 shall survive indefinitely.
- 4. <u>Inspection; Audit.</u> The Grant Recipient shall permit the Green Bank and its representatives and agents and the Auditors of Public Accounts to visit and inspect the Grant Recipient's properties, to examine and audit, or have audited, its books of account and records related to elements and programs funded by Green Bank and to discuss its affairs, finances and accounts related to these activities with its officers, all upon reasonable advance notice and at such reasonable times during normal business hours as Green Bank or the auditors of public account may request.
- 5. Relationship of the Parties. Each party is an independent contractor, and has and hereby retains the right to exercise full control of and supervision over its own performance of its obligations under this Agreement and retains full control over the employment, direction, compensation and discharge of its employees assisting in the performance of such obligations. Nothing contained herein shall constitute the parties as joint venturers, partners, employees or agents of one another, and neither party shall have the right or power to bind or obligate the other. Nothing herein will be construed as making either party responsible or liable for the obligations and undertakings of the other party. Nothing in this Agreement shall constitute a party as a legal representative or agent of the other party, nor shall a party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other party unless otherwise expressly permitted by such other party.
- 7. Notice. Whenever this Agreement requires or permits any notice, approval, request or demand from one party to another, the notice, approval, request or demand must be in writing and addressed to the party to be notified at the following address (or at such other address as may have been designated by written notice of such party to the other party) and delivered in person, by certified mail return receipt requested or by overnight courier service and shall be deemed given when actually received or delivery is refused:

If to the Green Bank: Connecticut Green Bank

845 Brook Street

Rocky Hill, CT 06067 Attn: General Counsel

If to the Grant Recipient Inclusive Prosperity Capital, Inc.

845 Brook Street

### Rocky Hill, CT 06067 Attn: Chief Executive Officer

- 8. <u>Entire Agreement</u>. This Agreement, including all of the attachments hereto, and any PSAs related to programs, activities and operations described in the Business Plan constitute the entire agreement of the parties hereto related to the subject matter hereof, and supersede any previous agreement or understanding related to the subject matter hereof. This Agreement may not be modified or extended except in writing executed by the parties.
- 9. <u>Severability</u>. In the event that any one or more of the provisions contained in this Agreement shall be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and all other provisions shall remain in full force and effect.
- 10. <u>Governing Law</u>. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Connecticut, without regard to its principles relating to conflicts of laws.
- 11. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts (including those delivered by facsimile or other electronic means), each of which shall be deemed to be an original and all of which taken together shall be deemed to be one and the same agreement.
- 12. <u>No Recourse</u>. It is expressly understood and agreed that no obligation of the Green Bank under this Agreement shall be an obligation of its directors, officers, employees or agents, and there shall be no recourse or claim under this Agreement against any such person individually in any circumstances.

IN WITNESS WHEREOF, the parties have executed this Grant Agreement as of the date first set forth above.

# INCLUSIVE PROSPERITY CAPITAL, INC.

By:	
Name:	
Title:	
CONNECTICUT GREEN BANK	
By:	
Name:	
T:41	

# EXHIBIT A

# DEEP AGREEMENT

[Attached]

#### **GRANT AGREEMENT**

This Grant Agreement (this "<u>Agreement</u>") is made as of July 2, 2018 by and between Inclusive Prosperity Capital, Inc. (the "<u>Grant Recipient</u>") and Connecticut Green Bank (the "<u>Green Bank</u>").

### **Background**

- A. The Green Bank has participated in the formation of the Grant Recipient, and is entering into this Agreement, in the exercise of powers granted in subdivisions (ii) and (ix) of subsection (D) of Section 16-245n(d)(1) of the Connecticut General Statutes.
- B. In exercising such powers, the Board of Directors of the Green Bank has determined that the public purposes of the Green Bank will be furthered by the formation and activities of the Grant Recipient conducted in accordance with its organizational documents, including through its ability to seek and accept foundation grants, charitable contributions or other public support in order to continue the operation of certain Green Bank clean energy programs that might otherwise have to be discontinued as a result of reduced state funding available to the Green Bank.
- C. Such programs include those to be administrated by the Grant Recipient on behalf of the Green Bank pursuant to, and with the funding provided under, various Professional Services Agreements ("<u>PSAs</u>") to be entered into between the Green Bank and the Grant Recipient.
- D. In furtherance of the activities of the Grant Recipient, the Green Bank has been awarded a grant from the Connecticut Department of Energy and Environmental Protection ("<u>DEEP</u>") designated as DEEP Project DEPA00003095038 attached as <u>Exhibit A</u> in an amount not to exceed \$1,500,000 (the "<u>DEEP Grant</u>").
- E. With the written consent of DEEP, the Green Bank desires to assign the DEEP Grant to the Grant Recipient, including the terms and conditions thereof and the Scope of Work related thereto, all as set forth in <a href="Exhibit A">Exhibit A</a> (the "DEEP Agreement").

NOW, THEREFORE, in consideration of the mutual promises set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

### 1. Financial Assistance; Conditions.

(a) The Green Bank will provide the grant proceeds from the DEEP Grant to the Grant Recipient payable by check or wire transfer to an account designated by the Grant Recipient; provided that (i) both DEEP and the Board of Directors of the Green Bank have approved the Grant Recipient's business plan (the "Business Plan") that has been submitted to them before the date hereof, and (ii) the Grant Recipient has provided the Green Bank with a certificate of legal existence from the Secretary of State of the State of Connecticut.

- (b) The Grant Recipient shall use the DEEP Grant solely for the purposes set forth in the DEEP Agreement.
- (c) The Grant Recipient shall comply with all provisions of the DEEP Agreement as if it were the "Contractor" thereunder, including all state contracting requirements and state standard terms and conditions set forth therein, and the Grant Recipient's execution of this Agreement shall constitute its certification and agreement to all of such state contracting requirements and state standard terms and conditions. For avoidance of doubt, the Grant Recipient shall provide DEEP with all project summaries and reports required by the DEEP Agreement and provide copies thereof to the Green Bank at the time of submission thereof to DEEP.
- (d) The total amount of the grant funding under this Agreement shall be dependent upon the total amount of the DEEP Grant provided by DEEP. The Grant Recipient shall be required to return to DEEP any grant proceeds required to be returned by the terms of the DEEP Agreement.
- (e) Notwithstanding anything to the contrary contained in this Agreement, the Green Bank shall not be obligated to provide financial assistance pursuant to this Agreement from its own funds, the only source of financing hereunder being the DEEP Grant.
- (f) The Green Bank may terminate this Agreement upon written notice to the Grant Recipient of a breach of this Agreement if the Grant Recipient fails to cure such breach within 90 days of such notice. Upon termination for the Grant Recipient's breach, the Green Bank may require the return of all or a portion of the grant proceeds.
- (g) The Green Bank may terminate this Agreement upon written notice to the Grant Recipient if the Internal Revenue Service fails to determine that the Grant Recipient is a tax-exempt organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the "Code"), within 18 months of this Agreement. Upon such termination, the Green Bank may require the return of all or a portion of the grant proceeds.
- 2. <u>Representations and Warranties</u>. The Grant Recipient represents, warrants and covenants as follows:
- (a) The Grant Recipient is a Connecticut non-stock corporation duly organized and validly existing under the laws of the State of Connecticut and is organized and shall be operated exclusively for the charitable and educational purposes within the meaning of Section 501(c)(3) of the Code. Further, the Grant Recipient will preserve and maintain its existence as a duly organized entity, validly existing, and in good standing under the laws of Connecticut.
- (b) The Grant Recipient has all franchises, permits, licenses, and other similar authorizations necessary for the conduct of its business as now being conducted by it, and it is not aware of any state of facts that would make it impossible or impractical to obtain any similar authorization necessary for the conduct of its business as planned to be conducted. The Grant Recipient is not in violation, nor will the transactions contemplated by the Agreement cause a

violation, of the terms or provisions of any such franchise, permit, license, or similar authorization.

- (c) The execution and delivery of this Agreement by the Grant Recipient, and the performance of its obligations hereunder, are within its power, have been duly authorized by all necessary action on its part, and are not in contravention of law nor in contravention of its organizational documents, including its certificate of incorporation or bylaws, or of the provisions of any indenture, agreement, or undertaking to which it is a party or by which it is bound.
- (d) There is no pending or, to the Grant Recipient's knowledge, threatened litigation, bankruptcy or insolvency, injunction, order or claim with respect to the Grant Recipient or any of the transactions contemplated hereby.
- (e) The Grant Recipient has filed or will file within the time prescribed by law (including extensions of time approved by any appropriate taxing authority) all tax returns and reports required to be filed with the United States Internal Revenue Service or with the State of Connecticut or any political subdivision thereof and (except to the extent that the failure to file would not have a material adverse effect on the condition or operations of the Company) with all other jurisdictions where such filing is required by law, and the Grant Recipient has paid all taxes, interest, penalties, assessments or deficiencies due in connection therewith.
- (f) The Grant Recipient certifies that it has not (1) 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 this 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) received one or more criminal convictions related to the injury or death of any employee in the three-year period preceding the date of this Agreement.

### 3. <u>Indemnification; Limitation of Liability</u>.

- (a) The Grant Recipient agrees to indemnify the Green Bank and its officers, directors, employees, agents and affiliates (the "<u>Indemnified Parties</u>") against, and defend and hold each of them harmless from, any liability, obligation, loss, cost, damage or expense (including attorneys' fees) suffered or incurred by any of them as a result of, arising out of, and/or relating to this Agreement, other than resulting from the negligence or willful misconduct of an Indemnified Party.
- (b) Except in connection with the Grant Recipient's indemnification for third party claims set forth above, neither party shall be liable to the other party for indirect, incidental, punitive, special, or consequential damages arising out of this Agreement, even if the party has been informed of the possibility of such damages, including but not limited to, loss of profits, loss of revenues, failure to realize expected savings, loss of data, loss of business opportunity, or

similar losses of any kind. However, this limitation shall not apply to damages of any kind related to criminal, intentional, reckless, or grossly negligent conduct or omissions on the part of either party.

- (c) The provisions of this Section 3 shall survive indefinitely.
- 4. <u>Inspection; Audit.</u> The Grant Recipient shall permit the Green Bank and its representatives and agents and the Auditors of Public Accounts to visit and inspect the Grant Recipient's properties, to examine and audit, or have audited, its books of account and records related to elements and programs funded by Green Bank and to discuss its affairs, finances and accounts related to these activities with its officers, all upon reasonable advance notice and at such reasonable times during normal business hours as Green Bank or the auditors of public account may request.
- 5. Relationship of the Parties. Each party is an independent contractor, and has and hereby retains the right to exercise full control of and supervision over its own performance of its obligations under this Agreement and retains full control over the employment, direction, compensation and discharge of its employees assisting in the performance of such obligations. Nothing contained herein shall constitute the parties as joint venturers, partners, employees or agents of one another, and neither party shall have the right or power to bind or obligate the other. Nothing herein will be construed as making either party responsible or liable for the obligations and undertakings of the other party. Nothing in this Agreement shall constitute a party as a legal representative or agent of the other party, nor shall a party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other party unless otherwise expressly permitted by such other party.
- 7. Notice. Whenever this Agreement requires or permits any notice, approval, request or demand from one party to another, the notice, approval, request or demand must be in writing and addressed to the party to be notified at the following address (or at such other address as may have been designated by written notice of such party to the other party) and delivered in person, by certified mail return receipt requested or by overnight courier service and shall be deemed given when actually received or delivery is refused:

If to the Green Bank: Connecticut Green Bank

845 Brook Street

Rocky Hill, CT 06067 Attn: General Counsel

If to the Grant Recipient Inclusive Prosperity Capital, Inc.

845 Brook Street

Rocky Hill, CT 06067

Attn: Chief Executive Officer

8. <u>Entire Agreement</u>. This Agreement, including all of the attachments hereto, and any PSAs related to programs, activities and operations described in the Business Plan constitute

the entire agreement of the parties hereto related to the subject matter hereof, and supersede any previous agreement or understanding related to the subject matter hereof. This Agreement may not be modified or extended except in writing executed by the parties.

- 9. <u>Severability</u>. In the event that any one or more of the provisions contained in this Agreement shall be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and all other provisions shall remain in full force and effect.
- 10. <u>Governing Law</u>. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Connecticut, without regard to its principles relating to conflicts of laws.
- 11. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts (including those delivered by facsimile or other electronic means), each of which shall be deemed to be an original and all of which taken together shall be deemed to be one and the same agreement.
- 12. <u>No Recourse</u>. It is expressly understood and agreed that no obligation of the Green Bank under this Agreement shall be an obligation of its directors, officers, employees or agents, and there shall be no recourse or claim under this Agreement against any such person individually in any circumstances.

IN WITNESS WHEREOF, the parties have executed this Grant Agreement as of the date first set forth above.

#### INCLUSIVE PROSPERITY CAPITAL, INC.

By:	
Name:	
Title:	
CONNECTICUT GREEN BANK	
By:	
Name:	
T:41	

#### EXHIBIT A

#### DEEP AGREEMENT

[Attached]

#### STANDARD PROFESSIONAL SERVICES AGREEMENT

This Standard Professional Services Agreement ("Agreement") is made on July 2, 2018 ("Effective Date"), by and between the CONNECTICUT GREEN BANK ("Green Bank"), a quasi-public agency of the State of Connecticut, having its business address at 845 Brook Street, Rocky Hill, CT 06067, and Inclusive Prosperity Capital, Inc. ("Consultant"), having its business address at 845 Brook Street, Rocky Hill, CT 06067. Green Bank and Consultant together are the Parties and each individually is a Party to this Agreement.

- WHEREAS, the Green Bank has an established program providing credit enhancements for loans made to single family building owners for energy upgrades by local lenders known as Smart-E; and
- **WHEREAS,** for the Smart-E loan the Green Bank has an established pre-approved group of contractors with whom the Green Bank works; and
- **WHEREAS**, the Connecticut General Assembly has redirected the funds from the system benefit charge limiting the reach of the Green Bank; and
- **WHEREAS**, the Green Bank seeks to continue the success of the Smart-E loan program to reduce the energy burden of home owners; and
- **WHEREAS**, the Green Bank has participated in the formation of the Consultant, as a 501(c)(3) nonprofit, and entered into a memorandum of understanding with the Consultant (the "MOU") to provide a general framework of support on a transitional basis, as part of its participation in the formation and initial operations of the Consultant; and
- **WHEREAS**, the staff of the Consultant are intimately familiar with the Smart-E Loan and can operate the program on Green Bank's behalf;
- **NOW, THEREFORE,** Green Bank and Consultant, intending to be legally bound, agree as follows:
- 1. <u>Scope of Services.</u> Consultant shall provide Green Bank with professional consulting services ("Work") as detailed in Consultant's proposal in Attachment A, which is incorporated into this Agreement. In the event of a conflict between the terms and conditions in this Agreement and the terms and conditions in the MOU, this Agreement shall control.
- **2.** Period of Performance. Green Bank agrees to retain Consultant, and Consultant agrees to perform the Work under this Agreement, from the Effective Date through June 30, 2024 ("Period of Performance"), unless earlier terminated in accordance with Section 8 of this Agreement. The Parties can extend the Period of Performance only by a written amendment to this Agreement signed and dated by Green Bank and Consultant.

**Payment.** Green Bank agrees to pay Consultant for the Work performed under the Proposal, as set forth in the Proposal, but in an amount not-to-exceed \$425,770 inclusive of fees and any other expenses for year one only and will be revised annually as part of the annual budget process referenced below.

This payment is comprised of two components: Program Administration and Human Capital. The Program Administration will be paid monthly and represents the costs charged back to the Green Bank for administering the Work that is more effectively and efficiently managed by the Consultant minus any savings achieved through efficiencies and scale. The Green Bank agrees to pay Program Administration expenses as set forth in the budget in Attachment A. Any program expenses where the nonprofit procures goods or services from a third-party to manage the attached Work on behalf of the Green will be charged back to the Green Bank at cost. The Human Capital component will be paid monthly, in advance, and is comprised of the agreed upon staffing levels needed to execute the Work. For the first three years of this PSA, the Green Bank agrees to pay 100% of the cost of the headcount as set forth in Attachment A. For the second three years, the Green Bank agrees to pay 50% of the cost of the headcount. The staffing levels will be reviewed as part of the annual budgeting process and savings due to efficiencies and scale will be passed on to the Green Bank in a manner outlined in a mutually agreed upon Fee Review Process. In this process, the two organizations will review the fees and costs borne on behalf of the Green Bank in comparison to the fees/costs paid by other parties contracting with the Consultant to ensure that the Green Bank is not subsidizing the scopes of work of others.

THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT CAN BE MODIFIED BY THE PARTIES ONLY BY A WRITTEN AMENDMENT SIGNED AND DATED BY GREEN BANK AND CONSULTANT <u>PRIOR</u> TO ANY WORK TO BE PERFORMED BY CONSULTANT WHICH WOULD RESULT IN PAYMENTS IN EXCESS OF THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT.

4. <u>Invoices.</u> Consultant shall submit invoices to Green Bank beginning on July 2, 2018 for amounts due to Consultant pursuant to the Proposal with sufficient detail to demonstrate Consultant's provision of the work under the Proposal. All invoices shall be subject to Green Bank's approval for conformity with the terms and conditions of this Agreement. For approved invoices, Green Bank will pay Consultant within thirty (30) days of receipt by Green Bank of an invoice. Consultant agrees to include the PSA #, which can be found at the top of this Agreement, on all invoices submitted to Green Bank in connection with Work performed under this Agreement. Invoices shall be submitted to:

Connecticut Green Bank 845 Brook Street Rocky Hill, CT 06067 Attn: Accounts Payable Department

UNDER NO CIRCUMSTANCES WILL GREEN BANK ACCEPT INVOICE(S) SUBMITTED BY CONSULTANT WHICH THE TOTAL AMOUNT OF THE INVOICE(S) EXCEEDS THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT. THE NOT-TO-EXCEED AMOUNT WILL BE REVISED ON AN ANNUAL BASIS.

- **Subcontracting or Assignment.** Consultant shall not subcontract, assign, or delegate any portions of the Work under this Agreement to any other person or entity not identified in Section 3, above, without prior written approval from Green Bank.
- **6.** <u>Independent Contractor.</u> Consultant understands that it is acting as an independent contractor and shall not hold itself out as representing or acting in any manner on behalf of Green Bank except within the Proposal or any other active agreements between Green Bank and Consultant.
- 7. <u>Disclosure of Information.</u> Consultant agrees to disclose to Green Bank any information discovered or derived in the performance of the Work required under this Agreement. Consultant shall not disclose to others any such information, any information received or derived in performance of this Agreement, or any information relating to Green Bank without the prior written permission of Green Bank, unless such information is otherwise available in the public domain.
- **8.** <u>Termination.</u> (a) This Agreement may be terminated by a non-breaching Party upon giving prior written notice to the breaching Party of a breach of this Agreement with an opportunity to cure (which shall be not less than ninety days after formal notice by the non-breaching Party).
- (b) Green Bank may terminate this Agreement upon giving prior written notice to the Consultant of a breach of any grant agreement between Green Bank and Consultant with an opportunity to cure (which shall be not less than ninety days after formal notice by Green Bank).
- (c) In the event of such termination, Green Bank shall be liable only for payment in accordance with the payment provisions of the Agreement for the Work actually performed prior to the date of termination.
- (d) If this Agreement is not renewed at the end of the Period of Performance, or is terminated for any reason, Consultant must provide for a reasonable, mutually agreed period of time after the expiration or termination of this Agreement, all reasonable transition assistance requested by Green Bank, to allow for the expired or terminated portion of the services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to Green Bank or its designees. Such transition assistance will be deemed by the Parties to be governed by the terms and conditions of this Agreement, except for those terms or conditions that do not reasonably apply to such transition assistance. Green Bank will pay Consultant for any resources utilized in performing such transition assistance at the most current rates provided by this

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Agreement. If there are no established contract rates, then the rate shall be mutually agreed upon. If Green Bank terminates this Agreement for cause, then Green Bank will be entitled to offset the cost of paying Consultant for the additional resources Consultant utilized in providing transition assistance with any damages Green Bank may have otherwise accrued as a result of said termination.

**9.** Indemnification and Limitation of Liability. Consultant agrees, to the fullest extent permitted by law, to indemnify and hold harmless Green Bank, its officers, directors, and employees against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Consultant's negligent performance of professional services under this Agreement and that of its sub-consultants or anyone for whom the Consultant is legally liable.

Neither Party shall be liable to the other Party for indirect, incidental, punitive, special, or consequential damages arising out of this Agreement, even if the Party has been informed of the possibility of such damages, including but not limited to, loss of profits, loss of revenues, failure to realize expected savings, loss of data, loss of business opportunity, or similar losses of any kind. However, this limitation shall not apply to the indemnification obligations set forth above or to damages of any kind related to criminal, intentional, reckless, or grossly negligent conduct or omissions on the part of either Party.

- **10. Quality of Service.** Consultant shall perform the Work with care, skill, and diligence in accordance with the applicable professional standards currently recognized by its profession, and shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all work product and/or Work furnished under this Agreement. If Consultant fails to meet applicable professional standards, Consultant shall, without additional compensation, correct or revise any errors or deficiencies in any work product and/or Work furnished under this Agreement.
- 11. <u>Severability.</u> In the event that any one or more of the provisions contained in this Agreement shall be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and all other provisions shall remain in full force and effect. If any provision of this Agreement is held to be excessively broad, then that provision shall be reformed and construed by limiting and reducing it to be enforceable to the maximum extent permitted by law.
- **12.** <u>Entire Agreement.</u> This Agreement constitutes the entire agreement of the Parties hereto, and supersedes any previous agreement or understanding. This Agreement with respect to the subject matter hereof may not be modified or extended except in writing executed by the Parties.
- **13.** Governing Law. The validity, interpretation, and performance of this Agreement shall be governed by the laws of the State of Connecticut. All disputes which arise in connection with, or in relation to, this Agreement or any claimed breach thereof shall be resolved, if not sooner settled, by litigation only in Connecticut or the Federal Court

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otherwise having subject matter jurisdiction over the dispute and not elsewhere, subject only to the authority of the Court in question to order changes of venue. To this end, Consultant waives any rights it may have to insist that litigation related to this Agreement to which Consultant is a party be had in any venue other than the above court, and covenants not to sue Green Bank in court other than the above courts with respect to any dispute related to this Agreement.

14. <u>State Contracting Obligations.</u> Consultant understands and agrees that Green Bank will comply with Conn. Gen. Stat. Sections 4a-60 and 4a-60a. Consultant agrees to comply for the Period of Performance with the state contracting obligations in this Section 14. For purposes of this Section 14, Contractor and Consultant 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;

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- (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."

<u>Nondiscrimination Certification</u>. Consultant represents and warrants that, prior to entering into this Agreement, Consultant has provided Green Bank with documentation evidencing Consultant'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 Consultant is attached.

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Campaign Contribution Restrictions. For all state contracts, as defined in Conn. Gen. Stat. § 9-612(g)(1)(C), having a value in a calendar year of \$50,000 or more or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See <a href="http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf">http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf</a>.

Occupational Safety and Health Act Compliance. Consultant 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) 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.

Consulting Agreements. Consultant hereby swears and attests as true to the best knowledge and belief that no consulting agreement, as defined in Conn. Gen. Stat. § 4a-81, has been entered into in connection with this Agreement. Contractor agrees to amend this representation if and when any consulting agreement is entered into during the term of the Contract. See Affidavit Regarding Consulting Agreements, attached.

- **15.** <u>Limitation on Recourse.</u> All liabilities and obligations of Green Bank under this Agreement are subject and limited to the funding available under Connecticut law.
- **16. Non-impairment and Assessment**. As a further inducement for the Consultant to enter into this Agreement, subsection (h) of section 16-245n of the Conn. General Statutes is incorporated into this Agreement.
- **17.** 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, Consultant should specifically and in writing identify to Green Bank the information that Consultant claims to be exempt.

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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.

Consultant acknowledges that (1) Green Bank has no obligation to notify Consultant of any FOIA request it receives, (2) Green Bank may disclose materials claimed by Consultant 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 Consultant 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) Consultant 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.

**18.** <u>Counterparts</u>. This Agreement may be executed in any number of counterparts (including those delivered by facsimile or other electronic means), and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, shall together constitute but one and the same agreement.

[Signature page follows]

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**IN WITNESS WHEREOF,** the Parties have executed this Agreement as of the day and year first above written.

CONI	NECTICUT GREEN BANK
Ву: _	Bryan T. Garcia, President and CEO
INCL	USIVE PROSPERITY CAPITAL, INC.
Ву:	INSERT NAME
	INSERT TITLE



# STATE OF CONNECTICUT NONDISCRIMINATION CERTIFICATION — <u>Affidavit</u> <u>By Entity</u>

For Contracts Valued at \$50,000 or More

Documentation in the form of an <u>affidavit signed under penalty of false statement by a chief executive officer</u>, president, chairperson, member, or other corporate officer duly authorized to adopt corporate, <u>company</u>, 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:

AFFIDAVIT:

**Notary Public** 

For use by an <u>entity</u> (corporation, limited liability company, or partnership) when entering into any contract type with the State of Connecticut valued at \$50,000 or <u>more</u> 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.

### 



Certification to accompany a State contract, having a value of \$50,000 or more, pursuant to Connecticut General Statutes §§ 4-250 and 4-252(b), and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Sign and date in the presence of a Commissioner of the Superior Court or Notary Public. Submit to the awarding State agency at the time of contract execution.

#### **CERTIFICATION:**

I, the undersigned State agency official or State employee, certify that (1) I am authorized to execute the attached contract on behalf of the State agency named below, and (2) the selection of the contractor named below was not the result of collusion, the giving of a gift or the promise of a gift, compensation, fraud or inappropriate influence from any person.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

<u>Inclusive Prosperity Capital, Inc.</u> Contractor Name		
<u>Connecticut Green Bank</u> Awarding State Agency		
State Agency Official or Employee Signa	eture	Date
Bryan T. Garcia		President and CEO
Printed Name		Title
Sworn and subscribed before me on the	nis day of , 20	
	Commissioner of the Superior C or Notary Public	Court
	My Commission Expires	

V.030117



Written or electronic certification to accompany a State contract with a value of \$50,000 or more, pursuant to C.G.S. §§ 4-250, 4-252(c) and 9-612(f)(2) and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Attach additional pages, if necessary, to provide full disclosure about any lawful campaign contributions made to campaigns of candidates for statewide public office or the General Assembly, as described herein. Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of initial contract execution and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or proposal for a contract, whichever is earlier. Such person shall also submit an accurate, updated certification not later than fourteen days after the twelve-month anniversary of the most recently filed certification or updated certification.

CHECK ONE: only.)	$\boxtimes$	Initial Certification	12 Month Anniversary Update (Multi-year contracts
		•	f change of information contained in the most elve-month anniversary update.

#### **GIFT CERTIFICATION:**

As used in this certification, the following terms have the meaning set forth below:

- "Contract" means that contract between the State of Connecticut (and/or one or more of it agencies or instrumentalities) and the Contractor, attached hereto, or as otherwise described by the awarding State agency below;
- 2) If this is an Initial Certification, "Execution Date" means the date the Contract is fully executed by, and becomes effective between, the parties; if this is a twelve-month anniversary update, "Execution Date" means the date this certification is signed by the Contractor;
- 3) "Contractor" means the person, firm or corporation named as the contactor below;
- 4) "Applicable Public Official or State Employee" means any public official or state employee described in C.G.S. §4-252(c)(1)(i) or (ii);
- 5) "Gift" has the same meaning given that term in C.G.S. § 4-250(1);
- 6) "Principals or Key Personnel" means and refers to those principals and key personnel of the Contractor, and its or their agents, as described in C.G.S. §§ 4-250(5) and 4-252(c)(1)(B) and (C).

I, the undersigned, am a Principal or Key Personnel of the person, firm or corporation authorized to execute this certification on behalf of the Contractor. I hereby certify that, no gifts were made by (A) such person, firm, corporation, (B) any principals and key personnel of the person firm or corporation who participate substantially in preparing bids, proposals or negotiating state contracts or (C) any agent of such, firm, corporation, or principals or key personnel who participates substantially in preparing bids, proposals or negotiating state contracts, to (i) any public official or state employee of the state agency or quasi-public agency soliciting bids or proposals for state contracts who participates substantially in the preparation of bid solicitations or request for proposals for state contracts or the negotiation or award of state contracts or (ii) any public official or state employee of any other state agency, who has supervisory or appointing authority over such state agency or quasi-public agency.

I further certify that no Principals or Key Personnel know of any action by the Contractor to circumvent (or which would result in the circumvention of) the above certification regarding **Gifts** by providing for any other Principals, Key Personnel, officials, or employees of the Contractor, or its or their agents, to make a **Gift** to any Applicable Public Official or State Employee. I further certify that the Contractor made the bid or proposal for the Contract without fraud or collusion with any person.

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#### **CAMPAIGN CONTRIBUTION CERTIFICATION:**

I further certify that, on or after January 1, 2011, neither the Contractor nor any of its principals, as defined in C.G.S. § 9-612(f)(1), has made any **campaign contributions** to, or solicited any contributions on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support, any candidate for <u>statewide public office</u>, in violation of C.G.S. § 9-612(f)(2)(A). I further certify that **all lawful campaign contributions** that have been made on or after January 1, 2011 by the Contractor or any of its principals, as defined in C.G.S. § 9-612(f)(1), to, or solicited on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support any candidates for <u>statewide public office</u> or the <u>General Assembly</u>, are listed below:

#### **Lawful Campaign Contributions to Candidates for Statewide Public Office:**

Contribution Date	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>
Lawful Ca	ampaign Contributions to Ca	andidates for the Ge	eneral Assembly:	
Contribution <u>Date</u>	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>
<u> </u>	Name of Contributor	Recipient	<u>value</u>	<u>Везеприон</u>
				_
Sworn as	true to the best of my knowled	ge and belief, subject	to the penalties of false	e statement.
Inclusive Prospe	rity Capital, Inc.			
Printed Contract	or Name		Printed Name of Aut	horized Official
Ciarra transcript	and a size of Occioint			
Signature of A	uthorized Official			
	Subscribed and acknowledge	owledged before m	e this day of	, 20
		Commissione	r of the Superior Cou	rt (or Notary Public)
		My Commissi	on Evnires	



Affidavit to accompany a bid or proposal for the purchase of goods and services with a value of \$50,000 or more in a calendar or fiscal year, pursuant to Connecticut General Statutes §§ 4a-81(a) and 4a-81(b). For sole source or no bid contracts the form is submitted at time of contract execution.

#### **INSTRUCTIONS:**

If the bidder or vendor has entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete all sections of the form. If the bidder or contractor has entered into more than one such consulting agreement, use a separate form for each agreement. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public. If the bidder or contractor has not entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete only the shaded section of the form. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public.

Submit completed form to the awarding State agency with bid or proposal. For a sole source award, submit completed form to the awarding State agency at the time of contract execution.

This affidavit must be amended if there is any change in the information contained in the most recently filed affidavit not later than (i) thirty days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier.

is earlier.			
AFFIDAVIT:	[Number of Affidavits S	worn and Subscribed On This Day:]	· ·
described in Co to execute suc	onnecticut General Statut	I am a principal or key personnel of the bides $\S$ 4a-81(b), or that I am the individual a ear that I have not entered into any constant <b>sted below</b> :	warded such a contract who is authorized
Consultant's N	ame and Title	<u>Inclusive Prosperity Ca</u> Name of Firm (if applicab	
July 2, 2018 Start Date	July 1, 2021 End Da	ate Cost	
Description of	Services Provided: <u>Servi</u>	ce Green Bank's program providing credit er	nhancements for loans made to single
family building	s owners for energy upgra	ades by local lenders known as SmartE.	
Is the consulta	int a former State employ	ee or former public official?	□ NO
If YES:	Name of Former State	Agency Termination Date	e of Employment
Sworn as true	to the best of my knowled	dge and belief, subject to the penalties of fa	lse statement.
	sperity Capital, Inc. of Bidder or Contractor	Signature of Principal or Key Personn	el Date
		Printed Name (of above)	Connecticut Green Bank Awarding State Agency
Sworn and su	ubscribed before me on	this day of, 20	0
		Commissioner of the Superior Court or Notary Public	
		My Commission Expires	

#### PSA # 5410; Inclusive Prosperity Capital, Inc. - Smart - E

#### CERTIFICATION REGARDING INVESTMENTS IN IRAN (Public Act No. 13-162)

For certain contracts or series or combination of contracts with a total value of more than \$500,000 in a calendar or fiscal year **CHECK ONE:** ☐ Initial Certification Amendment or Renewal As used in this affidavit and certification, the following terms have the meaning set forth below: "Entity" means any corporation, general partnership, limited partnership, limited liability partnership, joint venture, nonprofit organization or other business organization whose principal place of business is located outside of the United States, but excludes any United States subsidiary of a foreign corporation. "Large State Contract" means an agreement or a combination or series of agreements between a state a quasi-public agency and a person, firm or corporation, having a total value of more than five hundred thousand dollars in a calendar or fiscal year, for (A) a project for the construction, alteration or repair of any public building or public work, (B) services, including, but not limited to, consulting and professional services, (C) the procurement of supplies, materials or equipment, (D) a lease, or (E) a licensing arrangement. The term "large state contract" does not include a contract between a state agency or a quasi-public agency and a political subdivision of the state. "Quasi-public agency" has the same meanings as provided in Section 1-79 of the Connecticut General Statutes. "Respondent" means the name of the entity which is entering into a large state contract with the Quasi-4. agency. **CHECK APPLICABLE BOX:** Respondent's principal place of business is located within the United States or Respondent is a United States subsidiary of a foreign corporation. Respondents who check this box are <u>not</u> required to complete the certification portion of this form below but must still submit this form prior to submitting a bid or proposal for a large state contract. Date: \_\_\_\_\_ Respondent's principal place of business is located outside of the United States and it is not a United States subsidiary of a foreign corporation. Respondents who check this box are required to complete the certification portion of this form below and must submit the form prior to submitting a bid or proposal for a large state contract. **CERTIFICATION:** Respondent has not made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010. Respondent has either made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010, or Respondent has made such an investment prior to October 1, 2013 and has now increased or renewed such an investment on or after October 1, 2013, or both. Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement. \_\_\_\_\_\_Date: \_\_\_\_\_\_ Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_. Commissioner of the Superior Court (or Notary Public)

# Attachment A: Smart-E Loan — Scope of Services

#### **Program Description**

Smart-E Loans ("Program") can be used to finance over forty qualifying energy improvements at owner-occupied, 1-4 unit residential properties in Connecticut. The Program is administered by the **Connecticut Green Bank** ("Green Bank") in partnership with 10 local lenders (community banks and credit unions) and a network of over 350 eligible contractors. Beginning July 1, 2018, certain aspects of the Smart-E Loan program will be managed by Inclusive Prosperity Capital, Inc. (**Consultant**). This document will serve as a basis for a delineation of duties across both entities.

#### Activities and Services to be Performed by Consultant

#### • Lender Onboarding and Management

- The Consultant will be responsible for managing the current group of participating lenders and for identifying and onboarding new lenders. The new lenders receive an inperson overview of Smart-E that includes key benefits to the lender and their customers, program statistics, best practices and next steps as well as follow up information to bring them on board.
  - The Consultant will work with the new Lenders to coordinate execution of the standard Smart-E Financing Agreement. An execution copy of the Agreement will be prepared and presented to the Green Bank Legal team for review prior to sending to the lender. Any changes to this agreement will need approval from the Green Bank's Chief Legal Officer.
  - In Connecticut, the Financing Agreements will be managed by Green Bank.
  - Upon execution of the Financing Agreement, the Consultant will provide follow up to train staff of the new lender on the operations of the Smart-E program either in-person or by webinar. This training will cover all aspects of the life of a Smart-E loan.
  - The Consultant will notify the Green Bank Accounting staff and the Green Bank Director of Operations of any new lender to include in monthly or quarterly processes such as data collection or Loan Loss Reserve calculations.

#### Contractor Onboarding and Management

- The Consultant will be responsible for all aspects of managing the group of participating contractors in the Program. The Consultant will liaise with contractors to ensure that they are eligible for participation by maintaining the current standards and requirements of the Program. Any changes to these will come at the direction of the Green Bank. In support of this, The Consultant shall:
  - Maintain the signed Smart-E Contractor Compliance form;
  - Track and Maintain records of copies of participating contractors' current
     Certificate of General Liability Insurance and contractor license (with the

- Connecticut (or state) Department of Consumer Protection) in the Green Bank's instance of Salesforce; and
- Conduct weekly online webinar trainings and maintain attendance of such according to existing practices or at the instruction of the Green Bank.
- Additionally, the Consultant will provide Green Bank Marketing staff with a bi-weekly report of newly eligible Smart-E contractors to be added to the eligible contractor lists on the Green Bank and EnergizeCT Smart-E webpages.

#### • Smart-E Loan Project Technical Approvals

- The Consultant will be responsible for all technical approvals. Within one business day
  of submittal of new project information to the Program's online platform, Consultant
  will review projects submitted by contractors to ensure that:
  - 1) The proposed equipment meets the Program's technical requirements
  - 2) The sales agreement/contract and the Smart-E Utility Data Release Form are signed by the homeowner and uploaded to the platform
- Upon review, the Consultant will approve or deny the project in the online portal.

#### • Loan Loss Reserve ("LLR")

- The Consultant will be responsible for supporting the Green Bank's management of the loan loss reserve.
- The Consultant will create a quarterly report for lenders with information on their Loan
   Loss Reserve status and their overall performance as compared to all lenders.
  - The Consultant will notify lenders quarterly via the reports of loans in default that may qualify for payment from the LLR.
  - The Consultant will provide lenders with the documentation for requesting payment on loans in default.
  - The Consultant will work with Green Bank staff to process LLR payment through Green Bank within one week of receipt of request from the lender.

#### • Other Administrative Tasks

- The Consultant will maintain the Program's eligible measures list, updating it as necessary, particularly when notified of changes in equipment requirements for rebates through EnergizeCT.
- The Consultant will monitor and respond to inquiries from the Program's email account (<u>smarte@ctgreenbank.com</u>) and telephone number (860-357-5676).
- The Consultant will manage customer service issue resolution with guidance from Green Bank
- o Consultant will create monthly reports and other analyses as requested

#### Utility, Energy Efficiency Board (EEB) & Department of Energy & Environmental Protection (DEEP) Coordination

 Consultant will coordinate with Green Bank, utilities, EEB and DEEP; will attend meetings as necessary; and will coordinate on offerings to the market.

#### Marketing

- o In coordination with Green Bank marketing staff, the consultant will:
  - Coordinate with Green Bank marketing staff on all marketing activities;
  - Liaise with Green Bank staff on monthly Marketing budget expenditures; and
  - Liaise with contractor and lender and other outreach partner needs.

#### Inspections

- The Consultant will coordinate and facilitate the Green Bank's management of the inspections for the Program. This will include a regular weekly meeting between the two to discuss outstanding issues.
- Upon receipt of all required completion documentation from the contractor(s) involved in the project, Consultant will update the Program's online platform within 2 business days, which will simultaneously 1) approve the lender to release final payment and 2) notify Green Bank's Statutory and Infrastructure Programs staff of a need for inspection.

#### Smart-EV Pilot

- The Consultant will manage all aspects of the Smart-EV pilot program including:
  - Lender outreach and onboarding and execution of the Program Agreement in consultation with Green Bank Legal staff;
  - Channel outreach including dealers, municipalities and other partners in coordination with Green Bank staff;
  - Administration of the interest rate buydown program, coordinating with lenders on available offers and required reporting for payment, in coordination with Green Bank accounting staff; and
  - Coordination with Green Bank Marketing staff on marketing activities.

#### Activities and Services to be performed by Connecticut Green Bank

The Green Bank will perform services including but not limited to:

#### Marketing

- The Green Bank and the Consultant will work collaboratively to support the market development and outreach for the Smart-E Program. This includes but is not limited to:
  - Marketing Plans Development of marketing plans to help meet business goals and objectives
  - Collateral Development and Support Creation and maintenance/updating of print materials
  - Digital Media Planning, Monitoring and Reporting Design of digital media campaigns aligned with business goals; Coordination of the creation of digital content; Monitoring and reporting ROI and KPIs
  - Public Relations, Media Relations Creation and distribution of residential communications to channel partners and end-users; Content creation for all press materials (e.g., press releases, media advisories, invitations); Relationship management of public relations firm
  - Event Planning Event coordination and execution
  - Website Support Creation and maintenance/updating of residential pages on The Green Bank and Energize CT webpages, including bi-weekly updates to the contractor lists, or as-requested.
  - Email Marketing Design and implementation of direct email marketing campaigns; Report on measurement and ROI of campaign
  - Social Media Management Development and administration of social media campaign content designed to engage users and create an interactive relationship between the product and the end-user

- Budget Coordinate with The Green Bank on monthly Marketing budget expenditures
- Outreach coordinate with The Green Bank marketing staff on all marketing activities

#### • Smart-E Loan Project Inspections (On projects needing an inspection)

- The Green Bank will maintain the operation of the Program's inspections. Upon receipt of all required completion documentation from the contractor(s) involved in the project, Consultant will update the Program's online platform within 2 business days, which will simultaneously 1) approve the lender to release final payment and 2) notify The Green Bank's Statutory and Infrastructure Programs staff of a need for inspection.
  - The Green Bank & Consultant will work together to determine a need to inspect additional projects outside of the first three requirement at the request of the homeowner or lender, or if a pattern of failed inspections or service issues is detected.
- The Green Bank will notify a Green Bank-approved inspector of their inspection assignment via email within 3 business days of receiving notification from the Program's online platform.
- The Green Bank inspector will contact the homeowner via email to coordinate an inspection within 5 business days of receiving notification from The Green Bank.
  - The Green Bank inspector will attempt to contact homeowner three times: twice via email and once via telephone.
    - If unsuccessful after three attempts, The Green Bank inspector will notify The Green Bank who will attempt to connect with the original contractor to request their assistance with contacting the customer.
  - If the Green Bank inspector and original contractor's attempts to contact the homeowner are unanswered, The Green Bank will notify the Consultant and the inspection requirement will be waived. The Green Bank will move the project to "completed" status in the Program's online platform and will update the "inspection notes" section to reflect that the inspection requirement was waived.
- Upon receipt of inspection reports, The Green Bank will upload the document(s) to the project record in the Program's online platform and either:
  - Advance the project to "completed" status if the inspection is passed, or
  - Mark the project as "failed inspection"
- Consultant and The Green Bank will meet weekly to review failed inspections, and
   Consultant will contact the original installer to address the flagged issues.
- The Green Bank will update Consultant of any inspection issues and request assistance as needed
- The Green Bank will prepare invoices for the Consultant's review and approval.

#### • Smart-EV Pilot:

 Green Bank will coordinate with Consultant on outreach and partner opportunities for the Smart-EV pilot, as well as general marketing and specific campaign opportunities.

#### Staff Allocation – CT Green Bank

Andrea Janecko (Marketing)

Rudy Sturk (Marketing)

Barbara Waters (Marketing)

Catherine Duncan (Accounting - LLR)

George Bellas (Finance and Administration - LLR)

Emily Basham (Marketing and Outreach)

Lucy Charpentier (EM&V - Reporting)

Lynne Lewis (Statutory and Infrastructure Programs - Inspections)

Bill Colonis (Statutory and Infrastructure Programs - Inspections)

Matt Macunas (Legal and Marketing)

#### Staff Allocation – Consultant

Kerry O'Neill

Chris Magalhaes

**Madeline Priest** 

Joe Buonannata

Liz Johnson

#### Budget

The Green Bank will pay the Consultant monthly, with an annual not to exceed amount of \$425,770 as it relates to year one only based on the program administration and human capital components as described in the PSA.

Table 1

		sidential art-E
<b>Human Capital Fee Component</b>	\$	335,652
<b>Administration Fee Component</b>	\$	90,118
NTE (1 Year)	\$	425,770
6 Year projected assuming no		
increase in Program Admin		
costs	\$1	,676,142

The budget and fees (based on headcount and administration) will be revisited annually by the two organizations to determine the cost of operating the program to achieve targets as outlined in the PSA.

As a part of this review, the Consultant will review their financials with the Green Bank annually to determine if there are operating cost savings resulting from a growth in scale. In the event of any savings are found as it relates to both the human capital fee and the program administration fee components, these will be passed on to the Green Bank in the form of a fee reduction as outlined in a mutually agreed upon Fee Review Process.

The majority of program administrative expenses for the Program will be contracted through the Green Bank. For program administrative expenses not contracted directly through the Green Bank for the Program, the Green Bank will fund the remaining portion of program administrative expenses through this PSA. After year one and as part of the annual review, the Parties will review the program administrative expenses to determine if such expenses should continue to be funded directly through the Green Bank or funded through the PSA to achieve operating efficiencies and operating cost savings resulting from a growth in scale.

The combined budget for this scope of work across both organizations for FY19 is as follows:

Table 2

Program Code - Program Name		52210	Smart-E L	oans
				FY19
		FY19	FY19	Budget
	Account	Budget	Budget	Consolida
	Number	(CGB)	(NP)	ted
Administrative Expenses				
Compensation and benefits				
- Salaries & Wages	Salaries	96,894	239,751	336,645
- Employee Benefits	Benefits	79,453	95,901	175,354
- Temporary employees	677300	-	-	-
Program development and administr	<u>ation</u>			
- Program development costs	680030	-	-	-
- Program administration costs	680040	5,000	-	5,000
- Technology support costs	680080	-	75,000	75,000
- Project Inspection fees	680070	25,000	-	25,000
<u>EM&amp;V</u>	683100	100,000	-	100,000
Marketing expenses	MKTG	120,000	-	120,000
Legal expenses (BF to budget)	682200	2,000	-	2,000
Other expenses				
- Consulting/Advisory	681100	-	-	-
- Subscriptions	689070	-	-	-
- Training/education	689075	-	5,505	5,505
- Travel,meeting& related expenses	689300	-	9,613	9,613
Overhead Costs Allocated to Program	<u>m:</u>			
Rent and location related expenses				
- Rent/Utilities/Maintenance	687050	7,011	-	7,011
- Telephone/Communications	689020	2,331	-	2,331
- Depreciation FF&E	Depr	1,575	-	1,575
Office, computer & other expenses				-
- Office expense	Office	2,337	-	2,337
- IT operations	IT	7,861	-	7,861
Total administrative expenses		449,462	425,770	875,232

In addition to this PSA, the Green Bank estimates it will spend \$1,500,000 in program administration on Smart-E over the next 6 years either on its own or through the Nonprofit.

#### Technology

For Fiscal year 2019, the Smart-E program will leverage the same technology it presently does including Metis, Salesforce, and Pardot. All will continue to be used in the same manner in which they are presently used. Any change must be cleared by the Green Bank Director of Operations prior to being implemented.

The Green Bank and the Consultant will continue to build and issue the existing reports and dashboards and the Consultant will facilitate the Green Bank's efforts to automate these.

In order to reduce costs for operating the Smart-E program, the Consultant will develop a system that will replace the existing Metis Platform that is central to the operation of Smart-E but has a lower cost to operate. The Green Bank will allocate \$75,000 towards this end. In exchange, the Green Bank will receive a pro-rata portion based on other investors contributions, of any licensing fees earned by the consultant for this system.

#### Targets and Milestones

Each year the Green Bank and the Consultant will meet to discuss and set targets and milestones.

#### **Targets**

In FY 2019, the Consultant shall deliver for the Green Bank 540 Smart-E loans for \$8,775,000 and an installed capacity of 1.3 MW. The Consultant will report specifically about efforts to build the Smart-E program with LMI and credit-challenged homeowners.

The Consultant will meet with the Green Bank at least Quarterly to review progress to these targets.

#### **Milestones**

- Semi-Annually, the Consultant will review product offerings and operations with the Green Bank.
- The Consultant will support the Green Bank's development and implementation of a survey of Smart-E participants that will be the basis of efforts to investigate the Program's effectiveness among other EM&V efforts.
- The Consultant will meet with other potential partners and present the Green Bank a timeline and specifications for a Metis replacement by the end of September 2018.

#### STANDARD PROFESSIONAL SERVICES AGREEMENT

This Standard Professional Services Agreement ("Agreement") is made on July 2, 2018 ("Effective Date"), by and between the CONNECTICUT GREEN BANK ("Green Bank"), a quasi-public agency of the State of Connecticut, having its business address at 845 Brook Street, Rocky Hill, CT 06067, and Inclusive Prosperity Capital, Inc. ("Consultant"), having its business address at 845 Brook Street, Rocky Hill, CT 06067. Green Bank and Consultant together are the Parties and each individually is a Party to this Agreement.

WHEREAS, the Green Bank has established programs for financing, providing credit enhancements, and technical assistance for loans and grants made to owners of multifamily buildings for energy upgrades; and

**WHEREAS**, the Connecticut General Assembly has redirected the funds from the system benefit charge limiting the reach of the Green Bank; and

WHEREAS, the Green Bank seeks to continue the success of the Multifamily programs to reduce the energy burden of tenants and multifamily building owners; and

**WHEREAS**, the Green Bank has participated in the formation of the Consultant, as a 501(c)(3) nonprofit, and entered into a memorandum of understanding with the Consultant (the "MOU") to provide a general framework of support on a transitional basis, as part of its participation in the formation and initial operations of the Consultant.

**WHEREAS**, the staff of the Consultant are intimately familiar with the Multifamily programs and can operate the program on Green Bank's behalf;

**NOW, THEREFORE,** Green Bank and Consultant, intending to be legally bound, agree as follows:

- 1. <u>Scope of Services.</u> Consultant shall provide Green Bank with professional consulting services ("Work") as detailed in Consultant's proposal in Attachment A (the "Proposal), which is incorporated into this Agreement. In the event of a conflict between the terms and conditions in this Agreement and the terms and conditions in the Proposal, this Agreement shall control.
- **2.** Period of Performance. Green Bank agrees to retain Consultant, and Consultant agrees to perform the Work under this Agreement, from the Effective Date through June 30, 2024 ("Period of Performance"), unless earlier terminated in accordance with Section 8 of this Agreement. The Parties can extend the Period of Performance only by a written amendment to this Agreement signed and dated by Green Bank and Consultant.
- **3.** Payment. Green Bank agrees to pay Consultant for the Work performed under the Proposal, as set forth in the Proposal, but in an amount not-to-exceed \$374,657

inclusive of fees and any other expenses for year one only and will be revised annually as part of the annual budget process referenced below.

This payment is comprised of two components: Program Administration and Human Capital. The Program Administration will be paid monthly and represents the costs charged back to the Green Bank for administering the Work that is more effectively and efficiently managed by the Consultant minus any savings achieved through efficiencies and scale. The Green Bank agrees to pay Program Administration expenses as set forth in the budget in Attachment A. Any program expenses where the nonprofit procures goods or services from a third-party to manage the attached Work on behalf of the Green will be charged back to the Green Bank at cost. The Human Capital component will be paid monthly, in advance, and is comprised of the agreed upon staffing levels needed to execute the Work. For the first three years of this PSA, the Green Bank agrees to pay 100% of the cost of the headcount as set forth in Attachment A. For the second three years, the Green Bank agrees to pay 50% of the cost of the headcount. The staffing levels will be reviewed as part of the annual budgeting process and savings due to efficiencies and scale will be passed on to the Green Bank in a manner outlined in a mutually agreed upon Fee Review Process. In this process, the two organizations will review the fees and costs borne on behalf of the Green Bank in comparison to the fees/costs paid by other parties contracting with the Consultant to ensure that the Green Bank is not subsidizing the scopes of work of others.

THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT CAN BE MODIFIED BY THE PARTIES ONLY BY A WRITTEN AMENDMENT SIGNED AND DATED BY GREEN BANK AND CONSULTANT PRIOR TO ANY WORK TO BE PERFORMED BY CONSULTANT WHICH WOULD RESULT IN PAYMENTS IN EXCESS OF THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT.

Invoices. Consultant shall submit invoices to Green Bank beginning on July 2. 4. 2018 for amounts due to Consultant pursuant to the Proposal with sufficient detail to demonstrate Consultant's provision of the work under the Proposal. All invoices shall be subject to Green Bank's approval for conformity with the terms and conditions of this Agreement. For approved invoices, Green Bank will pay Consultant within thirty (30) days of receipt by Green Bank of an invoice. Consultant agrees to include the PSA #, which can be found at the top of this Agreement, on all invoices submitted to Green Bank in connection with Work performed under this Agreement. Invoices shall be submitted to:

Connecticut Green Bank 845 Brook Street Rocky Hill, CT 06067 Attn: Accounts Payable Department

UNDER NO CIRCUMSTANCES WILL GREEN BANK ACCEPT INVOICE(S) SUBMITTED BY CONSULTANT WHICH THE TOTAL AMOUNT OF THE INVOICE(S)

2 V.030117

## EXCEEDS THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT. THE NOT-TO-EXCEED AMOUNT WILL BE REVISED ON AN ANNUAL BASIS.

- **5.** <u>Subcontracting or Assignment.</u> Consultant shall not subcontract, assign, or delegate any portions of the Work under this Agreement to any other person or entity not identified in Section 3, above, without prior written approval from Green Bank.
- **6.** <u>Independent Contractor.</u> Consultant understands that it is acting as an independent contractor and shall not hold itself out as representing or acting in any manner on behalf of Green Bank except within the Proposal or any other active agreements between Green Bank and Consultant.
- 7. <u>Disclosure of Information.</u> Consultant agrees to disclose to Green Bank any information discovered or derived in the performance of the Work required under this Agreement. Consultant shall not disclose to others any such information, any information received or derived in performance of this Agreement, or any information relating to Green Bank without the prior written permission of Green Bank, unless such information is otherwise available in the public domain.
- **8.** <u>Termination.</u> (a) This Agreement may be terminated by a non-breaching Party upon giving prior written notice to the breaching Party of a breach of this Agreement with an opportunity to cure (which shall be not less than ninety days after formal notice by the non-breaching Party).
- (b) Green Bank may terminate this Agreement upon giving prior written notice to the Consultant of a breach of any grant agreement between Green Bank and Consultant with an opportunity to cure (which shall be not less than ninety days after formal notice by Green Bank).
- (c) In the event of such termination, Green Bank shall be liable only for payment in accordance with the payment provisions of the Agreement for the Work actually performed prior to the date of termination.
- (d) If this Agreement is not renewed at the end of the Period of Performance, or is terminated for any reason, Consultant must provide for a reasonable, mutually agreed period of time after the expiration or termination of this Agreement, all reasonable transition assistance requested by Green Bank, to allow for the expired or terminated portion of the services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to Green Bank or its designees. Such transition assistance will be deemed by the Parties to be governed by the terms and conditions of this Agreement, except for those terms or conditions that do not reasonably apply to such transition assistance. Green Bank will pay Consultant for any resources utilized in performing such transition assistance at the most current rates provided by this Agreement. If there are no established contract rates, then the rate shall be mutually agreed upon. If Green Bank terminates this Agreement for cause, then Green Bank will be entitled to offset the cost of paying Consultant for the additional resources Consultant

utilized in providing transition assistance with any damages Green Bank may have otherwise accrued as a result of said termination.

**9.** <u>Indemnification and Limitation of Liability.</u> Consultant agrees, to the fullest extent permitted by law, to indemnify and hold harmless Green Bank, its officers, directors, and employees against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Consultant's negligent performance of professional services under this Agreement and that of its sub-consultants or anyone for whom the Consultant is legally liable.

Neither Party shall be liable to the other Party for indirect, incidental, punitive, special, or consequential damages arising out of this Agreement, even if the Party has been informed of the possibility of such damages, including but not limited to, loss of profits, loss of revenues, failure to realize expected savings, loss of data, loss of business opportunity, or similar losses of any kind. However, this limitation shall not apply to the indemnification obligations set forth above or to damages of any kind related to criminal, intentional, reckless, or grossly negligent conduct or omissions on the part of either Party.

- **10.** Quality of Service. Consultant shall perform the Work with care, skill, and diligence in accordance with the applicable professional standards currently recognized by its profession, and shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all work product and/or Work furnished under this Agreement. If Consultant fails to meet applicable professional standards, Consultant shall, without additional compensation, correct or revise any errors or deficiencies in any work product and/or Work furnished under this Agreement.
- 11. <u>Severability.</u> In the event that any one or more of the provisions contained in this Agreement shall be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and all other provisions shall remain in full force and effect. If any provision of this Agreement is held to be excessively broad, then that provision shall be reformed and construed by limiting and reducing it to be enforceable to the maximum extent permitted by law.
- **12. Entire Agreement.** This Agreement constitutes the entire agreement of the Parties hereto, and supersedes any previous agreement or understanding. This Agreement with respect to the subject matter hereof may not be modified or extended except in writing executed by the Parties.
- 13. Governing Law. The validity, interpretation, and performance of this Agreement shall be governed by the laws of the State of Connecticut. All disputes which arise in connection with, or in relation to, this Agreement or any claimed breach thereof shall be resolved, if not sooner settled, by litigation only in Connecticut or the Federal Court otherwise having subject matter jurisdiction over the dispute and not elsewhere, subject only to the authority of the Court in question to order changes of venue. To this end, Consultant waives any rights it may have to insist that litigation related to this Agreement

to which Consultant is a party be had in any venue other than the above court, and covenants not to sue Green Bank in court other than the above courts with respect to any dispute related to this Agreement.

14. <u>State Contracting Obligations.</u> Consultant understands and agrees that Green Bank will comply with Conn. Gen. Stat. Sections 4a-60 and 4a-60a. Consultant agrees to comply for the Period of Performance with the state contracting obligations in this Section 14. For purposes of this Section 14, Contractor and Consultant 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. Consultant represents and warrants that, prior to entering into this Agreement, Consultant has provided Green Bank with documentation evidencing Consultant'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 Consultant is attached.

<u>Campaign Contribution Restrictions</u>. For all state contracts, as defined in Conn. Gen. Stat. § 9-612(g)(1)(C), having a value in a calendar year of \$50,000 or more

or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See <a href="http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf">http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf</a>.

Occupational Safety and Health Act Compliance. Consultant 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) 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.

Consulting Agreements. Consultant hereby swears and attests as true to the best knowledge and belief that no consulting agreement, as defined in Conn. Gen. Stat. § 4a-81, has been entered into in connection with this Agreement. Contractor agrees to amend this representation if and when any consulting agreement is entered into during the term of the Contract. See Affidavit Regarding Consulting Agreements, attached.

- **15.** <u>Limitation on Recourse.</u> All liabilities and obligations of Green Bank under this Agreement are subject and limited to the funding available under Connecticut law.
- **16. Non-impairment and Assessment**. As a further inducement for the Consultant to enter into this Agreement, subsection (h) of section 16-245n of the Conn. General Statutes is incorporated into this Agreement.
- **17.** 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, Consultant should specifically and in writing identify to Green Bank the information that Consultant claims to be 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.

Consultant acknowledges that (1) Green Bank has no obligation to notify Consultant of any FOIA request it receives, (2) Green Bank may disclose materials claimed by Consultant 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 Consultant 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) Consultant 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.

**18.** <u>Counterparts</u>. This Agreement may be executed in any number of counterparts (including those delivered by facsimile or other electronic means), and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, shall together constitute but one and the same agreement.

[Signature page follows]

**IN WITNESS WHEREOF,** the Parties have executed this Agreement as of the day and year first above written.

CONN	NECTICUT GREEN BANK
Ву: _	
-y. <u>-</u>	Bryan T. Garcia, President and CEO
INCL	JSIVE PROSPERITY CAPITAL, INC.
Ву:	INSERT NAME INSERT TITLE



## STATE OF CONNECTICUT NONDISCRIMINATION CERTIFICATION — Affidavit By Entity

For Contracts Valued at \$50,000 or More

Documentation in the form of an <u>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</u>

#### INSTRUCTIONS:

AFFIDAVIT:

For use by an <u>entity</u> (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.

Commissioner of the Superior Court/ Notary Public	Commission Expiration Date
Sworn and subscribed to before me on this	day of, 20
Printed Name	_
Authorized Signatory	_
General Statutes §§ 4a-60(a)(1)and 4a-60a(a)(1), as	amended.
has a policy in place that complies with the nondiscrin	nination agreements and warranties of Connecticut
<u>Inclusive Prosperity Capital, Inc.</u> and that <u>Inc</u> Name of Entity	clusive Prosperity Capital, Inc. Name of Entity
I certify that I am authorized to execute and deliver t	his affidavit on behalf of
duly formed and existing under the laws of <u>the Stat</u> Nar	te of Connecticut ne of State or Commonwealth
an oath. I am ofI Signatory's Title	nclusive Prosperity Capital, Inc. , an entity Name of Entity
I, the undersigned, am over the age of eighteen (18)	and understand and appreciate the obligations of

V.030117



Certification to accompany a State contract, having a value of \$50,000 or more, pursuant to Connecticut General Statutes §§ 4-250 and 4-252(b), and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Sign and date in the presence of a Commissioner of the Superior Court or Notary Public. Submit to the awarding State agency at the time of contract execution.

#### **CERTIFICATION:**

I, the undersigned State agency official or State employee, certify that (1) I am authorized to execute the attached contract on behalf of the State agency named below, and (2) the selection of the contractor named below was not the result of collusion, the giving of a gift or the promise of a gift, compensation, fraud or inappropriate influence from any person.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

<u>Inclusive Prosperity Capital, Inc.</u> Contractor Name		
Connecticut Green Bank Awarding State Agency		
State Agency Official or Employee Signa	ature	Date
Bryan T. Garcia		President and CEO
Printed Name		Title
Sworn and subscribed before me on tl	nis day of , 20	
	Commissioner of the Superior C or Notary Public	ourt
	My Commission Expires	

V.030117



Written or electronic certification to accompany a State contract with a value of \$50,000 or more, pursuant to C.G.S. §§ 4-250, 4-252(c) and 9-612(f)(2) and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Attach additional pages, if necessary, to provide full disclosure about any lawful campaign contributions made to campaigns of candidates for statewide public office or the General Assembly, as described herein. Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of initial contract execution and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or proposal for a contract, whichever is earlier. Such person shall also submit an accurate, updated certification not later than fourteen days after the twelve-month anniversary of the most recently filed certification or updated certification.

CHECK ONE: only.)	$\boxtimes$	Initial Certification	12 Month Anniversary Update (Multi-year contracts
		•	f change of information contained in the most elve-month anniversary update.

#### **GIFT CERTIFICATION:**

As used in this certification, the following terms have the meaning set forth below:

- 1) "Contract" means that contract between the State of Connecticut (and/or one or more of it agencies or instrumentalities) and the Contractor, attached hereto, or as otherwise described by the awarding State agency below;
- 2) If this is an Initial Certification, "Execution Date" means the date the Contract is fully executed by, and becomes effective between, the parties; if this is a twelve-month anniversary update, "Execution Date" means the date this certification is signed by the Contractor;
- 3) "Contractor" means the person, firm or corporation named as the contactor below;
- 4) "Applicable Public Official or State Employee" means any public official or state employee described in C.G.S. §4-252(c)(1)(i) or (ii);
- 5) "Gift" has the same meaning given that term in C.G.S. § 4-250(1);
- 6) "Principals or Key Personnel" means and refers to those principals and key personnel of the Contractor, and its or their agents, as described in C.G.S. §§ 4-250(5) and 4-252(c)(1)(B) and (C).

I, the undersigned, am a Principal or Key Personnel of the person, firm or corporation authorized to execute this certification on behalf of the Contractor. I hereby certify that, no gifts were made by (A) such person, firm, corporation, (B) any principals and key personnel of the person firm or corporation who participate substantially in preparing bids, proposals or negotiating state contracts or (C) any agent of such, firm, corporation, or principals or key personnel who participates substantially in preparing bids, proposals or negotiating state contracts, to (i) any public official or state employee of the state agency or quasi-public agency soliciting bids or proposals for state contracts who participates substantially in the preparation of bid solicitations or request for proposals for state contracts or the negotiation or award of state contracts or (ii) any public official or state employee of any other state agency, who has supervisory or appointing authority over such state agency or quasi-public agency.

I further certify that no Principals or Key Personnel know of any action by the Contractor to circumvent (or which would result in the circumvention of) the above certification regarding **Gifts** by providing for any other Principals, Key Personnel, officials, or employees of the Contractor, or its or their agents, to make a **Gift** to any Applicable Public Official or State Employee. I further certify that the Contractor made the bid or proposal for the Contract without fraud or collusion with any person.

# PSA # 5411; Inclusive Prosperity Capital, Inc. (Multifamily)

#### **CAMPAIGN CONTRIBUTION CERTIFICATION:**

I further certify that, on or after January 1, 2011, neither the Contractor nor any of its principals, as defined in C.G.S. § 9-612(f)(1), has made any **campaign contributions** to, or solicited any contributions on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support, any candidate for <u>statewide public office</u>, in violation of C.G.S. § 9-612(f)(2)(A). I further certify that **all lawful campaign contributions** that have been made on or after January 1, 2011 by the Contractor or any of its principals, as defined in C.G.S. § 9-612(f)(1), to, or solicited on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support any candidates for <u>statewide public office</u> or the <u>General Assembly</u>, are listed below:

# **Lawful Campaign Contributions to Candidates for Statewide Public Office:**

Contribution Date	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>
Lawful Ca	ampaign Contributions to Ca	andidates for the Ge	eneral Assembly:	
Contribution <u>Date</u>	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>
<u>Date</u>	Name of Contributor	Recipient	<u>value</u>	<u>Description</u>
Sworn as t	crue to the best of my knowled	ge and belief, subject	to the penalties of false	e statement.
Inclusive Prospe	rity Capital, Inc.			
Printed Contract	or Name		Printed Name of Aut	horized Official
Signature of Ai	uthorized Official			
	Subscribed and ackn	owledged before m	e this day of	, 20
		Commissione	r of the Superior Cou	rt (or Notary Public)
		My Commissi	on Evnires	

### **PSA # 5411**; Inclusive Prosperity Capital, Inc. (Multifamily)



Affidavit to accompany a bid or proposal for the purchase of goods and services with a value of \$50,000 or more in a calendar or fiscal year, pursuant to Connecticut General Statutes §§ 4a-81(a) and 4a-81(b). For sole source or no bid contracts the form is submitted at time of contract execution.

#### **INSTRUCTIONS:**

If the bidder or vendor has entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete all sections of the form. If the bidder or contractor has entered into more than one such consulting agreement, use a separate form for each agreement. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public. If the bidder or contractor has not entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete only the shaded section of the form. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public.

Submit completed form to the awarding State agency with bid or proposal. For a sole source award, submit completed form to the awarding State agency at the time of contract execution.

This affidavit must be amended if there is any change in the information contained in the most recently filed affidavit not later than (i) thirty days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier

is earlier.					
AFFIDAVIT:	[Number of A	offidavits Sworn and Sul	bscribed On This Day:	]	
described in Co to execute such	nnecticut Gene h contract. I	eral Statutes § 4a-81(b	), or that I am the ind ave not entered into a	ividual awarded suc	rractor awarded a contract, as h a contract who is authorized ment in connection with such
Consultant's Na	ame and Title		<u>Inclusive Pr</u> Name of Firm (if	osperity Capital, Inc applicable)	<u>.                                    </u>
July 2, 2018 Start Date	_	<u>July 1, 2021</u> End Date	Cost		
Description of S	Services Provid	ed: <u>Service Green Ban</u>	k's programs for financ	cing, providing credi	t enhancements, and
		made owners of multifa			
Is the consultar	nt a former Sta	te employee or former	public official?	☐ YES ☐	NO
If YES:	Name of Forr	ner State Agency	Termina	tion Date of Employ	 ment
Sworn as true t	to the best of n	ny knowledge and belief	f, subject to the penal	cies of false statemen	nt.
Inclusive Pr Printed Name o	osperity Capita of Bidder or Cor		of Principal or Key I	Personnel Da	te
		Printed Nar	me (of above)	The Connect Awarding S	cticut Green Bank tate Agency
Sworn and su	bscribed befo	re me on this	day of	, 20	
		Commission or Notary	oner of the Superior Public	Court	
		My Commi	ission Expires	<u> </u>	

# PSA # 5411; Inclusive Prosperity Capital, Inc. (Multifamily)

# <u>CERTIFICATION REGARDING INVESTMENTS IN IRAN</u> (Public Act No. 13-162)

For certain contracts or series or combination of contracts with a total value of more than \$500,000 in a calendar fiscal year	<u>or</u>
CHECK ONE:	
As used in this affidavit and certification, the following terms have the meaning set forth below:	
1. "Entity" means any corporation, general partnership, limited partnership, limited liability partnership, joint venture nonprofit organization or other business organization whose principal place of business is located outside of the United States but excludes any United States subsidiary of a foreign corporation.  2. "Large State Contract" means an agreement or a combination or series of agreements between a state agency a quasi-public agency and a person, firm or corporation, having a total value of more than five hundred thousand dollars in calendar or fiscal year, for (A) a project for the construction, alteration or repair of any public building or public work (B) services, including, but not limited to, consulting and professional services, (C) the procurement of supplies, materials or equipment, (D) a lease, or (E) a licensing arrangement. The term "large state contract" does not include a contract between a state agency or a quasi-public agency and a political subdivision of the state.  3. "Quasi-public agency" has the same meanings as provided in Section 1-79 of the Connecticut General Statutes.  4. "Respondent" means the name of the entity which is entering into a large state contract with the Quasi-public agency.  CHECK APPLICABLE BOX:	or n a
Respondent's principal place of business is located within the United States or Respondent is a United States subsidiary of a foreign corporation. Respondents who check this box are <b>not</b> required to complete the certification portion of this form below but must still submit this form prior to submitting a bid or proposal for a large state contract.	on
Signed: Date:	
Respondent's principal place of business is located outside of the United States and it is not a United States subsidiary of a foreign corporation. Respondents who check this box are required to complete the certification portion of this form below and must submit the form prior to submitting a bid or proposal for a large state contract.	f
CERTIFICATION:	
Respondent has not made a direct investment of twenty million dollars or more in the energy sector of Iran on after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010.	r
Respondent has either made a direct investment of twenty million dollars or more in the energy sector of Iran or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestme Act of 2010, or Respondent has made such an investment prior to October 1, 2013 and has now increased or renewed such an investment on or after October 1, 2013, or both.	nt
Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.	
Signed:Date:	
Subscribed and sworn to before me, this day of, 20	
Commissioner of the Superior Court (or Notary Public)	

# Multifamily Lending Scope

# Multifamily Product Descriptions

**The Navigator Pre-Development Energy Loan** funds pre-development costs for building owners who prefer to select and manage energy contractors and other professionals needed to scope and design their project.

The Sherpa Pre-Development Energy Loan offers an affordable, low-risk, one-stop solution to analyze, design and arrange financing for green energy upgrades. Connecticut Green Bank has partnered with New Ecology Inc., an expert multifamily technical services provider and nationally-recognized non-profit, to act as an owner's representative to help scope, design and arrange financing for energy improvement projects.

The Low Income Multifamily Energy (LIME) Loan funds energy improvement projects for low- and moderate-income properties. These loans are unsecured, require no money down, and are repaid from energy cost savings for terms up to 20 years They serve mid-cycle, refinancing, and new construction properties.

**Catalyst Financing** is available at favorable terms for merited projects that are unable to secure adequate funding from other sources. These funds can be used for energy improvements and energy-related health and safety measures and are designed to fill funding gaps necessary to catalyze multifamily energy projects.

**The EnergizeCT Health & Safety Revolving Loan Fund** provides low interest loans and limited grants that allow owners of multifamily housing serving low income residents to make health and safety improvements in conjunction with energy upgrades.

These programs are administered by the **Connecticut Green Bank** ("GREEN BANK"). Beginning July 1, 2018, these multifamily programs will be managed by Inclusive Prosperity Capital, Inc. (**Consultant**). This document will serve as a basis for a delineation of duties across both entities.

# **Product Process Function Tables**

Process function tables are provided below for the following five products that are fully owned by the Multifamily sector. These include:

- The Navigator Pre-Development Energy Loan
- The Sherpa Pre-Development Energy Loan
- The Low Income Multifamily Energy (LIME) Loan
- Catalyst Financing
- The EnergizeCT Health & Safety Revolving Loan Fund

Coordinated product delivery with the Multifamily Team is required for the three products that are not owned by the Multifamily sector. These include:

- Commercial Solar PPA
- C-PACE & C-PACE New Construction Pilot
- Project Finance

# The Navigator Pre-Development Energy Loan

This program is currently funded by the MacArthur Program Related Investment (PRI) and administered by the Housing Development Fund (HDF). HDF will perform the functions designated below in its role as administrator of the MacArthur PRI Funds. Once these funds are fully deployed and repaid to the MacArthur Foundation, HDF will no longer perform these functions. Additional funds to continue funding the Navigator Pre-Development Loan will be raised by the Consultant from other sources.

Navigator Pre-Development Loan	FY'19	FY'20 & Beyond
Process Functions	Service Provider	Service Provider
Marketing & Sales		
General Marketing - to build awareness	Green Bank	Green Bank& Consultant
Direct outreach & client sales	Green Bank& Consultant	Green Bank& Consultant
Loan Origination		
Receive & process loan applications, underwriting, loan approvals, closing & funding	Consultant & HDF	Consultant & HDF
TA to owner (if needed)	Green Bank& Consultant	Consultant
Loan Servicing & Tracking		
Requisition & track repayments	Green Bank& HDF	Green Bank& HDF
Process/ approve loan forgiveness requests	Consultant	Consultant
Manage compliance & collection of delinquent loans	Green Bank& HDF	Green Bank& HDF
Pipeline Management & Reporting System, Legal &	Administrative	
Project tracking through all stages & reporting	Green Bank, Consultant & HDF	Green Bank, Consultant & HDF
Legal support	Consultant & HDF	Consultant & HDF
Guidelines development & updating	Consultant	Consultant
Capital Raising		
Capital Raising	Consultant	Consultant

# The Sherpa Pre-Development Energy Loan

The Sherpa Pre-Development Loan Program is administered by New Ecology, Inc. (NEI). It is a 3-phased program characterized by:

- Phase 1 Opportunity Assessment
- Phase 2 Audit, and
- Phase 3 -- Design & Funding

Upon completion of the Phase 1 / Opportunity Assessment, subsequent phases follow the same steps as the Navigator Pre-Development Loan Program described above. This program will continue until funds budgeted under PSA # 5157 have been expended or the Green Bank and the Consultant mutually decide to terminate the program.

Sherpa Pre-Development Loan Functions (Administered by NEI)	FY'19 Service Provider	FY'20 & Beyond Service Provider
Marketing & Sales		
General Marketing - to build awareness	Green Bank	Green Bank
Direct outreach & client sales	Green Bank, Consultant & NEI	Consultant & NEI
Origination (Phase 1: Opportunity Assessment)		
Receive & process applications	Consultant & NEI	Consultant & NEI
Approval (or decline)	Consultant & NEI	Consultant & NEI
Agreement execution with customers	NEI	NEI
Funding NEI	Consultant	Consultant

# The Low Income Multifamily Energy (LIME) Loan

The LIME Loan Program is administered by Capital For Change (C4C).

LIME Loan Functions	FY'19	FY'20 & Beyond
(Administered by Capital For Change)	Service Provider	Service Provider
Marketing & Sales		
General Marketing - to build awareness	Green Bank	Green Bank
Direct outreach & client sales	Green Bank, Consultant & C4C	Consultant & C4C
Loan Origination		
Receive & process loan applications, underwriting, approval, closing & funding	Consultant & C4C	Consultant & C4C
TA to owner (if needed)	Green Bank, Consultant & C4C	Consultant & C4C
Construction Monitoring (if applies)	C4C	C4C
Completion QA/ Commissioning/ Ensure M&V in place	Green Bank, Consultant & C4C	Consultant & C4C
Loan Servicing & Tracking		
Requisitions & track repayments	C4C	C4C
Monitor energy & cost savings performance	Green Bank, Consultant & C4C	Consultant & C4C
Close out paid out loans	C4C	C4C
Manage compliance & collection of delinquent loans	C4C	C4C
Pipeline Management & Reporting, Legal	& Administrative	
Project tracking through all stages & reporting	Green Bank, Consultant & C4C	Green Bank, Consultant & C4C
Legal support	C4C	C4C
Guidelines development & updating	C4C	C4C
Capital Raising		
Capital Raising	C4C	C4C

# **Catalyst Financing**

This program is currently funded by the MacArthur PRI and administered HDF. HDF will perform the functions designated below in its role as administrator of the MacArthur PRI Funds. Once these funds are fully deployed and repaid to the MacArthur Foundation, HDF will no longer perform these functions. Additional funds to continue funding the Navigator Pre-Development Loan will be raised by the Consultant from other sources.

Catalyst Loan Fund Functions	FY'19 Service Provider	FY'20 & Beyond Service Provider
Marketing & Sales		
General Marketing - to build awareness	Green Bank	Green Bank& Consultant
Loan Origination		
Receive & process loan applications, underwriting, approval, closing & funding	Consultant	Consultant
TA to owner (if needed)	Green Bank& Consultant	Consultant
Construction Monitoring (if applies)	Consultant & HDF	Consultant & HDF
Completion QA/ Commissioning/ Ensure M&V in place	Consultant & HDF	Consultant & HDF
Loan Servicing & tracking		
Requisitions & track repayments	Green Bank& HDF	Green Bank& HDF
Monitor energy & cost savings performance	Green Bank, Consultant & HDF	Consultant & HDF
Close out paid out loans	Green Bank& HDF	Green Bank& HDF
Manage compliance & collection of delinquent loans	Green Bank& HDF	Green Bank& HDF
Pipeline Management & Reporting System, Le	egal & Administrative	
Project tracking through all stages & reporting	Green Bank, Consultant & HDF	Green Bank, Consultant & HDF
Legal support	Consultant & HDF	Consultant & HDF
Guidelines development & updating	Consultant	Consultant
Capital Raising		
Capital Raising	Consultant	Consultant

# The EnergizeCT Health & Safety Revolving Loan Fund

EnergizeCT H&S Revolving Loan Functions	FY'19 Service Providers	FY'20 & Beyond Service Providers
Marketing & Sales		
General Marketing - to build awareness	Green Bank	Green Bank& Consultant
Release & manage RFP process	Consultant	Consultant
Loan Origination		
Receive & process loan applications, underwriting, approval, closing, funding	Consultant	Consultant
TA to owner (if needed)	Green Bank& Consultant	Consultant
Construction Monitoring (if applies)	Consultant	Consultant
Completion QA/ Commissioning/ Ensure M&V in place	Green Bank& Consultant	Consultant
Loan Servicing & Tracking		
Requisition & track repayments	Green Bank	Green Bank
Monitor energy & cost savings performance	Green Bank& Consultant	Green Bank& Consultant
Close out paid out loans	Green Bank	Green Bank
Manage compliance & collection of delinquent loans	Green Bank	Green Bank
Pipeline Management & Reporting System, Leg	al & Administrative	
Project tracking through all stages & reporting	Green Bank& Consultant	Green Bank& Consultant
Legal support	Consultant	Consultant
Guidelines development & updating	Consultant	Consultant
Capital Raising		
Capital Raising	Consultant	Consultant

# Activities and Services to be performed by Consultant

With regard to the aforementioned Multifamily programs and attracting multifamily projects to other Green Bank Programs, the Consultant shall provide the following services:

**Marketing Services** – Green Bank and Consultant will work collaboratively to support the market development and outreach for the Multifamily sector. This includes but is not limited to:

- Marketing: Collaborate with Green Bank on marketing and outreach activities.
- <u>Sales Partners</u>: Provide management and oversight of sales partners including Joe Podchaiski and Brian Sullivan.
- <u>Lead Identification</u>: Provide oversight of lead identification through analysis of municipal grand lists (Brian Sullivan).
- <u>Case Studies</u>: Support Green Bank's development of case studies, focusing on content upon written request.

## **Market Development and Capacity Building Services**

- <u>Development and Capacity Building</u>: In conjunction with Green Bank, support efforts to develop and build capacity in the Multifamily market, enabling increased scale deployment of multifamily products and services and their value to the properties and communities served.
- <u>Sub-metering</u>: In Conjunction with Green Bank, support the development of sub-metering market guidance.
- <u>Energy Efficiency Board (EEB)-Green Bank Relationship:</u> In Conjunction with Green Bank, support the management representation and establishment of appropriate relationships with the utility companies, Department of Energy and Environmental Protection (DEEP) and the EEB Board for the Multifamily sector.

#### **Product & Program Delivery Services**

- <u>Multifamily Loan Products</u>: The Consultant will hold primary responsibility for delivery of the 5 loan products that are owned by the Multifamily sector, per the functions and roles described in the product flow charts above.
- <u>Loan Products in Other Sectors that Serve Multifamily</u>: The Consultant will hold primary responsibility for coordinating delivery of the three loan programs that are owned by other sectors that broadly serve the C&I, MUSH and Multifamily markets.
- <u>Client Technical Assistance</u>: Provide client technical assistance to clients in collaboration with Green Bank.
- <u>Loan Servicing</u>: Support program partners HDF and C4C and Green Bank in providing loan servicing functions for the Consultant, per the functions and roles described in the product flow charts above.

- <u>Existing Program Administration</u>: Oversee and manage vendors critical to the delivery of specific multifamily programs such as New Ecology Inc.
- <u>Tracking and Reporting</u>: Lead product and pipeline tracking and reporting.
- <u>Salesforce</u>: Support development of Salesforce platform, including integration into marketing platforms. Ensure that project data is maintained and updated in salesforce on a timely and regular basis.

### **Product Development Services**

- <u>EnergizeCT Health and Safety (H&S) Revolving Loan Fund</u>: Support Green Bank in full development of EnergizeCT H&S Revolving Loan Fund product/processes.
- Process Improvements: Lead streamlining and improvement of product delivery.
- <u>Product Guidelines</u>: Lead development and updates of product guidelines.

#### **Capitalization of Loan Products**

• <u>Capital Raising</u>: In conjunction with the Green Bank, raise and manage capital to fund the suite of multifamily loan products.

# Activities and Services to be performed by Connecticut Green Bank

# **Marketing Services**

- Green Bank and Consultant will work collaboratively to support the market development and outreach for the Multifamily sector. This includes but is not limited to: <u>Marketing Plans</u> – Develop marketing plans to help meet business goals and objectives.
- <u>Collateral Development and Support</u> Creation and maintenance/updating of collateral materials and case studies.
- <u>Public Relations, Media Relations</u> Creation and distribution of communications to channel partners and end-users; content creation for all press materials (e.g. press releases, media advisories, invitations); relationship management of PR firm.
- <u>Event Planning</u> Event coordination and execution, management of event sponsorships, memberships and conference proposals.
- <u>Website Management/Support</u> Creation and maintenance/updating of multifamily pages on the CT Green Bank (ctgreenbank.com) and EnergizeCT (<u>www.energizect.com</u>) webpages.

- <u>Email Marketing</u> Design and implement direct email marketing campaigns; report on measurement and ROI of campaign; creation and distribution of quarterly e-newsletters (and maintenance of associated email lists).
- <u>Social Media Management</u> Develop and administer social media campaign content that is designed to engage users and create an interactive relationship between the product and the end-user.
- <u>Sales Partners</u>: Support of sales/outreach partners (including Joe Podchaiski, Brian Sullivan, Kathy Dorgan and the Connecticut Housing Coalition).
- <u>BenchmarkCT Database</u>: Mine the BenchmarkCT database. Develop and implement, in partnership with the Consultant, a strategy for outreach to properties with highest potential to benefit from energy and water improvements and use the Multifamily programs.
- <u>Outreach</u>: Continue to maintain and build channel relationships with program partners, organizations and thought leaders in the Multifamily sector.
- <u>Customer Satisfaction</u>: Survey customers, prospects and leads for input on program effectiveness, value, and ease of use to identify where and how programs can be improved and scaled to achieve broader and deeper impact.

#### **Market Development and Capacity Building Services**

The activities described below are focused on enabling Green Bank to increase scaled deployment of our Multifamily suite of products and services and their value to the properties and communities we serve. Green Bank and Consultant will work collaboratively to support this goal, which includes, but is not limited to:

- Market Education and Training: Oversee education and training programs that promote a
  holistic approach to energy improvements and multifamily financing. Activities include, but are
  not limited to, in-person trainings, webinars, building a resource center, publication of the
  Multifamily How-To Manual.
- <u>Multifamily Peer-to-Peer Network</u>: Continue support and development of the Peer-to-Peer Network, administered through the CT Housing Coalition.
- <u>Co-op Sector Development</u>: Continue support and development of capacity building and energy lending to the co-op sector, with support from UHAB and other possible service providers.
- Split Incentive and Utility Allowance Challenges: Lead efforts to analyze and recommend solutions that incent owners to make energy improvement investments when confronted by split incentive challenges.
- <u>Sub-metering</u>: Develop sub-metering guidance for the market, including optimal opportunity timing and configuration for the multifamily market.
- <u>Program Capacity Development</u>: Oversee service providers working to support and improve development of Green Bank's multifamily programs. This includes Kathy Dorgan, Stephen Turner Inc. and possibly others.

• <u>EEB-</u> Green Bank <u>Relationship</u>: Manage, represent, and build appropriate relationships with the utility companies, DEEP and the EEB Board for the Multifamily sector.

## **Product and Program Delivery Services**

- <u>Multifamily Loan Products</u>: Green Bank will support Consultant in delivery of the five loan products that are owned by the Multifamily sector, per the functions and roles described in the product flow charts above.
- Loan Products in Other Sectors that Serve Multifamily: Green Bank will support Consultant in coordinating delivery of the three loan programs that are owned by other sectors that broadly serve the C&I, MUSH and multifamily markets.
- <u>Client Technical Assistance</u>: Provide client technical assistance to support Consultant in delivery of its products.
- <u>Salesforce</u>: Support Consultant development of the Salesforce platform, including integration into marketing platforms.
- Tracking and Reporting: Support Consultant on product and pipeline tracking and reporting.

# **Product Development Services**

- <u>EnergizeCT Health & Safety Revolving Loan Fund</u>: Ensure full development of H&S Revolving Loan Fund product/processes.
- QA/QC of Implemented Measures: Lead development and implementation of QA/QC protocols across programs, leading to high quality installation of energy measures funded by our loan programs.
- Monitoring, Verification and Reporting of Implemented Measures: Lead development and implementation of M&V quarterly performance reports, targeted for property owners, managers and lenders. Start first with portfolio of LIME loans.
- <u>Contractor Guidance for Owners</u>: Establish program appropriate guidance on identifying and securing energy design and implementation professionals for owners.

#### **Finance: Capitalization of Loan Products**

• <u>Capital Raising</u>: Support Consultant in raising capital to fund the suite of multifamily loan products. Consider and provide capital investments to Consultant that meet Green Bank's return requirements, as appropriate and based on capital availability.

#### **Accounting: Loan Servicing**

• <u>Loan Servicing</u>: Provide loan servicing functions for Consultant, per the functions and roles described in the product flow charts above. As the programs evolve and as appropriate, Consultant has the option to secure another loan servicing vendor with appropriate notice to Green Bank.

# Staff Allocation – Green Bank & Consultant

Consultant Staff	Notes	Green Bank Staff	Notes
MFH Program Team		MFH Program Team	
Kerry O'Neill		W Cl	
John D'Agostino		Kim Stevenson	
Finance Team		C&I Team	Vaccas Calan alva Stancas
Ben Healey		Anthony Clark	Kresge Solar plus Storage, C-PACE MFH, & C-PACE
Chris Magalhaes		CPACE Team	New Construction
		LMI Team	
		Emily Basham	SustainableCT
		Finance Team	
		Bert Hunter	
		Fiona Stewart	Solar PPA projects
		Marketing Team	
		Rudy Sturk	
		Barbara Waters	
		Craig Connolly	
		Accounting Team	
		George Bellas	Loop convising
		Accounting Team	Loan servicing
		<b>Operations Team</b>	
		Eric Shrago	Donorting
		Lucy Charpentier	Reporting

# Budget

The Green Bank will pay the Consultant monthly, with an annual not to exceed amount of \$374,657 as it relates to year one, based on the program administration and human capital components as described in the PSA.

<b>Human Capital Fee Component</b>	\$339,631
Administration Fee Component	\$35,026
NTE (1 Year)	\$374,657
6 Year projected assuming no	
increase in Program Admin	
costs	\$ 2,474,995

The budget and fees (based on headcount and administration) will be revisited annually by the two organizations to determine the cost of operating the program to achieve targets as outlined in the PSA. As a part of this review, the Consultant will review their financials with the Green Bank annually to determine if there are operating cost savings resulting from a growth in scale. In the event of any savings are found as it relates to both the human capital fee and the program administration fee components, these will be passed on to the Green Bank in the form of a fee reduction as outlined in a mutually agreed upon Fee Review Process.

The majority of program administrative expenses for the Program will be contracted through the Green Bank. For program administrative expenses not contracted directly through the Green Bank for the Program, the Green Bank will fund the remaining portion of program administrative expenses through this PSA. After year one and as part of the annual review, the Parties will review the program administrative expenses to determine if such expenses should continue to be funded directly through the Green Bank or funded through the PSA to achieve operating efficiencies and operating cost savings resulting from a growth in scale.

The combined budget for this scope of work across both organizations for FY19 is as follows:

Program Code - Program Name		All Multifamily Programs		
				FY19
		FY19	FY19	Budget
	Account	Budget	Budget	Consolidat
	Number	(CGB)	(NP)	ed
Administrative Expenses				
Compensation and benefits				
- Salaries & Wages	Salaries	241,595	235,451	477,046
- Employee Benefits	Benefits	198,108	94,180	292,288
- Temporary employees	677300	-	10,000	10,000
Program development and administ	<u>tration</u>			
- Program development costs	680030	185,000	-	185,000
- Program administration costs	680040	250,000	-	250,000
- Technology support costs	680080	8,000	-	8,000
- Project Inspection fees	680070	-	15,000	15,000
EM&V	683100	20,000	-	20,000
Marketing expenses	MKTG	80,500	-	80,500
Legal expenses (BF to budget)	682200	9,000	-	9,000
Other expenses				
- Consulting/Advisory	681100	-	-	-
- Subscriptions	689070	-	-	-
- Training/education	689075	5,000	6,478	11,478
- Travel, meeting& related expenses	689300	10,000	13,548	23,548
Overhead Costs Allocated to Progra	am:			
Rent and location related expenses				
- Rent/Utilities/Maintenance	687050	17,478	-	17,478
- Telephone/Communications	689020	5,812	-	5,812
- Depreciation FF&E	Depr	3,927	-	3,927
Office, computer & other expenses				
- Office expense	Office	5,826	-	5,826
- IT operations	IT	19,596	-	19,596
Total administrative expenses		1,059,843	374,657	1,434,500

The Green Bank estimates it will spend \$3,351,000 in program administration on Multifamily Programs over the next 6 years either on its own or through the Nonprofit.

# Technology

For Fiscal year 2019, the Multifamily program will leverage the same technology it presently does including Salesforce and Pardot. All will continue to be used in the same manner in which they are presently used. Any change must be cleared by Green Bank Director of Operations prior to being implemented.

Green Bank and the Consultant will continue to build and issue the existing reports and dashboards and Consultant will facilitate Green Bank's efforts to automate these.

# Other Resources

Green Bank will make available access to BenchmarkCT Data to the Consultant.

# Targets and Milestones -

Each year Green Bank and Consultant will meet to discuss and set targets and milestones.

## **Targets**

In FY 2019, Consultant shall deliver for Green Bank 4 predevelopment loans for \$70,000. Consultant will deliver 15 term loans for \$2,500,000 and an installed capacity of .85 MW.

#### **Milestones**

- 1. **Product Extensions**: Develop a product extension plan in Q1 to be executed in Q2 Q4 of FY'19. Products should be designed to fill current unserved sector including properties with LMI tenants that pay all utilities as well as properties serving market rate tenants. (The current thinking is to use LIME as the base program and to modify income and underwriting requirements to service these gaps.) Provide quarterly progress reviews.
- 2. **Program Guidelines**: Deliver updated program guidelines, as needed, at the end of each quarter for each product administered by Consultant.
- Process Improvement and QA/QC Procedures: Provide quarterly updates on implementation of QA/QC procedures. This includes loan program process streamlining/ improvements as well as QA/QC on funded energy projects.
- 4. **Monitoring & Verification of Energy & Cost Savings**: Provide quarterly updates on loan portfolio performance and expansion of M&V monitoring from the LIME portfolio to all other products.

## STANDARD PROFESSIONAL SERVICES AGREEMENT

This Standard Professional Services Agreement ("Agreement") is made on July 2, 2018 ("Effective Date"), by and between the CONNECTICUT GREEN BANK ("Green Bank"), a quasi-public agency of the State of Connecticut, having its business address at 845 Brook Street, Rocky Hill, CT 06067, and Inclusive Prosperity Capital, Inc. ("Consultant"), having its business address at 845 Brook Street, Rocky Hill, CT 06067. Green Bank and Consultant together are the Parties and each individually is a Party to this Agreement.

**WHEREAS,** the Green Bank has established itself as an innovator in offering solar financing including Power Purchase Agreements (PPAs) to underserved Commercial, Industrial, and Institutional building owners to maximize projected savings associated with solar installations; and

**WHEREAS**, the Connecticut General Assembly has redirected the funds from the system benefit charge limiting the reach of the Green Bank; and

WHEREAS, the Green Bank seeks to continue to offer solar financing and PPAs to the underserved Commercial, Industrial, and Institutional markets in Connecticut through existing open funds and partnerships as well as future funds; and

**WHEREAS**, the Green Bank has participated in the formation of the Consultant, as a 501(c)(3) nonprofit, and entered into a memorandum of understanding with the Consultant (the MOU) to provide a general framework of support on a transitional basis, as part of its participation in the formation and initial operations of the Consultant; and

**WHEREAS**, the staff of the Consultant are intimately familiar with building funds to support a solar financing or PPA offering in the state of Connecticut and can operate the fund to support this goal;

**NOW, THEREFORE,** Green Bank and Consultant, intending to be legally bound, agree as follows:

- 1. <u>Scope of Services.</u> Consultant shall provide Green Bank with professional consulting services ("Work") as detailed in Consultant's proposal in Attachment A ("Proposal"), which is incorporated into this Agreement. In the event of a conflict between the terms and conditions in this Agreement and the terms and conditions in the Proposal, this Agreement shall control.
- 2. **Period of Performance**. Green Bank agrees to retain Consultant, and Consultant agrees to perform the Work under this Agreement, from the Effective Date through June 30, 2024 ("<u>Period of Performance</u>"), unless earlier terminated in accordance with Section 8 of this Agreement. The Parties can extend the Period of Performance only by a written amendment to this Agreement signed and dated by Green Bank and Consultant.

**Payment.** Green Bank agrees to pay Consultant for the Work performed under the Proposal, as set forth in the Proposal, but in an amount not-to-exceed \$173,123 inclusive of fees and any other expenses for year one only and will be revised annually as part of the annual budget process referenced below.

This payment is comprised of two components: Program Administration and Human Capital. The Program Administration will be paid monthly and represents the costs charged back to the Green Bank for administering the Work that is more effectively and efficiently managed by the Consultant minus any savings achieved through efficiencies and scale. The Green Bank agrees to pay Program Administration expenses as set forth in the budget in Attachment A. Any program expenses where the nonprofit procures goods or services from a third-party to manage the attached Work on behalf of the Green will be charged back to the Green Bank at cost. The Human Capital component will be paid monthly, in advance, and is comprised of the agreed upon staffing levels needed to execute the Work. For the first three years of this PSA, the Green Bank agrees to pay 100% of the cost of the headcount as set forth in Attachment A. For the second three years, the Green Bank agrees to pay 50% of the cost of the headcount. The staffing levels will be reviewed as part of the annual budgeting process and savings due to efficiencies and scale will be passed on to the Green Bank in a manner outlined in a mutually agreed upon Fee Review Process. In this process, the two organizations will review the fees and costs borne on behalf of the Green Bank in comparison to the fees/costs paid by other parties contracting with the Consultant to ensure that the Green Bank is not subsidizing the scopes of work of others.

THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT CAN BE MODIFIED BY THE PARTIES ONLY BY A WRITTEN AMENDMENT SIGNED AND DATED BY GREEN BANK AND CONSULTANT <u>PRIOR</u> TO ANY WORK TO BE PERFORMED BY CONSULTANT WHICH WOULD RESULT IN PAYMENTS IN EXCESS OF THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT.

4. <u>Invoices.</u> Consultant shall submit invoices to Green Bank beginning on July 2, 2018 for amounts due to Consultant pursuant to the Proposal with sufficient detail to demonstrate Consultant's provision of the work under the Proposal. All invoices shall be subject to Green Bank's approval for conformity with the terms and conditions of this Agreement. For approved invoices, Green Bank will pay Consultant within thirty (30) days of receipt by Green Bank of an invoice. Consultant agrees to include the PSA #, which can be found at the top of this Agreement, on all invoices submitted to Green Bank in connection with Work performed under this Agreement. Invoices shall be submitted to:

Connecticut Green Bank 845 Brook Street Rocky Hill, CT 06067 Attn: Accounts Payable Department

UNDER NO CIRCUMSTANCES WILL GREEN BANK ACCEPT INVOICE(S) SUBMITTED BY CONSULTANT WHICH THE TOTAL AMOUNT OF THE INVOICE(S)

# EXCEEDS THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT. THE NOT-TO-EXCEED AMOUNT WILL BE REVISED ON AN ANNUAL BASIS.

- **5.** <u>Subcontracting or Assignment.</u> Consultant shall not subcontract, assign, or delegate any portions of the Work under this Agreement to any other person or entity not identified in Section 3, above, without prior written approval from Green Bank.
- **6.** <u>Independent Contractor.</u> Consultant understands that it is acting as an independent contractor and shall not hold itself out as representing or acting in any manner on behalf of Green Bank except within the Proposal or any other active agreements between Green Bank and Consultant.
- 7. <u>Disclosure of Information.</u> Consultant agrees to disclose to Green Bank any information discovered or derived in the performance of the Work required under this Agreement. Consultant shall not disclose to others any such information, any information received or derived in performance of this Agreement, or any information relating to Green Bank without the prior written permission of Green Bank, unless such information is otherwise available in the public domain.
- **8.** <u>Termination.</u> (a) This Agreement may be terminated by a non-breaching Party upon giving prior written notice to the breaching Party of a breach of this Agreement with an opportunity to cure (which shall be not less than ninety days after formal notice by the non-breaching Party).
- (b) Green Bank may terminate this Agreement upon giving prior written notice to the Consultant of a breach of any grant agreement between Green Bank and Consultant with an opportunity to cure (which shall be not less than ninety days after formal notice by Green Bank).
- (c) In the event of such termination, Green Bank shall be liable only for payment in accordance with the payment provisions of the Agreement for the Work actually performed prior to the date of termination.
- (d) If this Agreement is not renewed at the end of the Period of Performance, or is terminated for any reason, Consultant must provide for a reasonable, mutually agreed period of time after the expiration or termination of this Agreement, all reasonable transition assistance requested by Green Bank, to allow for the expired or terminated portion of the services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to Green Bank or its designees. Such transition assistance will be deemed by the Parties to be governed by the terms and conditions of this Agreement, except for those terms or conditions that do not reasonably apply to such transition assistance. Green Bank will pay Consultant for any resources utilized in performing such transition assistance at the most current rates provided by this Agreement. If there are no established contract rates, then the rate shall be mutually agreed upon. If Green Bank terminates this Agreement for cause, then Green Bank will be entitled to offset the cost of paying Consultant for the additional resources Consultant

utilized in providing transition assistance with any damages Green Bank may have otherwise accrued as a result of said termination.

**9.** <u>Indemnification and Limitation of Liability.</u> Consultant agrees, to the fullest extent permitted by law, to indemnify and hold harmless Green Bank, its officers, directors, and employees against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Consultant's negligent performance of professional services under this Agreement and that of its sub-consultants or anyone for whom the Consultant is legally liable.

Neither Party shall be liable to the other Party for indirect, incidental, punitive, special, or consequential damages arising out of this Agreement, even if the Party has been informed of the possibility of such damages, including but not limited to, loss of profits, loss of revenues, failure to realize expected savings, loss of data, loss of business opportunity, or similar losses of any kind. However, this limitation shall not apply to the indemnification obligations set forth above or to damages of any kind related to criminal, intentional, reckless, or grossly negligent conduct or omissions on the part of either Party.

- **10. Quality of Service.** Consultant shall perform the Work with care, skill, and diligence in accordance with the applicable professional standards currently recognized by its profession, and shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all work product and/or Work furnished under this Agreement. If Consultant fails to meet applicable professional standards, Consultant shall, without additional compensation, correct or revise any errors or deficiencies in any work product and/or Work furnished under this Agreement.
- 11. <u>Severability.</u> In the event that any one or more of the provisions contained in this Agreement shall be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and all other provisions shall remain in full force and effect. If any provision of this Agreement is held to be excessively broad, then that provision shall be reformed and construed by limiting and reducing it to be enforceable to the maximum extent permitted by law.
- **12.** Entire Agreement. This Agreement constitutes the entire agreement of the Parties hereto, and supersedes any previous agreement or understanding. This Agreement with respect to the subject matter hereof may not be modified or extended except in writing executed by the Parties.
- 13. <u>Governing Law.</u> The validity, interpretation, and performance of this Agreement shall be governed by the laws of the State of Connecticut. All disputes which arise in connection with, or in relation to, this Agreement or any claimed breach thereof shall be resolved, if not sooner settled, by litigation only in Connecticut or the Federal Court otherwise having subject matter jurisdiction over the dispute and not elsewhere, subject only to the authority of the Court in question to order changes of venue. To this end, Consultant waives any rights it may have to insist that litigation related to this Agreement

to which Consultant is a party be had in any venue other than the above court, and covenants not to sue Green Bank in court other than the above courts with respect to any dispute related to this Agreement.

14. <u>State Contracting Obligations.</u> Consultant understands and agrees that Green Bank will comply with Conn. Gen. Stat. Sections 4a-60 and 4a-60a. Consultant agrees to comply for the Period of Performance with the state contracting obligations in this Section 14. For purposes of this Section 14, Contractor and Consultant 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. Consultant represents and warrants that, prior to entering into this Agreement, Consultant has provided Green Bank with documentation evidencing Consultant'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 Consultant is attached.

<u>Campaign Contribution Restrictions</u>. For all state contracts, as defined in Conn. Gen. Stat. § 9-612(g)(1)(C), having a value in a calendar year of \$50,000 or more

or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See <a href="http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf">http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf</a>.

Occupational Safety and Health Act Compliance. Consultant 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) 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.

Consulting Agreements. Consultant hereby swears and attests as true to the best knowledge and belief that no consulting agreement, as defined in Conn. Gen. Stat. § 4a-81, has been entered into in connection with this Agreement. Contractor agrees to amend this representation if and when any consulting agreement is entered into during the term of the Contract. See Affidavit Regarding Consulting Agreements, attached.

- **15.** <u>Limitation on Recourse.</u> All liabilities and obligations of Green Bank under this Agreement are subject and limited to the funding available under Connecticut law.
- **16. Non-impairment and Assessment**. As a further inducement for the Consultant to enter into this Agreement, subsection (h) of section 16-245n of the Conn. General Statutes is incorporated into this Agreement.
- **17.** 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, Consultant should specifically and in writing identify to Green Bank the information that Consultant claims to be 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.

Consultant acknowledges that (1) Green Bank has no obligation to notify Consultant of any FOIA request it receives, (2) Green Bank may disclose materials claimed by Consultant 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 Consultant 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) Consultant 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.

**18.** <u>Counterparts</u>. This Agreement may be executed in any number of counterparts (including those delivered by facsimile or other electronic means), and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, shall together constitute but one and the same agreement.

Signature page follows

**IN WITNESS WHEREOF,** the Parties have executed this Agreement as of the day and year first above written.

CON	NECTICUT GREEN BANK	
Ву: _	Bryan T. Garcia, President and CEO	
INCL	USIVE PROSPERITY CAPITAL, INC.	
Ву: _	INSERT NAME INSERT TITLE	



Documentation in the form of an <u>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</u>

#### INSTRUCTIONS:

AFFIDAVIT:

**Notary Public** 

For use by an <u>entity</u> (corporation, limited liability company, or partnership) when entering into any contract type with the State of Connecticut valued at \$50,000 or <u>more</u> 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.

# 

V.030117



Certification to accompany a State contract, having a value of \$50,000 or more, pursuant to Connecticut General Statutes §§ 4-250 and 4-252(b), and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Sign and date in the presence of a Commissioner of the Superior Court or Notary Public. Submit to the awarding State agency at the time of contract execution.

#### **CERTIFICATION:**

I, the undersigned State agency official or State employee, certify that (1) I am authorized to execute the attached contract on behalf of the State agency named below, and (2) the selection of the contractor named below was not the result of collusion, the giving of a gift or the promise of a gift, compensation, fraud or inappropriate influence from any person.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

<u>Inclusive Prosperity Capital, Inc.</u> Contractor Name		
Connecticut Green Bank Awarding State Agency		
State Agency Official or Employee Signa	ature	Date
Bryan T. Garcia Printed Name		President and CEO
Sworn and subscribed before me on t	his day of , 20	
	Commissioner of the Superior C or Notary Public	Court
	My Commission Expires	

V.030117



Written or electronic certification to accompany a State contract with a value of \$50,000 or more, pursuant to C.G.S. §§ 4-250, 4-252(c) and 9-612(f)(2) and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Attach additional pages, if necessary, to provide full disclosure about any lawful campaign contributions made to campaigns of candidates for statewide public office or the General Assembly, as described herein. Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of initial contract execution and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or proposal for a contract, whichever is earlier. Such person shall also submit an accurate, updated certification not later than fourteen days after the twelve-month anniversary of the most recently filed certification or updated certification.

CHECK ONE: only.)	$\boxtimes$	Initial Certification		12 Month Anniversary Update (Multi-year contracts	
omy.)		Updated Certification because of change of information contained in the most recently filed certification or twelve-month anniversary update.			

#### **GIFT CERTIFICATION:**

As used in this certification, the following terms have the meaning set forth below:

- 1) "Contract" means that contract between the State of Connecticut (and/or one or more of it agencies or instrumentalities) and the Contractor, attached hereto, or as otherwise described by the awarding State agency below;
- 2) If this is an Initial Certification, "Execution Date" means the date the Contract is fully executed by, and becomes effective between, the parties; if this is a twelve-month anniversary update, "Execution Date" means the date this certification is signed by the Contractor;
- 3) "Contractor" means the person, firm or corporation named as the contactor below;
- 4) "Applicable Public Official or State Employee" means any public official or state employee described in C.G.S. §4-252(c)(1)(i) or (ii);
- 5) "Gift" has the same meaning given that term in C.G.S. § 4-250(1);
- 6) "Principals or Key Personnel" means and refers to those principals and key personnel of the Contractor, and its or their agents, as described in C.G.S. §§ 4-250(5) and 4-252(c)(1)(B) and (C).

I, the undersigned, am a Principal or Key Personnel of the person, firm or corporation authorized to execute this certification on behalf of the Contractor. I hereby certify that, no gifts were made by (A) such person, firm, corporation, (B) any principals and key personnel of the person firm or corporation who participate substantially in preparing bids, proposals or negotiating state contracts or (C) any agent of such, firm, corporation, or principals or key personnel who participates substantially in preparing bids, proposals or negotiating state contracts, to (i) any public official or state employee of the state agency or quasi-public agency soliciting bids or proposals for state contracts who participates substantially in the preparation of bid solicitations or request for proposals for state contracts or the negotiation or award of state contracts or (ii) any public official or state employee of any other state agency, who has supervisory or appointing authority over such state agency or quasi-public agency.

I further certify that no Principals or Key Personnel know of any action by the Contractor to circumvent (or which would result in the circumvention of) the above certification regarding **Gifts** by providing for any other Principals, Key Personnel, officials, or employees of the Contractor, or its or their agents, to make a **Gift** to any Applicable Public Official or State Employee. I further certify that the Contractor made the bid or proposal for the Contract without fraud or collusion with any person.

#### **CAMPAIGN CONTRIBUTION CERTIFICATION:**

I further certify that, on or after January 1, 2011, neither the Contractor nor any of its principals, as defined in C.G.S. § 9-612(f)(1), has made any **campaign contributions** to, or solicited any contributions on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support, any candidate for <u>statewide public office</u>, in violation of C.G.S. § 9-612(f)(2)(A). I further certify that **all lawful campaign contributions** that have been made on or after January 1, 2011 by the Contractor or any of its principals, as defined in C.G.S. § 9-612(f)(1), to, or solicited on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support any candidates for <u>statewide public office</u> or the <u>General Assembly</u>, are listed below:

# **Lawful Campaign Contributions to Candidates for Statewide Public Office:**

Contribution <u>Date</u>	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>			
Lawful	Campaign Contributions to (	Candidates for the Ger	neral Assembly:				
Contribution <u>Date</u>	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>			
Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.							
Inclusive Prost	perity Capital, Inc.						
Printed Contra	ctor Name		Printed Name of Au	thorized Official			
Signature of	Authorized Official						
Subscribed and acknowledged before me this day of , 20							
	Subscribed and ack	nowieugea berore me	this day of	, 20			
		Commissioner	Commissioner of the Superior Court (or Notary Public)				
		My Commissio	n Expires				



Affidavit to accompany a bid or proposal for the purchase of goods and services with a value of \$50,000 or more in a calendar or fiscal year, pursuant to Connecticut General Statutes §§ 4a-81(a) and 4a-81(b). For sole source or no bid contracts the form is submitted at time of contract execution.

#### **INSTRUCTIONS:**

If the bidder or vendor has entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete all sections of the form. If the bidder or contractor has entered into more than one such consulting agreement, use a separate form for each agreement. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public. If the bidder or contractor has not entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete only the shaded section of the form. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public.

Submit completed form to the awarding State agency with bid or proposal. For a sole source award, submit completed form to the awarding State agency at the time of contract execution.

This affidavit must be amended if there is any change in the information contained in the most recently filed affidavit not later than (i) thirty days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier.

is earlier.			
AFFIDAVIT:	[Number of Affidavits S	worn and Subscribed On This Day:]	· ·
described in Co to execute suc	onnecticut General Statut	I am a principal or key personnel of the biddes § 4a-81(b), or that I am the individual awa ear that I have not entered into any consult sted below:	arded such a contract who is authorized
Consultant's Na	ame and Title	<u>Inclusive Prosperity Cap</u> Name of Firm (if applicable	
July 2, 2018 Start Date			
Description of	Services Provided: Services	e Green Bank's solar financing and PPAs to th	ne underserved Commercial, Industrial,
and Institution	al markets in Connecticut	through existing open funds and partnerships	s as well as future funds.
Is the consulta	nt a former State employ	ee or former public official?	□ NO
If YES:	Name of Former State	Agency Termination Date of	of Employment
Sworn as true	to the best of my knowled	dge and belief, subject to the penalties of false	e statement.
	osperity Capital, Inc. of Bidder or Contractor	Signature of Principal or Key Personnel	Date
			Connecticut Green Bank Warding State Agency
Sworn and su	ıbscribed before me on	this day of, 20_	<u></u> .
		Commissioner of the Superior Court or Notary Public	
		My Commission Expires	

### CERTIFICATION REGARDING INVESTMENTS IN IRAN (Public Act No. 13-162)

For certain contracts or series or combination of contracts with a total value of more than \$500,000 in a calendar or fiscal year **CHECK ONE:** ☐ Initial Certification Amendment or Renewal As used in this affidavit and certification, the following terms have the meaning set forth below: "Entity" means any corporation, general partnership, limited partnership, limited liability partnership, joint venture, nonprofit organization or other business organization whose principal place of business is located outside of the United States, but excludes any United States subsidiary of a foreign corporation. "Large State Contract" means an agreement or a combination or series of agreements between a state a quasi-public agency and a person, firm or corporation, having a total value of more than five hundred thousand dollars in a calendar or fiscal year, for (A) a project for the construction, alteration or repair of any public building or public work, (B) services, including, but not limited to, consulting and professional services, (C) the procurement of supplies, materials or equipment, (D) a lease, or (E) a licensing arrangement. The term "large state contract" does not include a contract between a state agency or a quasi-public agency and a political subdivision of the state. "Quasi-public agency" has the same meanings as provided in Section 1-79 of the Connecticut General Statutes. "Respondent" means the name of the entity which is entering into a large state contract with the Quasi-4. agency. **CHECK APPLICABLE BOX:** Respondent's principal place of business is located within the United States or Respondent is a United States subsidiary of a foreign corporation. Respondents who check this box are **not** required to complete the certification portion of this form below but must still submit this form prior to submitting a bid or proposal for a large state contract. Date: Respondent's principal place of business is located outside of the United States and it is not a United States subsidiary of a foreign corporation. Respondents who check this box are required to complete the certification portion of this form below and must submit the form prior to submitting a bid or proposal for a large state contract. **CERTIFICATION:** Respondent has not made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010. Respondent has either made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010, or Respondent has made such an investment prior to October 1, 2013 and has now increased or renewed such an investment on or after October 1, 2013, or both. Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement. Date: Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_. Commissioner of the Superior Court (or Notary Public)

# Solar Fund Scope

# **Product Descriptions**

The Green Bank has used third-party ownership structures to deploy distributed solar generation in Connecticut both in the in the Commercial sectors. These funds are a unique combination of a tax equity investor and a syndicate of debt providers and the Green Bank to support solar PV installations (i.e., rooftop residential lease financing for solar PV and commercial leases and PPAs for rooftop, carport, and ground mount solar PV).

#### CT Solar Lease 2

The CT Solar Lease 2 fund was the second "solar PV fund" established using a combination of ratepayer funds and private capital. In developing this fund, which was fully utilized in 2017, the Green Bank sought to innovate both in the types of credits that would be underwritten and broaden the sources of capital in the fund. Before these innovations by the Green Bank, low cost financing was scarce to underwrite certain residential solar PV installations as well as installations on a "commercial scale" such as for municipal and school buildings, community oriented not-for-profit structures (all of which can't take advantage of Federal tax incentives due to their tax-exempt status) as well as a vast array of for profit enterprises. These commercial-scale projects were historically the most difficult to finance: too small to attract investment funds, and similarly if aggregated to a size worthy of investment, comprised of off-takers that for the most part are non-investment grade or "unrated" credits that are difficult to underwrite in a manner that would permit deploying solar PV at scale. By prudently assessing these risks and operational issues, the Green Bank could obtain the support of the tax equity investor and Connecticut lenders - in the fund. CT Solar Lease 2 was the first fund to secure solar leases and power purchase agreements using a PACE lien – an innovation that has prompted California to introduce legislation to enable the same security arrangement for its businesses and not for profit organizations. The Green Bank's leadership and innovation was recognized by the Clean Energy States Alliance "State Leadership in Clean Energy" award in 2016, and the Green Bank has continued its work on this front – solely with respect to commercialscale projects – via a CT Solar Lease 3 fund.

The fund Solar Lease 2 (SL2), closed in FY17. Current activity is limited just to asset management.

#### Solar Lease 3 and Onyx Partnership

At present the Green Bank operates a fund, Solar Lease 3 (SL3), that targets underserved commercial, industrial, municipal, and institutional customers that do not have the need for the tax credits associated with solar ownership. SL3 is due to close to new projects in the second half of 2018. It also operates a partnership with Onyx Development Group LLC to further the deployment of power purchase agreements in the commercial sector in Connecticut. This partnership is expected to continue through 30 September 2018.

The Green Bank expects to continue to support the growth of solar through similar vehicles and is engaging with Inclusive Prosperity Capital, Inc (Consultant) to manage the remainder of project acquisition for SL3 and Onyx and the same function and launch of a new vehicle to support these ends.

#### **REC Management**

The Green Bank earns Renewable Energy Certificates (RECs) from a subset of its projects. Based on certain Green Bank transitioning employees experience and familiarity with the market for these RECs, the Consultant will provide guidance to the Green Bank on REC monetization.

# Chart of Product Responsibilities

General Tasks	Connecticut Green Bank Responsibility	Consultant Responsibility
SL2/SL3 Capital Fund Management (US Bank)		
Pipeline & Forecast Reports (Prepare & send)	Х	
Traunching (Prepare documents, collect project & fund documents, & send)	х	
Fair Market Valuation/Cohn Reznick (Send documentation to Cohn Reznick for valuation, manage pricing on the valuations)	х	
Project Origination & Development		
Pricing Requests (Review pricing requests		
from contractors and provide indicative PPA		
prices to contractors)	x	Х
Underwriting (Financial underwriting for		
CPACE secured projects and non-IG projects)	X	Х
Documentation Drafting (Prepare PPA, EPC,		
and ZREC for projects)	X	Х
Legal Review	Χ	
Project Closing & Construction		
Documentation Closing	х	Х
Milestone Payments (Collecting		
documentation and paying EPC payments		
according to project schedule)	X	
Benefit Assessment Lien Filing (CPACE)	X	
Asset Management		
Billing (Creating schedule, invoicing		
customers, annual true-ups)	X	
Monitoring (Creating Locus portal, providing	V	
customer & O&M access, monitoring)  Operations & Maintenance (Managing O&M	X	
provider & issues arising from projects)	X	
ZREC/LREC Process (PURA Filings, NEPOOL		
Registrations, RDAD Filings, PURA Compliance		
Filings)	X	
Reporting (Metrics, Financial, etc.)	X	Х
Insurance Reporting	Х	
Customer Relations (Problem Solving)	Х	Х

## Activities and Services to be performed by Consultant

The Consultant will perform services including but not limited to:

## CT Solar Lease 2/3 Fund

The Consultant will provide advice on existing SL3 pipeline projects with a focus on problem solving and relationship management for non-standard projects, legacy issues and will assist in underwriting new projects. The Consultant will provide advice and context with regard to existing projects in both funds in terms of operating problems that arise and asset management.

#### Onyx

The Consultant will provide input and advice to facilitate the wind-down of the Onyx relationship specifically with regard to handing over existing pipeline projects to Onyx, determining/approving the final sourcing fee, and any additional ad hoc advice problem solving.

## **New Solar Fund**

The Consultant will lead in the fundraising efforts and transaction negotiation, with support from Green Bank staff for structuring and implementing a new commercial fund to achieve similar goals as the previous fund that can operate in markets including but not limited to Connecticut. The Green Bank is contracting and supporting only the Connecticut portion of this vehicle. The Green Bank, may assist and support the establishment the new Special Purpose Vehicle (SPV) as well as legal review of documentation.

As a part of the new Fund, the Consultant will be responsible for sourcing all investment into this Fund recognizing the Green Bank's right of first refusal for investing in the fund. The Consultant will be responsible for the operation and asset management functions of the new Fund however the Green Bank may play a role in supporting this depending on the structure, requirements, and resources. The Consultant will, as needed or requested by the Green Bank, provide advice with regard to, but not limited to, the underwriting of specific projects and the engagement and management of new and existing contractors.

The Parties recognize that this Fund is expected to operate not just in Connecticut. The Consultant is permitted to work on any aspects related to the expansion the fund outside of Connecticut including but not limited to:

- Sourcing and structuring additional sources of financing, if necessary (i.e. geography-specific)
- Establishing and managing relationships with new (non-Connecticut) contractors
- Modifying documentation / process to take into account any non-Connecticut state requirements

## **Renewable Energy Credit Market Guidance**

The Consultant shall provide advice as requested by the Green Bank in terms of current market activity and pricing for Renewable Energy Credits (RECs). The Consultant, in conjunction with the Green Bank, may identify potential counterparties and negotiate transactions where the Green Bank sells its RECs to a third party.

## Activities and Services to be performed by Connecticut Green Bank

## New Commercial Solar Fund (Consultant as managing member):

The Green Bank will continue its project origination and development tasks (per the Project Flow Chart referenced above) for the benefit of the new solar Fund falling under the purview of the Consultant.

- The Green Bank may provide initial accounting support to set up the SPV, SPV reporting, management of funds related to each tranche, fund accounting as per the MOU.
- The Green Bank may provide the legal support to set up the SPV, review fund documents, review Connecticut PPA project-level documents, and CPACE, ZREC filings. This arrangement will be finalized based on the scope of the Solar Fund.
- The Green Bank's Finance team will provide project management for Connecticut PPA projects (per Product Flow Chart above) including: pricing, underwriting, documentation drafting, doc negotiation, project due diligence (EPC requirements etc.), O&M management, asset management, and true-ups.
- The Green Bank may manage milestone payments, and billing using financial resources provided by Consultant and the Fund.
- In collaboration with the Consultant, the Green Bank's Marketing Team will support the marketing of the new Fund including but not limited to:
  - Collateral development and support Creation and maintenance/updating of print materials describing and selling the Green Bank Solar PPA
  - Website support Creation and maintenance/updating of Green Bank Solar PPA pages on the CT Green Bank (ctgreenbank.com) and C-PACE (cpace.com) webpages
- The Green Bank Finance team will maintain project records in accordance with existing processes in Salesforce.

## **Renewable Energy Credit Market Guidance**

 The Green Bank will determine the quantity of RECs produced and work in conjunction with the Consultant to determine the best counterparty to whom to sell the RECs. The transaction will be executed by the Green Bank.

## Staff Allocation – Green Bank

- Laura Fidao (Origination/Project Development/Diligence/Asset Management)
- Louise Venables (Origination/Project Development/Diligence/Asset Management)
- Fiona Stewart (Origination/Project Development/Diligence/Asset Management/REC Monetization)
- Mike Yu (legacy investment support SL2/SL3 focus)
- Catherine Duncan (Construction Milestones/ ZREC Process)
- Natalia Soares (Billing)
- George Bellas (Accounting/Tranching/Audit)
- Alex Kovtunenko/Brian Farnen (Legal)
- Rob Schmitt (Marketing)

## Staff Allocation – Consultant

• Ben Healey

## Budget

The Green Bank will pay the Consultant monthly, with an annual not to exceed amount of \$173,125, as it relates to year one only, based on the program administration and human capital components as described in the PSA.

Table 1

	Con	nmercial Solar
<b>Human Capital Fee Component</b>	\$	170,523.08
<b>Administration Fee Component</b>	\$	2,599.98
NTE (1 Year)	\$	173,125.00
6 Year projected assuming no		
increase in Program Admin		
costs	\$	782,953.74

The budget and fees (based on headcount and administration) will be revisited annually by the two organizations to determine the cost of operating the program to achieve targets as outlined in the PSA.

As a part of this review, the Consultant will review their financials with the Green Bank annually to determine if there are operating cost savings resulting from a growth in scale. In the event of any savings are found as it relates to both the human capital fee and the program administration fee components, these will be passed on to the Green Bank in the form of a fee reduction as outlined in a mutually agreed upon Fee Review Process.

The majority of program administrative expenses for the Program will be contracted through the Green Bank. For program administrative expenses not contracted directly through the Green Bank for the Program, the Green Bank will fund the remaining portion of program administrative expenses through this PSA. After year one and as part of the annual review, the Parties will review the program administrative expenses to determine if such expenses should continue to be funded directly through the Green Bank or funded through the PSA to achieve operating efficiencies and operating cost savings resulting from a growth in scale.

The combined budget for the Solar Fund Management across both organizations for FY19 is as follows:

Program Code - Program Name	Al	Solar Fur	nd	
	Account Number	FY19 Budget	FY19 Budget (NP)	FY19 Budget Consolidat ed
Administrative Expenses				
Compensation and benefits				
- Salaries & Wages	Salaries	460,041	121,802	581,843
- Employee Benefits	Benefits	377,234	48,721	425,954
- Temporary employees	677300	-	-	-
Program development and adminis	<u>tration</u>			
- Program development costs	680030	-	-	-
- Program administration costs	680040	-	-	-
- Technical Administrator	680020	-	-	-
- Technology support costs	680080	-	-	-
- Municipal fees	680010	-	-	-
- Project Inspection fees	680070	-	-	-
- Third party loan servicing fees	680100	-	-	-
EM&V	683100	-	-	-
Marketing expenses	MKTG	4,000	-	4,000
Legal expenses (BF to budget)	682200	8,000	-	8,000
Other expenses				
- Consulting/Advisory	681100	-	-	-
- Subscriptions	689070	-	-	-
- Training/education	689075	-	765	765
- Travel, meeting& related expenses	689300	-	1,835	1,835
Overhead Costs Allocated to Progr	am:			
Rent and location related expenses				
- Rent/Utilities/Maintenance	687050	33,282	-	33,282
- Telephone/Communications	689020	11,067	-	11,067
- Depreciation FF&E	Depr	7,478	-	7,478
Office, computer & other expenses				
- Office expense	Office	11,094	-	11,094
- IT operations	IT	37,315	-	37,315
Total administrative expenses		949,511	173,123	1,122,634

The Green Bank estimates it will spend \$24,000 in program administration on the Solar PPA Fund over the next 6 years either on its own or through the Nonprofit.

## Technology

For Fiscal year 2019, the Solar Fund will leverage the same technology it presently does including Salesforce, Locus, Green Bank Data Warehouses and Pardot. All will continue to be used in a similar manner in which

they are presently used. Any change must be approved by the Green Bank Director of Operations before being implemented.

The Green Bank and the Consultant will continue to build and issue the existing reports, dashboards, and asset management functionality and the Consultant will facilitate the Green Bank's efforts to automate these.

## Other Resources

The Green Bank will provide upon request, consistent with any applicable licensing requirements, access to the Sustainable Energy Advantage's REMO market analyses.

## Targets and Milestones

Each year the Green Bank and the Consultant will meet to discuss and set targets and milestones.

## **Targets**

In FY 2019, the Consultant shall work with the Green Bank to deliver 25 PPA/Leases in SL3, Onyx, and the new Solar Fund for \$14,062,500 and an installed capacity of 6.3 MW.

The Consultant will meet with the Green Bank staff at least quarterly to review progress to these targets.

#### **Milestones**

- The aforementioned new Solar Fund will be launched by the Consultant by December 31, 2018.
- The Consultant will provide the Green Bank an opportunity to invest in the new Solar Fund by August 1, 2018.
- The Consultant and the Green Bank will meet quarterly to discuss any inventory of Green Bank RECs and their sale.

## STANDARD PROFESSIONAL SERVICES AGREEMENT

This Standard Professional Services Agreement ("Agreement") is made on July 2, 2018 ("Effective Date"), by and between the CONNECTICUT GREEN BANK ("Green Bank"), a quasi-public agency of the State of Connecticut, having its business address at 845 Brook Street, Rocky Hill, CT 06067, and Inclusive Prosperity Capital, Inc. ("Consultant"), having its business address at 845 Brook Street, Rocky Hill, CT 06067. Green Bank and Consultant together are the Parties and each individually is a Party to this Agreement.

WHEREAS, the Green Bank makes both programmatic and extra-programmatic loans to specific projects and companies to further its mission including those specifically that allow the Green Bank to reduce the energy burden of Low-to-Moderate Income ("LMI") Communities in the state of Connecticut; and

**WHEREAS**, the Connecticut General Assembly has redirected the funds from the system benefit charge limiting the reach of the Green Bank; and

**WHEREAS**, the Green Bank seeks to continue to reduce the energy burden of the most vulnerable in the state; and

**WHEREAS**, the Green Bank has participated in the formation of the Consultant, as a 501(c)(3) nonprofit, and entered into a memorandum of understanding with the Consultant (the MOU) to provide a general framework of support on a transitional basis, as part of its participation in the formation and initial operations of the Consultant; and

**WHEREAS**, the staff of the Consultant are intimately familiar with the many of the existing investments of the Green Bank especially the Green Bank's initiatives in the LMI market segment;

**NOW, THEREFORE,** Green Bank and Consultant, intending to be legally bound, agree as follows:

- 1. <u>Scope of Services.</u> Consultant shall provide Green Bank with professional consulting services ("Work") as detailed in Consultant's proposal in Attachment A, which is incorporated into this Agreement. In the event of a conflict between the terms and conditions in this Agreement and the terms and conditions in the Proposal, this Agreement shall control.
- **2.** Period of Performance. Green Bank agrees to retain Consultant, and Consultant agrees to perform the Work under this Agreement, from the Effective Date through June 30, 2024 ("Period of Performance"), unless earlier terminated in accordance with Section 8 of this Agreement. The Parties can extend the Period of Performance only by a written amendment to this Agreement signed and dated by Green Bank and Consultant.

**3.** Payment. Green Bank agrees to pay Consultant for the Work performed under the Proposal, as set forth in the Proposal, but in an amount not-to-exceed \$292,160 inclusive of fees and any other expenses for year one only and will be revised annually as part of the annual budget process referenced below.

This payment is comprised of two components: Program Administration and Human Capital. The Program Administration will be paid monthly and represents the costs charged back to the Green Bank for administering the Work that is more effectively and efficiently managed by the Consultant minus any savings achieved through efficiencies and scale. The Green Bank agrees to pay Program Administration expenses as set forth in the budget in Attachment A. Any program expenses where the nonprofit procures goods or services from a third-party to manage the attached Work on behalf of the Green will be charged back to the Green Bank at cost. The Human Capital component will be paid monthly, in advance, and is comprised of the agreed upon staffing levels needed to execute the Work. For the first three years of this PSA, the Green Bank agrees to pay 100% of the cost of the headcount as set forth in Attachment A. For the second three years, the Green Bank agrees to pay 50% of the cost of the headcount. The staffing levels will be reviewed as part of the annual budgeting process and savings due to efficiencies and scale will be passed on to the Green Bank in a manner outlined in a mutually agreed upon Fee Review Process. In this process, the two organizations will review the fees and costs borne on behalf of the Green Bank in comparison to the fees/costs paid by other parties contracting with the Consultant to ensure that the Green Bank is not subsidizing the scopes of work of others.

THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT CAN BE MODIFIED BY THE PARTIES ONLY BY A WRITTEN AMENDMENT SIGNED AND DATED BY GREEN BANK AND CONSULTANT <u>PRIOR</u> TO ANY WORK TO BE PERFORMED BY CONSULTANT WHICH WOULD RESULT IN PAYMENTS IN EXCESS OF THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT.

4. <u>Invoices.</u> Consultant shall submit invoices to Green Bank beginning on July 2, 2018 for amounts due to Consultant pursuant to the Proposal with sufficient detail to demonstrate Consultant's provision of the work under the Proposal. All invoices shall be subject to Green Bank's approval for conformity with the terms and conditions of this Agreement. For approved invoices, Green Bank will pay Consultant within thirty (30) days of receipt by Green Bank of an invoice. Consultant agrees to include the PSA #, which can be found at the top of this Agreement, on all invoices submitted to Green Bank in connection with Work performed under this Agreement. Invoices shall be submitted to:

Connecticut Green Bank 845 Brook Street Rocky Hill, CT 06067

Attn: Accounts Payable Department

UNDER NO CIRCUMSTANCES WILL GREEN BANK ACCEPT INVOICE(S) SUBMITTED BY CONSULTANT WHICH THE TOTAL AMOUNT OF THE INVOICE(S) EXCEEDS THE NOT-TO-EXCEED AMOUNT OF THIS AGREEMENT. THE NOT-TO-EXCEED AMOUNT WILL BE REVISED ON AN ANNUAL BASIS.

- **5.** <u>Subcontracting or Assignment.</u> Consultant shall not subcontract, assign, or delegate any portions of the Work under this Agreement to any other person or entity not identified in Section 3, above, without prior written approval from Green Bank.
- **6.** <u>Independent Contractor.</u> Consultant understands that it is acting as an independent contractor and shall not hold itself out as representing or acting in any manner on behalf of Green Bank except within the Proposal or any other active agreements between Green Bank and Consultant.
- 7. <u>Disclosure of Information.</u> Consultant agrees to disclose to Green Bank any information discovered or derived in the performance of the Work required under this Agreement. Consultant shall not disclose to others any such information, any information received or derived in performance of this Agreement, or any information relating to Green Bank without the prior written permission of Green Bank, unless such information is otherwise available in the public domain.
- **8.** <u>Termination.</u> (a) This Agreement may be terminated by a non-breaching Party upon giving prior written notice to the breaching Party of a breach of this Agreement with an opportunity to cure (which shall be not less than ninety days after formal notice by the non-breaching Party).
- (b) Green Bank may terminate this Agreement upon giving prior written notice to the Consulant of a breach of any grant agreement between Green Bank and Consultant with an opportunity to cure (which shall be not less than ninety days after formal notice by Green Bank).
- (c) In the event of such termination, Green Bank shall be liable only for payment in accordance with the payment provisions of the Agreement for the Work actually performed prior to the date of termination.
- (d) If this Agreement is not renewed at the end of the Period of Performance, or is terminated for any reason, Consultant must provide for a reasonable, mutually agreed period of time after the expiration or termination of this Agreement, all reasonable transition assistance requested by Green Bank, to allow for the expired or terminated portion of the services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such services to Green Bank or its designees. Such transition assistance will be deemed by the Parties to be governed by the terms and conditions of this Agreement, except for those terms or conditions that do not reasonably apply to such transition assistance. Green Bank will pay Consultant for any resources utilized in performing such transition assistance at the most current rates provided by this Agreement. If there are no established contract rates, then the rate shall be mutually

agreed upon. If Green Bank terminates this Agreement for cause, then Green Bank will be entitled to offset the cost of paying Consultant for the additional resources Consultant utilized in providing transition assistance with any damages Green Bank may have otherwise accrued as a result of said termination.

**9.** Indemnification and Limitation of Liability. Consultant agrees, to the fullest extent permitted by law, to indemnify and hold harmless Green Bank, its officers, directors, and employees against all damages, liabilities, or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the Consultant's negligent performance of professional services under this Agreement and that of its sub-consultants or anyone for whom the Consultant is legally liable.

Neither Party shall be liable to the other Party for indirect, incidental, punitive, special, or consequential damages arising out of this Agreement, even if the Party has been informed of the possibility of such damages, including but not limited to, loss of profits, loss of revenues, failure to realize expected savings, loss of data, loss of business opportunity, or similar losses of any kind. However, this limitation shall not apply to the indemnification obligations set forth above or to damages of any kind related to criminal, intentional, reckless, or grossly negligent conduct or omissions on the part of either Party.

- **10. Quality of Service.** Consultant shall perform the Work with care, skill, and diligence in accordance with the applicable professional standards currently recognized by its profession, and shall be responsible for the professional quality, technical accuracy, completeness, and coordination of all work product and/or Work furnished under this Agreement. If Consultant fails to meet applicable professional standards, Consultant shall, without additional compensation, correct or revise any errors or deficiencies in any work product and/or Work furnished under this Agreement.
- 11. <u>Severability.</u> In the event that any one or more of the provisions contained in this Agreement shall be held to be invalid, illegal, or unenforceable in any respect, then such invalidity, illegality, or unenforceability shall not affect any other provisions of this Agreement, and all other provisions shall remain in full force and effect. If any provision of this Agreement is held to be excessively broad, then that provision shall be reformed and construed by limiting and reducing it to be enforceable to the maximum extent permitted by law.
- **12. Entire Agreement.** This Agreement constitutes the entire agreement of the Parties hereto, and supersedes any previous agreement or understanding. This Agreement with respect to the subject matter hereof may not be modified or extended except in writing executed by the Parties.
- 13. <u>Governing Law.</u> The validity, interpretation, and performance of this Agreement shall be governed by the laws of the State of Connecticut. All disputes which arise in connection with, or in relation to, this Agreement or any claimed breach thereof shall be resolved, if not sooner settled, by litigation only in Connecticut or the Federal Court otherwise having subject matter jurisdiction over the dispute and not elsewhere, subject

only to the authority of the Court in question to order changes of venue. To this end, Consultant waives any rights it may have to insist that litigation related to this Agreement to which Consultant is a party be had in any venue other than the above court, and covenants not to sue Green Bank in court other than the above courts with respect to any dispute related to this Agreement.

14. <u>State Contracting Obligations.</u> Consultant understands and agrees that Green Bank will comply with Conn. Gen. Stat. Sections 4a-60 and 4a-60a. Consultant agrees to comply for the Period of Performance with the state contracting obligations in this Section 14. For purposes of this Section 14, Contractor and Consultant 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 actionequal 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. Consultant represents and warrants that, prior to entering into this Agreement, Consultant has provided Green Bank with documentation evidencing Consultant'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 Consultant is attached.

Campaign Contribution Restrictions. For all state contracts, as defined in Conn. Gen. Stat. § 9-612(g)(1)(C), having a value in a calendar year of \$50,000 or more or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Elections Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See <a href="http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf">http://www.ct.gov/dpw/lib/dpw/Form11SEEC.pdf</a>.

Occupational Safety and Health Act Compliance. Consultant 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) 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.

Consulting Agreements. Consultant hereby swears and attests as true to the best knowledge and belief that no consulting agreement, as defined in Conn. Gen. Stat. § 4a-81, has been entered into in connection with this Agreement. Contractor agrees to amend this representation if and when any consulting agreement is entered into during the term of the Contract. See Affidavit Regarding Consulting Agreements, attached.

- **15.** <u>Limitation on Recourse.</u> All liabilities and obligations of Green Bank under this Agreement are subject and limited to the funding available under Connecticut law.
- **16. Non-impairment and Assessment**. As a further inducement for the Consultant to enter into this Agreement, subsection (h) of section 16-245n of the Conn. General Statutes is incorporated into this Agreement.
- 17. 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, Consultant should specifically and in writing identify to Green Bank the information that Consultant claims to be 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.

Consultant acknowledges that (1) Green Bank has no obligation to notify Consultant of any FOIA request it receives, (2) Green Bank may disclose materials claimed by Consultant 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 Consultant 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) Consultant 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.

**18.** <u>Counterparts</u>. This Agreement may be executed in any number of counterparts (including those delivered by facsimile or other electronic means), and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, shall together constitute but one and the same agreement.

[Signature page follows]

**IN WITNESS WHEREOF,** the Parties have executed this Agreement as of the day and year first above written.

By:	
Bryan T. Garcia, President and CEO	
INCLUSIVE PROSPERITY CAPITAL, INC.	
By:INSERT NAME INSERT TITLE	



# STATE OF CONNECTICUT NONDISCRIMINATION CERTIFICATION — <u>Affidavit</u> <u>By Entity</u>

For Contracts Valued at \$50,000 or More

Documentation in the form of an <u>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</u>

#### INSTRUCTIONS:

AFFIDAVIT:

**Notary Public** 

For use by an <u>entity</u> (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.

# 

V.030117



Certification to accompany a State contract, having a value of \$50,000 or more, pursuant to Connecticut General Statutes §§ 4-250 and 4-252(b), and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Sign and date in the presence of a Commissioner of the Superior Court or Notary Public. Submit to the awarding State agency at the time of contract execution.

## **CERTIFICATION:**

I, the undersigned State agency official or State employee, certify that (1) I am authorized to execute the attached contract on behalf of the State agency named below, and (2) the selection of the contractor named below was not the result of collusion, the giving of a gift or the promise of a gift, compensation, fraud or inappropriate influence from any person.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

<u>Inclusive Prosperity Capital, Inc.</u> Contractor Name		
Connecticut Green Bank Awarding State Agency	<del></del> ,	
, warding state rigerie;		
State Agency Official or Employee Signa	ature	Date
Bryan T. Garcia		President and CEO
Printed Name		Title
Sworn and subscribed before me on the	nis day of , 20	
	Commissioner of the Superior C	Court
	or Notary Public	
	My Commission Expires	

V.030117



Written or electronic certification to accompany a State contract with a value of \$50,000 or more, pursuant to C.G.S. §§ 4-250, 4-252(c) and 9-612(f)(2) and Governor Dannel P. Malloy's Executive Order 49.

#### **INSTRUCTIONS:**

Complete all sections of the form. Attach additional pages, if necessary, to provide full disclosure about any lawful campaign contributions made to campaigns of candidates for statewide public office or the General Assembly, as described herein. Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of initial contract execution and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or proposal for a contract, whichever is earlier. Such person shall also submit an accurate, updated certification not later than fourteen days after the twelve-month anniversary of the most recently filed certification or updated certification.

CHECK ONE: only.)	$\boxtimes$	Initial Certification	12 Month Anniversary Update (Multi-year contracts
		•	f change of information contained in the most elve-month anniversary update.

## **GIFT CERTIFICATION:**

As used in this certification, the following terms have the meaning set forth below:

- 1) "Contract" means that contract between the State of Connecticut (and/or one or more of it agencies or instrumentalities) and the Contractor, attached hereto, or as otherwise described by the awarding State agency below;
- 2) If this is an Initial Certification, "Execution Date" means the date the Contract is fully executed by, and becomes effective between, the parties; if this is a twelve-month anniversary update, "Execution Date" means the date this certification is signed by the Contractor;
- 3) "Contractor" means the person, firm or corporation named as the contactor below;
- 4) "Applicable Public Official or State Employee" means any public official or state employee described in C.G.S. §4-252(c)(1)(i) or (ii);
- 5) "Gift" has the same meaning given that term in C.G.S. § 4-250(1);
- 6) "Principals or Key Personnel" means and refers to those principals and key personnel of the Contractor, and its or their agents, as described in C.G.S. §§ 4-250(5) and 4-252(c)(1)(B) and (C).

I, the undersigned, am a Principal or Key Personnel of the person, firm or corporation authorized to execute this certification on behalf of the Contractor. I hereby certify that, no gifts were made by (A) such person, firm, corporation, (B) any principals and key personnel of the person firm or corporation who participate substantially in preparing bids, proposals or negotiating state contracts or (C) any agent of such, firm, corporation, or principals or key personnel who participates substantially in preparing bids, proposals or negotiating state contracts, to (i) any public official or state employee of the state agency or quasi-public agency soliciting bids or proposals for state contracts who participates substantially in the preparation of bid solicitations or request for proposals for state contracts or the negotiation or award of state contracts or (ii) any public official or state employee of any other state agency, who has supervisory or appointing authority over such state agency or quasi-public agency.

I further certify that no Principals or Key Personnel know of any action by the Contractor to circumvent (or which would result in the circumvention of) the above certification regarding **Gifts** by providing for any other Principals, Key Personnel, officials, or employees of the Contractor, or its or their agents, to make a **Gift** to any Applicable Public Official or State Employee. I further certify that the Contractor made the bid or proposal for the Contract without fraud or collusion with any person.

## **CAMPAIGN CONTRIBUTION CERTIFICATION:**

I further certify that, on or after January 1, 2011, neither the Contractor nor any of its principals, as defined in C.G.S. § 9-612(f)(1), has made any **campaign contributions** to, or solicited any contributions on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support, any candidate for <u>statewide public office</u>, in violation of C.G.S. § 9-612(f)(2)(A). I further certify that **all lawful campaign contributions** that have been made on or after January 1, 2011 by the Contractor or any of its principals, as defined in C.G.S. § 9-612(f)(1), to, or solicited on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support any candidates for <u>statewide public office</u> or the <u>General Assembly</u>, are listed below:

## **Lawful Campaign Contributions to Candidates for Statewide Public Office:**

Contribution <u>Date</u>	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>		
Lawful (	Campaign Contributions to C	Candidates for the Ger	neral Assembly:			
Contribution <u>Date</u>	Name of Contributor	<u>Recipient</u>	<u>Value</u>	<u>Description</u>		
Sworn as	Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.					
Printed Contra	ctor Name		Printed Name of Aut	thorized Official		
Signature of	Authorized Official					
	Subscribed and ack	nowledged before me	this day of	, 20		
		Commissioner	of the Superior Cou	rt (or Notary Public)		
		My Commissio	n Fynires			



Affidavit to accompany a bid or proposal for the purchase of goods and services with a value of \$50,000 or more in a calendar or fiscal year, pursuant to Connecticut General Statutes §§ 4a-81(a) and 4a-81(b). For sole source or no bid contracts the form is submitted at time of contract execution.

#### **INSTRUCTIONS:**

If the bidder or vendor has entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete all sections of the form. If the bidder or contractor has entered into more than one such consulting agreement, use a separate form for each agreement. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public. If the bidder or contractor has not entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete only the shaded section of the form. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public.

Submit completed form to the awarding State agency with bid or proposal. For a sole source award, submit completed form to the awarding State agency at the time of contract execution.

This affidavit must be amended if there is any change in the information contained in the most recently filed affidavit not later than (i) thirty days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier

is earlier.			
AFFIDAVIT:	[Number of Affidavits S	worn and Subscribed On This Day:	_]
described in Co to execute sucl	nnecticut General Statut	es $\S$ 4a-81(b), or that I am the individua ear that I have not entered into any co	bidder or contractor awarded a contract, as I awarded such a contract who is authorized nsulting agreement in connection with such
		Inclusive Prospe	rity Capital, Inc.
Consultant's Na	ime and Title	Name of Firm (if applic	cable)
	End Da  Services Provided: <u>Services</u>	ce Green Bank's programmatic and extra-	programmatic loans to specific projects and
			Bank to reduce the energy burden of Low-
to-Moderate Inc	come ( LMI ) Communici	es in the state of Connecticut.	
Is the consultar	nt a former State employ	ee or former public official?	ES NO
If YES:	Name of Former State	Agency Termination D	ate of Employment
Sworn as true t	to the best of my knowled	dge and belief, subject to the penalties of	false statement.
	osperity Capital, Inc	Cianatura of Drivainal as Kay Dayson	
Printed Name o	f Bidder or Contractor	Signature of Principal or Key Person	nnel Date
		Printed Name (of above)	Connecticut Green Bank Awarding State Agency
		Timed Name (or above)	Awarding State Agency
Sworn and su	bscribed before me on	this day of,	20
		Commissioner of the Superior Court or Notary Public	t .
		My Commission Expires	_

## CERTIFICATION REGARDING INVESTMENTS IN IRAN (Public Act No. 13-162)

For certain contracts or series or combination of contracts with a total value of more than \$500,000 in a calendar or fiscal year **CHECK ONE:** ☐ Initial Certification Amendment or Renewal As used in this affidavit and certification, the following terms have the meaning set forth below: "Entity" means any corporation, general partnership, limited partnership, limited liability partnership, joint venture, nonprofit organization or other business organization whose principal place of business is located outside of the United States, but excludes any United States subsidiary of a foreign corporation. "Large State Contract" means an agreement or a combination or series of agreements between a state a quasi-public agency and a person, firm or corporation, having a total value of more than five hundred thousand dollars in a calendar or fiscal year, for (A) a project for the construction, alteration or repair of any public building or public work, (B) services, including, but not limited to, consulting and professional services, (C) the procurement of supplies, materials or equipment, (D) a lease, or (E) a licensing arrangement. The term "large state contract" does not include a contract between a state agency or a quasi-public agency and a political subdivision of the state. "Quasi-public agency" has the same meanings as provided in Section 1-79 of the Connecticut General Statutes. "Respondent" means the name of the entity which is entering into a large state contract with the Quasi-4. agency. **CHECK APPLICABLE BOX:** Respondent's principal place of business is located within the United States or Respondent is a United States subsidiary of a foreign corporation. Respondents who check this box are **not** required to complete the certification portion of this form below but must still submit this form prior to submitting a bid or proposal for a large state contract. Date: Respondent's principal place of business is located outside of the United States and it is not a United States subsidiary of a foreign corporation. Respondents who check this box are required to complete the certification portion of this form below and must submit the form prior to submitting a bid or proposal for a large state contract. **CERTIFICATION:** Respondent has not made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010. Respondent has either made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010, or Respondent has made such an investment prior to October 1, 2013 and has now increased or renewed such an investment on or after October 1, 2013, or both. Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement. Date: Subscribed and sworn to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_. Commissioner of the Superior Court (or Notary Public)

# Investment Management Scope

## **Product Description**

In support of its mission, both as a part of, and separate from, its programs, the Connecticut Green Bank ("Green Bank") finances individual organizations and projects. It also supports market convening initiatives that further support these investments. Inclusive Prosperity Capital, Inc. ("the Consultant") will provide ongoing management services with regard to specific investments made by the Green Bank and support future investments made by the Green Bank. The management of the PosiGen Solar for All Partnership in Connecticut will be a primary investment for which the Green Bank is engaging the consultant at this point.

## PosiGen Solar for All Partnership

The Connecticut "Solar for All" program is a public-private partnership that facilitates the installation of solar PV and energy efficiency measures on low-to-moderate income (LMI) residences through a solar lease and energy savings agreement (ESA) financing model. PosiGen, the project developer and owner, offers a low-cost 20-year solar PV lease with an optional energy savings agreement that provides up to \$2,400 of energy efficiency improvements. The solar lease offered by PosiGen is a non-escalating product that requires no upfront payment by the customer, and the ESA (if applicable) is repaid by the customer via a \$10/month payment over a 10-year term. PosiGen uses an alternative underwriting approach to qualify customers for the solar PV lease and ESA rather than a traditional credit score measure approach. This alternative underwriting technique examines factors such as bill payment history, as well as bad debt and bank databases, and opens the market to customers who may not have otherwise qualified for a solar PV product, or were too intimidated to apply for a solar PV product that relies on traditional credit scores.

PosiGen's solar PV lease is supported in Connecticut by an elevated LMI performance-based incentive (PBI) via the Green Bank's Residential Solar Investment Program. This elevated incentive is applied to projects on residences where the homeowner earns less than 100% of the Area Median Income for the geography in which they live. The elevated incentive allows PosiGen to offer a lower lease price to customers than would be possible otherwise at current market conditions.

In addition to administering the LMI PBI the Green Bank supplied an initial debt facility of \$5 million to PosiGen's Connecticut lease funds, which finances the underlying solar PV and energy efficiency measures. By means of subordination and financial structuring, the Green Bank debt facility has since attracted an additional \$8.5 million in senior private debt in the Connecticut lease funds provided by Enhanced Capital and Stonehenge Capital, totaling upwards of \$40-50 million in lease financing for solar and energy efficiency measures targeting LMI homeowners.

Lastly, the Green Bank provides marketing and outreach support to PosiGen's community campaigns and accelerate the adoption of clean energy solutions that help low-to-moderate income households reduce their energy burdens.

## **Green and Healthy Homes Initiative**

In general support of the Low-to-Moderate Income market, the Green Bank has acted as the convener of the Green and Health Homes Initiative in Connecticut. The Consultant will represent the Green Bank

with regards to this initiative and will manage the initiative on the Green Bank's behalf. In June 2017, the Green Bank and its project partners launched 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. Various stakeholder convenings were held including a convening with over 20 organizations from the health, housing and energy sector as well as representatives from the health systems industry.

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 because 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.

The Phase I Project Pre-Feasibility Research is complete. Phase II will launch in 2018 and focus on a Pilot Project Design and Implementation Strategy, which will establish a Connecticut Green & Healthy Homes statewide, integrated health, energy and housing services delivery model.

## Functional Responsibility

## PosiGen Solar for All Partnership

	Consultant Responsibility	Connecticut Green Bank Responsibility
Investment Management		
Monitoring fund collateral	~	~
Monitoring capital repayment	~	~

Monitoring compliance with an edit correspondent and all		
Monitoring compliance with credit agreement and all related project documents (e.g. inter-creditor	~	<b>~</b>
agreements with 3 <sup>rd</sup> party capital counterparties)		
Ad-hoc financial advisory services to the Green Bank,	<b>~</b>	
PosiGen, and other capital providers		
Production-Based Incentive Management		
PBI application review and processing		<b>✓</b>
<ul> <li>Verifying proper documentation is submitted to receive an RSIP incentive</li> </ul>		
<ul> <li>Verifying proper documentation is submitted for</li> </ul>		
projects that receive the LMI PBI		
Review of project completion paperwork		<b>✓</b>
Oversight of contractors – adherence to compliance standards (inspections), and RSIP terms and		<b>~</b>
conditions		
Monitoring System Production for the purposes of:	<b>✓</b>	<b>✓</b>
- Processing PBI payments to PosiGen	•	•
- Creating SHRECs		
	Consultant	Connecticut Green
	Responsibility	Bank Responsibility
Partnership Management		, , , , , , , , , , , , , , , , , , , ,
PosiGen deployment strategy	~	<b>✓</b>
PosiGen product pricing and offering review and	<b>✓</b>	~
approval		
Review of Incentive Levels for RSIP LMI	<b>~</b>	
Setting of Incentive Levels for RSIP LMI		<b>~</b>
Marketing		
Provide consultation and support on marketing	<b>✓</b>	~
campaigns, community outreach strategies and		
customer acquisition techniques Ongoing contractor engagement, including regular		<b>✓</b>
communications and trouble-shooting	•	•
Approve marketing collateral and co-branded	~	~
marketing pieces		
Staffing events, workshops, meetings, etc.		<b>~</b>
Administrative		
Managing online administrative platform for		<b>✓</b>
performance-based incentives		
Managing pipeline reports, metrics received and other	<b>~</b>	<b>✓</b>
data requests/requirements  Performing bi-annual document audits for projects		
	<b>V</b>	•
receiving the LMI PBI		
receiving the LMI PBI Management Reporting	~	~

## **Green and Healthy Homes Initiative**

	Consultant Responsibility	Connecticut Green Bank Responsibility
Project Management		
Managing GHHI staff and ensuring all deliverables outlined in the Phase II Scope of Work are met	~	
Engaging and communicating with project partners	~	
Securing foundation funding for project continuation	~	
Providing input and review on the pilot strategy developed by GHHI	~	~
Establishing goals and Scope of Work for Phase III of the GHHI program	<b>~</b>	~
Administration		
Coordinating and participating in regular project check in calls	~	~
Executing and managing project contract with GHHI	<b>✓</b>	<b>✓</b>
Managing project reporting, including to CGB management and federal Department of Energy	~	<b>~</b>

## Activities and Services to be performed by Consultant

Outlined above and summarized below:

## **Solar for All Partnership**

Consultant will be responsible for managing the Green Bank's investments in PosiGen lease funds, including investments in PosiGen's Connecticut solar PV and energy efficiency lease funds as well as any working capital loans provided to the company. These asset management services shall include monitoring fund collateral, capital repayment, and PosiGen and other capital providers' (to the extent applicable/relevant) compliance with the terms of the credit agreement.

In coordination with Green Bank, and as outlined in the Functional Responsibility table above, Consultant will be responsible for providing marketing and outreach support and consultation to PosiGen to assist in meeting the Green Bank's goals for solar PV deployment under the "Solar for All" program. Responsibilities include providing input and guidance to PosiGen on the company's overall marketing strategy and community-based campaigns.

Consultant will work with Green Bank to track PosiGen's progress towards the goals established by Green Bank for LMI solar PV deployment. This includes monitoring PosiGen's pipeline reports, tracking closed projects and lost projects, and consulting with the company to address any failures to achieve the program goals.

In conjunction with the Green Bank, the Consultant will administer the survey of PosiGen customers and facilitate any other Evaluation, Measurement & Verification initiatives.

Lastly, Consultant will provide ad hoc support to Green Bank on relevant federal, state, or local grants and initiatives as they relate to the Green Bank's low-income solar activities.

## **Green and Healthy Homes Initiative:**

Consultant will be responsible for administering and managing the Green and Healthy Homes project on behalf of, and in coordination with, the Green Bank. Consultant responsibilities will include managing GHHI staff to ensure all project deliverables are completed according to the Phase II Scope of Work, reviewing GHHI work products and providing feedback/revisions as appropriate, managing project partner and foundation relationships, representing the Green Bank at meetings and events, and developing the Scope of Work for Phase III of the program.

#### **Other Investment Management**

The Consultant may provide advice and management services including but not limited to Asset Management, project modeling, underwriting, loan modification, and due diligence for existing or future investments made by the Green Bank to third parties.

Over the course of the fiscal year, Consultant will work with the Green Bank to transition the management and oversight of the CT Solar Lease 2 and CT Solar Loan portfolio of projects to the Green Bank. Management of CT Solar Lease 2 includes, but is not limited to: working with customers and the program's servicer on customer service and billing matters including lease transfers and subordinations, working with the program's technical support servicer on project issue management to ensure optimal portfolio performance, and working with the program's warranty and insurance providers on any relevant matters related to their existing scope of work. Management of CT Solar Loan includes, but is not limited to: working with the program's servicer on customer service and billing matters including subordinations and loan transfers.

## Activities and Services to be performed by Connecticut Green Bank

## PosiGen Solar for All Partnership

The Green Bank will be responsible for managing PosiGen's participation in the Residential Solar Investment Program, and in particular the company's compliance with all requirements for accessing the tiered LMI incentive within the RSIP. These responsibilities include reviewing and approving any changes to PosiGen's solar PV lease offering in the Connecticut market, reviewing and approving PosiGen applications for the PBI and LMI PBI, monitoring PosiGen system production and providing PBI payments.

The Green Bank will also continue to provide marketing and outreach support for PosiGen's marketing strategy and community-based campaigns to further adoption of solar PV amongst LMI households and achieve energy burden reductions. Such support may include providing feedback on PosiGen's overall strategy, providing data to PosiGen to support their marketing strategy, attending outreach events with the company and reviewing and approving marketing collateral co-branded with Green Bank logos or other brand identities.

The Green Bank will also be responsible for managing any relevant federal, state, or local grants related to Green Bank's low income solar activities (including the partnership with PosiGen). Management responsibilities will include complying with any and all federal reporting requirements, management of grant funds as they relate to supporting the deployment of solar energy in LMI communities and/or PosiGen specifically.

#### **Green and Health Homes Initiative**

The Green Bank will be responsible for executing and managing the Phase II contract with the Green and Healthy Homes Initiative (GHHI), and monitoring GHHI and the Consultant's progress towards the milestones and deliverables outlined in the Phase II Project Scope of Work. To this end, Green Bank will participate in regular project check-ins, attend program-related events and maintain responsibility for reporting progress on the initiative as it may relate to any ongoing federal Department of Energy grants obtained by Green Bank.

## **Other Investment Management**

Over the course of the fiscal year, the Green Bank will be responsible for working with Consultant to assume management and oversight responsibilities associated with the CT Solar Lease 2 and CT Solar Loan portfolio of projects.

## Staff Allocation – Green Bank

**Emily Basham** 

Isabelle Hazlewood

Andrea Janecko

Kim Stevenson

**Bert Hunter** 

Laura Fidao

**Bill Colonis** 

Loyola French

Brian Farnen

## Staff Allocation – Consultant

Kerry O'Neill

**Madeline Priest** 

Chris Magalhaes

Ben Healey

Joe Buonannata

## Budget

The Green Bank will pay the Consultant monthly, with an annual not to exceed amount of \$292,161, for year one only, based on the program administration and human capital components as described in the PSA.

Table 1

	Residentia	al LMI
<b>Human Capital Fee Component</b>	\$ 279,1	53.81
<b>Administration Fee Component</b>	\$ 13,0	06.29
NTE (1 Year)	\$ 292,1	61.00
6 Year projected assuming no		
increase in Program Admin		
costs	\$1,334,2	29.88

The budget and fees (based on headcount and administration) will be revisited annually by the two organizations to determine the cost of operating the program to achieve targets as outlined in the PSA.

As a part of this review, the Consultant will review their financials with the Green Bank annually to determine if there are operating cost savings resulting from a growth in scale. In the event of any savings are found as it relates to both the human capital fee and the program administration fee components, these will be passed on to the Green Bank in the form of a fee reduction as outlined in a mutually agreed upon Fee Review Process.

The majority of program administrative expenses for the Program will be contracted through the Green Bank. For program administrative expenses not contracted directly through the Green Bank for the Program, the Green Bank will fund the remaining portion of program administrative expenses through this PSA. After year one and as part of the annual review, the Parties will review the program administrative expenses to determine if such expenses should continue to be funded directly through the Green Bank or funded through the PSA to achieve operating efficiencies and operating cost savings resulting from a growth in scale.

The combined budget for this scope of work across both organizations for FY19 is as follows:

Program Code - Program Name		All Residential Programs		
				FY19
		FY19	FY19	Budget
	Account	Budget	Budget	Consolidat
	Number	(CGB)	(NP)	ed
Administrative Expenses				
Compensation and benefits				
- Salaries & Wages	Salaries	114,097	199,396	313,492
- Employee Benefits	Benefits	93,559	79,758	173,318
- Temporary employees	677300	-	-	
Program development and administ	<u>ration</u>			
- Program development costs	680030	200,000	-	200,000
- Program administration costs	680040	-	-	-
- Technology support costs	680080	-	-	-
- Project Inspection fees	680070	-	-	-
EM&V	683100	30,000	-	30,000
Marketing expenses	MKTG	10,000	-	10,000
Legal expenses (BF to budget)	682200	10,000	-	10,000
Other expenses		-	-	-
- Consulting/Advisory	681100	-	-	-
- Admin Services Fee (MerHydro)	680435	4,500	-	4,500
- Training/education	689075	-	5,252	5,252
- Travel, meeting& related expenses	689300	-	7,754	7,754
Overhead Costs Allocated to Progra	am:			-
Rent and location related expenses				-
- Rent/Utilities/Maintenance	687050	8,256	-	8,256
- Telephone/Communications	689020	2,745	-	2,745
- Depreciation FF&E	Depr	1,855	-	1,855
Office, computer & other expenses	,			-
- Office expense	Office	2,752	-	2,752
- IT operations	IT	9,256	-	9,256
Total administrative expenses		487,021	292,160	779,181

The Green Bank estimates it will spend \$1,440,000 in program administration on LMI initiatives over the next 6 years either on its own or through the Nonprofit.

## Technology

For Fiscal year 2019, the Consultant will leverage the same technology it presently does including Powerclerk, Locus, Survey Monkey, Salesforce and Pardot. All will continue to be used in a similar manner in which they are presently used. Any change must be cleared by the Green Bank Director of Operations before being implemented.

The Green Bank and the Consultant will continue to build and issue the existing reports and dashboards and the Consultant will facilitate the Green Bank's efforts to automate these.

## Other Resources

The Green Bank will provide the Consultant access to datasets, including but not limited to:

- Customer segmentation analyses (2014, 2017- PosiGen and RSIP)
- Experian data (2013, 2017)
- Census and demographic data, as consolidated and assembled by Green Bank
- Models developed and used to evaluate product impact on household energy burdens
- Any additional research that is commissioned through a relevant federal, state, or local grant related to LMI solar and/or energy efficiency

## Targets and Milestones

Each year the Green Bank and the Consultant will meet to discuss and set targets and milestones.

## **Targets**

In FY 2019, the Consultant shall work with the Green Bank and PosiGen to deliver 450 PPA/Leases for \$11,953,302 in Fair Market Value (FMV) and an installed capacity of 2.8 MW.

The Consultant will meet with the Green Bank staff at least Quarterly to review progress to these targets.

#### **Milestones**

- Semi-Annually, the Consultant will review product offerings and operations with the Green Bank.
- The Consultant will, as needed, raise additional capital by June 30, 2019 for PosiGen's continued and expanded operations.
- The Consultant will work with the Green Bank and PosiGen to smooth the transition to a new tariff structure, including exploration of viable financing structures.
- Green Bank has established a goal of completing Phase II of the Green and Healthy Homes project by June 30, 2019.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> For a full list of activities to be performed see the "Connecticut Green Bank State of Connecticut Green & Healthy Homes Project GHHI Technical Assistance Contract Scope of Services – Phase II - Project Design and Implementation Strategy"

## **License Agreement**

THIS LICENSE AGREEMENT ("Agreement") was made effective as of \_\_\_\_ day of \_\_\_\_, 20\_\_ (the "Effective Date") by and between Connecticut Green Bank ("Licensor") and Inclusive Prosperity Capital, Inc. ("Licensee").

**WHEREAS**, Licensor is owner of certain content and materials and related intellectual property as further described in <u>Exhibit A</u> attached hereto and incorporated herein ("Licensor IP");

**WHEREAS**, Licensor and the Licensee have entered into that certain Memorandum of Understanding dated July 2<sup>nd</sup>, 2018 that sets forth the agreement between the parties (the "MOU");

**WHEREAS,** in accordance with the MOU, Licensor desires Licensee to manage the development and implementation of certain programs that will utilize the Licensor IP under professional services agreements ("PSA(s)") executed between the parties or through various agreements with third parties outside the scope of the PSAs; and

**WHEREAS**, the parties desire that Licensee have a license to use the Licensor IP for the PSA(s) on the terms and conditions hereinafter set forth;

**NOW, THEREFORE**, in consideration of the promises and covenants contained herein and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

- 1. <u>LICENSE</u>: Licensor agrees to and does hereby grant to Licensee an exclusive license to use the Licensor IP for the development and implementation of the programs under the PSA(s) and for other business with third parties for Licensee's business (the "Purpose") for the Term.
- 2. WORK PRODUCT. During the development and implementation of the services for the program under the PSA(s) (the "Services"), Licensee may create work product relating to the Licensor's programs (the "Work Product"). The Work Product shall be deemed a 'work made for hire' under U.S. Copyright laws. If for any reason the Work Product is not deemed a 'work made for hire', License agrees to and does hereby assign to Licensor all right, title and interest to such Work Product. The Work Product shall become a part of the Licensor IP that is licensed to Licensee for the Purpose hereunder.

## 3. USE OF LICENSE:

a. Licensor IP Oversight: The Licensee agrees to provide materials bearing any Licensor trademarks or any other materials containing Licensor IP licensed under this Agreement and any other related documents which may permit the Licensor to determine whether the

- Licensee's use of such Licensor IP for the Purpose meets the standards, specifications and directions as may be provided to Licensee by the Licensor from time to time.
- b. Rejection of Use: The Licensor may prohibit the Licensee from using the Licensor IP, at its reasonable discretion, in any instances that are inconsistent with the Licensor's standards and guidelines, the PSAs or the MOU. The Licensee will bring such inconsistent use into compliance with Licensor's standards and guidelines, the PSAs or the MOU within ten (10) business days of Licensee's receipt of notice from Licensor or earlier if reasonably feasible.
- 4. <u>OWNERSHIP</u>: Licensee agrees that ownership of the Licensor IP and the goodwill relating thereto shall at all times vest in Licensor. Licensee agrees not to challenge, contest or question the validity of Licensor's ownership of the Licensor IP and related goodwill or any registration therein by Licensor and that any use of the Licensor IP by Licensee or third parties shall inure to the benefit of Licensor.
- 5. <u>RIGHTS TO NEW MATERIAL</u>: The Licensor shall retain all rights to the Licensor IP, including without limitation, the Work Product created by the Licensee directly in support of the management of the PSAs on behalf of the Licensor.
- 6. <u>INDEMNIFICATION</u>: In the event Licensee is named as a defendant in any action based on Licensee's use of the Licensor IP, Licensee agrees to promptly notify Licensor. Licensee hereby assumes all responsibility for and agrees to indemnify Licensor against any and all damages, losses, claims, suits or other expenses whatsoever arising out of Licensee's use of the Licensor IP, including Licensor's reasonable attorneys' fees.
- 7. <u>TERM</u>: This Agreement shall continue in operation until and unless terminated by Licensor upon giving thirty days prior written notice to Licensee for cause for breach of this Agreement with an opportunity to cure (which shall be no less than ninety days). The trademark license shall be reviewed and renewed on a triannual basis (the "Term"); provided, however, that the Term shall automatically be extended for an additional three year term upon the first triannual anniversary in the event the MOU has not been terminated on or prior to that date.
- 8. <u>CONSIDERATION</u>: Annually, the Licensor and the Licensee will review the financials of the Licensee during which it will be determined if there have been any cost savings or profit due to the growing scale of the Licensee's programs. If such a savings and profit can be identified, a prorated portion will be passed on to the Licensor in the form of a fee reduction.

- 9. <u>ASSIGNMENT</u>: This Agreement is not assignable without the prior written consent of Licensor and any assignment without such consent shall be null and void. This Agreement and the use of the Licensor IP by Licensee hereunder will inure to the benefit of each party, its successors, heirs and assigns.
- 10. <u>CHOICE OF LAW/SURVIVAL</u>: This Agreement shall be interpreted under the laws of the State of Connecticut without regard to conflict of law principles. Provisions 3, 4, 5, 7 and 9 and any other provisions that by their nature should survive expiration or termination will survive expiration or termination of this Agreement.
- 11. <u>WAIVER</u>: The waiver by either party of a breach of a provision of this Agreement shall not operate or be construed to invalidate the balance of the provisions contained in this Agreement, which shall continue to remain in effect.
- 12. <u>SEVERABILITY</u>: The finding by any court that a provision of this Agreement is invalid shall not operate or be construed to invalidate the balance of the provisions contained in this Agreement, which provisions shall continue to remain in full force and effect.
- 13. ENTIRE AGREEMENT; COUNTERPARTS: This Agreement contains the entire agreement between the parties relating to the subject matter hereof, and all prior proposals, discussions or writings are superseded hereby. The terms of this Agreement shall be binding upon and shall inure to the benefit of the parties and their successors, heirs and assigns. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which, taken together, shall constitute one and the same agreement.

**IN WITNESS WHEREOF,** the parties hereto execute this Agreement by their duly authorized representatives on the date set forth above.

Connecticut Green Bank	Inclusive Prosperity Capital, Inc.
By:	Ву:
Name:	Name:
	Title:

## **EXHIBIT A: LICENSOR IP**

## Licensor IP:

- (1) Licensor's program names; Licensor's systems; Licensor's processes; Licensor's financial models; Licensor's documentation; and other Licensor program documents (SOPs, reporting files, loan documents and financing agreements)
- (2) Program marketing assets (e.g. collateral, digital/web assets, etc.)
- (3) Solar customer segmentation data and other market data
- (4) Branding guidelines for Licensor relationship (e.g. "Sparked by CGB" similar to previous Solarize and GoSolarCT initiative uses).

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CONNECTICUT
GREEN BANK

## Memo

To: Bryan Garcia (President and CEO of the Connecticut Green Bank) and Kerry O'Neill (Incoming CEO of

Inclusive Prosperity Capital)

From: Bert Hunter (EVP and Chief Investment Officer), Brian Farnen (General Counsel & Chief Legal Officer),

and Eric Shrago (Director of Operations)

**CC:** Ben Healey (Incoming President of Inclusive Prosperity Capital)

**Date:** July 6, 2018

**Re:** Fee Review Process with Inclusive Prosperity Capital, Inc.

#### **BACKGROUND**

As a result of the Connecticut General Assembly's ("CGA") sweeps of \$14.0 million a year from the Clean Energy Fund for FY 2018 and FY 2019, as well as the \$2.3 million a year from the Regional Greenhouse Gas Initiative, the Connecticut Green Bank ("Green Bank") has sought alternative ways to continue to deliver its innovative programs and products that reduce the energy burden for underserved markets while meeting the objectives and targets of its Sustainability Plan adopted in response to the legislative sweeps on December 15, 2017.

A key to this strategy has been the support and launch of a new non-profit, Inclusive Prosperity Capital, Inc. ("IPC"), with whom the Green Bank is proposing a strategic partnership that will allow the Green Bank to reduce costs to achieve savings while still delivering upon its FY 2019 targets, including those approved by the Green Bank Board of Directors on June 28, 2018. Similarly, the Green Bank recognizes IPC's need to achieve its own sustainability. The shared services agreement (MOU) and product-focused Professional Service Agreements (PSA's) have specific language to address this, including reference to a Fee Review Process.

This memo outlines the annual Fee Review Process that will be used by the Green Bank and IPC to identify savings.

## FEE REVIEW PROCESS AND SAVINGS DETERMINATION – GUIDANCE FROM THE AGREEMENTS

In IPC's PSA's, the Green Bank and IPC are agreeing to a regular look back at the financials of IPC and the Green Bank to determine any programs where there is a fee for service where there have been efficiency gains – due to changes in scale (e.g., increase in investment activity by IPC beyond business plan expectations) and/or operational efficiency (e.g., reduction in administrative expenses due to improved operations) – that have resulted in savings that will reduce the Green Bank's ongoing support

for IPC based on the share of the total business done by IPC that is on behalf of the Green Bank through the various outsource arrangements set forth in the standard PSAs.

Additionally, the MOU lays out the concept of Consideration for Green Bank to realize any potential savings, as well as Force Majeure events that would give the Green Bank the flexibility it would need in the event, say, of major sweeps of funding, to amend the PSAs.

## Here is the specific language in the PSA's:

This payment is comprised of two components: Program Administration and Human Capital. The Program Administration will be paid monthly and represents the costs charged back to the Green Bank for administering the Work that is more effectively and efficiently managed by the Consultant minus any savings achieved through efficiencies and scale. The Green Bank agrees to pay Program Administration expenses as set forth in the budget in Attachment A. Any program expenses where the nonprofit procures goods or services from a third-party to manage the attached Work on behalf of the Green will be charged back to the Green Bank at cost. The Human Capital component will be paid monthly, in advance, and is comprised of the agreed upon staffing levels needed to execute the Work. For the first three years of this PSA, the Green Bank agrees to pay 100% of the cost of the headcount as set forth in Attachment A. For the second three years, the Green Bank agrees to pay 50% of the cost of the headcount. The staffing levels will be reviewed as part of the annual budgeting process and savings due to efficiencies and scale will be passed on to the Green Bank in a manner outlined in a mutually agreed upon Fee Review Process. In this process, the two organizations will review the fees and costs borne on behalf of the Green Bank in comparison to the fees/costs paid by other parties contracting with the Consultant to ensure that the Green Bank is not subsidizing the scopes of work of others.

## Here is the specific language in the Scopes of Work attached to the PSA's:

The budget and fees (based on headcount and administration) will be revisited annually by the two organizations to determine the cost of operating the program to achieve targets as outlined in the PSA. As a part of this review, the Consultant will review their financials with the Green Bank annually to determine if there are operating cost savings resulting from a growth in scale. In the event of any savings are found as it relates to both the human capital fee and the program administration fee components, these will be passed on to the Green Bank in the form of a fee reduction as outlined in a mutually agreed upon Fee Review Process.

The majority of program administrative expenses for the Program will be contracted through the Green Bank. For program administrative expenses not contracted directly through the Green Bank for the Program, the Green Bank will fund the remaining portion of program administrative expenses through this PSA. After year one and as part of the annual review, the Parties will review the program administrative expenses to determine if such expenses should continue to be funded directly through the Green Bank or funded through the PSA to achieve operating efficiencies and operating cost savings resulting from a growth in scale.

## Here is the specific language in the MOU:

Consideration: Annually, the Green Bank and the Nonprofit will review the financials of the Nonprofit during which review it will be determined if there have been any savings achieved through efficiencies

and scale of the Nonprofit's programs, including an examination of the ratio of costs borne by the Green Bank versus other parties contracting with the Nonprofit for such program services. If such savings can be identified or if the ratio of costs allocated to the Green Bank versus other parties contracting with the Nonprofit for such program services is out of proportion to the Nonprofit's contracted deliverables due to the Green Bank, a portion will be passed on to the Green Bank in the form of a fee reduction. Specifics will be set forth in the individual PSA's.

# Here is the additional language added to the MOU with regard to Changes in the Mission and Force Majeure Events under the MOU:

The MOU also provides that if there is a (i) change in the business model or sustainability plan that changes the mission of the Green Bank or a (ii) force majeure event such as a significant legislative sweep of Green Bank funding, the parties will work in good faith to amend the MOU to address this new reality.

The following should be a guide for the annual process used to review the financials and determine a savings:

The Green Bank and IPC will review the programs managed by IPC on behalf of the Green Bank at the end of each fiscal year using the following steps to identify Human Capital savings:

- 1. IPC will provide a list of ALL other similar fee for service programs managed by its staff.
- 2. The two organizations will review the fees paid by the Green Bank in comparison to the fees paid by other parties to ensure that the Green Bank is not subsidizing the scopes of work of others (e.g., if the Green Bank compensates IPC for three staff fully dedicated for managing Smart-E and these individuals are managing that scope of work for the Green Bank and additional Work for other parties without additional headcount, the Green Bank would be entitled to a fee reduction reflective of its portion of IPC's workload).
- 3. To conduct this review, IPC will also provide an allocation of the time of its Green Bank-supported staff that shows how much of their time is allocated to the various scopes of work in which IPC is engaged, metrics reflecting the results achieved per scope of work, and the fees charged for that scope.
- 4. In comparing similar scopes of work, the Green Bank will focus on the following key target metrics for the fiscal year for comparing fees and staffing in terms of results:
  - Smart-E number of loans closed
  - Multifamily number of units impacted in closed projects
  - Solar Fund megawatts of capacity installed in closed projects
  - LMI megawatts of capacity installed in closed projects

In addition, the IPC team and the Green Bank staff will review program expenses to identify expenses that could be more efficiently managed or funded directly by IPC with the equivalent resources provided under a PSA for Program Administration with the Green Bank.

Note that in the first year, the overwhelming majority of program expenses are being managed by the Green Bank. As IPC scales, there should be an opportunity to outsource more administrative expenses to IPC and thus achieve additional savings for the Green Bank.

Note that according to the MOU, IPC will pass all goods and services procured as part of a Green Bank scope of work on to the Green Bank at cost.

#### CONCLUSION

The process described in this memo serves to fulfill the intention of the Green Bank, through its MOU and product-related PSA's with IPC, to reduce costs to achieve savings while still delivering upon its targets for the areas that IPC has been engaged to deliver on behalf of the Green Bank.

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# Memo

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

From: Bryan Garcia, Dale Hedman and Kerry O'Neill

**Date:** July 27, 2018

**Re:** Residential Solar Investment Program – Steps 14 and Beyond Recommendations

# **Background**

On March 2, 2012, the Connecticut Green Bank launched the Residential Solar Investment Program ("RSIP"). Per Section 106 of Public Act 11-80 (as amended and now codified at Connecticut General Statute Sec. 16-245ff), the RSIP requires that a minimum of 300 MW of new residential solar PV be installed in Connecticut on or before December 31, 2022, at a reasonable payback to the customer all the while developing a sustainable market for contractors. The RSIP provides to residential customers, via solar PV contractors, direct financial incentives in the form of a one-time expected performance-based buy-down ("EPBB") or a 6-year performance-based incentive ("PBI") for the purchase and/or lease of qualifying PV systems respectively. The success of the RSIP over its first three years resulted in an improvement to the policy in the 2015 legislative session – with subsequent technical fixes in the 2016 legislative session. During the 2015 legislative session, Public Act 15-194 "An Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy" was passed with bipartisan support and Governor Malloy.

#### Deployment Progress for Incentives

To date, through the RSIP, we have approved and completed over 215 megawatts of projects – approximately 70 percent of the public policy target – while reducing the level of subsidies by over 80 percent since 2012 through 13 steps – see Table 1. About 24 percent (or 52 MW) of the installations are homeownership through the EPBB.

Table 1. Installed Capacity by Step for Approved, In Progress, and Completed Projects (as of June 30, 2018)

RSIP Incentive Step	Approved (kW)	Completed (kW)	<b>Total</b> (kW)	Average Incentive (\$W <sub>STC</sub> )
1	0	1,381	1,381	\$ 1.789
2	0	5,992	5,992	\$ 1.629
3	6	13,108	13,114	\$ 1.229
4	80	19,258	19,338	\$ 1.033
5	154	13,276	13,430	\$ 0.746
6	84	12,162	12,247	\$ 0.513
7	89	19,043	19,132	\$ 0.400

RSIP	Approved	Completed	Total	Average Incentive
Incentive	(kW)	(kW)	(kW)	(\$/W <sub>STC</sub> )
Step				
8	457	26,798	27,254	\$ 0.357
9	1,525	24,917	26,443	\$ 0.332
10	4,119	27,594	31,713	\$ 0.325
11	7,023	12,965	19,988	\$ 0.311
12	14,720	4,537	19,257	\$ 0.268
13*	6,026	7	6,033	\$ 0.261
Total	34,283	181,038	215,321	\$ 0.529

About 53 MW of solar PV deployment were the results of Steps 1 through 5, 117 MW of solar PV deployment were the results of Steps 6 through Step 10, and 45 MW is the result of Steps 11 through Step 13 thus far (and anticipated to be close to 60 MW at end of Step 13).<sup>1</sup>

In FY17, we successfully petitioned PURA to approve the 53 MW, i.e. 6,473 projects, from Steps 1 through 5 enabling the Connecticut Green Bank to sell RECs on the spot and future market. PURA also approved the 15-year master purchase agreement for the Solar Home Renewable Energy Credits (SHRECs) – a contract between the utilities and the Connecticut Green Bank. In FY17, the Green Bank created SHREC Tranche 1 with nearly 6,796 projects (representing 49.2 MW) and, in FY18, created SHREC Tranche 2 with 7257 projects (representing 59.8 MW). In the first three quarters of FY18, the Green Bank sold 39,221 Tranche 1 SHRECs to EDCs. The investment of over \$867 million in residential solar PV in Connecticut through the RSIP to date has created 11,384 job-years (i.e., 4,501 direct, and 6,883 indirect and induced) and will reduce nearly 3.4 MMTCO<sub>2</sub> emissions over the 25-year life of the projects.

# Deployment Progress by Area Median Income

Of the over 27,700 projects approved under the RSIP, in recent years, the Connecticut Green Bank has made progress with respect to installed capacity of residential solar PV by income – see Table 2 for a breakdown of census tracts by Area Median Income (AMI).

Table 2. Statewide Residential Solar PV Deployment by Income Level and Census Tract (as of June 30, 2018)

MSA AMI Band	Owner Occupied 1-4 Unit Households	% of Total HHs	# of FY Project Units	% of FY Project Units	# of Cumulative Project Units	% of Cumulative Projects	Cumulative Project Units / 1,000 HHs	Cumulative Capital Deployed	Cumulative Capital Deployed / HHs
<60%	60,769	7%	775	13%	2,339	8%	38.5	\$59,252,197	7%
60%-80%	99,220	12%	958	16%	3,453	12%	34.8	\$93,596,450	11%
80%-100%	165,331	19%	1,198	20%	5,091	18%	30.8	\$155,284,061	18%
100%-120%	187,463	22%	1,280	21%	6,485	23%	34.6	\$206,773,779	24%
>120%	345,311	40%	1,759	29%	10,421	37%	30.2	\$352,324,968	41%
Unknown		0%	1	0%	1	0%	0.0	\$41,014	0%
Total	858,094	100%	5,971	100%	27,790	100%	32.4	\$867,272,469	100%

<sup>&</sup>lt;sup>1</sup> Section 106 of PA 11-80 applies to Steps 1 through 5, while PA 15-194 applies to Steps 6 and beyond – or projects approved after January 1, 2015.

Table 2 presents market penetration of RSIP projects among census tract Area Median Income (AMI) bands as a percentage of owner occupied households in these same income bands. CT has gone beyond parity with respect to reaching the same or better adoption of solar PV among 100% and lower AMI bands as with 100% and higher AMI band customers. For example, the Cumulative Project Units per 1000 households (HHs) is highest in the less than 60% AMI band at 38.5 projects per 1000 HHs, which equates to 3.85%. Similarly, market penetration is 34.8 projects per 1000 HHs or 3.48% in the 60-80% AMI band, 3.08% in the 80-100% band, 3.46% in the 100-120% AMI band, and 3.02% in the greater than 120% AMI band.

Deployment Progress in Comparison to Regional States

The RSIP performance in Connecticut, in comparison to Massachusetts, New Jersey, and New York, demonstrates many favorable signs with respect to policy design and implementation – see Table 3.

Table 3. Comparison of Residential Solar PV Markets - CT, MA, NJ, and NY<sup>2</sup>

Residential Solar PV Market Comparison, Projects Completed H1 2018 (January-June 2018)	Connecticut	Massachusetts	New Jersey	New York
Electric Retail Rate (\$/kWh) - EIA - April 2018	\$0.2144	\$0.2234	\$0.1559	\$0.1800
Installed Cost of Homeowner Owned System (\$/W)	\$3.63	\$3.86	\$4.17	\$4.04
State Incentives (\$/W)	\$0.40	\$2.68	\$2.00	\$0.96
Federal ITC (30%)	\$0.97	\$0.36	\$0.65	\$0.92
Net Cost to Consumer after all incentives	\$2.26	\$0.83	\$1.52	\$2.16
Net Cost to Consumer as % of Installed Cost	62%	21%	36%	53%
LCOE*	\$0.195	\$0.204	\$0.220	\$0.213
LCOE to Customer*	\$0.125	\$0.093	\$0.100	\$0.122
Electric Retail Rate - LCOE to Customer = per kWh Savings	\$0.089	\$0.131	\$0.056	\$0.058
Installed Capacity in CY 2017 (MW)	46	86	154	142
Installed Capacity in CY 2017 per capita	13	12	17	7
Installed Capacity per State Incentives Invested (W/\$)	3.2	0.4	0.5	1.0
Energy Efficiency (EE) Requirement	energy audit required for all projects	energy audit required if using Mass Solar Loan	none	none
% Third Party Owned (H1 2018)	71%	45%	77%	50%
Installed Cost of TPO System (\$/W)	\$3.52	\$3.74	\$4.06	\$4.03
Net Metering Policy**	yes	yes	yes	yes

<sup>&</sup>lt;sup>2</sup> Installed costs and incentives based on available data from state websites for projects completed January - June 2018, and SREC trading websites. MA and NJ have SRECs (10 and 15 years, respectively) while CT and NY have traditional state program incentives. MA has personal income tax credit, the lesser of 15% of system cost or \$1000. MA is transitioning to the MA SMART incentive program which will replace SRECs. MA Solar Loan Program nearing full utilization in September 2017, \$10 million to be added for low to moderate income customers. NY has property tax credit of 25% of system cost, capped at \$5,000, which can be carried over for up to five years. Installed capacity from U.S. Solar Market Insight Report 2018 Q2.

3

<sup>\*</sup> LCOE figures do not include O&M and equipment replacement costs estimated to be \$0.051/kWh.

<sup>\*\*</sup> NY is transitioning to a value of solar tariff. CT passed legislation with future changes to net metering.

The favorable signs for Connecticut in comparison to the region, include:

- Lower overall state incentives, resulting in higher federal incentives;
- Comparable installed capacity per capita;
- Highest installed capacity per state incentives invested, 3 to 8 times more leveraging;
- Low end of installed cost range and competitive financing products will help market achieve sustained orderly development over the long-term as state and federal incentives are phased out; and
- Inclusion of energy efficiency audit requirement, supporting deployment of both solar PV and energy efficiency measures, furthering the goals of the Green Bank, the utility-administered energy efficiency programs, and the state's climate change and economic development goals. Note that CT is the only state in this regional comparison that requires an energy audit on all projects to receive an incentive for the installation of a residential solar PV system.

# **RSIP Proposed Schedule of Incentives for Step 14**

The staff proposes the following incentive for Step 14 of the RSIP:

- Race to the Solar Rooftop The total capacity target for Step 14 is approximately 80.0 MWs, the remainder of the MWs available to the 300 MW goal. Although Staff is recommending a target for the remainder of the RSIP program, Staff may seek 1 or more additional Steps to bring the RSIP program to an orderly close.
- Launch Date Step 14 will begin at the conclusion of Step 13.
- <u>Incentive Level</u> we are proposing additional incentive levels by steps, including continuation of the LMI PBI (i.e., below 100% AMI), as well as a new pilot – see incentive descriptions below.

### Non-LMI RSIP Incentives

In order to continue to differentiate the incentive levels for the EPBB and PBI (see Table 4) given the legislative guidance of comparable economic incentives as well as national best practice incentive levels.<sup>3</sup> we are proposing the following incentive levels:

- EPBB for Step 14, the EPBB will be \$463/kW, the same as Step 13.
- **PBI** for Step 14, the PBI will be \$35/MWH.

Table 4. Schedule of Incentives for Steps 11 through 14 for NON-LMI HOUSEHOLDS

RSIP		EPBB			PBI
Incentive		(\$/W)		(9	S/kWh)
Step	≤5 kW	5 to 10	>10kW	≤10	>10 kW
		kW		kW	
1	\$2.450	\$1.250	\$0.000	\$0.300	\$0.000
2	\$2.275	\$1.075	\$0.000	\$0.300	\$0.000
3	\$1.750	\$0.550	\$0.000	\$0.225	\$0.000

<sup>&</sup>lt;sup>3</sup> "A Survey of State and Local PV Program Response to Financial Innovation and Disparate Federal Tax Treatment in the Residential PV Sector" by Mark Bolinger and Edward Holt in LBNL-181290 (June 2015).

RSIP Incentive		EPBB (\$/W)		<b>PBI</b> (\$/kWh)		
Step	≤5 kW	5 to 10	>10kW	≤10	>10 kW	
		kW		kW		
4	\$1.250	\$0.750	\$0.000	\$0.180	\$0.000	
5	\$0.8	800	\$0.400	\$0.125	\$0.060	
6	\$0.0	675	\$0.400	\$0.080	\$0.060	
7	\$0.	540	\$0.400	\$0.064	\$0.060	
8	\$0.	540	\$0.400	\$0.054		
9	\$0.	513	\$0.400	\$0.046		
10	\$0.4	487	\$0.400	\$	0.039	
11	\$0.4	487	\$0.400	\$	0.039	
12	\$0.463		\$0.400	\$0.035		
13	\$0.463		\$0.400	\$0.035		
14	\$0.4	463	\$0.400	\$0.035		

The incentive level for the EPBB is roughly \$0.01/kWh more than the PBI over a 15-year period – per the statute, making the incentive levels more economically comparable.

# LMI RSIP Incentives

Given the continuing priority of expanding solar PV in Connecticut into the low to moderate income market segments (i.e., Solar for All), and to attempt to ensure that the 300 MW policy target provides an opportunity to reach all household income levels in Connecticut, we are proposing the following schedule of incentives for the LMI-PBI to continue the progress we are making (see Table 5).

Table 5. Schedule of Incentives for Steps 11 through 14 for LMI Households

RSIP Incentive	LMI-PBI (\$/kWh)			
Step	≤10 kW	>10 kW		
8	\$0.110	\$0.055		
9	\$0.110	\$0.055		
10	\$0.110	\$0.055		
11	\$0.110	\$0.055		
12	\$0.100	\$0.050		
13	\$0.090	\$0.045		
14	\$0.090	\$0.045		

We propose continuing the LMI-PBI incentive at Step 14 with the option of coming back to the Board with a recommendation to lower the incentive if staff of the Green Bank feels it necessary to reduce the incentive relative to development of an interim tariff that may be established under PA 18-50 Sec.7 or other compelling reasons.

# Grid Modernization and Climate Change Pilot RSIP Incentives-

The residential solar PV market in Connecticut is nearly 4 GW, or 660,000 households.<sup>4</sup> The successful implementation of the 300 MW RSIP policy will deliver nearly 10 percent of the economic potential for solar PV in Connecticut. The long-term success of the residential solar PV market in Connecticut depends on the regulatory certainty of the state's policy for compensation of distributed generation (currently retail net metering and transitioning to a

<sup>&</sup>lt;sup>4</sup> FY 2017 and FY 2018 Comprehensive Plan of the Connecticut Green Bank (p. 41)

tariff structure upon RSIP reaching its 300 MW target). In addition to continuation of an adequate compensation structure for solar PV, progress should also be made in the following areas:

- Fostering the sustained orderly development of a state-based industry, with respect
  to policies such as DER compensation, as well as a supportive regulatory
  environment and interconnection processes, and reasonable costs of doing business
  in the state:
- 2. Successfully collaborating with the electric distribution companies administering the Conservation and Load Management Fund; and
- 3. Integrating "cost-effective" solar PV as a zero-emission stable fuel source for transportation, home heating and cooling, and distributed energy resources (e.g., battery storage).

The role of the Connecticut Green Bank in being a market catalyst is helping ensure that residential solar PV achieves its economic potential in Connecticut over the long-term.

# Net Metering Transition to Tariff Structure

The Green Bank is participating in the process of tariff development as specified in PA 18-50 to help ensure that the sustained orderly development of the residential solar PV industry in Connecticut (as provided for in PA 11-80 and PA 15-194), as well as reasonable customer and solar company economics are given adequate consideration as guiding principles in the establishment of the tariff structure and rates.

#### Grid Modernization

Understanding the value solar can bring to the grid and the ability of new technologies to increase hosting capacity are key to sustained market growth and adequately valuing solar resources post-RSIP. Green Bank and UI are hoping to demonstrate this value via the Localized Targeting of DERs demonstration project by deferring a planned infrastructure upgrade and shedding light on the ability of advanced inverter technologies to increase the hosting capacity of the distribution system. If successful, these technologies could have a significant impact on solar soft costs and enable more PV systems to be interconnected without additional infrastructure costs.

In addition, Green Bank is participating in a PURA docket on Distribution System Planning that provides a forum to address significant barriers to greater DER deployment, for example: (1) clarification and improvement of interconnection processes, specifications and requirements for battery storage, (2) addressing infrastructure upgrade challenges especially for transformers, and (3) providing a suitable regulatory and process framework and physical infrastructure to implement new policy around DER compensation that continues to encourage DER deployment and contributes to grid modernization.

#### Sustained Orderly Development

The RSIP policy requires that the Green Bank "provide incentives that decline over time and will foster the sustained, orderly development of a state-based solar industry". Sustained orderly development is a concept proposed in 1992<sup>5</sup> that describes a condition in which a growing and stable market is identified by orders that are replaced on a reliable schedule. The orders increase as previous deliveries and engineering and field experience lead to

<sup>&</sup>lt;sup>5</sup> Sustained Orderly Development of the Solar Electric Technologies by Donald W. Aitkin in Solar Today (May/June 1992)

further reductions in costs. In addition, the reliability of these orders can be projected many years into the future, based on long-term contracts, to minimize market risks and investor exposure.

#### Collaboration with the Utilities

The Comprehensive Plan of the Green Bank for Fiscal Years 2017 through 2019 acknowledges the importance of working collaboratively with the utility administrators of the Conservation and Load Management Fund.<sup>6</sup> Whether it is the Home Energy Solutions (HES) program, or supporting more efficient space and water heating in our homes, driving comprehensive and deeper savings by reinforcing the connection between solar PV and energy efficiency presents a unique collaboration opportunity for the Connecticut Green Bank to work with the utility administrators of the Conservation and Load Management Fund. The goals of the Joint Committee would be supported through improved linkages between our programs.<sup>7</sup>

Transportation, Home Heating and Cooling, and Distributed Energy Resources
Through the Global Warming Solutions Act of 2008, the State of Connecticut has a goal of reducing greenhouse gas emissions by 80 percent from 2001 levels by 2050 with an interim target of 45% below 2001 levels by 2030 set by the recently enacted PA 18-828. The largest emitting sectors in Connecticut are the burning of fossil fuels for transportation and the thermal needs of our buildings (i.e., water and space heating and cooling). The Comprehensive Plan of the Connecticut Green Bank for Fiscal Years 2017 through 2019 and the strategic retreat held by the Board of Directors in January of 2017 acknowledged the importance of transportation, heating and cooling and distributed energy resources of transportation, heating and cooling and distributed energy resources. By combining zero-emission solar PV as a fuel source for transportation, as well as the thermal needs of our homes, we can provide consumers with a "cleaner, cheaper, and more reliable source of energy".

At the April 28, 2017 Board Meeting, the Board approved the Grid Modernization and Climate Change Pilot that requires the following, with minor wording adjustments to recognize recent policy developments, in order for households to receive solar PV incentives through the RSIP pilot:

- 1. Home Energy Solutions a household undertakes HES first, before a solar PV system is designed or installed. Households will be provided incentives to pursue "deeper" energy efficiency measures based on the HES assessment through utility incentives and loans and the Smart-E Loan. They will also be provided a DOE Home Energy Score as part of undertaking HES. This score is anticipated to be incorporated into real estate multiple listing services which will increase the value of energy efficiency and solar PV in real estate transactions.
- 2. <u>Smart Inverters</u> following energy efficiency, households then install solar PV systems that include smart inverters to enable households, utilities, and third-party owners to share information about the value of distributed energy resources, whether in the current net metering structure or in a future tariff structure.

<sup>&</sup>lt;sup>6</sup> Ibid (p. 11, 38-39, 50-51)

<sup>&</sup>lt;sup>7</sup> The Comprehensive Plan of the Connecticut Green Bank for Fiscal Years 2017 through 2019

<sup>&</sup>lt;sup>8</sup> https://www.cga.ct.gov/2018/ACT/pa/pdf/2018PA-00082-R00SB-00007-PA.pdf

<sup>&</sup>lt;sup>9</sup> Connecticut Greenhouse Gas Emissions Inventory 2012

<sup>&</sup>lt;sup>10</sup> The Comprehensive Plan of the Connecticut Green Bank for Fiscal Years 2017 through 2019

3. <u>Data Release and System Access</u> – households will be required to sign a data release form for access to the production of solar PV and consumption of energy data from their homes for research purposes to better understand the value of distributed energy resources. Included on this form will be the allowance for the utility, when ready, to communicate to the solar PV system, if battery storage included, to access energy when the grid needs it so that households can share the benefits of storage with the utilities.

Incentives for the pilot were approved with the Steps 11 through 13 EPBB and PBI incentives (see Table 6). Staff has yet to implement the incentive given that Staff is consulting with the EDCs, contractors and Third-Party Owners regarding the incentive in light of structures to replace net-metering in PA 18-50. Based on these discussions, Staff may come back to the Board with a recommendation to revise the incentive.

Table 6. Preliminary Proposed Schedule of Incentives for Steps 11 through 14 for Grid Modernization and Climate Change Pilot

RSIP Incentive Step	EPBB (\$/W) or PBI (\$/kWh) for Grid Mod Pilot	<b>LMI PBI</b> (\$/kWh)	(14 kWh Max)  And Power Rating  (8 kW Max)	
			(\$/kWh)	(\$/kW)
11	\$0.487 / \$0.039	\$0.110	\$60.00	\$50.00
12	\$0.487 / \$0.039	\$0.110	\$60.00	\$50.00
13	\$0.487 / \$0.039	\$0.110	\$60.00	\$50.00
14	\$0.487 / \$0.039	\$0.110	\$60.00	\$50.00

# Resolution

WHEREAS, Public Act 15-194 "An Act Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy" (the "Act") requires the Connecticut Green Bank ("Green Bank") to design and implement a Residential Solar Photovoltaic ("PV") Investment Program ("Program") that results in no more than three-hundred (300) megawatts of new residential PV installation in Connecticut before December 31, 2022 and creates a Solar Home Renewable Energy Credit ("SHREC") requiring the electric distribution companies to purchase through 15-year contracts the Renewable Energy Credits ("RECs");

**WHEREAS**, as of June 30, 2018, the Program has thus far resulted in over two hundred and fifteen megawatts of new residential PV installation application approvals and completions in Connecticut;

**WHEREAS**, pursuant to Conn. Gen Stat. 16-245a, a renewable portfolio standard (RPS) was established that requires that Connecticut Electric Suppliers and Electric Distribution Company Wholesale Suppliers obtain a minimum percentage of their retail load by using renewable energy, and an update to this RPS was provided in PA 18-50 that increased the

Class I RPS from 20% by 2020 to 40% by 2030, reduces the Alternative Compliance Payment (ACP) to \$40 from \$55, adds power generation from waste heat and expands the definition of run of river hydropower as Class I resources.

**WHEREAS**, real-time revenue quality meters are included as part of solar PV systems being installed through the Program that determine the amount of clean energy production from such systems as well as the associated RECs which, in accordance with Public Act 15-194 will be sold to the Electric Distribution Companies through a master purchase agreement entered into between the Green Bank, Eversource Energy, and United Illuminating, and approved by the Public Utility Regulatory Authority;

**WHEREAS**, pursuant to the Act, the Green Bank has prepared a declining incentive block schedule ("Schedule") that offers direct financial incentives, in the form of the expected performance based buy down ("EPBB") and performance-based incentives ("PBI"), for the purchase or lease of qualifying residential solar photovoltaic systems, respectively, fosters the sustained orderly development of a state-based solar industry, and sets program requirements for participants, including standards for deployment of energy efficient equipment as a condition for receiving incentive funding;

**WHEREAS**, pursuant to the Act, to address willingness to pay discrepancies between communities, the Green Bank will continue to provide additional incentive dollars to improve the deployment of residential solar PV in low to moderate income communities.

**WHEREAS**, pursuant to the Act, to address sustained orderly development of a state-based solar industry, the proposed grid modernization and climate change pilot will provide incentives for solar PV to offset the additional energy load from clean energy sources and storage needs.

**WHEREAS**, pursuant to Section 16-245(d)(2) of the Connecticut General Statutes, a Joint Committee of the Energy Conservation Management Board and the Connecticut Green Bank was established to "examine opportunities to coordinate the programs and activities" contained in their respective plans (i.e., Conservation and Load Management Plan and Comprehensive Plan);

**WHEREAS**, the Global Warming Solutions Act of 2008 requires Connecticut to reduce its greenhouse gas emissions by 80 percent from 2001 levels by 2050, all the while transportation and the thermal heating and cooling of buildings representing the largest emitting sectors;

**WHEREAS,** residential solar PV can provide cleaner, cheaper, and more reliable sources of energy for electric vehicles and renewable thermal technologies while creating jobs and supporting local economic development;

**NOW**, therefore be it:

**RESOLVED**, that the Board, including the Commissioner of the Department of Energy and Environmental Protection, approves of the Schedule of Incentives as set forth in Tables 4, 5, and 6 of the memo dated July 27, 2018, including setting the Step 14 incentive levels the same as Step 13 incentive levels for the EPBB, PBI, and LMI PBI incentive types through the end of RSIP's 300 MW target.

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# Memo

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

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

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

Counsel and CLO

**Date:** July 20, 2018

Re: CREBs Issuance for CSCU Solar

# Background

At its September 28 and December 15, 2017 meetings, the Connecticut Green Bank's ("Green Bank") Board of Directors (the "Board") authorized (the "Board Approval") the issuance of New Clean Renewable Energy Bonds ("CREBs") backed by the Special Capital Reserve Fund ("SCRF") to support the installation of over 4.6 MW of solar to benefit the Connecticut State College and University ("CSCU") system across several campuses around the state (collectively, the "Project").

The purpose of this memo is to share with the Board details about the CREBs issuance and request:

- 1) The establishment, effective as of December 29, 2017, of a minimum debt service reserve fund required for the SCRF in an amount of \$961,960.75 (see closing docs);
- 2) An initial Project contribution in an amount not expected to exceed \$150,000 to cover interest payments due in the first year as the projects are being installed;
- 3) A conditional increase, if necessary, in the Green Bank's balance sheet contribution in an amount not to exceed \$1,500,000 (a \$300,000 increase from the previously approved \$1,200,000 contribution approved by the Board); and
- 4) Adoption of the Project's Findings of Self Sufficiency for the purposes of the SCRF.

#### Financing and Bond Issuance

On December 7, 2017, the Internal Revenue Service notified Green Bank of the allocation of CREBs for the Project. Following Board approval on December 29, 2017, Green Bank issued the CREBs in a principal amount of \$9,101,729.15. Repayment of the bonds is over a 20-year period with a 1.65% net effective interest rate<sup>1</sup>. Banc of America Leasing & Capital, LLC ("BALC") purchased the bonds through an Equipment Lease/Purchase Agreement ("ELPA"). Bond proceeds were deposited in an escrow account and funds will be released upon: i) SCRF approval by Connecticut's Office of the Treasurer ("OTT") and Office of Policy and Management ("OPM"), ii) mechanical completion of the solar PV projects and assignment of project documents to BALC; iii) evidence of insurance, and iv) security filings.

<sup>&</sup>lt;sup>1</sup> Net effective rate includes a 10-year 1% interest rate buy down from Connecticut's Public Utility Regulatory Authority applied to the entire CREBs amount.

Upon the CREBs issuance in December, Green Bank staff began working with OTT and OPM on obtaining SCRF approval for the transaction. In the process of seeking SCRF approval, OTT and OPM brought up a variety of concerns with the original documentation, which Green Bank has addressed by i) working with BALC to make amendments to the ELPA and ii) seeking legislative approval to clarify language in Section 16-245mm(f) of the statute to allow the use of SCRF for bond financing to be approved after its issuance and through a lease agreement

Green Bank staff expects approximately 88-90% of the project to be funded by the CREBs issuance, with the balance of funding to be provided by a balance sheet contribution from the Green Bank. The final project costs will be finalized with Current by GE, the developer for the Project, by mid-August. The need to provide for prevailing wages under Davis-Bacon Act requirements for any projects financed with CREBs proceeds has increased the original cost projections, but Green Bank staff, CSCU, and Current by GE are working to minimize the overall cost impact of this requirement and develop a suitable solution to supplement the contracted revenue streams in order to support the Project's additional costs. The proposed solution involves increasing the term of the various Power Purchase Agreements ("PPAs") with CSCU from 20 to 25 years. This approach, as suggested by the pro forma presented herein, will both ensure that the Project is producing sufficient cash flow to cover CREBs obligations and that the Green Bank should secure a modest return over the term of the PPAs.

Funding Sources	
Green Bank Equity	\$1,186,351
CREBs Proceeds	\$9,101,729
Total	\$10,288,080
Net Present Value Analysis	
25-year NPV	\$3,026,030

**Summary Revenues and Expenses - PROJECTIONS** 

Years	Energy Generation (kWH)	PPA Revenue (\$)	REC Revenue (\$)	Capacity Revenue (\$)	Treasury Direct Subsidy (\$)	PURA Subsidy (\$)	SCRF Reserve Release (\$)	Initial Project Support Capital (\$)	OpEx (\$)	Total Deposits to Revenue Fund (\$)	Interest Payments (\$)	Principal Payments (\$)	Net Cashflow	DSCR
1 - 5	22,141,026	1,718,544	1,643,839	160,000	1,074,810	282,084	57,710	150,000	(363,706)	4,723,280	(2,022,492)	(2,101,760)	599,029	1.15x
6 - 10	27,059,247	2,100,287	2,008,988	0	768,570	282,084	99,887	0	(497,078)	4,762,737	(1,446,234)	(2,777,293)	539,210	1.13x
11 - 15	26,389,497	2,048,302	1,959,263	0	397,604	0	105,003	0	(548,815)	3,961,357	(748,179)	(2,960,797)	252,381	1.07x
16 - 20	25,736,324	1,997,604	257,363	0	99,020	0	431,055	0	(605,936)	2,179,107	(186,327)	(1,261,879)	730,900	1.50x
21 - 25	25,099,318	1,948,161	250,993	0	0	0	268,306	0	(669,002)	1,798,458	0	0	1,798,458	
Total	126,425,412	9,812,898	6,120,446	160,000	2,340,003	564,167	961,961	150,000	(2,684,537)	17,424,939	(4,403,232)	(9,101,729)	3,919,978	

# Findings of Self Sufficiency

The Findings of Self Sufficiency ("Findings") comprise the statutorily required diligence and documentation for the Green Bank to access the SCRF. These findings have been confirmed by Green Bank's financial advisor, Lamont Financial, and are attached hereto as **Exhibit A**. Green Bank staff is bringing the Findings forward for formal Board adoption as required by Section 16-245mm of the Connecticut General Statutes for projects backed by the SCRF.

The Findings reflect that the revenues of the Project are sufficient to pay Project costs and debt service, including CREBs rental payments (broken down into principal and interest payments per the ELPA). As described in the Findings, the Green Bank will support the Project's revenues through a support agreement ("Project Support Agreement") with a one-time contribution expected not to exceed \$150,000 and further annual contributions if there are insufficient funds from the Project to pay annual capital lease rental payments. The Project Support Agreement (attached hereto as

**Exhibit B**) ensures the Project has adequate cash flow to cover the CREBs obligations so as to ensure that the SCRF is never likely to be called upon. From a practical perspective, the Green Bank's support for the Project via the Project Support Agreement simply allows the Green Bank to maximize the CREBs amount at very low interest rates, while providing adequate debt service coverage to ensure OTT and OPM are comfortable approving the use of the SCRF.

### Staff Recommendation

The Project's benefits are numerous and include: i) reduced energy costs to the State of Connecticut (\$12.7 million over a 25-year period); ii) diversity in location across 7 different municipalities via 4.6 MW of renewable energy deployment; and iii) \$10.5 million of total investment utilizing approximately \$1.5 million in investment from the Connecticut Green Bank (6:1 leverage ratio). The positive impact of this financing will be felt by the State for decades. Green Bank staff recommends that the Board authorize the modifications to the Bond issuance and adopt the Findings as presented in this memo.

### Resolutions

WHEREAS, at its September 28 and December 15, 2017 meetings ("Prior Meetings"), the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") authorized (i) a \$9,350,000 issuance of Clean Renewable Energy Bonds ("CREBs"), (ii) the use of ratepayer capital in an amount not to exceed \$1,200,000, and (iii) the President of the Green Bank to secure the use of the Special Capital Reserve Fund ("SCRF") to support the installation of various solar projects for the benefit of the Connecticut State College and University ("CSCU") system (the "Project");

**WHEREAS**, on December 29, 2017, Green Bank issued the CREBs in a principal amount of \$9,101,729.15 to Banc of America Leasing & Capital, LLC ("BALC") through an Equipment Lease/Purchase Agreement.

**NOW, THEREFORE, BE IT RESOLVED,** that the actions taken by and resolutions adopted by the Board at the Prior Meetings are hereby ratified and confirmed in all respects, except as otherwise revised or amended by this Resolution; and

**FURTHER RESOLVED**, that the establishment, funding and maintenance of a debt service reserve fund in an amount not to exceed \$965,000, as required for the SCRF, is hereby ratified and confirmed; and

**FURTHER RESOLVED,** that the Self Sufficiency Findings presented to the Board at this meeting and as attached hereto are hereby approved and adopted, and the President of the Green Bank and any other duly authorized officer are authorized to take appropriate actions to secure the SCRF for the CREBs issuance, provided the Green Bank complies with all statutory requirements for the SCRF, which will require among other things (1) State of Connecticut Office of Policy and Management approval, and (2) approval by the Office of the State Treasurer and other documentation required under the Connecticut General Statutes; and

**FURTHER RESOLVED,** that the Green Bank may provide additional ratepayer capital, in the form of equity to finance the Project as required for the successful structuring of the CREBs issuance, in the amount of \$300,000, so that the total amount of ratepayer capital authorized shall not exceed \$1,500,000; and,

**FURTHER RESOLVED**, that the Equipment Lease/Purchase Agreement, the Escrow and Account Control Agreement, the Deposit Account Control Agreements and all other documents executed and delivered by the President of the Green Bank and other proper Green Bank officers, employees and representatives in connection with the closing of the CREBs financing on December 29, 2017 are hereby ratified and confirmed, and the President of the Green Bank and said officers, employees and representatives are authorized to execute and deliver the First Amendment to the Equipment Lease/Purchase Agreement and the Project Support Agreement, substantially in the form as presented at this meeting of the Board with such revisions as may be determined by the President of the Green Bank, and any additional documents in connection with the CREBs financing as they shall deem necessary and desirable to carry out the intent of this Resolution.

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey and Mariana C. Trief, Clean Energy Finance.

#### **EXHIBIT A**

# *LAMONT*

# **Financial Services Corporation**

New Jersey • California

July 3, 2018

Mr. Bert Hunter EVP and Chief Investment Officer Connecticut Green Bank 845 Brook Street Rocky Hill, CT 06067

Bert,

Lamont Financial Services is serving as financial advisor to the Connecticut Green Bank and has reviewed the financing documents and financial analysis in connection with the multi-campus solar project for Connecticut State Colleges and University project. The project will install a total of 4.6 MW of solar capacity. The project is being financed with a CREBs allocation provided to the CGB by the IRS. The CREBs bond issue will produce a total of \$9,101,729 in proceeds to finance the project. In order to release the proceeds, CGB must furnish Bank of America Leasing and Capital Corporation with proof of a SCRF backing for the CREBs bonds. I am told that SCRF backing even at the reduced rating will be sufficient for Bank Of America to provide the indicated terms to the CGB.

#### The Findings

There are seven findings made by the Board in connection with seeking approval for SCRF backing:

- 1. The project is affordable. The combination of subsidies in the form of federal tax credits on the CREBs bonds and the PURA subsidy lower the net effective rate to 1.65% for the 20 year financing.
- 2. The Green Bank's counterparties are CSU for the Power Purchase Agreement, Eversource and United Illuminating for the ZRECs...all investment grade entities.
- 3. CGB will provide a Project Support Agreement which is a general obligation of the CGB and is available to provide funding and support if project revenues are insufficient in any period.
- 4. CGB is funding the DSRF in full for maximum annual debt service, and is also funding a \$150,000 project support contribution for construction interest on the CREBs.
- 5. There are expected to be substantial project revenues from the combination of the PPAs, ZRECs, PURA contributions, and the PSA before making claims on any of the SCRF backing.
- 6. It is possible to undo this project with optional buyouts, and such buyouts would provide the CGB with a net receipt.

Lamont has reviewed the documentation and exercised diligence in several conversations with the CGB and agrees with the findings presented to the Board.

Rationale for Self-Sufficiency Finding

The Security for the bond issue is a power purchase agreement with CSCU, various ZREC subsidies, PURA subsidies, and interest rate subsidies built into the structure of the CREBs transaction. In addition, to the extent that any shortfalls develop, the CGB is providing additional security through its Project Support Agreement. The Project Support Agreement is supported by all of the CGB revenues from the System Benefit Charge, RGGI funding, loan repayments, investment income, and the sale of investment credits. The CGB believes they have sufficient resources to be able to perform their obligations under the PSA. Further, there will be a Debt Service Reserve Fund established at Maximum Annual Debt Service which will be funded at closing and will provide support to the transaction and allow the SCRF mechanism to work if needed.

Direct subsidy bonds, of which CREBs are only one example, are subject to interest sequestration by the federal government. In general, a 7% sequestration rate is now being applied to direct subsidy bonds where the federal government pays a portion of the interest subsidy. This level of sequestration has been planned for in the projections. However, there is no assurance that additional interest sequestration may be sought by the federal government in the future.

The expected cash flow from the power purchases together with the subsidies are expected to provide debt service coverage after payment of O&M of greater than 1,04 times debt service in every year except for the initial installation period. If there was a failure to achieve the power generation expected from the solar installations, the Project Support Agreement would be first used to cover any debt service shortfall. The PSA is expected to be used to cover any shortfalls during the first year, but the projections suggest that the CGB will not need to provide additional support as the project is expected to be self-sufficient.

CGB is using Current, a division of GE, to construct, test, and commission the project. The solar equipment and inverters come with long-term warranties provided by the manufacturer. The design of this project is to build passive solar arrays on the various campuses of CSU. Each campus will benefit from the generated solar on its campus. The benefit of the PSA approach is that the CGB will have a source of funds to deal with the immediate impact of any problem and then pursue any issues that created a revenue shortfall. Thus, Lamont believes that the strategic support that will be available through the Project Support Agreement, when combined with all of the other remedies that CGB has built into their agreements strongly supports the Finding of Self-Sufficiency as required to use SRCF credit support.

Yours truly,

Robert A. Lamb

President

#### **EXHIBIT B**

# PROJECT SUPPORT AGREEMENT

This PROJECT SUPPORT AGREEMENT (this "Agreement"), is made and entered into by and between the CONNECTICUT GREEN BANK ("Lessee"), a quasi-public agency of the State of Connecticut with an address of 845 Brook Street, Rocky Hill, CT 06067, and BANC OF AMERICA LEASING & CAPITAL, LLC ("Lessor"), a Delaware limited liability company with an address of 11333 McCormick Road, Hunt Valley, MD 21031, as of \_\_\_\_\_\_\_\_, 2018 (the "Effective Date").

#### RECITALS

WHEREAS, Lessor and Lessee entered into an Equipment Lease/Purchase Agreement (Taxable Direct Pay New Clean Renewable Energy Bond) dated as of December 29, 2017 (the "Lease/Purchase Agreement") for the installation of equipment and related costs for solar projects at various locations within the Connecticut State College and Universities System (the "Projects"); and

WHEREAS, the Lease/Purchase Agreement provides that Lessee make payments of Project Support Agreement Amounts pursuant to a Project Support Agreement between Lessor and Lessee providing for Lessee's financial support of the Projects and Lessee's Rental Payments and payments to the Special Capital Reserve Fund Account established pursuant to the Lease/Purchase Agreement; and

WHEREAS, the Lease/Purchase Agreement further provides that as a condition of any approval by Lessor of the release of any funds from the Escrow Account for an individual Project, Lessee shall deliver to Lessor the approval of the Special Capital Reserve Fund Account by the Secretary of the Office of Policy and Management and the State Treasurer; and

WHEREAS, in order to obtain the approval of the Secretary of the Office of Policy and Management and the State Treasurer of the Special Capital Reserve Fund Account, the Project Support Agreement must provide adequate assurances that funds will be made available by Lessee so that the likelihood of a draw upon the Special Capital Reserve Fund Account is remote; and

WHEREAS, Lessor and Lessee desire to obtain the approval of the Special Capital Reserve Fund Account through, among other things, the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual promises herein, Lessor and Lessee agree as follows:

### 1. **DEFINITIONS**

The following terms used in this Agreement shall have the following meanings unless the context otherwise requires. Capitalized terms not defined herein shall have the meanings provided in the Lease/Purchase Agreement.

"Agreement" has the meaning set forth in the Introduction.

"Bank" means Webster Bank, National Association, as depository bank under each of the two deposit account control agreements respectively governing the Revenue Account and the Special Capital Reserve Fund Account, or such other successor bank that may serve in such capacity from time to time.

"Effective Date" has the meaning set forth in the Introduction.

"Projects" has the meaning set forth in the Recitals.

"Project Support Initial Contribution Amount" means a one-time contribution by Lessee to or for the benefit of Lessor in an amount sufficient, together with other funds available in the Revenue Account as of November 1, 2018, to pay for the Rental Payment (as shown on the Payment Schedule under the column heading "Non-Qualified Transaction Payments") due on November 15, 2018, which Rental Payment shall be in the amount of \$391,475.48. For purposes of illustration and without limiting the foregoing sentence, Lessee estimates that the Project Support Initial Contribution Amount will be an amount equal to \$150,000.

"Project Support Debt Service Amount" means an amount sufficient, together with other funds available in the Revenue Account, to pay for the Rental Payment (as shown on the Payment Schedule under the column heading "Non-Qualified Transaction Payments") becoming due on November 15, 2019, and then on each succeeding November 15, by the Lessee under the Lease/Purchase Agreement.

"Project Support Obligations" has the meaning set forth in Section 2.1(a).

"Person" means any individual, firm, partnership, joint venture, corporation, limited liability company, association, business enterprise, trust, governmental body or other entity.

"Special Capital Reserve Fund Requirement" shall mean as of any date of calculation, an amount equal to the maximum amount of any Rental Payment (as shown on the Payment Schedule under the column heading "Non-Qualified Transaction Payments") becoming due in the calendar year in which such computation is made or in any single succeeding calendar year, under the Lease/Purchase Agreement. For example, the Special Capital Reserve Fund Requirement calculated as of the Effective Date of this Agreement is \$961,960.75.

"Support Termination Date" means the earlier of November 15, 2037 or the date upon which all of Lessee's obligations under the Lease/Purchase Agreement have been paid and satisfied in full (or otherwise terminated).

### 2. PROJECT SUPPORT.

# 2.1 Project Support Obligations.

- a) Lessee, in accordance with the procedures set forth in this Agreement, will pay to the Bank (i) on November 1, 2018 for deposit into the Revenue Account, the Project Support Initial Contribution Amount; and (ii) on the fifth (5<sup>th</sup>) business day of November of each year, commencing in November 2019, for deposit into the Revenue Account, the Project Support Debt Service Amount (collectively, the "Project Support Obligations").
- b) Lessee's commitment to pay in full the Project Support Obligations, as and when the same become due: (i) will be effective on the Effective Date and will remain in effect through the Support Termination Date; (ii) will be continuing, absolute, unconditional and irrevocable; and (iii) will not be subject to termination by Lessee for any reason, including without limitation:
  - a. the bankruptcy or insolvency of Lessee;
  - b. any default by Lessee under any financing agreement; or
  - c. any reduction or elimination of State funding for Lessee.

Section 16-245kk(j) of the Connecticut General Statutes provides as follows:

The state of Connecticut does hereby pledge to and agree with the holders of any bonds, notes or other obligations issued under this section and with those parties who may enter into contracts with the Connecticut Green Bank or its successor agency pursuant to the provisions of this section that the state shall not limit or alter the rights hereby vested in said bank until such obligations, together with the interest thereon, are fully met and discharged and such contracts are fully performed on the part of said bank, provided nothing contained in this subsection shall preclude such limitation or alteration if and when adequate provision is made by law for the protection of the holders of such bonds, notes or other obligations of said bank or those entering into such contracts with said bank. Said bank is authorized to include this pledge and undertaking for the state in such bonds, notes or other obligations, or contracts.

# 2.2 [Reserved].

2.3 <u>Project Contributions</u>. The parties acknowledge that all payments made by or on behalf of Lessee to the Bank pursuant to this Agreement shall be made in support of Lessee's obligations under the Lease/Purchase Agreement with no right of repayment, redemption or preferred return.

#### 2.4 [Reserved].

2.5 <u>Special Capital Reserve Fund Payments</u>. In addition to its obligations hereunder, Lessee shall pay to the Bank, for deposit into the Special Capital Reserve Fund Account, any moneys allotted and paid to Lessee by the State for the purpose of restoring the Special Capital Reserve Fund to the amount of the Special Capital Reserve Fund Requirement.

# 3. LESSEE'S REPRESENTATIONS AND WARRANTIES.

Lessee hereby makes the following representations and warranties:

- a) Lessee 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;
- b) no approval of, or consent from, any governmental authority is required for the execution, delivery or performance by Lessee of this Agreement; and
- c) the execution, delivery and performance by Lessee of this Agreement and the transactions contemplated hereby (A) do not contravene any provisions of law applicable to Lessee, 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 Lessee is a party, by which Lessee may be bound, to which Lessee or its property may be subject, Lessee's enabling legislation or Lessee's bylaws.

# 4. MISCELLANEOUS PROVISIONS.

- 4.1 <u>Notices</u>. Except as otherwise specifically provided herein, all notices, requests, consents, demands, waivers and other communications hereunder shall be in writing and shall be delivered in person or sent by certified mail, return receipt requested, or by courier service (with evidence of receipt) to the address of the other party set forth in the introduction of this Lease or to such other address as such party shall have designated in writing by proper notice. Notices shall be deemed given upon actual receipt or when delivery is refused.
- 4.2 <u>Amendment and Waiver</u>. This Agreement may not be amended, nor may any provision hereof be waived, except by an instrument in writing signed by all of the parties hereto.
- 4.3 <u>References</u>; <u>Headings</u>; <u>Plurals</u>. Section and article references are to the sections and articles of this Agreement unless otherwise indicated. Headings used in this Agreement are for convenience only and shall not be used in connection with the interpretation of any of its provisions. Unless the context otherwise requires, words in the singular number include the plural, and words in the plural include the singular.
- 4.4 <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, each of which shall be an original and all of which shall constitute one agreement.

- 4.5 <u>Severability</u>. Any provision of this Agreement that is prohibited or unenforceable in a particular jurisdiction shall be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions of this Agreement in such jurisdiction or affecting the validity or enforceability of such provision in any other jurisdiction.
- 4.6 Entire Agreement. This Agreement embodies the entire agreement and understanding between Lessor and Lessee with respect to the subject matter hereof and supersedes all prior agreements and understandings between such parties with respect to the subject matter hereof.
- 4.7 <u>Assignment; Benefits</u>. Lessee may not assign or transfer any of its rights or delegate any of its obligations under this Agreement without the prior written consent of Lessor, except as may occur by operation of law. This Agreement shall be binding upon and shall inure to the benefit of the parties, their successors and permitted assigns.
- 4.8 <u>Governing Law</u>. Each party hereto irrevocably consents to the jurisdiction of the courts of the State of Connecticut in the matters set forth in this agreement, and to such legal or equitable remedies, including but not limited to injunctive relief, as may be imposed at law or in equity.

[SIGNATURE PAGE FOLLOWS]

**IN WITNESS WHEREOF**, the parties through their respective duly authorized agents, have executed this Agreement as of the date first above written.

# **CONNECTICUT GREEN BANK**

# BANC OF AMERICA LEASING & CAPITAL, LLC

BY:	BY:		 	
NAME: Bryan Garcia		NAME:		
TITLE: President and		TITLE:		
Chief Evecutive Officer				



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# **PosiGen Credit Facility Expansion**

A Residential Financing Program

Approval Request Memo

July 27, 2018

**Document Purpose:** This document contains background information and due diligence on the PosiGen Residential Solar and Energy Efficiency Lease Engagement and the organizations involved. This information is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

In some cases, this package may contain among other things, trade secrets, and commercial or financial information given to the Connecticut Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public discourse under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

# **Program Qualification Memo**

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

**From:** Chris Magalhaes, Associate Director, Clean Energy Finance; Ben Healey, Director, Clean Energy Finance;

Bert Hunter, EVP & CIO

Cc: Bryan Garcia, President & CEO; Brian Farnen, General Counsel & CLO; Kerry O'Neill, Vice President,

**Residential Programs** 

**Date:** July 27, 2018

Re: PosiGen Credit Facility Expansion

#### **Purpose**

The purpose of this memo is to request approval from the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") for certain changes to the existing term loan facility between the Green Bank and PosiGen, as originally approved by the Board on June 12, 2015 and as amended most recently on June 13, 2018 (the "Term Loan A Facility"). The changes, as described herein, would effectively merge the current overall PosiGen credit facility for Connecticut-based projects (the "CT Debt Facility") with a larger credit facility encompassing all of PosiGen's solar PV system and energy efficiency leases in the United States (both "Back-Levered" or "BL" credit facilities and as combined, the "Expanded BL Facility"). The impetus for the Expanded BL Facility is PosiGen's continued growth and evolution from a growth-stage startup to a steady-state organization benefitting from operational and financing efficiencies, and the results from merging the CT Debt Facility into the Expanded BL Facility (all of which being mutually reinforcing and momentum generating) will be (i.) the potential for greater residential Low and Moderate Income ("LMI") solar PV system and energy efficiency lease deployments in Connecticut, (ii.) equal or better terms, across both risk and return conditions, for the debt associated with Connecticut leases in the Expanded BL Facility (which is the role the Green Bank would play if all of the requests proposed herein are approved), and (iii.) improved liquidity and financial conditions for PosiGen derived from financing structure and transactional fee efficiencies.

The changes for which Green Bank staff requests approval from the Board are:

1.) To increase the amount of the Green Bank's participation in the Term Loan A Facility from its current level of \$8.5 million of total debt advanced up to \$10,000,000 of total debt advanced, and then to increase that participation in the Expanded BL Facility up to \$15,000,000 of total principal outstanding<sup>2</sup>, and in parallel to increase the interest rate on Green Bank debt for the *additional* \$1.5 million of Term Loan A Facility advances (i.e., the difference between the \$8.5 million limit of the current Term Loan A Facility and the

<sup>&</sup>lt;sup>1</sup> The term "back leverage" and its variants in this context refers to debt financing associated with solar PV projects that is not secured at the "project owner partnership entity" level but instead through a collateral structure at the "partnership member" level. See the Capital Flow Diagram section below for a visual representation of this construct.

<sup>&</sup>lt;sup>2</sup> Because the Term Loan A Facility is a non-revolving, amortizing debt facility (as discussed further in the "Green Bank Risk Exposure and Mitigants" section below), the facility debt limit is in terms of "dollars advanced", whereas because the Expanded BL Facility is an interest-only non-amortizing facility (also as discussed further in the sections below), the facility debt limit is in terms of "dollars outstanding".

proposed new limit of \$10 million) to a minimum floor of [[100]] (P.A.). Once the Expanded BL Facility is executed and effectively merged with the CT Debt Facility, the new [[100]] (P.A.) floor interest rate would be applied to the full amount of Green Bank debt outstanding. The current Green Bank principal balance outstanding under the Term Loan A Facility is expected to be \$7,819,001.76 as of July 27, 2018;

- 2.) To allow the Green Bank's participation in the Expanded BL Facility to have exposure to solar PV system and energy efficiency leases originated and maintained outside of the state of Connecticut. This means that while Green Bank capital is used to fund Connecticut leases within the Expanded BL Facility, there would be other debt comingled in the facility that would be used to fund non-Connecticut domiciled leases. The Green Bank would benefit from the collateralization of non-Connecticut solar PV systems and associated cashflows thereof, and, importantly, the structuring of the Green Bank debt in this environment would result in a risk/return profile that is at least the same, and with regards to certain conditions better than, the Green Bank's current exposure under the Term Loan A Facility (as discussed further in point (3) below);
- 3.) To allow the Green Bank to remain subordinate to [a] new 3<sup>rd</sup> party private capital provider(s) (the "Senior BL Lender(s)") in the Expanded BL Facility under terms at least as good as, and in some cases better than, the current subordination structure the Green Bank maintains in the Term Loan A Facility. From a return perspective, assuming the interest rate increase requested herein is approved, the interest rate on the Green Bank debt in the Expanded BL Facility would be equal to or higher than the Green Bank's interest rate in the Term Loan A Facility ([ [ ] (P.A.)). From a risk perspective, the Green Bank would face terms that were equal to or better than terms in the Term Loan A Facility on every measure of principal protection and repayment assurances: (a.) system liens (where available, maintaining those currently in place) and cash flow assignments, (b.) advance rates against available system value and cash flows (accounting for senior debt), (c.) exposure/duration of Green Bank principal outstanding, and (d.) principal repayment and yield received during default/runoff scenarios.

Further, because the Green Bank is backstopped by a corporate guaranty by the PosiGen parent-level entity under the Term Loan A Facility, and will continue to benefit from such a guaranty under the Expanded BL Facility, to the extent that the Expanded BL Facility improves the liquidity and financial conditions for PosiGen, it also increases the value of that corporate guaranty;

4.) To allow the Green Bank to invest in a solar PV system and energy efficiency lease financing structure that does not include the Residential Solar Investment Program ("RSIP") Performance-Based Incentive ("PBI"), which will be carved out of the Expanded BL Facility and monetized separately by PosiGen in a to-be-determined PBI-only fund structure. Under such a structure, the PBI will still achieve its original purpose, which is to support additional capital placement into the deployment of solar PV system and energy efficiency leases, but it will do so more directly. PosiGen's intent is to separate cashflows with different risk profiles (solar PV system and energy efficiency lease cashflows primarily having repayment and subordination [to tax equity] risk, and PBI cashflows primarily having production and RSIP risk) in order to better align debt advances with those different risk profiles, and the Green Bank's participation in the

Expanded BL Facility would be adjusted accordingly to account for cashflows without PBIs.

5.) To allow the Green Bank the ability to syndicate (i.e., sell off) all, or a portion, of its participation in the Expanded BL Facility to 3<sup>rd</sup> party investors under terms that would be brought back to the Board for approval if/when necessary. Reasons why the Green Bank might find it advantageous to syndicate a portion of its participation in the Expanded BL Facility at some point in the future include: (a.) to reduce its capital outstanding in the facility, and thus increase its liquidity available for other purposes as may be deemed desirable in the future, (b.) to promote further 3<sup>rd</sup> party private capital participation in the capitalization of solar PV system and energy efficiency leases, and (c.) to take advantage of beneficial terms and conditions being offered by, and negotiated with, interested counterparties.

### **Benefits to Connecticut**

By allowing the Green Bank to increase its participation in PosiGen financing facilities, and by allowing participation in the Expanded BL Facility to be a part of a national portfolio of solar PV system and energy efficiency leases (points #1 and #2 in the "Purpose" section above, respectively), the Green Bank will be delivering clean energy deployment benefits (and in particular for the LMI community) directly to Connecticut.

The increase in the Green Bank's participation in the Term Loan A Facility, with the intention of having this expanded participation roll over into the Expanded BL Facility, along with additional 3<sup>rd</sup> party debt that is expected to capitalize the Expanded BL Facility (and will most likely "take out", or refinance Enhanced Capital and Stonehenge debt, as discussed further in the "Green Bank Risk Exposure and Mitigants" section below) will directly contribute to further clean energy deployment in Connecticut, with the potential to finance an additional 4,000+ systems in Connecticut over the next 3 years as explained below.

Since PosiGen launched its Connecticut operations in 2016, the company has opened local offices in Bridgeport and Hartford (this summer) to run sales and operations in Connecticut, resulting in not only the deployment of 1,699 residential rooftop solar PV systems (as mentioned above) but also in local tax revenue generation for towns and local job creation for individuals. The local, community-based focused of PosiGen's sales, operations, and hiring is especially important to both Connecticut and the Green Bank as approximately 63% of leases are qualified as LMI<sup>3</sup> through income verification and 74% are deployed in census tracts that are <100% of area median income.

PosiGen's growth within Connecticut, and the localized economic "multiplier" benefits incurred from that growth, is expected to continue to be a core component of PosiGen's strategic outlook and focus. As of July 6, 2018,

<sup>&</sup>lt;sup>3</sup> With household income levels at or below 100% of Area Median Income and adjusted for number of household members.

Connecticut solar PV systems comprise PosiGen's largest deployment outside of Louisiana, accounting for close to [ of the FMV of PosiGen's total portfolio. PosiGen projects that the Expanded BL Facility will finance an additional 4,000+ systems in Connecticut over the next 3 years from Q4 2018 through Q3 2021, with the capital exposure to the Green Bank being limited to the participation restrictions requested herein (\$15,000,000) and the rest of the financing coming from Senior BL Lender(s). While development and origination projections can tend to be optimistic, even with a significant sensitivity factor applied to the PosiGen projections and applying an experiential factor based on deployments in Connecticut to date, it is clear that as long as PosiGen is able to continue to successfully originate leases in Connecticut, the Expanded BL Facility has the potential to contribute to the significant deployment of solar PV systems in Connecticut beyond the 1,699 systems currently deployed.

### **Green Bank Risk Exposure and Mitigants**

The increase in the Green Bank's participation in PosiGen financing facilities will be paired with structured mitigants, terms, and conditions that leave the Green Bank with at least the same, but envisioned as better holistically, risk profile as compared with that under the Term Loan A Facility, even without inclusion of PBI cashflows in the financing structure and inclusive of the ability to opportunistically syndicate portions of its participation (points # 3 – 5 in the "Purpose" section above, respectively). Importantly, the protections put in place will hold true regardless of whether PosiGen is successfully growing or in default and bankruptcy/liquidation distress, relieving the Green Bank of the need to depend on PosiGen for preservation of capital and yield recovery.

A comparison of guidelines and conditions associated with the current Term Loan A Facility vs. those in the Expanded BL Facility, assuming all of the requests summarized herein are approved by the Board, is summarized in the table below:

CATEGORY	Existing Term Loan A Facility	Expanded BL Facility
Collateral	A UCC-1 filed lien in Connecticut solar PV systems and assignment of all associated net cashflows - inclusive of energy efficiency leases, and net of all senior cashflow obligations (e.g. tax equity and senior debt payments)	A UCC-1 lien in Connecticut solar PV systems, where available going forward, and assignment of all associated net cashflows from all systems in the Expanded BL Facility, exclusive of PBI cashflows – inclusive of energy efficiency leases, and net of all senior cashflow obligations (e.g. tax equity and senior debt payments)
Advance Rate	The lower of either 40% of the solar PV system FMV or 85% of all solar PV system net cashflows across the operating term discounted at a rate equal to or higher than the interest rate on all debt within the CT Debt Facility	The lower of either 40% of the solar PV system FMV or 85% of all solar PV system net cashflows across the operating term discounted at a rate that results in both the ability to successfully refinance all of the debt in the BL Facility at the end of the expected term and the ability of the lenders in the Expanded BL facility to recover principal and adequate interest in a default and runoff payment scenario

Guarantor(s)	PosiGen corporate parent	PosiGen corporate parent
Interest Rate (P.A.)		advanced under the Term Loan A Facility above the current \$8.5 million facility size (up to the proposed \$10 million limit), and then subsequently applied to the <i>full amount</i> of Green Bank debt outstanding under the Expanded BL Facility (up to the proposed \$15 million limit).
Amortization; Term (Yrs)	10 Year amortization; 6 Year term	3 Year interest-only term with bullet repayment at the end of term
Repayment	Quarterly in arrears	Quarterly in arrears
Default/Runoff Cashflow Distributions	Senior lenders are paid out in full first, for both principal and accrued interest, from existing collateral at time of default; Green Bank receives all remaining cash, applied towards principal repayment and interest recovery	A to-be negotiated split of cashflow distributions between Senior BL Lender(s) and Green Bank resulting in a principal repayment and interest recovery profile at least equal to that of the Existing Term Loan A Facility

As inferred from the table above, the constraints guiding debt advance rates (e.g. 85% of discounted available cash flows) remain a key protection for the repayment of Green Bank debt because they automatically limit Green Bank advances to just available cashflows, mitigating the impact of, for example, the removal of the PBI cashflows from the financing model. That the advance rate constraints are applied to cashflows that are already net of cash payments to tax equity and senior debt (both of which have priority to the Green Bank in the financing cash flow waterfall across all PosiGen financing structures) means that Green Bank debt is always sized appropriately relative to an available "borrowing base", and the application of an 85% margin and a discount rate against those cashflows provides for both a margin of error and a cushion for interest payments across the passage of time.

The reasoning behind the change in discount rate nomenclature in the table above between the Term Loan A Facility and the Expanded BL Facility stems from the impact of (a.) an interest-only term structure combined with higher interest rates across a 3-year term, vs. (b.) an amortizing term structure combined with lower interest rates across a 6-year term. Because an amortizing term structure include principal and interest payments, an interest-only term structure can have a higher interest rate but still result in lower periodic cash payments than an amortizing term structure with a lower interest rate, so from a cash perspective the interest rate in the interest-only term structure can exceed the discount rate. From the lender perspective, the focus then becomes making sure that the differential between the discount rate on the cash flows and the interest rate on the interest-only facility doesn't result in an inability to recover principal and yield in either a bullet repayment or a default/runoff scenario. As noted in the "Advance Rate" section of the table above, this is exactly the focus that Green Bank staff will have when determining the final advance amounts relative to the discount rate.

The 3-year term also acts to shorten the exposure of Green Bank principal outstanding to PosiGen, resulting in (a.) less risk with respect to the duration of principal outstanding, (b.) a shorter time to the refinancing event at term-

end (which articulates how much the market values PosiGen leases and whether the assumptions made on the financing facility are accurate), and (c.) a shorter time to having more private capital participation in financing Connecticut-based solar PV system and energy efficiency leases. Under the current Term Loan A Facility structure, into which the Green Bank has been advancing since Q1 2016, the first refinancing event resulting from the '6-year term / 10-year amortization' construction will occur in Q2 2022 and will continue through Q4 2024. If the Expanded BL Facility closes in Q3 2018, the refinancing of the entire facility will occur by Q3 2021. In terms of quantifying the refinancing events, staff estimates show that under the Term Loan A Facility structure, approximately 55% of the principal is repaid before the refinancing event, whereas under the Expanded BL Facility 100% of the principal is not repaid until the refinancing event. Looking at repayment from a purely cash basis a 7.50% interest-only facility generates approximately 60% of the periodic cash flows that a 5.00%, 10-year amortizing facility generates (which is the current amortization profile of the Term Loan Facility) and approximately 94% of the periodic cash flows that a 5.00%, 20-year amortizing facility generates (which would be a hypothetical amortization profile in a default and runoff facility where a lender in the PosiGen financing facilities is repaid over the course of full customer lease terms).

Under the scenario where there is a default, and a runoff scenario occurs where lenders choose to be repaid over time via operating cash flows from systems/collateral (as opposed to selling the systems for a one-time gain and repayment, assuming that would be the greater value-generating option), the distributions of cash between the Senior BL Lender(s) and the Green Bank will be equal to, or better than, the runoff scenario profile currently faced by the Green Bank in the Term Loan A Facility. It is envisioned that the current senior lenders in the CT Debt Facility, Enhanced Capital and Stonehenge, will be paid out in full by the incoming Senior BL Lender(s) as part of the consolidation of the CT Debt Facility into the Expanded BL Facility, which provides Green Bank staff with the opportunity to negotiate terms and dictate minimum capital protection and preservation requirements. The payout of Enhanced Capital and Stonehenge is a value to the senior lenders, as they are able recover their capital (inclusive of the interest they've accrued to date) and recycle investments in either other projects or back into a PosiGen-related facility at some point in the future.

#### **Benefits to PosiGen**

PosiGen's capital planning and strategy to date reflects this approach, as do its plans for continued growth. Starting in 2011 in Louisiana, PosiGen reached enough critical scale to launch and succeed within the Connecticut market (with the help of the Green Bank). That expansion into Connecticut was achieved through a fully separate, and self-contained financing structure and operational approach. To be sure, the corporate personnel at PosiGen oversaw the expansion, but for the purposes of (a.) originating Connecticut systems and leases, and (b.) financing

Connecticut systems and leases, the approach and structures employed by PosiGen were bespoke and disjointed from Louisiana. The benefits of this "silo" approach were that from a capital perspective, the Green Bank and subsequent market participants could structure financing facilities with a familiar, Connecticut-only exposure, and from an operational perspective, could focus on and "learn" how to enter into a new market. The drawbacks (or rather, tradeoffs) of the "silo" approach were that transactional friction was high (especially legal costs and timing delays) due to the patching together of various capital providers and the associated intercreditor agreements, and operational efficiency took time to be realized.

Just as three years ago, when PosiGen reached a critical growth junction in Louisiana and took the next step in the evolution of its corporate growth trajectory by expanding into Connecticut, now that PosiGen has achieved a certain critical scale of growth in Connecticut, it is poised to take its next steps towards that ultimate goal of "steady state" operational and financing efficiency. Those steps include:

- 1.) Continuing to install systems and leases in Louisiana and Connecticut;
- 2.) Expanding operations into new territories, such as [ and [ and [ ];
- 3.) Reducing transactional costs/inefficiencies by consolidating all separate debt facilities across states into a single debt facility collateralized by all PosiGen systems and leases across the United States; and
- 4.) Reducing financing costs through portfolio "seasoning" (i.e. strong repayment history), portfolio growth (i.e. greater diversification/collateralization to investors) and improvements in corporate financial health.

The Expanded BL Facility being recommended here by staff is the platform that will allow PosiGen to achieve the above-listed steps, and from a credit facility perspective is a bridge towards a potential capital markets play in three years that will catalyze the ultimate goals of steady state operational and financing efficiency.

### **Strategic Plan**

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

Addressing the LMI market in Connecticut has been, and continues to be, a strategic imperative for the Green Bank. Initially as a direct response to Board directives to staff, addressing the LMI market in Connecticut through direct funding initiated during the FY16 budget and continued through FY19 has resulted in the success of PosiGen financing facilities to date. Continuing to support PosiGen financing facilities will further the deployment of clean energy measures in the LMI market.

#### Ratepayer Payback

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

Under the Term Loan A Facility, the Green Bank has advanced \$8.5 million of debt (i.e. the ratepayer funds at risk), which has contributed to the deployment of approximately 11.1 MW of residential rooftop solar PV systems in Connecticut. Assuming a 20-year system lifetime (a conservative estimate in order to bookend system lifetime with initial customer lease terms), a 12.5% solar PV system capacity factor, and a 0.5% degradation rate, projected

clean energy produced from the current portfolio of systems is 232 GWh versus \$8.5 million of ratepayer funds at risk, resulting in approximately 27.28 kWh for every ratepayer dollar at risk. Additional Green Bank advances are expected to have similar clean energy production ratios on a per dollar basis.

#### **Terms and Conditions**

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

#### Risk

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

The maximum risk exposure of ratepayer funds is \$9,319,001.76 under the Term Loan A Facility, which is the current principal outstanding plus the \$1.5 million of additional capacity under the facility limit if approved, and **\$15,000,000** upon the execution of the Expanded BL Facility.

#### **Financial Statements**

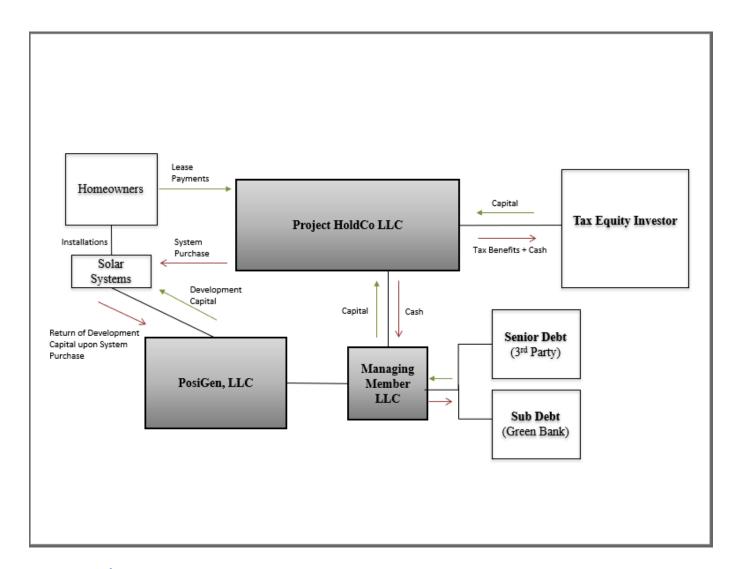
How is the program investment accounted for on the balance sheet and profit and loss statements?

Advances of debt are accounted for by a reduction in the Green Bank Cash and Cash Equivalents Accounts (Current Assets on the Balance Sheet) and a corresponding increase in "[Subordinated] Promissory Notes – [PosiGen]" (Non-Current Asset on the Balance Sheet).

#### **Capital Flow Diagram**

The Capital Flow Diagram for the Term Loan A Facility remains the same structure as that initially approved by the Board on June 12, 2015.

The Capital Flow Diagram for the Expand BL Facility is similar, with the exception that the Expanded BL Facility excludes PBI cashflows from the financing structure (which in the Term Loan A Facility was represented by PBI cashflows being directly distributed into the Project HoldCo LLC). Further, the underlying participants represented by the structure diagram may change – specifically the Senior Debt providers Enhanced Capital and Stonehenge are expected to be replaced by [ ], and the Tax Equity Investor LLC will include a variety of tax equity investors (as discussed further below in the "Program Partners" section):



# **Target Market**

The Target Market for this engagement continues to be Connecticut LMI households. By partnering with PosiGen, the Green Bank has had success making solar more accessible to LMI homeowners, and staff endeavors to continue that success with the financing facility modifications requested herein.

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

Green Bank staff continues to assist PosiGen in the overall design and implementation of the engagement, including capital support, marketing, and operations. The Green Bank selected PosiGen as a result of its Residential Solar Financing RFP, originally issued in December 2014. PosiGen responded with a comprehensive proposal to deliver a solar lease and energy efficiency financing offering to LMI households, and the Green Bank continues to engage with PosiGen as a result of that proposal.

# **Program Partners**

- PosiGen
- Various tax equity providers, including [

• [Potentially] [ ], as a Senior BL Lender, with whom Green Bank and PosiGen are currently in negotiations for its participation in the Expanded BL Facility

The PosiGen background and leadership remains substantially the same as that described in the original Board Memo submitted June 12, 2015. The tax equity providers in the PosiGen financing facilities are not direct partners of the Green Bank (as shown in the Capital Flow Diagram above). They are direct counterparties to PosiGen, in the capacity of providing investment platforms that monetize tax benefits associated with solar PV systems, and though the Green Bank and the tax equity investors may negotiate documentation that clarifies rights across all of the counterparties in the financing structures relative to underlying solar PV system cash flows and collateral, those interactions are purely transactional, a function of whom PosiGen selects as a tax equity provider for various Project HoldCo LLCs, and does not represent any type of programmatic or strategic partnership.

As [ is, at this point in time, a potential Senior BL Lender, and thus a strategic and financial counterparty to the Green Bank in the Expanded BL Facility, below is a further description of this [potential] Program Partner:

#### Mission

[REDACTED]

#### **Programs/Programmatic Strengths/Service Area**

[REDACTED]

#### **Leadership**

[REDACTED]

# **Risk and Mitigation Strategies**

See the "Green Bank Risk Exposure and Mitigants" section above for Risk and Mitigation Strategies.

#### Resolutions

**WHEREAS**, the Connecticut Green Bank ("Green Bank") has a mandate to deploy its resources to benefit all ratepayers, including low and moderate income ("LMI") residential households;

WHEREAS, LMI households bear a disproportionate burden of the state's high energy costs as a percentage of their income, generally do not benefit from existing federal incentives for clean energy adoption given that such incentives require sufficient tax liabilities to be of value, and traditional financing for residential solar PV and energy efficiency upgrades rely on credit tests that screen out many LMI households and exclude them from third-party ownership models for residential solar PV;

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

**WHEREAS**, the Green Bank has provided an initial debt capital commitment of \$5,000,000 (the "Term Loan A Facility") to PosiGen that is currently in repayment with no outstanding payments or amounts due at this time;

**WHEREAS**, the Term Loan A Facility was amended on June 13, 2018 to include an increased debt capital commitment of an additional \$3,500,000 to PosiGen that has since been advanced in full;

**WHEREAS**, PosiGen has successfully deployed approximately 1,699 residential solar PV systems in Connecticut since the formation of its existing and successful partnership with Green Bank;

**WHEREAS**, PosiGen endeavors to merge the current overall PosiGen credit facility in Connecticut (the "CT Debt Facility"), of which the Term Loan A Facility is part, with a larger credit facility encompassing all of PosiGen's solar PV system and energy efficiency leases in the United States (both "Back-Levered" or "BL" credit facilities and as combined, the "Expanded BL Facility") as part of its strategic growth plan;

**NOW**, therefore be it:

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver changes to the Term Loan A Facility agreements and execute and deliver agreements to consummate arrangements pursuant to which the Green Bank will participate in the Expanded BL Facility with the with terms and conditions consistent with the memorandum submitted to the Board dated July 27, 2018, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of authorization by the Board; 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: Chris Magalhaes, Associate Director, Clean Energy Finance; Ben Healey, Director, Clean Energy Finance; Bert Hunter, EVP & CIO

# Draft [ Term Sheet - CONFIDENTIAL

[REDACTED]

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



# Memo

To: Brian Farnen, General Counsel and Chief Legal Officer

From: Matt Macunas, Legislative Liaison and Senior Marketing Manager

**Date:** May 31, 2018

Re: 2018 Laws Passed and the Green Bank's 2018 Legislative Agenda

The Green Bank approached the 2018 Regular Session of the Connecticut General Assembly with several key objectives, all of which were fulfilled by session adjournment. The Green Bank required time to stabilize its finances as a result of the state budget passed during the 2017 special session in October; accordingly, the Green Bank was not looked to for further revenue diversions beyond those already enacted in law. Also as fallout from 2017 revenue sweeps, the organization asked for stronger assurances from the State that its public-private contracting agreements would be honored. Additionally, the Green Bank asked for ratification of a solar PV financing deal with the state university system. Finally, the Green Bank supported legislation to enact the goals of the State's Comprehensive Energy Strategy.

#### Public Act 18-42 – passed both houses, not yet signed by Governor

AN ACT CONCERNING THE FAILURE TO FILE FOR CERTAIN GRAND LIST EXEMPTIONS, VALIDATING A CONNECTICUT GREEN BANK AGREEMENT AND CERTAIN ACTIONS OF THE CITY OF DERBY, CONCERNING PAYMENT OF A GRANT-IN-AID TO THE TOWN OF DARIEN AND THE CRITERIA OF CERTAIN MEMBERS OF SCHOOL GOVERNANCE COUNCILS AND EXTENDING A PROVISION CONCERNING REEMPLOYMENT OF CERTAIN TEACHERS

This bill validates various exemptions blessed by the legislature that are not related to clean energy policy. Section 5 of the bill authorizes the Green Bank to secure, with a Special Capital Reserve Fund (SCRF), its obligations to make basic rental payments, consisting of principal and interest, under the equipment lease-purchase agreement it entered into in December 2017 for the installation of solar equipment at various locations of the Connecticut State Colleges and Universities. This legislation was necessary due to the expiration of certain federal tax incentives at the end of last year.

#### Public Act 18-50 – signed by Governor

#### AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE

This legislation enacts elements of DEEP's Comprehensive Energy Strategy, including extension and restructuring of various programs, particularly with the goal of making renewable energy more accessible and affordable. Section 10 of the Act strengthens the Green Bank's statutory "non-impairment" provision, requiring the State's pledge not to limit or alter the Green Bank's rights until it meets its contract obligations. The State's pledge is to be interpreted and applied broadly to maintain the organization's financial capacity and perform its essential government function. The Act also stipulates that the Green Bank's contracts and obligations must be supported with appropriated Green Bank funds to meet such obligations. A full bill analysis is available <a href="https://example.com/here/bank).pdf</a>

#### Public Act 18-82 – signed by Governor

#### AN ACT CONCERNING CLIMATE CHANGE PLANNING AND RESILIENCY

This legislation strengthens state environmental laws and was presented as a companion to Public Act 18-50 concerning energy modernization. The Act codifies the midterm GHG emissions reduction target so as to ensure meeting targets set under the Global Warming Solutions Act of 2008. It also integrates sea level change projections into statute; combines the existing reporting obligations of the Comprehensive Energy Strategy and the Governor's Council on Climate Change; and makes various other minor changes. A full bill summary is available here.



# State Leadership in Clean Energy AWARDS

## Advancing Clean Energy Progress: Past, Present, and Future

JUNE 2018











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#### **Cover Images**

Front Cover: (top) Block Island Offshore Wind Farm – Source: Deepwater Wind (bottom left) Lake Nokomis Beach Solar Canopy – Source: Minneapolis Park and Recreation Board (bottom middle) Electric Vehicle Charger in Ulster Country, NY – Source: Ulster Country (bottom right) Solar Homes in Connecticut - Source: PosiGen

Inside Front Cover: East Phillips Park in Minneapolis (Wall Mounted PV panels) – Source: Ray Colby/Sundial Solar

Inside Back Cover: PV System at Octagon Apartments, New York City – Source: NYSERDA

#### Introduction

This past year, the Clean Energy States Alliance (CESA) celebrated its 15th Anniversary as a national, nonprofit consortium of states with robust, renewable energy programs. It is wonderful to see the impressive progress that CESA-member organizations have made to advance clean energy over that time. The collective impact of the states' leadership and programs has been tremendous. In most parts of the country, and especially in states participating in CESA, the number of renewable energy installations has ramped up dramatically and clean energy deployment continues to grow. Both rooftop solar and utility-scale solar arrays are common sights; tens of thousands of wind turbines are churning out emission-free electricity; battery storage is in a period of rapid expansion; and various other clean energy technologies, including air-source heat pumps, wood pellet boilers, and biogas digesters, are gaining markets.

CESA's State Leadership in Clean Energy Awards, established in 2008 and held biennially, highlight the continuing progress and achievements by state clean energy programs across the U.S. Past award winners have included state programs that supported the first Solarize program in the country and created thermal renewable energy certificates (RECs), as well as solar lease programs, commercial PACE, solar RECs, and business incubator programs, to name a few.

The 2018 award winners continue a tradition of innovation and practical solutions. The six winning programs have shown vision, perseverance, and creativity. They have helped establish new markets for offshore wind, energy storage, and solar financing. They also have stimulated community-level clean energy actions and made solar PV more accessible. The awardees illustrate the wide range of clean energy activities that states are pursuing as they continue to transform clean energy markets.

The programs detailed in this summary report are excellent examples of effective state action. An independent panel of judges selected these six winners from among many other noteworthy efforts that were nominated. In conjunction with the release of this report, CESA is hosting a webinar series featuring each of the winning programs to provide additional information and lessons learned. We invite you to learn about the State Leadership in Clean Energy Award winners, past and present, at www.cesa.org/projects/state-leadership-in-clean-energy, where case study reports and webinar recordings can be accessed.

It is likely that the next 15 years will be as transformational as the last, with emerging technologies such as electric vehicles, energy storage, and offshore wind becoming more prevalent; and with established renewables such as solar PV and land-based wind becoming much more economical than fossil-fueled electricity. This future will be realized because of the leadership, actions, and decisions that states and their populations make to embrace clean energy technologies.

We look forward with great enthusiasm to a future with more state program innovations and clean energy progress in the years to come.

#### Maria Blais Costello

Manager of Program Administration, CESA

#### The 2018 Award Judges

## State Leadership \_\_in Clean Energy\_

The State Leadership in Clean Energy Awards are made possible by the generous donation of time and expertise by our panel of judges. These individuals have an impressive wealth of knowledge and experience related to clean energy. We would like to express our sincere appreciation for their enthusiasm and participation in this process.



**Elizabeth Doris Principal Laboratory** Program Manager, **National Renewable Energy Laboratory** 

Elizabeth Doris is the Principal Laboratory Program Manager for State Local, and Tribal Audiences at the National Renewable Energy Laboratory. She manages a \$10M annual portfo-

lio and is responsible for developing and directing all aspects of NREL's relationship with these audiences and coordinating these activities across the laboratory. Liz has 18 years of program development and management experience in energy efficiency and renewable energy policy research and content expertise in energy policy, including over 50 publications on effective policies for clean energy development. Her current projects include NREL's Advanced Energy Systems Design Initiative, which uses high performance computing, NREL's world class energy decision-making tools, and high-end visualization to increase accessibility of technical information to stakeholders making today's complex energy decisions.



John Geesman **Former Commissioner** and Executive Director, **California Energy** 

Commission

John Geesman has been a soldier in California's energy revolution since the 1970s and has served in leadership positions at the California Energy Commission, the California

Power Exchange, and The Utility Reform Network. An attorney, he spent two decades in the bond markets as an investment banker and is winding up six years of regulatory litigation over the shutdowns of the San Onofre Nuclear Generating Station and the Diablo Canyon Nuclear Power Plant. From 2006 to 2011, John served as Co-Chair of the American Council on Renewable Energy and was a frequent speaker at national and international policy conferences. He is the author of two energy-related e-books and former executive producer of the blip-tv animated series, Scurvy News Network.



#### Sara Fisher-Goad Senior Program Manager, The Denali Commission

Sara Fisher-Goad was the Executive Director for the Alaska Energy Authority from February 2011 through July 2016. Sara was responsible for leading Alaska's energy office, including the development of energy policy, renewable energy projects, diesel powerhouse systems, bulk fuel tank farms, and energy efficiency projects. Sara lives in Washington DC and

works as a senior program manager for the Denali Commission, an independent federal agency designed to provide critical utilities, infrastructure, training and support for rural Alaska.



#### Rebecca O'Neil

#### **Program Manager, Renewable Energy Programs, Pacific Northwest National Laboratory**

Rebecca O'Neil oversees the laboratory's support of the EERE renewable power offices within the U.S. Department of Energy. Her personal research interests lie in energy storage regulatory development, electricity market design, hydropower valuation, and marine energy development. She is presently

serving a rotation into the U.S. Department of Energy's Water Power Technologies Office. Prior to her work at the federal level, Rebecca led several renewable energy and energy efficiency programs for the state of Oregon's Department of Energy, including the Renewable Portfolio Standard. She has also administered a utility energy efficiency incentive program and coordinated a coalition of river conservation and recreation organizations to participate in federal hydropower dam licensing.



**Devashree Saha** 

#### **Director of Energy & Environmental Policy, The Council of State** Governments

Dr. Devashree Saha is the Director of Energy and Environmental Policy at the Council of State Governments where she works with state legislative, executive and judicial branch officials on a wide range of energy and environmental topics. Prior to joining CSG, Devashree was an associate fellow at

the Brookings Institution Metropolitan Policy Program where her research focused on the intersection of clean energy and economic development policy. She has published several highly impactful publications, including papers on clean energy financing, that have informed state and metropolitan policy making in the United States. Prior to joining Brookings, she worked at the National Governors Association on transportation and land use planning issues.

#### **Program Highlights**

- ► The Solar for All partnership has supported over 1,540 solar PV systems totaling over 9 MW in Connecticut, with 970 (63 percent) of these installations verified as low-to-moderate income homeowners.\*
- ► These systems are estimated to produce over 280,000 MWh of electricity, and PosiGen's presence in Connecticut has generated over 45 direct jobs.
- Participating homeowners will save 20–30% on utility costs over the lifetime of their contracts.
- The Solar for All program has leveraged nearly \$40 million in private capital.
- Since the partnership was launched, solar penetration in Connecticut's low-income communities has increased 188 percent.
- \* RSIP-approved PosiGen projects through 5/31/18. In Connecticut, households earning less than 100% of the area median income are considered LMI.



#### **Connecticut Green Bank and PosiGen**

#### "SOLAR FOR ALL" PARTNERSHIP

The Connecticut *Solar for All* program is a ground-breaking public-private partnership between the Connecticut Green Bank and PosiGen. The program offers a low-to-moderate income (LMI) targeted solar lease paired with energy efficiency measures for homeowners, regardless of income or credit. Since the partnership launched, solar penetration in Connecticut's low-income communities has increased 188 percent and 970 low-income verified households have signed up to go solar with PosiGen. *Solar for All* is an exemplary model of how to bring LMI energy solutions to scale and achieve inclusive prosperity in the clean energy economy.

#### **Bringing the Benefits of Clean Energy to LMI Communities**

Achieving participation by low- to moderate-income constituents in the clean energy economy is a key challenge throughout the United States. There are many barriers to going solar for low-income communities, including state program structures, access to financing, perceived and real credit-quality issues, inability to fully realize public incentives, education gaps, and contractors' customer acquisition strategies. All of these challenges can prevent solar from reaching LMI customers. By integrating the Green Bank's LMI solar financing resources with PosiGen's solar and energy efficiency product offerings, Connecticut has demonstrated a model for addressing several of these barriers.

With the *Solar for All* program, the Green Bank provides two types of financial support to advance low-income solar access in Connecticut. Through the Green Bank's Residential Solar Investment Program (RSIP), which provides incentives to residential solar PV installations across the state, the Green Bank offers an elevated performance-based incentive (PBI) for qualifying LMI solar projects. The LMI PBI enables contractors to offer more affordable pricing to LMI customers. In addition, the Green Bank has partnered with and provided financing to PosiGen Solar Solutions to help the company rapidly scale up an LMI-focused solar lease and energy efficiency savings agreement (ESA) product in Connecticut. The Green Bank's financial support includes direct credit enhancement of PosiGen's Connecticut lease fund in the form of \$5 million of subordinated debt and \$3.5 million in working capital.



#### **Background on Connecticut's Efforts**

The Connecticut Green Bank was established through legislation in 2011 and is the country's first full-scale Green Bank. The Green Bank supports clean energy deployment across several sectors, including single-family residential homes, multifamily properties, and commercial and institutional buildings. It is a state-supported institution that works with private-sector investors to create low-cost, long-term sustainable financing to maximize the use of public funds.

In 2012, the Green Bank launched the RSIP to provide upfront rebates and performance-based incentives to solar PV installations on owner-occupied residential properties through a declining block model. Within two years of launching the RSIP, Connecticut experienced tremendous growth in its residential solar market, expanding from 16 MW approved in 2012–2013, to 33 MW in 2014 alone.

Despite this success, only 11 percent of projects approved in 2014 were located in census tracts with a median income less than 80 percent of the area median income. While the RSIP was successful from the start in stimulating residential solar investment and development, it served few low-income customers.

To rectify this disparity, in 2015 the Green Bank established a unique low-to-moderate income performance-based incentive within the RSIP that is approximately three times higher than the market rate PBI. Because LMI homeowners frequently do not have a large enough tax burden to take advantage of the federal solar tax credit for owned systems, this incentive is available to third-party-owned solar PV installations that serve LMI customers. To qualify for the program, contractors must respond to an open RFQ with their proposed product pricing, marketing strategy, and general qualifications. The additional program requirements ensure that Green Bank-supported LMI solar projects will have a positive economic benefit for customers, are able to leverage all available revenue streams, and provide strong consumer protection.

The Green Bank provided a direct credit enhancement in the form of \$5,000,000 of subordinated debt to PosiGen's Connecticut lease fund, as well as \$3.5 million in working capital loans to facilitate timing gaps associated with third-party tax equity financing.



Matilda and Hubert Young are excited about the new solar installation on their home in Bridgeport, CT. Source: Susan Young.

Recognizing that contractors interested in serving LMI solar markets may face unique challenges, and to spur early market development, in 2015 the Green Bank also issued a solar financing RFP to identify solar PV system providers for underserved markets. The purpose of this financing opportunity was to help the selected provider(s) establish solar businesses in Connecticut that are focused on LMI customers and to further ensure that contractors utilizing the LMI PBI would be successful in reaching underserved markets.

PosiGen responded to both opportunities and was approved by the Green Bank to participate in the LMI RSIP and the solar financing opportunity. PosiGen offers both a solar lease and an optional energy savings agreement that allows customers to install additional energy efficiency upgrades and pay for them over time. PosiGen's product is available to customers regardless of income or traditional measures of creditworthiness. PosiGen's model includes an alternative underwriting approach to qualify customers, and a community-based marketing model that targets LMI communities—two key ingredients to reaching this market segment.

#### **Program Components**

As mentioned above, the Green Bank approved PosiGen as a qualified solar contractor to access the RSIP LMI PBI and also selected the company to receive Green Bank investment under its solar financing RFP. The Green Bank provided a direct credit enhancement in the form of \$5,000,000 of subordinated debt to PosiGen's Connecticut lease fund, as well as \$3.5 million in working capital loans to facilitate timing gaps associated with third-party tax equity financing. In 2017, the RSIP program budget was \$13.6 million, \$1.5 million of which was appropriated to LMI solar projects.

The subordinated debt and working capital loans Green Bank provided to PosiGen have supported the company in attracting over seven times more private investment than the Green Bank's term financing contribution. These investments have supported a fund of \$37 million for PosiGen's Connecticut solar installations. The Green Bank support through the RSIP program's LMI PBI provides an additional stream of high-quality cash flows that further attracts third-party capital into PosiGen's Connecticut fund. In addition, by driving down the cost of capital through its participation in the financing structure, the Green Bank allows PosiGen to offer a more competitive solar lease product and achieve deeper savings for customers.

To further bolster chances of success within Connecticut's LMI market, the Green Bank provided strategic support to PosiGen on community partnerships, outreach, and general market research. The Green Bank helped to identify four communities in which to launch focused campaigns (Bridgeport, Hartford, New Haven, and New London) and facilitated introductions to non-profit and community-based organizations for potential partnering opportunities.

In 2017, Green Bank worked with PosiGen and C+C Consulting to complete an updated Connecticut LMI solar customer segmentation analysis which provided key insights into potential market segments, size, geographies, and messaging. The Green Bank also worked with Yale University and Experian to purchase and analyze a large dataset of Connecticut residents' credit and financial health. Both of these market analyses have supported the Green Bank and PosiGen in quantifying market potential, honing outreach strategies, targeting efforts, and measuring success.

#### **Program Results**

The Solar for All partnership demonstrates innovation in the way it tackles multiple barriers to LMI solar access while delivering a product that has real impact on household-level energy burdens. The combination of low-cost Green Bank

capital with the low-to-moderate income performance-based incentive provides security to PosiGen investors and enables PosiGen to offer an attractive lease product to customers. PosiGen's alternative underwriting approach circumvents many of the real and perceived credit-quality issues LMI homeowners face, and a lease offering for LMI homeowners allows customers to receive the full value of the federal investment tax credit in the price they pay for solar.

By partnering with the Green Bank, PosiGen has been regarded in the market as both a quality contractor and a trusted community partner. Consumer protections the Green Bank built into the program provide greater oversight to LMI contractors in the state and assurance that LMI solar adopters receive quality installations. By working with municipalities, community groups, and faith organizations to implement Solarize-style community campaigns and deliver their message, PosiGen has been able to enter new markets through trusted partners that can help educate homeowners on the benefits of solar and PosiGen's product offering.

In addition to solar access, customers are offered the opportunity to go deeper with energy efficiency improvements through an added \$10-a-month, 20-year energy savings agreement to further reduce energy burdens and make the most of the PV system. Nearly 100 percent of PosiGen customers receive basic energy efficiency services through the state's utility-run Home Energy Solutions program, and 70 percent of customers have opted to go deeper on efficiency with PosiGen's energy savings agreement. Participating homeowners will save 20–30 percent



Governor Dan Malloy joins staff from CT Green Bank, CT DEEP, PosiGen, and the town of Hamden, CT for a Solar for All kickoff event. From Left: Jody Goeler, Superintendent of Schools; Kathleen Schomaker, Town of Hamden; Bryan Garcia, CT Green Bank; Mary Sotos, CT DEEP; Tom Neyhart, PosiGen; and Connecticut Governor Dan Malloy. Source: Rudy Sturk, CT Green Bank.

Customers who go solar with PosiGen pay \$60-\$110 a month for a 4.5-8 kW system and receive an average net savings of \$450 each year. This equates to over \$690,000 in solar savings annually across PosiGen's 1,540 solar homes.

on utility costs over the lifetime of their contracts (based on Green Bank's energy burden model which accounts for state electricity prices, estimated annual production, and cost of the solar lease over 20 years).

Customers who go solar with PosiGen pay \$60-\$110 per month for a 4.5–8 kW system and receive an average net savings of \$450 each year. This equates to over \$690,000 in solar savings annually across PosiGen's 1,540 solar homes.

Through the Solar for All program offerings and partnership, the Green Bank and PosiGen have demonstrated leadership in tackling difficult LMI energy issues and providing real solutions for moving the needle on inclusive prosperity. By taking a multi-pronged, strategic approach to addressing many of the barriers and needs of the state's LMI communities, the Green Bank and PosiGen have been able create a model that works for Connecticut homeowners and that could be replicated by other states that want to provide solar benefits to LMI customers and meaningful reductions to LMI energy burdens.

#### **Judges' Comment**

"Bringing the benefits of solar power to low-income communities is challenging and has numerous obstacles. The Connecticut Green Bank's Solar for All partnership is a smart and well-designed program that is having tangible impacts by lowering the utility bills for over 800 low-income homeowners who have been able to go solar so far. The public-private partnership structure has allowed the Connecticut Green Bank to use limited public dollars to attract sevenfold private investment, maximizing the program's impact."



#### **About the Connecticut Green Bank**

The Connecticut Green Bank was established by the Connecticut General Assembly on July 1, 2011 as a part of Public Act 11-80. As the nation's first full-scale green bank, it is leading the clean energy finance movement by leveraging public and private funds to scale-up renewable energy deployment and energy efficiency projects across Connecticut. The Green Bank's success in accelerating private investment in clean energy is helping Connecticut create jobs, increase economic prosperity, promote energy security and address climate change. In 2017, the Connecticut Green Bank received the Innovations in American Government Award from the Harvard Kennedy School Ash Center for Democratic Governance and innovation for their "Sparking the Green Bank Movement" entry. For more information about the Connecticut Green Bank, please visit www.ctgreenbank.com.

#### For more information:

www.ctgreenbank.com www.posigen.com

#### **Contact**

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#### **Program Highlights**

- ► ACES supports 26 demonstration projects, showcasing both monetizable and nonmonetizable benefits, that will dramatically increase the state's storage capacity.
- ► The Commonwealth's \$20 million in grant funds is bolstered by a minimum 50 percent cost-share match, leveraging another \$31 million in cost-share.
- ► ACES-supported projects will demonstrate how currently non-monetizable benefits from energy storage projects can be assessed and defined for value, and the projects' results will inform policy recommendations for industry and the state.
- ► ACES projects will demonstrate replicable business models in diverse applications including residential, hospital, transportation, agriculture, and many others.





#### **Massachusetts Clean Energy Center/** Massachusetts Dept. of Energy Resources

ADVANCING COMMONWEALTH ENERGY STORAGE (ACES) PROGRAM

The Advancing Commonwealth Energy Storage (ACES) grant program, part of the Baker-Polito Administration's Energy Storage Initiative (ESI), was created to jump-start the energy storage industry by piloting innovative, broadly-replicable energy storage demonstration projects with multiple value streams, thereby priming Massachusetts for increased commercialization and deployment. ACES grants totaling \$20 million will support 26 demonstration projects, spanning nine use cases and 14 business models, which will collectively add 83 MWh to the grid where only 7 MWh currently exists. This is expected to accelerate the adoption of storage technologies, provide benefits to customers and utilities, highlight market and regulatory barriers, and help Massachusetts reach its immediate goal of 200 MWh of energy storage installed by January 1, 2020.

#### A Strategic Statewide Commitment to Advancing Energy Storage

Energy storage is a clean energy enabling technology with many potential benefits to the electric grid and all segments of the energy market. In the first phase of the Massachusetts Energy Storage Initiative (ESI), the Massachusetts Department of Energy Resources (DOER) and the Massachusetts Clean Energy Center (MassCEC) produced an energy storage study, State of Charge, which presented a broad view of energy storage technologies in order to inform future policy and programs. The study provided insights into the Massachusetts-specific context and regional context to advance energy storage interests in the Commonwealth based on analysis of grid conditions in Massachusetts and lessons from other states.



Interior of battery storage system container in Sterling, MA. Source: CESA.

#### Massachusetts Clean Energy Center/Massachusetts Department of Energy Resources



Massachusetts Governor Charlie Baker (back row, center) joins MassCEC CEO Stephen Pike, Massachusetts Department of Energy Resources Commissioner Judith Judson, and MassCEC's 2017 ACES award recipients at UMass Memorial Marlborough Hospital in December 2017. Source: Massachusetts Clean Energy Center.

The ACES Program is part of ESI's second phase. It was designed to catalyze the energy storage market in Massachusetts and to demonstrate how storage systems can achieve benefits that are currently non-monetizable, a significant barrier to the development of the storage market that was identified by the State of Charge report.

These benefits include cost reductions in the wholesale market; provision of ancillary services; lowered energy prices; services to the transmission and distribution grids; increased renewables integration; reduced peak demand; resiliency benefits; and greenhouse gas emissions reductions. *ACES*-funded projects aim to educate customers, utilities, consumers, policy makers and a variety of industry stakeholders on the benefits of energy storage; encourage appropriate regulatory and market reform to broaden the monetizable use cases available to energy storage; and help de-risk future investments in energy storage projects.

#### A Wide Array of Projects Demonstrate the Range of Benefits from Energy Storage

MassCEC and DOER worked in partnership to create the ACES Program. They received support from the U.S. Department of Energy's Office of Electricity, the Clean Energy States Alliance, and Sandia National Laboratories.

In December 2017, \$20 million dollars of funding was awarded to 26 projects under the ACES Program. These projects demonstrate nine diverse energy storage use cases and a variety of monetizable benefits and system-owner savings. The program's focus on replicable business models (14 distinct models were awarded) is expected to accelerate storage commercialization by showcasing adoptable and achievable examples of projects that provide multiple customer benefits, system benefits, and

positive economic returns. Most projects provide system benefits and some address specific local energy challenges. *ACES* grantees provide a foundation for the industry to demonstrate storage services and benefits for which no markets currently exist or where there are no existing methods for storage providers to be proportionally compensated for the services their systems provide.

Projects span a variety of use cases including transit, behind-the-meter commercial and industrial solar plus storage, municipal light plant assets, medical facility applications, and a merchant co-located with traditional generation plant, among others. Examples of replicable business models include owner owned and operated energy storage systems, storage-as-a-service, developer or third-party financed systems, and energy storage system leases, among others.

The 26 projects also represent a diverse set of energy storage technologies, including lithium-ion, zinc-iron flow, vanadium-redox flow, ice thermal technologies, and flywheels. While there is significant representation of lithium-ion battery technology among the awarded projects, the range of technologies among the ACES projects is more diverse than in

In December 2017, \$20 million dollars of funding was awarded to 26 projects under the *ACES Program*. These projects demonstrate nine diverse energy storage use cases and a variety of monetizable benefits and system-owner savings.

the current U.S. energy storage market, representing a unique opportunity for increased commercialization and deployment of emerging technologies in Massachusetts. Most of the projects involve integration with other clean energy technologies, such as solar photovoltaics, promoting innovative opportunities to increase deployment of renewable energy.

The ACES Program leveraged significant private investment. Awarded projects are required to provide at least a 50 percent cost-share match to their ACES grant amount, enabling the program to extend the impact of its grant funds even further. For the 26 projects under ACES, this amounts to approximately \$20 million in DOER grant funds and \$31 million in leveraged cost-share.

#### **Jump-Starting an Industry**

The ACES Program is the state's first substantial investment in energy storage projects and is designed to significantly catalyze the market. While technology demonstration programs are common, this program is unique in its business model demonstration objectives.

Broad replicability was a critical primary selection criterion of selected projects in order to prime Massachusetts for

The ACES Program leveraged significant private investment. Awarded projects are required to provide at least a 50 percent cost-share match to their ACES grant amount, enabling the program to extend the impact of its grant funds even further.

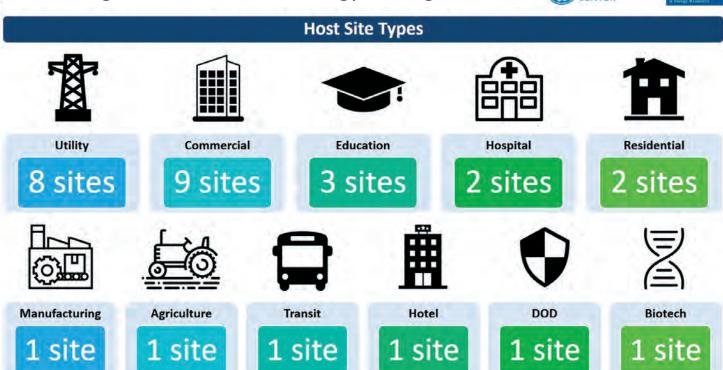
increased commercialization and deployment of storage technologies. To further promote the replicability and analysis of storage technologies, MassCEC intends to publicly share anonymized and aggregated lessons learned from the projects at periodic intervals, so that ACES awardees, as well as future projects, may consider these results in new project design and implementation. The lessons are expected to span the market, regulatory, and policy landscapes and will be of benefit to industry, policy makers, and customers. MassCEC also plans to hold periodic stakeholder meetings to share these lessons and foster discussions in an interactive setting.

The data collection, project reports, and insights from ACES projects will provide Massachusetts the opportunity

#### Advancing Commonwealth Energy Storage (ACES)







#### Massachusetts Clean Energy Center/Massachusetts Department of Energy Resources

The ACES Program is expected to have long-lasting impacts on the energy storage industry. Its successful demonstration of monetizable and non-monetizable benefits will help support new energy storage applications and markets in the Commonwealth and beyond.

to implement policy and market mechanisms to address barriers to large scale energy storage deployment

The ACES Program is expected to demonstrate that storage is ready to enter new markets at a time when efforts are underway to incorporate storage into existing programs such as the Alternative Portfolio Standards, energy efficiency plans, and

the Solar Massachusetts Renewable Target incentive program. Additionally, Order No. 841, issued by the Federal Energy Regulatory Commission, now requires Independent System Operators and Regional Transmission Organizations to revise market rules to allow energy storage to participate and to take the operational attributes of storage into account.

The ACES Program is expected to have long-lasting impacts on the energy storage industry. Its successful demonstration of monetizable and non-monetizable benefits will help support new energy storage applications and markets in the Commonwealth and beyond.

#### **Judges Comments**

"Storage is the holy grail in terms of integrating large volumes of renewables into the grid, but it is still in the early stages of market development. By demonstrating effective energy storage use cases and business models, the ACES program will have impacts far beyond Massachusetts."



#### Massachusetts Clean Energy Center (MassCEC)

MassCEC is a state economic development agency dedicated to accelerating the growth of the clean energy sector across the Commonwealth to spur job creation, deliver statewide environmental benefits, and secure long-term economic growth for the people of Massachusetts. MassCEC works to increase the adoption of clean energy while driving down costs and delivering financial, environmental, and economic development benefits to energy users and utility customers across the state. MassCEC manages the Renewable Energy Trust fund for the state. www.masscec.com



#### **Massachusetts Department of Energy Resources (DOER)**

DOER develops and implements policies and programs aimed at ensuring the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply to create a clean, affordable and resilient energy future. As part of DOER, the Emerging Technology Division works with other DOER Divisions and related state and federal agencies to develop programs and initiatives which promote energy resilience, energy storage and electric vehicle technologies. www.mass.gov/doer

#### For more information:

http://www.masscec.com/advancing-commonwealth-energy-storage-aces Read summaries of all 26 projects at: http://files.masscec.com/Simplified%20Projects%20Summary.pdf

#### **Contacts**

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#### **Program Highlights**

- ► The Clean Energy
  Communities Program
  encourages and financially supports clean
  energy solutions that
  incorporate tools and
  services from New York
  State Agencies and
  Authorities, while
  supporting trusted
  community champions
  to help implement local
  plans to deploy clean
  energy technologies.
- ► The Clean Energy Communities Program presents a clear roadmap for communities to engage in clean energy in a way that saves money while driving economic development.
- ▶ More than 400 local governments have completed more than 1,155 high impact actions. These governments represent over 16 million New Yorkers, which is more than 84 percent of the state's population.\*

\* As of 6/25/18

### NEW YORK STATE OF POPPORTUNITY. Clean Energy Communities

#### **NYSERDA**

#### **CLEAN ENERGY COMMUNITIES PROGRAM**

NYSERDA's Clean Energy Communities program helps local governments earn recognition and grant funding by demonstrating their clean energy leadership. NYSERDA has identified 10 high-impact actions that local governments can take to reduce energy costs, create jobs, and protect the environment. By completing four of the ten actions, the applying jurisdiction earns the Clean Energy Community designation. Additionally, the jurisdiction can apply for a grant, with no cost share, between \$50,000 and \$250,000 to support additional clean energy projects in the jurisdiction. Since the program was launched in August 2016 by Governor Andrew M. Cuomo, 413 communities from across the state have completed more than 1,155 high-impact actions. These communities represent more than 16 million New Yorkers, over 84 percent of the state's population. As of late June 2018, 195 communities have earned the Clean Energy Community designation.

#### **Supporting Local Governments to Implement Clean Energy**

Local governments play a critical role in affecting energy choices in their communities, but many local governments in New York State were not aware of available clean energy initiatives and funding opportunities. Those that were aware of the opportunities often struggled with how to prioritize, and eventually implement, those actions that would have the greatest impact in terms of meeting local needs, cost savings, and environmental benefits. The *Clean Energy Communities Program* provides local governments with a simple, but robust and flexible, framework to guide them through implementation of the most impactful clean energy actions. It includes:



Bradford Tito, NYSERDA's program manager for Communities and Local Government, joined local officials from the Town of Hempsted, NY, America's largest township, to celebrate their Clean Energy Communities designation. Source: NYSERDA

A Clear Roadmap: Clean Energy Communities is designed to help save energy and money, in both the municipalities' budgets, and within homes, businesses, and community institutions. It guides communities looking to save money, foster a vibrant economy, and improve the environment.

#### **Help for Resource-Constrained Local Governments:**

Dedicated and knowledgeable Clean Energy Coordinators from regional planning organizations are available to provide free on-demand technical assistance, step-by-step guidance, case studies, model ordinances, and project development support.

Funding to Support Local Priorities: The program is designed to provide grants to a total of 163 communities. Grant funding with no local cost share is available to support clean energy projects—up to \$250,000 for large communities (+40,000 population) and up to \$100,000 for small/medium communities (0-39,999 population). Grants are awarded to the first 18 communities in each of the state's ten Regional Economic Development Council regions, except for the New York City region where only New York City is eligible for a grant. Within each region, funding is set aside for large and small/medium-sized communities so communities in each region are only competing against those of similar size in their region. This Clean Energy Communities designation competition drives deep penetration of the program in every part of the state. Once all the grants are claimed in a size category or region, communities may still earn the Clean Energy Community designation but are not eligible for grant funding.

Clean Energy Communities resonates with a large cross-section of the state's communities and presents opportunities for even the smallest towns to benefit. The program has made major inroads in urban, rural, and suburban communities across the state from Western New York to Long Island.

#### **Clean Energy Community Impact Areas**

As part of the Clean Energy Communities Program, NYSERDA identified 10 high-impact clean energy actions that local governments can take to reduce energy costs, stimulate the economy, and protect the environment. By completing four of the 10 high-impact actions, municipalities earn the Clean Energy Community designation. At least two actions must be completed after August 1, 2016, when the program was launched. The high impact actions are:

1. **Benchmarking:** Adopt a policy to report the energy use of municipal buildings



Members of the Town of Chatham's Climate Smart Committee with the electric vehicle charging station they had installed as part of the Clean Energy Communities program. Source: Town of Chatham, NY.

- 2. **Clean Energy Upgrades:** Achieve 10 percent reduction in greenhouse gas emissions from municipal buildings
- 3. **LED Street Lights:** Convert at least half of the jurisdiction's street lights to energy efficient LED technology
- 4. **Clean Fleets:** Install electric vehicle charging stations or deploy alternative fuel vehicles in the municipal fleet
- 5. **Solarize:** Undertake a local solarize campaign to increase the number of solar installations
- 6. **Unified Solar Permit:** Streamline the approvals process for local solar projects
- 7. **Energy Code Enforcement Training:** Train compliance officers in energy code best practices
- 8. Climate Smart Communities Certification: Get certified by the New York State Department of Environmental Conservation
- 9. **Community Choice Aggregation:** Put energy supply choices in the community's hands
- 10. Energize New York Finance: Establish a Property Assessed Clean Energy (PACE) financing program for businesses and non-profits

#### **Providing Technical Assistance to Ensure Success**

To help local governments prioritize and implement the highimpact actions and navigate the program, expert guidance is provided by Clean Energy Communities Coordinators, at no cost to the local government. The Coordinators are funded by NYSERDA and based at regional planning organizations that have long-standing relationships with local governments in their regions. Their services include meeting with municipal staff, answering questions, preparing LED street light costbenefit reports, providing assistance with software for tracking municipal energy use, and identifying grant opportunities for electric vehicles and charging infrastructure.

Coordinator and community discussions are documented in customer relationship management (CRM) software. This allows program staff to track engagement with communities. Clean Energy Community Coordinators are currently in active discussions with nearly 600 communities state-wide. While 1,155 actions have been completed, communities are either considering or executing nearly 2,000 additional actions. Having this level of granular information collected with the CRM software allows for robust analysis to better understand the pipeline of high-impact actions and anticipate needs. NYSERDA has employed a wide range of data analytics and visualization to help target program resources. For example, this information allows the Coordinators to apply different strategies and tactics for moving a community from being "inactive" to "engaged" and from "engaged" to "participating" and from "participating" to "designated." Applying a sales approach to high-impact action engagement has helped maximize the impact of the program.

Clean Energy Communities resonates with a large cross-section of the state's communities and presents opportunities for even the smallest towns to benefit. The program has made major inroads in urban, rural, and suburban communities across the state from Western New York to Long Island.

Clean Energy Communities also offers online toolkits for each high-impact action with resources including step-by-step guides, calculators, case studies, and model language that communities can incorporate into legislation. These toolkits ensure the program will continue after funding is expended.

Once a community earns the *Clean Energy Community* designation, it has three months to submit a proposal for use of the grant. NYSERDA evaluates proposals to ensure they present a sound approach; reduce energy use and greenhouse gas emissions; transfer knowledge to the broader region and state; are innovative and replicable; and leverage public and private dollars and/or generate economic development benefits. A total of 111 grants have been awarded for projects that include converting street lights to LED, installing solar on

municipal buildings, purchasing electric vehicles, and making energy upgrades to wastewater treatment facilities.

#### **Cost Effectiveness**

Clean Energy Communities is a three-year initiative to award \$16 million in grants to local communities. The program is supported by an additional five-year, \$9 million contract for the network of Clean Energy Community Coordinators who will meet with municipal staff, to provide technical assistance, answer questions, prepare reports, and identify additional grant opportunities.

#### **Program Results and Replicability**

Clean-energy actions completed so far through the program include:

- 243,978 street lights converted to LED
- 612 electric vehicles deployed
- 670 electric vehicle charging points installed
- 357 municipal officials trained in Energy Code enforcement
- 192 laws passed to track and report the energy use in municipal buildings
- 215 communities have streamlined the permitting process for local solar projects

NYSERDA estimates clean energy high-impact actions taken to date have reduced greenhouse gas emissions by 126,000 tons annually—equivalent to taking 27,000 cars off the road.



The first Clean Energy Community designated in New York was Ulster County. Amanda LaValle and Mike Hein stand next to the EV charging station the County installed as part of the *Clean Energy Communities Program*. Source: County of Ulster.

While the Clean Energy Communities program is based around high impact actions that address the needs of New York jurisdictions, the program design could easily be adapted to include additional high-impact actions applicable to other locations.

NYSERDA has promoted the program through email blasts, newsletters, press releases, and press events. Most communities engage with the program as a direct result of local elected officials and staff having face-to-face meetings with NYSERDA staff and Clean Energy Community Coordinators. NYSERDA staff and Clean Energy Community Coordinators have presented at dozens of events and conferences across the state. Many webinars have educated municipal officials and community stakeholders on a range of topics.

The Clean Energy Communities program is replicable in other states, nationally and globally. Communities can take many practical steps to address their energy challenges. While the Clean Energy Communities program is based around high impact actions that address the needs of New York jurisdictions, the program design could easily be adapted to include additional high-impact actions applicable to other locations.

Other programs require communities to complete a certain number of pre-defined actions to earn designation or certification, but those programs often include more than 100 actions, as opposed to Clean Energy Communities which provides a short list of 10 high-impact actions.

#### **Judges' Comments**

"This is a high-impact program, demonstrating results in a short period of time, and pushing new solutions as well as existing ones. NYSERDA's Clean Energy Communities Program has effectively incentivized communities to participate, and it seems likely that momentum will continue after the program ends."



#### **About NYSERDA**

The New York State Energy Research and Development Authority, known as NYSERDA, promotes investment and innovation in clean energy and energy efficiency in ways that improve New York's economy and environment. Collectively, NYSERDA's efforts aim to reduce greenhouse gas emissions, accelerate economic growth, and reduce customer energy bills. NYSERDA works with stakeholders throughout New York including residents, business owners, developers, community leaders, local government officials, university researchers, utility representatives, investors, and entrepreneurs. NYSERDA partners with them to develop, invest, and foster the conditions that:

- Attract the private-sector capital investment needed to expand New York's clean energy economy
- · Overcome barriers to using clean energy at a large scale in New York
- Enable New York's communities and residents to benefit from energy efficiency and renewable energy.

Governed by a 13-member Board, NYSERDA has provided objective information and analysis, technical expertise, and support in New York State since 1975.

#### For more information:

https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Communities

#### **Contact**

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#### **Program Highlights**

- As the first tax credit auction in the country, the RED Grant Program is an innovative means to provide funds to award grants for renewable energy production systems.
- ▶ Approximately \$5 million has been awarded through the *RED Grant Program*. An additional \$2 million will be allocated in spring 2018.
- ▶ Once all 55 awarded projects are built, they will generate approximately 103 million renewable kilowatt hours each year in total, which could prevent the release of more than 156 million pounds of CO₂ annually.

## Oregon Department of Energy RENEWABLE ENERGY DEVELOPMENT GRANT PROGRAM

The Oregon Department of Energy's Renewable Energy Development (RED) Grant Program promotes investment in, and development of, renewable energy projects by providing competitive grants up to \$250,000 for businesses, public bodies, schools, nonprofits, and tribes that install and operate a renewable energy system that produces electricity. Since 2012, ODOE has awarded nearly \$5 million for 55 renewable projects statewide, including solar, hydropower, biogas, biomass, and geothermal installations. The program taps into an innovative funding source—an independently administered auction of tax credits—to help the agency serve Oregonians without using scarce general fund dollars.

#### An Innovative Finance Mechanism Leverages Limited Public Dollars and Encourages Private Investment

Oregon's Renewable Energy Development (RED) Grant Program, which started in 2011, was funded by the state's first-ever state tax credit auction. This innovative financing mechanism combines the benefits of a direct grant program, where everyone can participate, with the benefits of the auction format, which encourages private investment in renewable energy. Most of the Oregon Department of Energy's (ODOE) incentive programs have historically been in the form of tax credits. However, it's challenging for organizations that don't have tax liability, including nonprofits, government agencies, and schools, to participate. The auction allows bidders with tax credit appetites to support renewable grants to entities without tax liabilities.



This solar array at Bend Area Habitat for Humanity ReStore received awarded \$36,120 in *RED Grant Program* funds by the Oregon Department of Energy. Source: Jennifer Kalez, Oregon Department of Energy.



#### Oregon Department of Energy: Renewable Energy Development Grant Program



This solar array at Coyote Trails School of Nature in Medford, OR was awarded \$11,356 in RED Grant Program funds by the Oregon Department of Energy. Source: Jennifer Kalez, Oregon Department of Energy.

During each round of the auctions that fund the RED Grant *Program,* Oregonians bid on tax credit certificates in increments of \$500; the minimum bid is \$475, and the average bid from the most recent auction was \$551.70 with the highest bids winning. Buyers use the tax credits to reduce the amount they owe in state taxes. Additionally, buyers may be able to consider the tax credit purchase a charitable donation which they can deduct from their federal taxes, leading to bids in excess of the face value of the credit. Besides the financial incentive to participate in the auction, many bidders are motivated by the opportunity to support renewable energy development in Oregon.

All revenue from the tax credit auctions goes towards the RED grants. Most of the cost of administering the RED Grant *Program* is covered by a \$500 application fee and a 1.25 percent fee for projects selected for technical review. Since

Since the program's creation in 2011, the Oregon Department of Revenue has held nine auctions providing over \$8.5 million for RED grants. Oregon statute sets the maximum amount of tax credits that can be auctioned each biennium at \$3 million. the program's creation in 2011, the Oregon Department of Revenue has held nine auctions providing over \$8.5 million for RED grants. Oregon statute sets the maximum amount of tax credits that can be auctioned each biennium at \$3 million. Other benefits of the tax credit auction are that it allows more revenue to be generated than the actual value of the tax credits, and that proceeds from the tax credit auction can earn interest once deposited in the RED grant subaccount.

RED Grant Program funds often leverage funding from other sources, such as federal grant programs, Energy Trust of Oregon support, and programs by Oregon utilities. Leveraged amounts vary by project and organization, but many awardees earn a variety of funds thanks to the strength of their projects. For example, in the case of the Bend Area Habitat for Humanity's ReStore, the nonprofit installed a 56-kilowatt solar photovoltaic system with \$0 out of pocket after ODOE's RED grant and grants from Energy Trust of Oregon and Pacific Power's Blue Sky Renewable Energy program. The electricity cost savings from the solar array on the organization's ReStore support homeownership programs.

#### **Program Guidelines Support Diverse** and High-Quality Projects

The RED Grant Program supports renewable energy installations across the state—many of which would not be completed without the RED grant funding. The program also reaches diverse communities, as well as large and small organizations.

To apply for a grant, project owners submit an application in response to an open opportunity announcement. ODOE has developed a two-tier system for the competitive grants, so similarly sized projects compete together. For a \$2 million grant round, the agency allocates about \$500,000 in *RED* grant funds to projects sized up to 300 kW, and \$1.5 million to projects greater than 300 kW. The competitive process includes a careful review of projects and may adjusts award amounts to help spread funding to more applicants.

Projects are scored using several criteria, including amount of energy generated, resource diversity to support a variety of renewable types, and community benefits. Projects are awarded additional points for factors that achieve special public benefits, including: installations in rural communities and those with high unemployment rates; community-owned systems that benefit the larger community rather than just the building's owner; and the number of jobs created and sustained by the project. For the 2018 RED grant round, points will also be awarded for projects that are designed with resiliency in mind. Renewable systems that are capable of supplying electricity when the larger grid is unavailable—due to extreme weather or other emergencies—will earn more points.

In addition to providing funding, ODOE offers technical assistance and resources to entities exploring how to integrate renewable energy generation into their processes and/or footprint. These same resources are available to entities not seeking *RED* funding.

Top-ranked applications go through a technical review process: ODOE reviews the information provided in the application against industry standards to determine whether the project is technically feasible and should operate in accordance with the representations made by the applicant. If the project passes technical review, the renewable energy projects are awarded a performance agreement.

Projects must start construction within 12 months of the execution of the performance agreement. During construction, the applicant makes periodic progress reports to ODOE. Each project's performance agreement provides the timeframe to complete the project, usually two to three years.

Once projects are constructed and operating, project owners submit a final report documenting that the performance agreement has been satisfied. ODOE reviews the submitted material and conducts a site visit before dispersing grant funds. All projects issued a grant must remain in operation for at least five years to ensure that scarce funds are spent on long-sustaining projects. ODOE may inspect a project throughout the required five-year period of operation.

Since the *RED Grant Program* began, 35 projects—all solar installations—have been completed, totaling \$2.2 million in grants. Twenty more projects totaling \$2.8 million have been awarded tentative grants but have not yet been completed. Most of these projects are also for solar, but biogas, hydroelectric, and geothermal projects are also in process. The \$5 million in grant funding for the 55 projects is supporting nearly \$75 million in total costs for the projects.

In many cases, *RED Grant Program*-funded projects have helped awardees reduce electricity bills to zero and have influenced additional sustainability projects. For one project, at Coyote Trails School of Nature in Medford, the installed solar array has become part of the school's teaching curriculum. ODOE has highlighted several *RED* projects and their benefits on ODOE's blog and podcast: *energyinfo.oregon.gov.* 

In addition to providing funding, ODOE offers technical assistance and resources to entities exploring how to integrate renewable energy generation into their processes and/or footprint. These same resources are available to entities not seeking *RED* funding.

#### **Program Success**

The average award amount has increased over the years, as more Oregonians participate in the *RED Grant Program* auction to support clean energy:

Year RED of Application	Average Amount Awarded/ Offered/In Process
2012	\$36,365
2013	\$86,346
2014	\$26,216
2015*	\$91,420
2017	\$140,175

<sup>\*</sup> Two Opportunity Announcements offered in 2015, none in 2016. Data as of 1/24/18

#### Oregon Department of Energy: Renewable Energy Development Grant Program

Renewable energy projects supported by the grant program offset carbon emissions and reduce pollution caused by fossil fuel-generated energy. In total, the 55 awarded projects—both small-scale and very large-scale—are expected to generate approximately 103 million renewable kilowatt hours (kWh) each year, reducing carbon dioxide emissions by an estimated 156 million pounds annually.

#### **A Model for Other States**

The program is replicable by other states or jurisdictions. For states or jurisdictions that want to start slowly, the RED Grant Program's tier for smaller renewable energy generating projects could offer a modest way to begin supporting renewable energy generation and worthwhile community projects without committing large amounts of funding. With the continual drop in many renewable energy-related costs, even a small grants program can have a big impact.

The RED Grant Program's innovative funding method could be replicated by other states or jurisdictions that allow the sale of tax credits. The Oregon Legislature's House Bill 3672 (2011) established the parameters of the tax credit sales for renewable energy development contributions, and Administrative Rule 330-200-0000 implemented the program at ODOE.

For states or jurisdictions that want to start slowly, the RED Grant Program's tier for smaller renewable energy generating projects could offer a modest way to begin supporting renewable energy generation and worthwhile community projects without committing large amounts of funding.

#### **Judges' Comments**

"The Oregon Department of Energy's Renewable Energy Development Grant Program has an innovative funding structure that makes efficient and productive use of tax dollars. It is a creative way to use a tax credit program to support entities that may not be able to take advantage of tax credits: public agencies, schools, and nonprofits."



#### About the Oregon Department of Energy

The Oregon Department of Energy (ODOE) implements the state's energy goals and policies. ODOE programs help the state maximize energy efficiency and conservation, expand homegrown energy resources, and support innovations in demand response, energy storage, and resiliency. ODOE reports to the governor's office and to the state's legislative and judicial branches. ODOE also staffs the Energy Facility Siting Council, which is responsible for siting Oregon's large energy facilities.

#### For more information:

http://www.oregon.gov/energy/At-Work/Pages/Renewable-Energy-Grants.aspx

#### **Contact**

Jennifer Kalez Public Affairs and Outreach Coordinator Oregon Department of Energy jennifer.kalez@oregon.gov

#### **Program Highlights**

- ► The Block Island Offshore Wind Farm was the first offshore wind project successfully built in the U.S. and has helped create considerable momentum behind further offshore wind development along the Atlantic Coast.
- Strong support and considerable work by Rhode Island State Government over nearly a decade made the five-turbine project possible.
- ▶ The Block Island Offshore Wind Farm is capable of powering about 17,000 homes; and the town of New Shoreham uses only 1/6th of the power generated by the wind farm, with the rest of the power transmitted back to the mainland.
- ▶ Block Island residents previously had some of the highest power rates in the country due to local generation by small diesel-powered generators. Now, energy officials estimate that the average household will save \$30 per month.



## Rhode Island Office of Energy Resources BLOCK ISLAND OFFSHORE WIND FARM

In December 2016, Rhode Island became home to North America's first offshore wind farm with the successful installation and operation of the 30 MW Block Island Offshore Wind Farm. This five-turbine project was developed by Deepwater Wind, headquartered in Providence, Rhode Island. It was advanced and developed with the support and active participation of the administrations of three Governors starting in 2007. The wind farm has helped launch a new clean energy industry and is leading to additional, larger offshore wind farms along the Atlantic Coast. The project is also notable for helping to connect Block Island (an island off the state's southern coast) to the mainland electrical grid for the first time.

#### **Becoming the First: From Concept to Reality**

Rhode Island first began exploring the concept of offshore wind development in 2007. In subsequent years, a wide range of parties were involved with the process, including the Rhode Island Office of Energy Resources (OER) and other state energy and environmental regulatory agencies, federal governmental agencies, fisheries trades and businesses, and the University of Rhode Island (URI).

The Rhode Island General Assembly passed legislation in 2009 and 2010 that enabled the *Block Island Offshore Wind Farm* to be built through a long-term, power purchase agreement (PPA) with the Narragansett Electric Company/National Grid, the state's investor-owned utility. The PPA guaranteed a buyer for the power to be produced by the wind farm and helped to secure the needed financing



The fifth of five wind turbines being installed off Block Island, RI. Source: Deepwater Wind

#### Rhode Island Office of Energy Resources: Block Island Offshore Wind Farm



Block Island Offshore Wind Farm as seen from Block Island in January 2018. Source: Shauna Beland/RI OER.

for the project. Prior to the adoption of this state law, it was impossible for a PPA to be issued or awarded for offshore wind. Because of the law, Deepwater Wind, the developer of the Block Island Offshore Wind Farm, was able to enter into a long-term PPA with National Grid.

The Rhode Island Coastal Resource Management Council (CRMC) and URI developed an Ocean Special Area Management Plan (Ocean SAMP) that was adopted in 2010. The Ocean SAMP and associated research and stakeholder meetings occurred with state agencies (Coastal Resource Management Council, Department of Environmental Management), URI, environmental

The U.S. Department of Interior's Bureau of Ocean Energy Management has recognized Rhode Island's Ocean SAMP as a model that other states could utilize in evaluating offshore wind opportunities in coordination with other state and federal water uses.

nonprofits, and fisheries trade organizations between 2009 and 2011, and looked at the differing uses of the state waters. This provided a context for evaluating potential offshore wind projects. The Ocean SAMP resulted in the selection of the Block Island wind farm location. It also identified suitable locations for future offshore wind projects in federal waters adjacent to Rhode Island and Massachusetts state waters. The U.S. Department of Interior's Bureau of Ocean Energy Management has recognized Rhode Island's Ocean SAMP as a model that other states could utilize in evaluating offshore wind opportunities in coordination with other state and federal water uses.

The Block Island Offshore Wind Project began construction in the summer of 2015 with the installation of the jacket system foundations. The wind turbines (blades, nacelles, towers) were installed in the summer of 2016. The project became commercially operational with National Grid in December 2016. The town of New Shoreham on Block Island officially turned off its diesel generators in May 2017, becoming the first and only town in North America to be 100 percent powered by offshore wind.

Rhode Island Governor Gina Raimondo remarked that: "Rhode Island is proud to be home to the nation's first offshore wind farm—and I'm proud to be the only governor in America who can say we have steel in the water and blades spinning over the ocean."

#### The Role of the Rhode Island Office of Energy Resources

The Office of Energy Resources played a variety of important roles in advancing the *Block Island Offshore Wind Farm* project between 2007 and 2016. OER worked with the CRMC and URI in securing funds that enabled the Ocean SAMP research to be conducted between 2008 and 2012 to examine offshore wind opportunities in state and federal waters. OER also worked in coordination with the state's Department of Transportation and Department of Environmental Management as well as National Grid to determine the location for the submerged transmission cable coming to the mainland from the Block Island Wind Farm. Additional coordination with the Public Utility Commission was also necessary. The cable was installed at Narragansett State Beach.

The considerable attention the *Block Island Offshore Wind Farm* has received since it went online, its popularity with a wide range of Rhode Island stakeholders, and the opportunity it has given many people to visit an operating offshore wind project have all helped to create momentum behind further offshore wind development.

#### A Small Project with Large Benefits

Although the *Block Island Offshore Wind Farm* is small compared to future offshore wind projects that will be installed over the coming decade off the coasts of Northeast and Mid-Atlantic states, it has made large impacts. It is capable of powering about 17,000 homes, or about 1 percent of the state's electricity. Moreover, through the transmission interconnection between Block Island and the Rhode Island mainland, the project has allowed the town of New Shoreham to shut down the diesel-fired power plant that had previously provided electrical power, saving nearly one million gallons of fuel per year and eliminating the need to ship diesel fuel to Block Island. The switch from diesel to wind-powered electricity generation and the transmission connection to the mainland grid have increased reliability and will reduce island electric

rates for the town's ratepayers by an estimated 40 percent. The project is also helping the state meet its Renewable Energy Standard goal of 38.5 percent renewables by 2035, and it is contributing to Governor Raimondo's goal of 1,000 MW of clean energy by 2020.

From an economic development perspective, according to Deepwater Wind, more than 300 local workers were involved with building the *Block Island Offshore Wind Farm*. Moreover, Deepwater Wind used four Rhode Island ports—at Block Island, Galilee, Quonset Point and ProvPort—to complete construction and staging.

By launching the offshore wind industry in the U.S., the Block Island project has helped stimulate new workforce development opportunities. The Rhode Island Department of Labor and Training's Real Jobs RI program recently awarded an implementation grant to a partnership, "Implementing Rhode Island Wind Energy Technology Career Pathway System." The North Kingstown Chamber of Commerce is leading this grant effort along with the New England Institute of Technology, URI, Community College of Rhode Island, North Kingstown Schools, and Exeter Job Corps. The partnership will focus on developing a career pathways training program that can supply skilled workers to satisfy future demand. They will be working with multiple education entities across the state to utilize and augment existing training programs to fit the needs of the budding offshore wind industry.

#### **Leading the Way for More Offshore Wind Projects**

The *Block Island Offshore Wind Farm* showed that it is possible to build an offshore wind project in the United States. The considerable attention it has received since it went online, its popularity with a wide range of Rhode Island stakeholders, and the opportunity it has given many people to visit an operating offshore wind project have all helped to create momentum behind further offshore wind development.

Other states are now following Rhode Island's lead. Recent offshore wind solicitations by New York, Connecticut, and Massachusetts demonstrate the offshore wind industry's potential for becoming a major energy provider and economic catalyst for the Northeast and Mid-Atlantic. To help those states, OER has shared information about its experiences with the Block Island project and has passed along lessons learned.

The success of the Block Island project helped create an appetite in Rhode Island for a larger project. In May 2018, Rhode Island announced that it will procure 400 MW of offshore wind energy from Deepwater Wind's Revolution Wind project. The

#### Rhode Island Office of Energy Resources: Block Island Offshore Wind Farm

state selected that project by participating in a clean energy procurement process conducted by the Commonwealth of Massachusetts. Rhode Island state agencies, including OER and the Division of Public Utilities and Carriers, independently evaluated the proposals that were made in response to the procurement. Deepwater Wind and Rhode Island Governor Raimondo reported that the 400 MW Revolution Wind project will create over 800 jobs in the state, 50 of them permanent.

#### **Judges' Comments**

"The Block Island Offshore Wind Farm is a monumental achievement and a milestone for renewable energy in the United States. and it would not have happened without the advocacy and support of the Rhode Island Office of Energy Resources."

Other states are now following Rhode Island's lead. Recent offshore wind solicitations by New York, Connecticut, and Massachusetts demonstrate the offshore wind industry's potential for becoming a major energy provider and economic catalyst for the Northeast and Mid-Atlantic.





#### **About the Rhode Island Office of Energy Resources**

The Office of Energy Resources (OER) is Rhode Island's lead state agency on energy policy and programs. Its mission is to lead Rhode Island to a secure, cost-effective, and sustainable energy future. OER works closely with private and public stakeholders to increase the reliability and security of the state's energy supply, reduce energy costs and mitigate price volatility, and improve environmental quality. By developing and implementing smart energy policies—such as those that promote energy efficiency and renewable energy—OER reduces Rhode Island's dependence on out-of-state fossil fuels and helps make the state a national leader in the new clean energy economy.

#### For more information:

http://www.energy.ri.gov/renewable-energy/wind

#### **Contact**

Robert Beadle **Communications Manager** Rhode Island Office of Energy Resources

#### **Program Highlights**

- ► The five solar arrays installed throughout the city have displaced 288 MW of conventional electricity and avoided 214 metric tons of CO<sub>2</sub> in emissions.
- To support the local solar industry, all of the solar panels were manufactured in Minnesota, and the project employed local solar installers and consultants.
- ► The projects are featured throughout the Minneapolis park system, demonstrating solar energy to 23 million visitors each year and helping to educate them about the importance of solar energy.
- Community engagement and public input on the siting of solar projects was used for public buy-in for the project.

## Xcel Energy Renewable Development Fund (Minnesota)

#### MPRB SOLAR DEMONSTRATION PROJECT

With a grant to the Minneapolis Park and Recreation Board (MPRB), the Xcel Energy Renewable Development Fund supported the installation of 200 kW of solar PV in the Minneapolis parks system to model the seamless incorporation of renewable energy into public amenities. The PV installations demonstrate a wide variety of solar designs and are featured in high-traffic public areas, with the potential to reach the parks' 23 million visitors per year. The project includes specific education and interpretive program components, while demonstrating an environmentally friendly and sustainable solution for public works or park projects to mitigate energy costs, reduce carbon emissions, and promote local solar businesses.

#### **Engaging Diverse Communities in Solar Education**

Since its inception, the Xcel Energy Renewable Development Fund (RDF) has provided funding of more than \$317 million for renewable energy initiatives, including support for projects that identify and develop new or emerging renewable energy sources. RDF grants have been awarded to research universities, nonprofit organizations, commercial businesses, and government agencies. In early 2014, the fourth cycle of the RDF program recommended awards for 26 projects and three higher education research programs totaling nearly \$43 million. In March 2014, the Minnesota Public Utilities Commission approved the funding recommendations, and the MPRB Solar Demonstration Project was one of the grant recipients.







#### Xcel Energy Renewable Development Fund (Minnesota): MPRB Solar Demonstration Project

The MPRB applied for funding with four specific goals: first, to install 200 kW of photovoltaic capacity throughout the Minneapolis park system; second, to utilize Minnesota-made solar panels to support the local solar industry; third, to demonstrate the value of alternative solar designs such as canopies where roof mounted solar facilities are not feasible due to structural, historical, or other barriers to traditional solar installations; and fourth, to promote the use of solar through education and interpretive programs that increase the awareness of and demand for solar throughout the state of Minnesota.

Minneapolis is an economically and ethnically diverse city. One of the planning objectives for this project was to spread the solar installations amongst all six park districts in the city. Siting these projects in parks would reach people who may not readily have access to solar in their neighborhood while promoting solar via educational information demonstrating creative urban solar installations. Spreading out the installations has reached neighborhoods with unique and varied characteristics. Three of the five MPRB Solar Demonstration Project sites are in areas where residents' annual income is below the poverty threshold and where 50 percent or more of residents are people of color. The other two sites draw from a regionally diverse pool of visitors.

The project leverages the potential audience at some of the most popular, heavily used, public facilities in the Minneapolis to show the park system's 23 million annual visitors examples of solar energy installations. Each site contains interpretive signage to help educate park users. Those signs paired with



A 6.5-kW wall-mounted array at the East Phillips Park Community and Cultural Center in Minneapolis. Source: Ray Colby/Sundial Solar.

a multi-pronged digital campaign that included a social media video, rooftop news conference, and periodically updated online project page, amplify the reach of the solar demonstrations.

A public input process was used to consider public priorities, visibility, and accessibility to the neighborhoods that the MPRB serves. The project went through a community engagement process to receive community feedback and support for the proposed locations. More than 50 sites were considered after extensive public outreach and an open house event. All sites that were suggested from the public outreach process were vetted though a detailed matrix to determine technological and demographic suitability. The MPRB partnered with an expert sustainability consulting firm, Sustology, to identify the best opportunities for solar power in the park system. Potential project sites were evaluated for the best potential for visibility, safety and security, environmental impact, structural challenge, and budgetary limitations.

Ultimately, five sites were selected.

Parade Ice Garden Arena: The arena has the greatest electrical usage of any of the MPRB facilities. A 153-kW roof-mounted ballasted array is expected to produce about 184,000 kWh per year, roughly 15 percent of the building's annual power consumption. The arena's electricity demand reaches its highest point on hot summer days in July and August when solar output is also at its highest, thereby reducing energy demand at a crucial time. The solar array, along with several recently completed energy efficiency upgrades at the arena, saves taxpayers hundreds of thousands of dollars each year while cutting greenhouse gas emissions.

Webber Park Natural Swimming Pool: This pool became the first public natural swimming pool in North America when it opened on July 24, 2015. The pool is unique in that uses filters and plants, not chemicals, to cleanse its water. The unique characteristics of the pool draw visitors from across the community. A 4.6-kW roof-mounted solar array was installed and is expected to produce about 6,433 kWh per year, roughly 15 percent of the facility's total electricity usage. The solar array is located on the pump house that powers the natural filtration system.

Rev. Dr. Martin Luther King Jr. Recreation Center: This 18.5acre park serves the King Field neighborhood in the southwest part of the city. This park provides recreational opportunities to many communities of color and offers important services to low-income residents, such as free meals for youth during the



Solar installers working on the 6.4-kWh roof-mounted PV array that will power the pumps that clean the water at the Webber Natural Swimming Pool. Source: Ray Colby/Sundial Solar.

summer. The 6.2-kW roof-mounted solar array is expected to produce about 8,670 kWh per year, which is roughly 10 percent of the facility's total electricity usage.

#### **East Phillips Park Cultural and Community Center:**

A 6.5-kW wall-mounted solar array is expected to produce about 9,089 kWh per year, roughly 10 percent of the center's total electricity use. This site demonstrated the use of solar in a challenging location: because the gymnasium roof did not have the structural integrity to support solar panels, a wall-mounted array was used. The site was selected because the facility is used year-round, with a variety and levels of program activities ranging from community recreation to cultural events that support the great ethnic diversity of the neighborhood. The solar installation is partially visible from Minnesota State Highway 55.

Lake Nokomis Main Beach: A 7.4-kW solar canopy array was installed at the beach to provide much-needed shade for beachgoers. The solar array is expected to produce about 10,348 kWh per year, which is roughly 15 percent of the beach's total electricity use during the summer. In the winter, the solar array should deliver almost all power generated to the grid. As a regional resource, the beach draws visitors from all over the city and metropolitan area, including visitors from around Minnesota.

#### **Public Education and Program Results**

The MPRB Solar Demonstration Project highlights several varieties of solar installation (roof-mounted, wall-mounted, canopy) across a variety of unique, diverse urban environments. The project was innovative from a technological perspective by demonstrating how design can overcome challenging

installation limitations. Each installation had a unique design feature. For example, helical pier foundations were used for the canopy at Lake Nokomis to accommodate the unstable, sandy soil conditions. Since the community goals for the Nokomis beach area indicated the need for more shade, the solar installation was designed to provide that function. Special mounting brackets were used at the Martin Luther King recreation center to secure the system to the roof. Custom racking was designed for the East Phillips array to allow a wall mounting due to an unsuitable roof. Ballasted racking was used at the Parade Ice Arena to prevent damage to a newly installed roof. Special roof mounting brackets were used at Webber Park due to the steep roof pitch.

To date, the solar arrays installed via the MPRB Solar Demonstration Project have displaced 288 MW of traditional electrical power and provided 130 registered renewable energy certificates (RECs). The environmental benefits from the generation of this renewable energy include a reduction in air emissions of 214 metric tons equivalent of CO<sub>2</sub>. The project has provided an interpretive program and educational opportunities that highlight the installed arrays' energy output, carbon offsets, and other educational features as a way to increase solar demand in Minnesota.

The project has also supported the local clean energy economy: two Minnesota-based solar installation firms were hired to install the five arrays, and all the solar panels were manufactured in Minnesota. Additionally, 27 percent of the total project expenditures were allocated to City of Minneapolis Target Market Program businesses and Minnesota Unified Certification Program Disadvantaged Minority Owned Business Enterprises.

#### Xcel Energy Renewable Development Fund (Minnesota): MPRB Solar Demonstration Project

#### The Role of the RDF

The RDF supports renewable energy projects across Minnesota with funds that come from Xcel Energy electric customers in Minnesota. It especially looks for projects that promote the startup, expansion, and attraction of renewable energy projects and companies. The fund also stimulates research and development into renewable energy technologies. Both efforts are designed to increase innovation, introduction, and promotion of renewable energy resources at reasonable costs. RDF grant awards are recommended by a seven-member advisory group comprising two representatives of environmental organizations, a Prairie Island Indian Community representative, an industrial/commercial ratepayer representative, a residential ratepayer representative, and two Xcel Energy representatives. The Minnesota Public Utilities Commission approves Renewable Energy Fund grant awards.

The RDF grant of \$969,741 awarded to the Minneapolis Park and Recreation Board contributed significantly to the \$1,119,741 program budget for demonstration projects to utilize Minnesotamade solar panels and demonstrate the effectiveness of alternative solar designs. The program has educated millions of visitors to Minneapolis parks about the viability of solar technologies, reduced carbon emissions, and supported local economic development, which are excellent results for Minneapolis and for Minnesota that can be replicated in other locations.

#### **Judges' Comments**

"This is a unique project that has resulted in the deployment of public-facing solar installations that reach not only a large number of people, but also very diverse populations. This means that people who may not otherwise be exposed to solar have the opportunity to experience it up-close. It also furthers the expansion of solar into non-traditional spaces and fosters new advocates for solar energy."



#### **About the Xcel Energy Renewable Development Fund**

The Xcel Energy Renewable Development Fund (RDF), which is financed by Xcel Energy Minnesota electric ratepayers, promotes the start-up, expansion and attraction of renewable electric energy projects and companies in the Xcel Energy service area. The overall purpose of the RDF is to: stimulate research and development of renewable electric energy technologies; encourage grid modernization, including, but not limited to, projects that implement electricity storage, load control, and smart meter technology; and stimulate other innovative energy projects that reduce demand and increase system efficiency and flexibility. Expenditures from the fund must benefit Xcel Energy Minnesota ratepayers or the Prairie Island Indian community.



#### **About the Minneapolis Park and Recreation Board**

The Minneapolis Park and Recreation Board is an independent, semi-autonomous body responsible for the Minneapolis park system. With 179 park properties totaling 6,804 acres of land and water, the Park Board provides places and recreation opportunities for all people to gather and engage in activities that promote health, well-being, community and the environment. Its Grand Rounds Scenic Byway, neighborhood parks, recreation centers and diversified programming have made the park system an important component of what makes Minneapolis a great place to live, play and work. More than 23 million annual visits are made to the nationally acclaimed park system, which was named the number one park system in the nation in each of the last six years by The Trust for Public Land's ParkScore® Index.

#### For more information:

https://www.minneapolisparks.org/solar

#### **Contacts**

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Mark Ritter **RDF Grant Administrator Xcel Energy** mark.g.ritter@xcelenergy.com





#### **CESA Core Members**

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**Department of Energy & Environment — D.C.** 

Energy Trust of Oregon

**Illinois Power Agency** 

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**Massachusetts Clean Energy Center** 

New Hampshire Public Utilities Commission — Sustainable Energy Division

New Jersey Board of Public Utilities — New Jersey Clean
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Rhode Island Office of Energy Resources

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**Washington Department of Commerce** 

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**Oregon Department of Energy** 

**Prairie Island Indian Community** 

**Rhode Island Commerce Corporation** 

Smart Electric Power Association













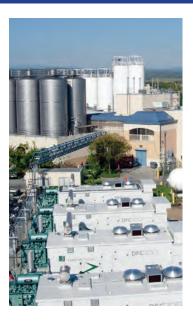
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The Clean Energy States Alliance (CESA) is a national, non-profit coalition of public agencies and organizations working together to advance clean energy. CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country.

CESA works with state leaders, federal agencies, industry representatives, and other stakeholders to develop and promote clean energy technologies and markets. It supports effective state and local policies, programs, and innovation in the clean energy sector, with an emphasis on renewable energy, power generation, financing strategies, and economic development. CESA facilitates information sharing, provides technical assistance, coordinates multi-state collaborative projects, and communicates the views and achievements of its members.

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#### Memo

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

**From:** Anthony Clark Associate Director, Commercial, Industrial & Institutional Programs; Laura Fidao, Senior Manager, Clean Energy Finance

CC: Bryan Garcia (President and CEO), Bert Hunter (EVP and CIO), and Mackey Dykes, Vice

President, Commercial, Industrial & Institutional Programs

**Date:** July 20, 2018

Re: Update on Utility SBEA Recapitalization Plan

#### **Background**

In November 2016, the Connecticut Green Bank ("Green Bank") conducted an RFP at the request of the Connecticut utilities, Eversource and UI, (the "Utilities") to recapitalize their Small Business Energy Efficiency ("SBEA") Program for energy efficiency loans with lower cost private capital sufficient for program purposes. Leading up to this RFP and thereafter, the C&I Committee of the Energy Efficiency Board (EEB) was actively part of the discussions with Green Bank and the Utilities. From that RFP process, a proposal was selected and Green Bank staff requested approval from the Green Bank Board of Directors in September 2017 to provide capital and facility management services as part of this recapitalization solution.

Following further discussions and negotiations amongst the utilities, EEB, and Green Bank in late 2017 and early 2018, the selected solution for private capital to fund the SBEA Program did not achieve consensus support. As a result, it was agreed that a second RFP process with greater involvement from the Utilities and EEB would be held in May 2018.

This second RFP resulted in 4 responses that were evaluated using the following criteria developed jointly by the Utilities, EEB and Green Bank (in approximate order of priority):

- Cost of capital: provide the lowest cost capital possible into the facility
- Scalability: provide sufficient capital to purchase existing loan portfolio (Eversource only) and finance future loans without capital restriction as facility grows over time
- Process: retain existing SBEA loan origination and servicing processes, including repayment of SBEA loan on-bill and streamlined contractor payments (with option for loan payments to be made directly from the RFP respondent to the Contractors as opposed to from the Utilities to the Contractors at present).
- Efficient use of CEEF capital: free up a portion of CEEF capital currently deployed as loan funds (Eversource only) for use in utility C&LM programs (i.e. free up cash)
- Efficient use of Utility balance sheet and shareholder capital
- Facility tenor: Utilities interested in seeing solutions up to three years, with insight into pricing differences for one-, two-, or three-year options

#### SBEA Recapitalization and Next Steps

Following a qualitative and quantitative evaluation conducted together by the Utilities, EEB Consultants and Green Bank, a joint proposal between Amalgamated Bank and the National Energy Improvement Fund (NEIF) was selected as the recommended proposal to refinance Eversource's existing loan portfolio of \$42 million and provide a commitment to finance future SBEA loan volumes of both Eversource and UI.

Key considerations of the winning Amalgamated/NEIF bid include:

- Lowest overall cost of capital: Year 1: 4.40%, thereafter LIBOR + 2.25% fixed at time of funding)
- Greatest savings to CEEF budget:
  - Savings of nearly \$6 million on a cost of capital basis over the lifetime of loans originated within the 3-year period
  - o 3-year cash flow savings to CEEF of \$2.7 million versus business-as-usual
- Retention of existing utility origination and contractor payment processes
- No need for a new special purpose entity (other than a "trust" to be established and managed by the lenders)
- Avoids requirement of CEEF to fund a reserve account
- Leverages Green Bank participation to reduce risk and improve financing terms for CEEF
  - 10% of funds raised to be provided by Green Bank
  - Green Bank to be subordinated to Sr Lenders
  - Green Bank to earn same rate of interest as Sr Lenders
  - Estimated FY 2019 participation of \$4m
- Amalgamed Bank and NEIF have significant experience in sustainable finance and working with utility financing programs

In July 2018, the EEB unanimously gave its support to proceed with next steps to recapitalize Eversource's SBEA program using the Amalgamated/NEIF solution. Given uncertainty about the administrative costs for UI associated with pursuing recapitalization through the Amalgamated/NEIF solution, further analysis on the costs and benefits of proceeding with a UI recapitalization is required. This analysis is to be completed before the August EEB meeting when a recommendation regarding recapitalization for UI will be presented for the EEB's approval.

While the parallel UI analysis is underway, the Green Bank and Eversource (with UI involvement) will proceed to a final term sheet and document negotiation. After documentation is finalized, the EEB will be asked to provide its final approval of the arrangement, after which the Utilities and Green Bank would move forward to implement the new capital for the SBEA program.

#### Conclusion

The efforts of the Green Bank together with the Utilities, EEB, and EEB consultants to develop a viable and cost-effective solution for recapitalizing the SBEA program marks a significant milestone in the cooperation between all parties and the evolution of energy efficiency finance in Connecticut. Staff will continue to work through details of the Amalgamated/NEIF recapitalization, including finalizing the terms of Green Bank participation. Staff anticipates and looks forward to presenting an investment proposal to the Board of Directors with terms aligned with our sustainability investment targets at the end of the third quarter or beginning of the fourth quarter of this year.