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CONNECTICUT
GREEN BANK

December 12, 2017

Dear Connecticut Green Bank Board of Directors:

We have a regular meeting of the Board of Directors scheduled this week for Friday, December 15, 2017 from 9:00-11:00 a.m. in the Colonel Albert Pope Board Room of the Connecticut Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

Given the nature of the conversation, it would be great if you were to come and join the meeting in person as we will be covering many critical items. My apologies in advance for providing various meeting materials over the course of the week.

On the agenda we have the following:

- **Consent Agenda** – approval of the meeting minutes for December 1, 2017 and regular meeting schedule of the Board of Directors for 2018.

- **Infrastructure Sector** – in support of the statutory program on anaerobic digesters (AD), we are bringing forth a farm-waste-to-energy transaction. In the past, we have recommended the approval of a 2% loan with a 20-year term for these sorts of AD projects. However, given the budget sweeps, we are now recommending a loan guarantee to support the project in receiving private capital to finance the project, instead of investing long term below market capital in the project. [Note – meeting materials will be distributed by COB, Wednesday, December 13, 2017.]

- **Residential Sector** – we are bringing forth a revision to the bridge loan extension for PosiGen. As you might recall, on June 9, 2017, we requested a bridge loan through December 31, 2017 to PosiGen to account for the scarcity of tax equity in the market. PosiGen has been successful in securing tax equity, however, staff is requesting a 12-month extension of the bridge loan with the flexibility of negotiating a higher interest rate (i.e., not to exceed 200 basis points) to support PosiGen's working capital needs resulting from their expansion in Connecticut. [Note – meeting materials will be distributed by COB, Wednesday, December 13, 2017.]

- **Sustainability Plan** – following on our discussion on December 1, 2017 with respect to the Residential Solar Investment Program (RSIP) business unit, we will now turn our attention to the core business unit of the Connecticut Green Bank – Clean Energy Finance. We will discuss the shift in our investment strategy from leverage to sustainability with a focus on reaching breakeven by reducing operating expenses and increasing investments in revenue producing assets. This will be the focus of the meeting. [Note – meeting materials will be distributed first thing on Thursday morning, December 14, 2017. I have provided a few examples to get you started.]

- **Communication Strategy** – after we discuss and get your feedback on the sustainability plan, we will initiate a discussion on our communication strategy to stakeholders.

These are difficult times at the Green Bank, which will require us having to make tough choices to continue to operate within our limited available resources, while at the same time continuing to serve our mission.

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

We look forward to seeing you later on this week.

Sincerely,

Bryan Garcia
President and CEO

AGENDA (Revised)

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

Friday, December 15, 2017
9:00-11:00 a.m.

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

1. Call to order

2. Public Comments – 5 minutes

3. Consent Agenda – 5 minutes

4. Infrastructure Sector Program – 10 minutes

    a. Farm Waste to Energy – AD Project Guarantee

5. Residential Sector Program – 10 minutes

    a. PosiGen – Bridge Loan Extension

6. Commercial, Industrial, and Institutional Sector Program – 10 minutes

    a. Board of Regents – Commercial Solar PV PPA

7. Sustainability Plan to Address the State Budget Sweeps – 60 minutes

8. Communication Strategy – 20 minutes

9. Adjourn

Join the meeting online at https://global.gotomeeting.com/join/476567677

Or call in using your telephone:
Dial (872) 240-3212
Access Code: 476-567-677

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

RESOLUTIONS (Revised)

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

Friday, December 15, 2017
9:00-11:00 a.m.

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

1. Call to order

2. Public Comments – 5 minutes

3. Consent Agenda – 5 minutes

Resolution #1

Motion to approve the minutes of the Board of Directors Meeting FOR December 1, 2017.

Resolution #2

Motion to approve the Regular Meeting Schedule of the Board of Directors for 2018.

4. Infrastructure Sector Program – 10 minutes

a. Farm Waste to Energy – AD Project Guarantee

Resolution #3

WHEREAS, in early 2013, Green Bank released a rolling Request for Proposals in the third round of solicitations for anaerobic digestion projects to participate in a statutorily mandated AD Pilot program, an initiative aimed at reducing landfill waste through the recycling of organics and helping to promote sustainable practices and economic prosperity of Connecticut farms and other businesses by using organic waste with on-site anaerobic digestion facilities to generate electricity and recoverable heat;

WHEREAS, Ag-Grid Energy, LLC submitted the Fort Hill Ag-Grid Anaerobic Digestion Facility proposal to develop in the City of Thompson a 450 kW anaerobic digestion project and, after a thorough review, was selected as a project that is consistent with the AD Pilot Program, Green Bank Comprehensive Plan and in the best interests of ratepayers;

NOW, therefore be it:

RESOLVED, that the President of Green Bank and any other duly authorized officer of Green Bank is authorized to execute and deliver definitive documentation materially based on the term sheet set forth in this due diligence package for financial support in the form of up to $850,000 of a loan guaranty, contingent on confirmation to the Board (or the Deployment Committee), at a subsequent meeting of the Board or Deployment Committee, and based on updated project details and financing contingencies, and as he or she shall deem to be in the interests of Green Bank and the ratepayers;

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

RESOLVED, that the Board's approval is conditioned upon the completion of Green Bank staff's due diligence review, including Green Bank's review and reasonable satisfaction with all project documentation that Green Bank is not a party to.

5. Residential Sector Program – 10 minutes

   a. PosiGen – Bridge Loan Extension

<u>Resolution #4</u>

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, 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 finance offering to LMI households in Connecticut, which includes a Green Bank debt capital facility (the "Loan") advanced as a bridge loan towards PosiGen closing on tax equity financing in 2017;

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 amend the Loan with terms and conditions consistent with the memorandum submitted to the Board dated December 8, 2017, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from 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.

6. Commercial, Industrial, and Institutional Sector Program – 10 minutes

a. Board of Regents – Commercial Solar PV PPA

Resolution #5

WHEREAS, at its September 28, 2017 meeting, the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") previously authorized the issuance of Clean Renewable Energy Bonds ("CREBs") to support the installation of various solar projects for the benefit of the Connecticut State College and University ("CSCU") system;

WHEREAS, Banc of America Public Capital Corp. ("BAPCC"), as the proposed purchaser of the CREBs, has requested that this issuance incorporate the support of the Special Capital Reserve Fund ("SCRF"); and

WHEREAS, uncertainty at the federal level makes it advantageous to issue the CREBs in calendar year 2017;

NOW, therefore be it:

RESOLVED, that the Board affirms the previous approvals granted at its September 28, 2017 meeting with respect to this proposed CREBs transaction;

RESOLVED, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to secure the issuance of CREBs utilizing the SCRF, 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, (2) an opinion of sufficiency as set forth in the Connecticut General Statutes ("CGS"), and (3) approval by the Office of the State Treasurer and other documentation required under the CGS; 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.

7. Sustainability Plan to Address the State Budget Sweeps – 60 minutes

Resolution #6

RESOLVED, that the Board of Directors of the Connecticut Green Bank (Green Bank) approve of the budget mitigation strategy consistent with the Sustainability Pathway Strategy as set forth in this memorandum dated December 15, 2017 and **Attachment A**.

RESOLVED, that the Board of Directors of the Green Bank direct the Green Bank staff to present a detailed business plan, budget and transition plan for certain employees to a non-profit affiliate for the review and consideration of the Board no later than the end of the First Quarter of 2018.

RESOLVED, that the Board of Directors of the Green Bank authorize the President of the Green Bank and any other duly authorized officer of the Green Bank to (i) permanently eliminate positions from the Green Bank workforce consistent with the Sustainability Pathway Strategy as set forth in this memorandum dated December 15, 2017 and **Attachment A** and (ii) offer a severance package consistent with the Green Bank's Severance Policy to employees that are not transitioning to the non-profit affiliate.

8. Communication Strategy – 20 minutes

9. Adjourn

Join the meeting online at https://global.gotomeeting.com/join/476567677

Or call in using your telephone:
Dial (872) 240-3212
Access Code: 476-567-677

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

Board of Directors Meeting

December 15, 2017

Board of Directors

Agenda Item #1

Call to Order

Board of Directors

Agenda Item #2

Public Comments

Board of Directors

Agenda Item #3

Consent Agenda

Consent Agenda
Resolutions 1 and 2

CONNECTICUT GREEN BANK

1. **Meeting Minutes** – approval of meeting minutes of December 1, 2017

2. **Meeting Schedule** – approval of the regular meeting schedule for the Board of Directors for 2018

- **Under $500,000 and No More than $1,000,000** – report out and clearance of the investments in the queue

Board of Directors

Agenda Item #4

Infrastructure Sector Program

Farm Waste to Energy – AD Project Guaranty

AD Program

Thompson Agricultural AD Project

Proposed Project Summary

- Project proposal submitted by Fort Hill Ag-Grid, LLC a SPE wholly owned by both Fort Hill Farms and Ag-Grid Energy, LLC
- 450 kW farm based Anaerobic Digester facility
- System to be located on a 1,000 acre multi-generation family owned and operated farm in Thompson, CT
- Farm currently has ~ 390 cows, 200 milking – plans for adding 150 milking cows over next 5 years.
- Facility will process ~ [[redacted]] tons/year of manure, food scraps & other organic materials - 70/30 mix of food scraps to manure/other organics.
- System will produce ~ 3,500 MWh of electricity annually, ~200,000 kWh to be used by farm.
- Digester will produce ~ 73 million ft^3/year of biogas

AD Program

Thompson Agricultural AD Project

Proposed Project Funding Sources – Base Case

- Project capital cost estimate ➔ $3.5M
- Tax Equity to be provided by Martin Energy Group ➔ $661k (~19%)
- Grants ➔ $480k (~14%)
- SPE Equity ➔ $125k - $255k (~4%-8%)
- Farm Credit East (“FCE”) Bank (Senior Lender) ➔ $2.1M (~60%)

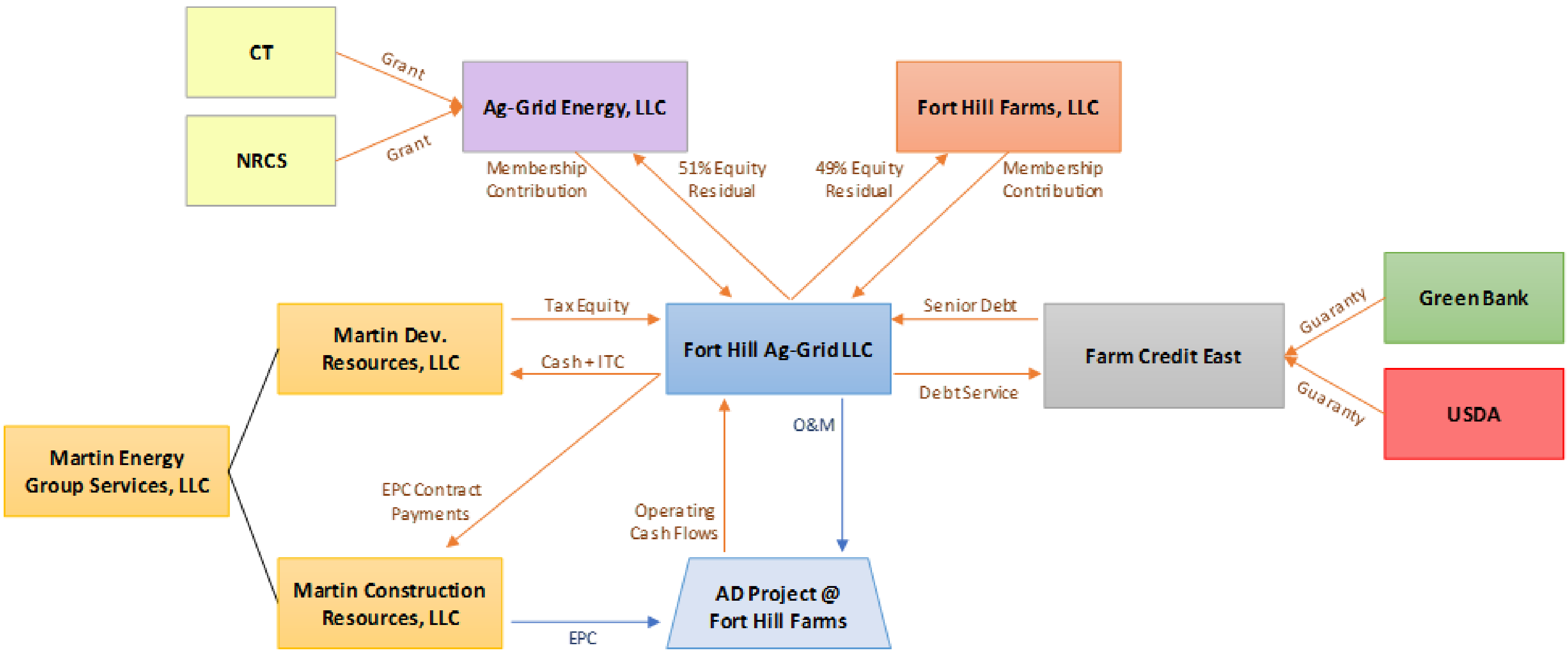
- USDA REAP Program Loan Guaranty ➔ Up to $1.4M of Senior Debt
- Green Bank Loan Guaranty ➔ Up to $700k of Senior Debt

Ownership & Partners

- Fort Hill Ag-Grid, LLC (Equity)
- Martin Energy Group (Tax Equity + EPC)

AD Program
Thompson Agricultural AD Project

Base Case Capital Structure Diagram



AD Program
Thompson Agricultural AD Project

Green Bank Role & Exposure Summary

- Green Bank Role: Guarantor for portion of FCE senior debt, with a maximum exposure of 20% of Project Capital Cost.

- Maximum Green Bank Exposure: $700k under Base Case Scenario, and $850k under Depackager Case Scenario (Additional $750k Project Capital Cost).

- Green Bank Impact: Green Bank Participation is a requirement of Senior Lender participation;
  - $3.5M of private capital and grants leveraged with $700k Green Bank Balance Sheet Guaranty. $4.25M leveraged with $850k Green Bank Guaranty.
  - 35,478,000 kWh of electricity and 164,688 MMBtu thermal energy produced over 10-year initial operating term

Board of Directors

Agenda Item #5

Residential Sector Program

PosiGen – Bridge Loan Extension

PosiGen Bridge Loan

Background

- **<u>PosiGen Debt Facility Approval</u>:** At its June 9, 2017 meeting, the Green Bank Board authorized a Green Bank loan to PosiGen to bridge a gap in its tax equity financing, in an amount not to exceed $3.5MM

- **<u>Use of Proceeds</u>:** PosiGen has continued to invest in Connecticut, increasing its systems deployed from ~900 at the time the bridge loan was approved to nearly 1,300 systems today, primarily serving LMI customers

Table 95. Low Income Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[130]

	# Project Units				MW				Investment (Gross Cost)			
Fiscal Year Closed	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**	**Total**	**Over 100% AMI**	**100% or Below AMI**	**% at 100% or Below**
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2014	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2015	4	1	3	75%	0.0	0.0	0.0	76%	$109,380	$27,000	$82,380	75%
2016	330	78	252	76%	2.1	0.5	1.6	76%	$9,450,354	$2,236,208	$7,214,146	76%
2017	627	142	485	77%	3.8	0.9	2.9	76%	$17,336,078	$4,137,937	$13,198,141	76%
Total	**961**	**221**	**740**	**77%**	**6.0**	**1.4**	**4.5**	**76%**	**$26,895,812**	**$6,401,145**	**$20,494,667**	**76%**

- **<u>Capitalization</u>:** PosiGen has succeeded in closing on new tax equity facilities, both to clear a backlog of systems and to provide ongoing capacity heading into 2018

PosiGen Bridge Loan
Facility Extension

CONNECTICUT GREEN BANK

- **Original Maturity:** The bridge loan was originally approved to be repaid out of tax equity proceeds received by PosiGen, but no later than December 31, 2017

- **Constraints:** The terms of the tax equity on which PosiGen has closed do not provide for upfront payments, meaning the company has not received a cash "windfall" out of which to repay the bridge loan, as expected. Additionally, PosiGen continues to prioritize reinvestment of excess cash into Connecticut growth, effectively making the Green Bank bridge loan more of a working capital facility

- **Staff Recommendation:** Extend the bridge loan another 12 months, with flexibility to increase the interest rate on the facility to ensure the pricing is commensurate with the longer tenor and moderately elevated risk profile associated with the Green Bank's revised lending position

PosiGen Bridge Loan
Risk & Mitigants

- In extending the bridge loan to PosiGen, staff recognizes the need to continue to mitigate repayment risk. Accordingly, the Green Bank will continue to:
  - Maintain the existing collateral position associated with our initial $5 million secured debt investment; and
  - Acquire additional collateral in newly installed systems associated with the $3.5 million secured bridge loan
- With respect to existing collateral, staff has confirmed that the net cash flows associated with systems already deployed is sufficient to repay all of PosiGen's Connecticut obligations at an effective interest rate of 3.5% over 20 years

CHART REDACTED

Board of Directors

Agenda Item #6

Commercial, Industrial, and Institutional Sector

Board of Regents

CREBs for CSCU Solar
Background

- **<u>Previous BOD Approval</u>:** At its September 28, 2017 meeting, the Green Bank Board authorized the issuance of CREBs to fund the installation of nearly 5MW of solar projects on a number of CSCU campuses

- **<u>Project Economics</u>:** Total installation costs projected at ~[redacted](of which ~90% will be funded by CREBs); anticipated savings to the CSCU system projected at ~$240,000 annually (for 20 years)

CHART REDACTED

CREBs for CSCU Solar

Credit and Timing Issues

- **<u>State Budget Passed</u>** – Since the Board authorized the CREBs issuance, the Green Bank has had its funds swept, and the CSCU system has experienced significant cuts

- **<u>Purchaser Concern</u>** – Bank of America Public Capital Corp. (“BAPCC”), as proposed purchaser of the CREBs, has communicated that it has newfound credit concerns associated with these State of Connecticut dynamics, and while the original plan presented to the Board did not rely on the use of the Special Capital Reserve Fund (“SCRF”), BAPCC is now requiring it

- **<u>Tax Reform</u>** – In addition, tax reform efforts have led to uncertainty with respect to the viability of certain tax-advantaged bonds heading into 2018, so BAPCC is suggesting that the Green Bank issue the CREBs (and fund into escrow) in 2017

CREBs for CSCU Solar
Staff Recommendation

- **Project Importance** – This is a model that can be replicated and scaled not just for the CSCU but for State of Connecticut buildings more broadly

- **SCRF** – Approve the use of the SCRF as a condition subsequent to issuing the CREBs, subject to all statutory requirements, with funds not to be released from escrow until the SCRF “wrap” is put in place

- **Issuance Timing** – So as to preserve access to the highly favorable pricing associated with CREBs, issue the bonds in calendar year 2017 (if possible), fund into an escrow controlled by BAPCC, and release funds only once all conditions subsequent are met

CONNECTICUT GREEN BANK

Board of Directors

Agenda Item #7

Sustainability Plan to Address the State Budget Sweeps

Connecticut State Budget

- **Biennial Budget**

  Bipartisan support from the CGA and signed by the Governor on October 31, 2017 a $41.3 billion biennial budget addressing reductions of **$3.5+ billion** in deficits and recent increase in deficit of **$200 million**

- **Energy Sweeps**

  $175 million in sweeps, including:

  - **$63.5 million (of $162 million or 39%)** a year for two years from the Energy Conservation and Load Management Fund administered by **Eversource Energy and Avangrid**
  - **$14 million (of $27 million or 52%)** a year for two years from the Clean Energy Fund administered by the **Connecticut Green Bank**
  - **$10 million** a year for two years from the Regional Greenhouse Gas Initiative administered by the **Department of Energy and Environmental Protection** – Connecticut Green Bank receives 23% of proceeds.

Connecticut Green Bank

Delivering Results for Connecticut

CONNECTICUT GREEN BANK

- **Investment**

  Mobilized nearly $1.1 billi… …t into Connecticut's clean energy economy so far

- **Energy Burden**

  Reduced the energy… …useholds and businesses

- **Jobs**

  Created an estimated … …ting to an estimated 7.5% to 20% of total job crea… …nk's first 5 years.*

- **Clean Energy**

  Deployed more than 2… …clean renewable energy helping to reduce 3.7 million tons of greenhouse gas emissions that cause climate change

Connecticut Green Bank is an excellent steward of public funds!!!

REFERENCES

*62,500 private non-farm jobs created in the state over 5 years since Green Bank creation mid-2011. Green Bank statistics are in job-years; "total jobs" include direct, indirect and induced. CT DOL statistics are aggregated from monthly point-in-time estimates. CT Department of Labor - http://www1.ctdol.state.ct.us/lmi/privatesectoremployment.asp

Sustainability Plan
Incentives vs. Investments

1. **Recognize Business Units** – acknowledge that the Connecticut Green Bank runs two businesses – incentives and investments.

2. **Incentives Business** – provide incentives to support no more than 300 MW of residential solar PV by the end of 2022. Incentives, administrative costs, and financing costs (e.g., securitization) are recovered through the sale of SHRECs through a 15-year MPA with the utilities.

3. **Investment Business** – core business of the organization to put capital to work in credit enhancement programs (e.g., Smart-E Loan), program and project investments (e.g., PosiGen and fuel cells), and warehouses or securitizations (e.g., C-PACE)

Sustainability Plan
Key Principles

- **<u>Mission</u>** – the Connecticut Green Bank must continue to execute on its statutory mission and purpose (albeit, now more modestly).
- **<u>Public Servants</u>** – the human capital that is serving Connecticut and the Connecticut Green Bank, must be handled in a compassionate, thoughtful, and methodical manner.
- **<u>Breakeven</u>** – the Connecticut Green Bank must restructure its core business of clean energy finance to put it on a pathway to breakeven within the next 4 to 7 years (which assumes the public funds are no longer counted as revenues)
- **<u>Profitability</u>** – as the Connecticut Green Bank has had to adjust its model from using limited public funds to attract and leverage private investment towards sustainability, it will now need to seek investment opportunities in its core business that maximizes returns in its pursuit for profitability at the expense of markets that are not profitable.

Project Annual Cash Flow Scenarios

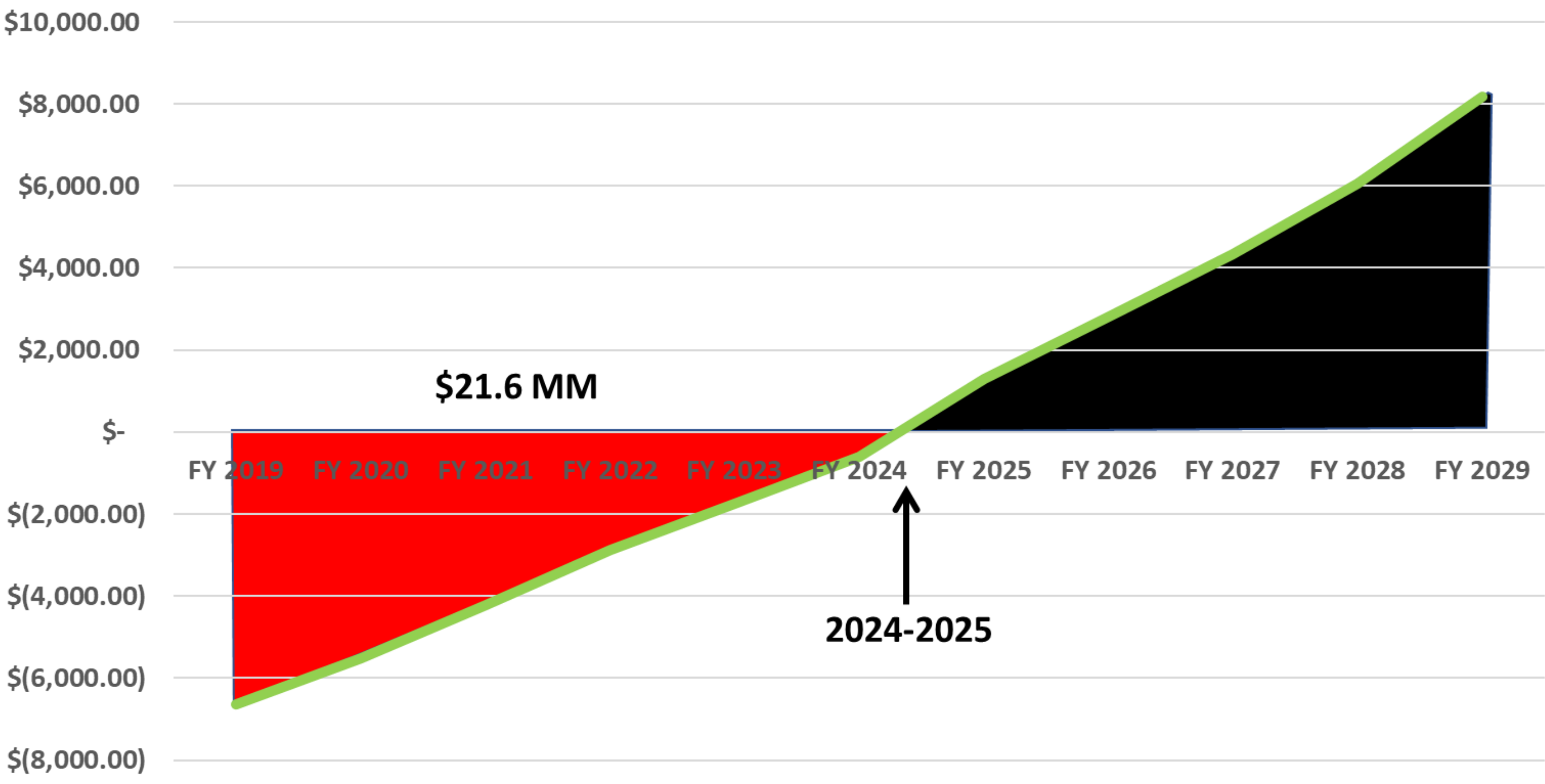
ATTACHMENT 2 - PROJECTED ANNUAL CASH FLOW FOR SUSTAINABILITY PATHWAY WITH CHANGE IN LAW

Connecticut Green Bank - Core Business

		FY 2018 Full Yr Budget	Partial FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Further Non-Personnel Related Operating Expense Reductions				$ -										
Personnel Related Operating Expense Reductions from Affiliate				$ [illegible]	$ 1,240	$ 1,240	$ 620	$ 620	$ 620	$ -	$ -	$ -	$ -	$ -
Current Law (if yes, then "x")														
1. Cash On Hand														
[Beginning of month]			$13,500.00	$14,838.51	$10,970.79	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00
2. Cash Receipts														
Receipts based on investments thru FY18	0.10%		$4,066.00	$5,226.00	$5,231.23	$5,236.46	$5,241.69	$5,246.94	$5,252.18	$5,257.43	$5,262.69	$5,267.95	$5,273.22	$5,278.50
Receipts (P&I) on investmentsmade in FY19 and forward	5.00%				$1,424.55	$2,947.11	$3,879.03	$5,223.24	$6,589.00	$8,102.26	$9,861.81	$11,624.38	$13,584.00	$15,959.81
Payment Amortization (Years)	10.00													
SBC, net of sweep			$2,315.80	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00
Growth rate for SBC	0.00%													
Repayment of SL I WC Loan			$2,900.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Kresge Loan			$0.00	$3,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
DEEP Grant for Low Income and Multifamily			$5,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Repayment of RSIP expenses paid by CORE			[illegible]	[illegible]	$1,000.00	$1,000.00	$1,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3. Total Cash Receipts			$27,781.80	$22,526.00	$19,955.78	$21,483.56	$22,420.72	$22,770.18	$24,141.19	$25,659.70	$27,424.50	$29,192.34	$31,157.22	$33,538.30
4. Total Cash Available	$0.00		$41,281.80	$37,364.51	$30,926.57	$25,483.56	$26,420.72	$26,770.18	$28,141.19	$29,659.70	$31,424.50	$33,192.34	$35,157.22	$37,538.30
5. Cash Paid Out														
Compensation and Benefits	2.00%	7,893.50	$ 4,738.3	$ 5,463.42	5,572.69	$ 5,684.14	$ 5,797.83	$ 5,913.78	$ 6,032.06	$ 6,152.70	$ 6,275.75	$ 6,401.27	$ 6,529.29	$ 6,659.88
Interest Expense														
Other administrative expenses	2.00%	8,472.80	$ 4,726.4	$ 5,257.00	5,362.14	$ 5,469.38	$ 5,578.77	$ 5,690.34	$ 5,804.15	$ 5,920.23	$ 6,038.64	$ 6,159.41	$ 6,282.60	$ 6,408.25
Financial Incentives - non RSIP			$ 265.0											
Investments per Year	$8,000.00		$8,344.4	$11,000.00	$11,756.78	$7,196.06	$10,379.66	$10,546.05	$11,684.98	$13,586.77	$13,610.11	$15,131.66	$18,345.33	$20,470.17
Investments visa vis Affiliate			$ 5,000.0											
CGB/Affiliate PSA for services				$1,150.00	$1,240.00	$1,240.00	$620.00	$620.00	$620.00	$0.00	$0.00	$0.00	$0.00	$0.00
Subtotal		$16,366.30	$23,074.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Loan Principal Payment (Kresge)											$1,500.00	$1,500.00		
Capital Purchases														
SBC for Non-SHREC PBIs net of REC recovery			$3,369.05	$3,523.31	$2,994.96	$1,893.98	$44.47							
6. Total Cash Paid Out			$26,443.29	$26,393.72	$26,926.57	$21,483.56	$22,420.72	$22,770.18	$24,141.19	$25,659.70	$27,424.50	$29,192.34	$31,157.22	$33,538.30
7. Cash Position			$14,838.51	$10,970.79	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00
Required $4 million cash														
CORE BUSINESS NET			-$5,398.	-$6,644.42	-$5,519.05	-$4,209.96	-$2,875.87	-$1,753.95	-$615.02	$1,286.77	$2,810.11	$4,331.66	$6,045.33	$8,170.17

Sustainability Pathway

With Change in Law (SBC/RGGI remains redirected)

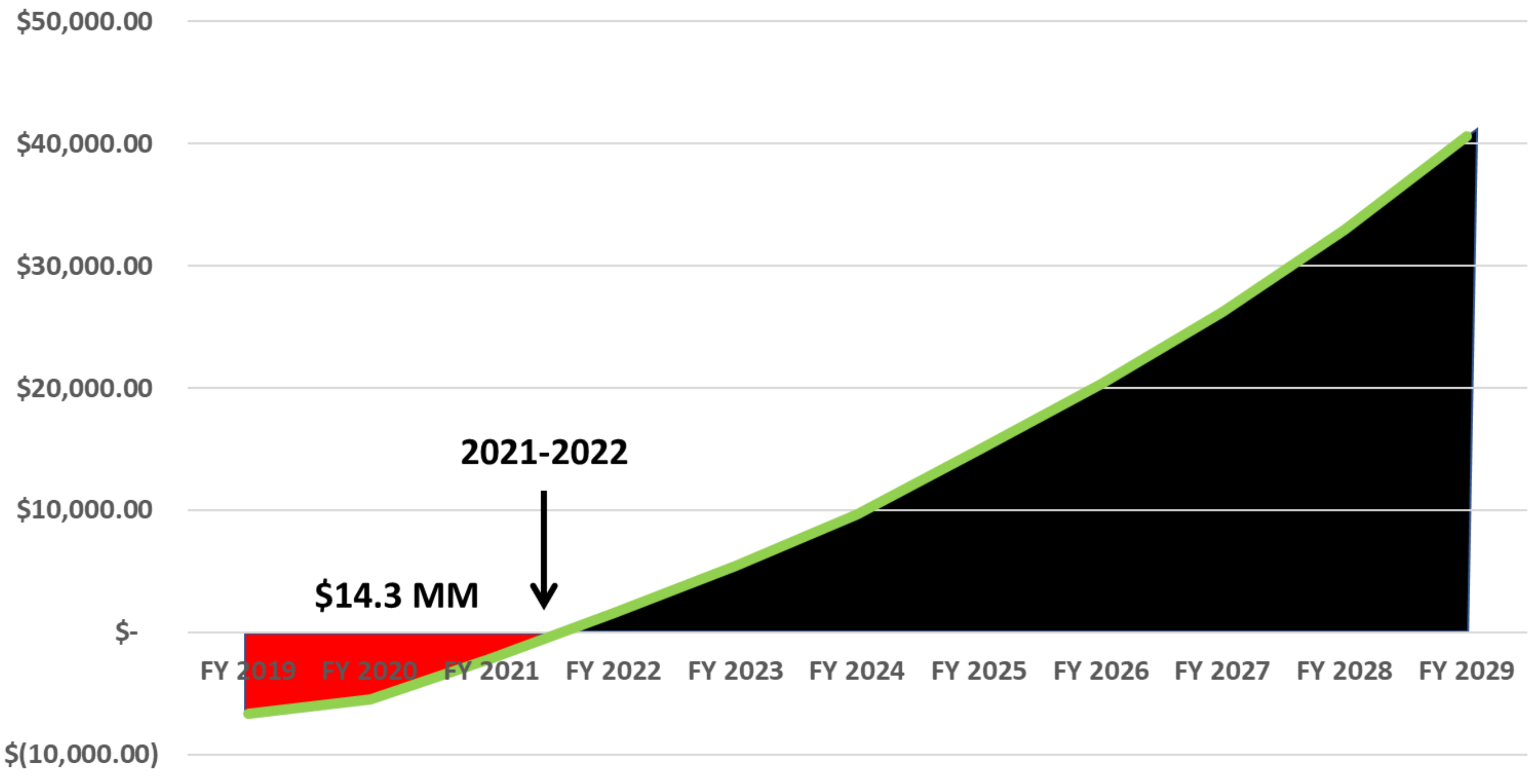


REFERENCES

Assumes operating expense budget reduction of 27% from FY 2018 to FY 2019; sweeps stay at current levels for FY 2018 and FY 2019 and out into the future through a law passage in FY 2020; and creation of non-profit affiliate to preserve low income market support.

Sustainability Pathway

With Current Law (SBC/RGGI restored)



REFERENCES

Assumes operating expense budget reduction of 27% from FY 2018 to FY 2019; sweeps stay at current levels for FY 2018 and FY 2019, but are dropped from FY 2020 and beyond for current law; and creation of non-profit affiliate to preserve low income market support.

Sustainability Pathway

Increase Revenues and Profitability

- **Profitability** – focus on sustainability of the Connecticut Green Bank versus leveraging limited public funds to attract multiples of private capital investment. Seeking weighted average returns of 5% over 10 year terms.

Program
Int. Rate
Term

Profitability & Sustainability

Shared Clean Energy Fac.	Solar Lease IV	LMI PosiGen
TBD	7.50%	5%
TBD	20	6

C-PACE	Project Finance	Small Bus. Energy Adv.
6.25%	5-7%	3.50%
20	10-20	4

Mission & Leverage

Anaerobic Digester	Combined Heat & Pow.	Smart-E	Multifamily Predev. LMI
2%	2%	-	0%
20	20	-	2

Multifamily Predev. Market	Multifamily LIME	Catalyst/Health & Safety
2.99%	6%	0%-3%
2	15-20	15

REFERENCES

"Black" tombstone – stays within the core business. "Green" tombstone – in partnership with the Affiliate. "Orange" tombstone – programs or projects get cancelled or postponed until resources are available.

Connecticut Green Bank

Investment Pathway Going Forward

- **FY 2018** – focusing on the following areas of investment to deliver towards profitability and sustainability with $8 million of investment:
  - C-PACE advances and pipeline (transactions are subject to funding from Hannon Armstrong)
  - PosiGen LMI single family solar PV and energy efficiency ESA
  - Fuel Cell Energy Triangle Street

- **FY 2019 and Beyond** – The proposed $11 million of investment be based on project finance opportunities (e.g., energy savings agreements, shared clean energy facilities, EV bus fleets, etc.) alongside other existing investment opportunities at the CT Green Bank (e.g., C-PACE, SBEA, etc.) as well as through the Affiliate (e.g., PosiGen, Commercial Solar PPA, etc.)

Sustainability Pathway

Reduce Operating Expenses

#	Action	Type	Reduction Amount	Timing
1	↓ Non-Personnel Related Oper. Exp.	P&L	($4.6 MM Reduced or 27%)	Immediate
2	↓ Personnel Related Oper. Exp. (non-staff)	P&L		Immediate
3	↓ Personnel Related Oper. Exp. (staff)	P&L		Immediate
4	Cancel R&D Initiatives	P&L		Immediate
5	Work with CI on Leases – 845 and 865	P&L		CY 2018
6	↓ Add. Personnel Related Oper. Exp.- Loan	P&L		FY 2019
7	↓ Add. Personnel Related Oper. Exp.- Affiliate	P&L		FY 2019
8	↓ Add. Non-Personnel Related Oper. Exp.	P&L		FY 2019

Reducing personnel and non-personnel related operating expenses from FY 2018 to FY 2019 by 27%

Sustainability Pathway
Affiliate

CONNECTICUT GREEN BANK

FORSYTH STREET

hf hampshirefoundation

Board charge to research private entity to drive scale and operating leverage, particularly for LMI.

Market scan identified significant gaps we are uniquely filling with our products.

- Segments of the market — the broader needs of buildings in LMI communities, unconventional credits, community assets, projects below utility scale — do not have access to appropriately-priced or structured capital for clean energy.
- While we are already operating at a significant scale relative to other actors, scale needs to be substantially greater to be self-sustaining.

Creation of a <u>mission-aligned independent non-profit</u> that houses our products for underserved market segments would <u>enable scaled impact and operating leverage</u>.

Key elements:

- Affiliate would run products on behalf of CGB
- Certain staff would move to Affiliate reaping immediate savings due to lower overhead
- CT-dedicated loan fund restricted to CT activities would seed Affiliate to attract other mission-oriented investors and private capital.

Allows a set of products ready for the next level of investment to survive and thrive despite limited resources at the Green Bank

Connecticut Green Bank

Future Structure

Connecticut Green Bank

Incentives
- RSIP

Financing & Investment
- CPACE
- SBEA
- Project Finance
- LMI (existing PosiGen)
- Existing Solar Lease Funds

Affiliate

- Smart-E
- LMI (e.g. future PosiGen)
- Multi-Family
    - Pre-Dev
    - LIME
    - Health & Safety
    - Catalyst
- Future Commercial Solar PPA

Cost Recovered

Self sustaining

Operating Leverage

Sustainability Pathway
Resolution

RESOLVED, that the Board of Directors of the Connecticut Green Bank (Green Bank) approve of the budget mitigation strategy consistent with the Sustainability Pathway Strategy as set forth in this memorandum dated December 15, 2017 and **Attachment A**.

RESOLVED, that the Board of Directors of the Green Bank direct the Green Bank staff to present a detailed business plan, budget and transition plan for certain employees to a non-profit affiliate for the review and consideration of the Board no later than the end of the First Quarter of 2018.

RESOLVED, that the Board of Directors of the Green Bank authorize the President of the Green Bank and any other duly authorized officer of the Green Bank to (i) permanently eliminate positions from the Green Bank workforce consistent with the Sustainability Pathway Strategy as set forth in this memorandum dated December 15, 2017 and **Attachment A** and (ii) offer a severance package consistent with the Green Bank's Severance Policy to employees that are not transitioning to the non-profit affiliate.

Board of Directors

Agenda Item #8 – Communication Strategy

Communications

Stakeholder Engagement

- **General Assembly**
  - Legislators
  - Caucus and committee staff
  - Legislative support office (e.g. OFA)
- **Partners**
  - Business (Capital Partners, Lenders, Contractors)
  - Unions and Associations
- **Advocates**
  - Environmental
  - Community
- **CGB Customers** (residential and commercial)
- Others

Communications
Campaign Planning

1. **Determine overall communication campaign goals**
   – Articulate CGB's legislative priorities
   – Create tactical calendar
2. **Define communication objective(s) for critical stakeholder audiences**
3. **Draft key messages tailored to each audience**
   – Provide reference materials, informational resources and support
4. **Develop communication-mix / strategy**
   – press, online, collateral, PR, social media
5. **Secure commitment from stakeholders**
6. **Create opportunities for stakeholders to express support for CGB**

Communications
Talking Points for Discussion

- Despite a significant decrease in funding for the next two years, the Connecticut Green Bank continues to be on a solid financial footing.
- CGB management and it's Board of Directors are finalizing a plan that will pave a sustainable path forward for the organization while ultimately reducing the Green Bank's dependence on ratepayer funds.
- However, substantial funding sweeps as the ones CGB has recently endured, will necessarily throttle the volume of environmental, economic and societal benefits the Green Bank has been providing the state for the past six years.
- This new fiscal reality has forced the organization to make significant changes to its operations. In turn, the Green Bank's ability to interact with its customers through various marketing and communication channels will be impaired, loan volume will be scaled back, innovation will occur at a slower rate and efforts to assess program performance will suffer.
- Still, CGB's priorities today are what they always have been, 1.) maintain the confidence and trust of our partners, 2.) provide exceptional service to our customers and 3.) continue to deliver on our statutory purpose related to climate change, energy burden reduction and job creation.

Board of Directors

Agenda Item #9 – Adjourn

CONNECTICUT GREEN BANK
Board of Directors
Draft Minutes
Friday, December 1, 2017

A special meeting of the Board of Directors of the Connecticut Green Bank (the "Green Bank") was held on December 1, 2017 at the office of the Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope board room.

1. **Call to Order**

Commissioner Smith called the meeting to order at 2:02 p.m.

Catherine Smith, Chairperson of the Green Bank, called the meeting to order at 2:02 p.m. Board members participating: Rob Klee, John Harrity, Reed Hundt (by phone), Matt Ranelli, Eric Brown Bettina Bronisz, and Tom Flynn (by phone).

Members Absent: Kevin Walsh, Betsy Crum, and Gina McCarthy

Others Attending:

Staff Attending: Bryan Garcia, Eric Shrago, Mackey Dykes, Kerry O'Neill, Brian Farnen, Bert Hunter, George Bellas, Cheryl Samuels, Kim Stevenson, and Dale Hedman

2. **Public Comments**

There were no public comments.

3. **Consent Agenda**

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

Resolution #1

Motion to approve the minutes of the Board of Directors Meetings for October 20, 2017, November 6, 2017, and November 13, 2017.

4. **Mitigation Plan to Address the State Budget Sweeps**

Bryan Garcia provided an overview of the Mitigation Plan. He thanked everyone for their continued support. He discussed the requests that the Board had made at the November 13, 2017, meeting regarding the Mitigation Plan. Those requests included restructuring the RSIP and SHREC through a better understanding of their cash flows, further reducing operating expenses, the implications of borrowing, the impact on the Green Bank's reputation, and the communication strategy. He stated that they need to have constant contact with Legislators. He stated that there is a meeting on December 4, 2017, with OFA and a REEBA Keynote on December 6, 2017. He stated that they are focusing on a strategy to identify pathways towards accelerating sustainability. He stated that as part of this process, staff needed to isolate the incentive side of the business (through the RSIP and SHREC) from their core clean energy financing side of the business. He stated that staff are looking at how they use resources through investment. He stated that staff are working toward the goal of having overall revenues cover operating expenses.

Bryan Garcia went on to discuss the administration of the RSIP, stating that it provides an incentive grant. He stated that starting on 1/1/2015, program costs are recovered through a 15-year contract with the utilities for the sale and purchase of solar home renewable energy credits (SHRECs). He stated that the RSIP is a self-contained system. He discussed investments, C-PACE, SMART E Loan, and the focus on attracting and deploying private investments. He stated that the challenge is to increase investments while decreasing expenses. He stated that they are looking at how to reduce overall operating expenses by 25% – 35%. He stated that they are not counting RGGI as a revenue source, given the budget sweeps, though they may return.

Commissioner Smith explained that there's a lot of upfront costs associated with RSIP. She stated that they need to solve this as it's the biggest cash demand on the organization.

Bryan Garcia went into how the RSIP policy works. He stated under the SHREC program which started in January 2015, it is designed to generate RECs from Connecticut residential solar projects which are then sold to Eversource and Avangrid (the "Utilities") under a 15 year master purchase agreement ("MPA"). He discussed the goals for the RSIP's 300 MW target. He explained that the goal is to achieve the target by the end of 2022. He stated that the first 50 MW's of the 300 were pre-SHREC policy, stating that everything up to that point the Green Bank does not receive SHRECs for, but does receive the renewable energy credits (RECs) associated with those pre-SHREC PV systems, which the Green Bank sells on the spot market through the Class I RPS policy. He explained that the REC prices vary by supply in the market. He stated that the Board did approve a process about 3 years ago on how they approach the spot market transactions. He explained that the remaining RECs are through the SHREC Program. He discussed the statute on the pricing of those SHRECs.

Bettina Bronisz inquired into the 300 MW target and how much they have achieved to date. Bryan Garcia stated that they are about 200 MWs of the 300 MW target. He stated that they need to manage how they're paying out the cash for the incentives because it is a drain on the core business of the organization. Commissioner Smith stated that all of the cash is upfront or paid out over a 6-year performance based incentive. Brian Farnen stated that the Green Bank was always planning to securitize the 15-year fixed payment per the negotiations with the Utilities concerning the MPA as provided in the statute and subsequently approved by PURA. Commissioner Klee stated that it's a necessity to securitize that.

Bryan Garcia provided an example of how SHRECs are created and monetized. He stated that they have decreased the RSIP incentives by 80% since 2012 – from about $12,500 per household to $3,000 in 2015. He discussed the first tranche of approximately 6,800 homes, priced at $50 per REC. He stated that that is an estimated $37 million of nominal cash flow is coming back to the Green Bank for the systems over the 15-year period of the SHRECs. He stated that their next step is to securitize future cash flow streams.

Eric Brown questioned if the utilities are required to buy back all of the RECs as they are available. Bryan Garcia stated yes, for all of the facilities in that tranche. Commissioner Smith questioned how much of the 250 MWs they have locked in. Bryan Garcia stated 50 MWs at $50 each through Tranche 1 of the MPA with the utilities. Bert Hunter stated that they are at 200 MW in the overall program. He stated that they determine the price based on cost recovery, including the incentive, administrative costs, and financing (or securitization) costs.

John Harrity questioned what the Green Bank's investment was on the $37 million value of the SHRECs. Bryan Garcia stated that they assume $3,000 per home as an incentive, so the value of the total SHREC proceeds of $5,300 is what the Green Bank gets paid back over time. Bert Hunter explained that as the incentive goes down, the SHREC price goes down as well.

Bert Hunter discussed the plans for securitization and started with an overview of the quarterly SHREC revenue profile anticipated from the SHREC tranches. He stated that they only have tranche 1 completed and sold to the Utilities, but within the next 3 – 6 months they will begin wrapping up tranche 2. Hunter presented that the graph reflects a quarterly payment stream of SHRECs since they started in January with a 2-month lag. He stated that you can see that they have decreased the price by $2 to provide a forecast of what it might look like for an annual revenue stream for all SHREC contracts over time. He explained that the problem from a cash perspective is that operating cash from "core" Green Bank operations has been used by the SHREC Program for the first 2-1/2 years without any revenue from the SHRECs. He stated that the revenue delay was a result of the time it took to get the SHREC statute finalized with the legislature and then the need to work through PURA and the utilities on the MPA. He stated that performance incentives are declining as the tranches are worked into the market.

Hunter went on to explain that these initial costs, which approximate $13 million, need to be recovered for the benefit of "core" Green Bank operations. In explaining the need to monetize the SHRECs and pull some of these future cash flows forward to not only recover these past costs but also to balance cash inflows and outflows associated with the SHREC program, he stated that staff wants to avoid bringing all of the cash back. Doing so would result in what is called a "negative carry" since our interest cost for any idle cash would exceed any interest income we might be able to obtain on liquid, short term investments, like the Treasurer's short term investment fund. He stated that staff will manage cash carefully to bring enough cash back in to fill in the gaps in cash flow they forecast in the future, to provide needed liquidity while seeking to minimize their interest expense. He stated that they will pay on the securitization off over time as the payments for the SHRECs are received from the Utilities.

Tom Flynn questioned the $37 million revenue over the next 15 years, stating that it's about $17 million in earnings. Bert Hunter stated that under the statute, the Green Bank recovers its costs, but doesn't make a profit on the program. Commissioner Smith stated that there are still costs over the next 15 years. Bert Hunter stated that there will be additional costs for securitization. Tom Flynn stated that they invest $20 million over 15 years, but they receive $37 million back. Bert Hunter stated that the cost recovery is to recover costs that they have expended to date, including incentives that have been paid, the 6-year profile of PBI to be paid over time, and the administration of the program, as well as the cost of securitization (including interest costs). Tom Flynn suggested that they use some of those funds to fund the program in the future. Bert Hunter stated that after 2022 that the cost will tail off dramatically. He stated that there will be no more incentives after 2022, possibly earlier, if the target is hit sooner. Commissioner Smith stated that the securitization effort is to cover the cost of the RSIP. She stated that if they're lucky there will be some additional cash to come back to the Green Bank, but that they can't count on this for extra cash flow over time. Commissioner Klee stated that the Green Bank has been paying for the RSIP through the resources from the core investment side of the business and that through the securitization the Green Bank can recover those costs. He stated that this will be a onetime repayment benefit.

Tom Flynn questioned what the risk was. Bert Hunter stated that as of the present time, staff has not yet securitized any SHRECs, although the Green Bank had collected its first payments from the Utilities for the SHRECs sold to them under tranche 1 of the MPA. He stated that over the past few months, staff have been in the process of having informal “pre-RFP” discussions with 7 investment banks, including banks from the US, Europe and Australia. He stated that over the next 3 months they will issue a formal RFP. Tom Flynn questioned if they know what the true number of the first tranche is. Bert Hunter stated that they have estimates. Tom Flynn stated that they cannot guarantee if they’re going to get the money back to cover those operating costs. Bert Hunter stated that while there are no guarantees, because this process is similar to what other firms have done to sell contracted cash flows and given the keen interest from the banks, staff is confident the program will be successful. He stated that staff are pulling out the RSIP from the rest of operations and separating the two units. He stated that this is a work in progress. He stated that staff will be refining the estimates that he has presented to the Board, but the figures shown to the Board gives them a good representation of what staff reasonably believes it can recover.

George Bellas discussed the cash flow of the SHREC securitization. He stated that REC sales have been received, but not yet securitized. He stated that they anticipate $2.5 million as a one-time revenue stream from what will be sold to the Utilities before the securitization. Bert Hunter stated that this has been structured at this time for analysis. He stated that they made the assumption that all revenues had been securitized. He stated that they had to create a schedule that says they get the money today and release it out over time to cover the gaps that were previously discussed. Matt Ranelli questioned if that assumption is based on all tranches. Bert Hunter stated, yes.

Reed Hundt questioned the total securitization and what the revenue was that it was compared to. Bert Hunter stated that it’s roughly $150 million. Hundt then asked whether the yield from all of the securitizations would be $106 million. George Bellas confirmed the figure. Huntd expressed concern over the size of the gap between the gross amount of revenue and the net yield. Hunter explained that this is for the purpose of the model right now – that for modeling purposes, given the time available to do the analysis, staff was unable to optimize the cash inflows and outflows as he explained to the Board earlier in the presentation. He stated that they will be minimizing the amount of securitization on the flows, so that the Green Bank securitizes only what is needed to recover past costs and just enough to fill in the gaps. Commissioner Smith stated that this is the worst-case scenario.

George Bellas continued to discuss the SHREC securitization. Bert Hunter stated that there are REC incentives associated with the non-SHREC systems. He stated that they sell those RECs to make up the difference. Commissioner Smith stated that they really only have $9 million or so to go to the core business from the remaining system benefit fund. Brian Farnen discussed the State Statute regarding the funds from SHREC and that those funds need to be used for the RSIP. Bryan Garcia stated that they really have two separate businesses – an incentive business through the RSIP and cost recovered through the SHREC, and an investment clean energy finance business.

George Bellas continued his discussion stating that reimbursement to the core business would include all payments made to support the RSIP prior to securitization. Matt Ranelli requested that he break down the administrative and incentive costs, asking if it includes the administration of non-SHREC. Bert Hunter stated that it does include the administration of non-SHREC. He stated that expenses associated with non-SHREC systems are very small, probably no more than 5% of the overall cost. Matt Ranelli questioned if there is a way to monetize them for less than 15 years. Bryan Garcia stated that they used what was called Strips by selling them forward 2 to 3 years, but that they don’t want to go out on a Strip today because REC prices are at $10 versus where they were priced in prior strips in 2014 through 2016 at $40.

Commissioner Smith stated that the goal is to get the net cash position above zero. She stated that this could be a feeder to the core business. Bert Hunter stated that they have just built up a bit of a buffer.

Eric Brown questioned where the expenses for the securitization were. Bert Hunter stated that they are embedded in net receipts in the securitization. He stated that they don't show up as an administrative cost.

Reed Hundt discussed SHREC. He questioned if the reimbursement to the core business could be any number that they want. Bert Hunter stated that it could be, but that the consequence of making it too high is that the funds left could be inadequate to fund future SHREC expenditures. The objective of staff is to determine through the RFP process the most cost efficient way to recover these costs, provide for future expenditures and while minimizing interest costs.

Reed Hundt questioned why they would take money out of a profitable business and put it into a losing business. Commissioner Smith stated that it is repaying from this business back to the Green Bank, expenses that were already spent. Brian Farnen stated that SHREC is the funding mechanism for the RSIP. Commissioner Klee stated that this is a capped program and that it is only allowed to operate until it ends on the specified date, or the MW target is reached. Bryan Garcia stated that once they reach the 300 MW target the program is over and outside of the Green Bank. He stated that if they hit the target and the industry disappears, the program will have failed to achieve the "sustained orderly development" component of the public policy. He stated that they are working with DEEP to transition from the RSIP to where it makes sense and there is an off-ramp to allow for sustainability moving forward. Commissioner Klee stated that they're working with the Green Bank to get things off of incentives. He stated that DEEP views this phase down as the right path, maintaining the industry, but keeping the costs and incentives down as much as possible. Reed Hundt stated that he's not sure if securitization will produce the outcome in terms of dollars. He stated that he feels that Richard Kauffman could offer some great advice. Bert Hunter agreed and stated that they're casting a wide net and getting a number of opinions on this. Commissioner Smith stated that the numbers do need to be tested. She stated that this process is doable based on the conversations so far.

Tom Flynn stated that he doesn't want them to get a false sense of security to cover their operating costs. Commissioner Smith stated that the team is working diligently on this. She stated that they are on a path to make it work. Commissioner Klee stated that they wanted to make sure they took the time to talk about the SHREC securitization. He stated that they want to make the RSIP a self-sustaining isolated entity.

Commissioner Smith stated that the Green Bank is already working on ways to stretch dollars. Bryan Garcia stated that one of the largest administrative costs is inspections. He stated that they're focused on lowering the inspection budget.

Commissioner Smith commended the team for their hard work.

Eric Brown expressed great support and feels that it's very important to get on a sustainable track, along with looking out for the ratepayers. Matt Ranelli shared the same support stating that it is important to get the burden on the ratepayers down. John Harrity stated that the burden on ratepayers still exists. He stated that he appreciates the work that everyone has been doing. He stated that they need to be planning for the future. He stated that he doesn't believe the Green

Bank should tell the Legislature that they're comfortable with these sweeps. He stated that if the legislature doesn't understand the benefits of what the Green Bank is doing, that they need to enlighten the Legislature. Commissioner Smith agreed. She stated that when they get to the communication phase they need to be able to say that this bank is solvent but to get to that point, it's been very challenging. She stated that they need to let them know that it was a mistake to sweep the funds and that the money needs to get back to the Green Bank.

Commissioner Klee discussed his trip to Virginia where he testified on behalf of Connecticut for the Clean Power Plan. He noted the extraordinary contingent of environmental justice communities that turned out in opposition to the removal of the Clean Power Plan. He stated that these are very hard choices and decisions. He stated that they need to ensure through creative ways on how to keep doing important programs.

Matt Ranelli questioned if they should be defending the Systems Benefit Charge. Commissioner Smith stated that there has been continuing dialogue. Bryan Garcia stated that they had met with Senator Franz for about an hour and a half to discuss the recent information request from Senator Fasano. He stated that they had spoken about the Green Bank. He stated that the conversation was a positive one and the Senator noted at the conclusion of the conversation that he was going to follow-up with Senator Fasano. He stated that the challenge is to inform other legislative leaders about the difference between grants and finance.

Brian Farnen stated that they're trying to claw back the funds that they have lost. He stated that they have a lot of work to do. He stated that they are going to fight for the money back.

5. **<u>Proposed Revisions to FY 2018 Budget</u>**

<u>Deferred to next Board meeting.</u>

6. **<u>Executive Session – Personnel Related Matters</u>**

There was no Executive Session.

7. **<u>Adjourn</u>**

Upon a motion made by John Harrity, and seconded by Bettina Bronisz, the Board voted unanimously to adjourn at 3:45 p.m.

Respectfully Submitted,

____
Catherine Smith, Chairperson

BOARD OF DIRECTORS

REGULAR MEETING SCHEDULE FOR 2018

The following is a list of dates and times for **regular meetings** of the Connecticut Green Bank Board of Directors through **2018**.

- January 26, 2018 – Regular Meeting from 9:00 to 11:00 a.m.
- April 27, 2018 – Regular Meeting from 9:00 to 11:00 a.m.
- June 22, 2018 – Regular Meeting from 9:00 to 11:00 a.m.
- July 27, 2018 – Regular Meeting from 9:00 to 11:00 a.m.
- October 26, 2018 – Regular Meeting from 9:00 to 11:00 a.m.
- December 14, 2018 – Regular Meeting from 9:00 to 11:00 a.m.

Should a **special meeting** need to be convened for the Connecticut Green Bank board of Directors to review staff proposals or to address other issues that arise, a meeting will be scheduled accordingly.

All regular and special meetings will take place at the:

Connecticut Green Bank
845 Brook Street, Building #2
Albert Pope Board Room
Rocky Hill, CT 06067

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

CONNECTICUT GREEN BANK

Memo

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

From: Bryan Garcia (President and CEO)

Date: December 15, 2017

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

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At the October 20, 2017 Board of Directors (BOD) meeting of the Connecticut Green Bank ("Green Bank") it was resolved that the BOD approves the authorization of Green Bank staff to evaluate and approve funding requests less than $500,000 which are pursuant to an established formal approval process requiring the signature of a Green Bank officer, consistent with the Comprehensive Plan, approved within Green Bank's fiscal budget and in an aggregate amount not to exceed $1,000,000 from the date of the last Deployment Committee meeting. This memo provides an update on funding requests below $500,000 that were evaluated and approved. During this period, 4 projects were evaluated and approved for funding in an aggregate amount of approximately $637,135. If members of the board would be interested in the internal documentation of the review and approval process Green Bank staff and officers go through, then please request it.

Project Name: **CT Boiler – 694 Oakwood Ave**

Amount: **$75,089**

Comprehensive Plan: **CPACE**

<u>Description</u>

The facility at 694 Oakwood Avenue (the "Property") is a 13,100-square foot industrial property owned and managed by Connecticut Boiler Repair and Manufacturing Co, Inc. ("CT Boiler" or the "Company") a family-run Connecticut corporation. The building is a two-story brick and concrete building in the Elmwood neighborhood of West Hartford, and is CT Boiler's base of operations for selling, installing, and repairing commercial boilers as well as general mechanical work. CT Boiler has owned the building since 1950, when CT Boiler was founded. The current President and sole shareholder, Peter Royer, assumed leadership of the Company from his father in 1979.

CT Boiler has been in business for over 60 years. They provide varying boiler services to broad range of clients. CT Boiler's 2017 contracts included several educational customers, including Southern Connecticut State University and the South Windsor public schools. They also serviced governmental clients, such as the CT Department of Correction and the US Navy's Submarine base in New London.

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank ("Green Bank") would provide construction financing (at a per annum 5.0% interest rate) and a 10-year term loan commitment (5.5% interest rate), in the amount of $75,089 to support the installation of a roof-mounted 14 kW solar PV system. The project's savings-to-investment ratio is 1.85 over the effective useful life. A C-PACE assessment through the City of West Hartford will provide security. Once completed, the Green Bank would hold the investment on its balance sheet until it can opportunistically sell it, likely as part of a larger asset sale, to a third-party capital provider. Staff believes HA C-PACE LLC, the special purpose entity set up between Hannon Armstrong and the Green Bank to buy C-PACE assessments, to be a likely purchaser of these assets.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Energy on the Line: In addition to the above sources of financing, the Green Bank has determined that CT Boiler is eligible for an Energy on the Line (EOTL) program, a partnership between the Green Bank and the CT Department of Economic and Community Development. The program is designed specifically for Connecticut manufacturing facility owners, and provides a grant up to $50,000, in the form of a reduced interest rate, for facilities undertaking C-PACE upgrades.

Project Name: **Piage Management Corp - 49 Plains Road, Essex**

Amount: **$223,716**

Comprehensive Plan: **CPACE**

<u>Description</u>

The facility at 49 Plains Road, Essex, CT is a 5,200-sq. ft., light industrial building with an office area, used for commercial operations related to the distribution of Boar's Head delicatessen meats, cheeses and condiments by a group of inter-related companies owned and operated by the Piagentini family. The property is owned by Piage Management Corporation (the "Company" or "Borrower"), which is a single-asset real estate holding company that derives all of its revenues from the property's rents. The Company's tenants are Cross Island Provisions, Inc., and JP Provisions, Inc., both of which operate as produce distributors, and together, both the Company and its tenants are owned by various members of the Piagentini Family.

Cross Island Provisions was incorporated in 1985, the same year as the construction of the facility, and JP Provisions was incorporated in 2009; [redacted] f [redacted]

Looking beyond the tenants and directly to the Borrower, Piage Management Corporation [redacted] and the property sufficiently valued, to support the proposed C-PACE Assessment. The proposed investment is composed of an 80.6 kW rooftop solar PV system financed with a C-PACE loan under which the Green Bank would provide construction financing, at a per annum 5.0% interest rate, which would roll up into a 20-year term loan commitment, at a per annum 6.25% interest rate[1], in the amount of $223,716 (the "C-PACE Loan"). The installation is projected to save the Company approximately $693,109 in gross energy costs over the 20-year financing term (which is aligned with the measure's expected

[1] Subject to Adjustment for Actual/360 days methodology.

useful life). Once completed, the Green Bank would hold the investment on its balance sheet until it can can be repositioned with a third-party capital provider. Staff believes HA C-PACE LLC, the special-purpose entity set up between Hannon Armstrong and the Green Bank to purchase C-PACE assessments, to be the likely purchaser of the assets. If for any reason not presently anticipated that HA C-PACE LLC does not acquire the asset, the Green Bank would continue to hold the investment on its balance sheet until it can opportunistically sell the loan, likely as part of a larger asset sale, to an alternative third-party capital provider. A C-PACE assessment through the Town of Essex will provide security.

Given the credit profile and size of the transaction, the proposed investment is a staff-level underwriting review.

[redacted]

The project exhibits a Savings-to-Investment Ratio (SIR) of 1.74x, [redacted]

[redacted]

[redacted]

[2] See note 4 on page 2 for calculation methodology.
[3] See note 3 on page 2 for adjustment details.

Given the adequate LiTV and LTV of the proposed investment, and sufficient projected cash flow and financial health of Borrower, staff recommends the project for approval.

Project Name: **287 Main Street, East Hartford, CT 06108**

Amount: **$255,683**

Comprehensive Plan: **CPACE**

<u>Description</u>

The facility at 287 Main Street, East Hartford, CT is a 21,480-sq. ft., multiple tenant Class B office building housing four main tenants via various multi-year lease agreements:

[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

SGBP, LLC (the "Company" or "Borrower") purchased the building in Q3 2016, and currently owns, operates, and leases the facility out, on behalf of 5 equity investors, for the purpose of providing the investors with cash flow into old age as a form of investment for retirement. The principal operator, and an equity investor, for SGPB, LLC [redacted]

SGBP, LLC purchased the $2,000,000 property [redacted]

The proposed investment is composed of energy savings measures financed with a C-PACE loan under which the Green Bank would provide construction financing, at a per annum 5.0% interest rate, which would roll up into a 6-year term loan commitment, at a per annum 5.1%

[redacted]

[redacted]

[redacted]

interest rate[7], in the amount of $255,683 to support the installation of HVAC air conditioning and heating systems and LED lights (the “C-PACE Loan”). The installations are projected to save the Company approximately $100,679 and $331,633 in gross energy costs over the 6-year financing term and 20-year expected useful life periods, respectively. Once completed, the Green Bank would hold the investment on its balance sheet until it can opportunistically sell the loan, likely as part of a larger asset sale, to a third-party capital provider. Staff believes HA C-PACE LLC, the special-purpose entity set up between Hannon Armstrong and the Green Bank to purchase C-PACE assessments, to be a likely purchaser of these assets. Additionally, a C-PACE assessment through the Town of East Hartford will provide security.

Given the credit profile and size of the transaction, the proposed investment is a staff-level underwriting review. [redacted]

The project exhibits a Savings-to-Investment Ratio (SIR) of 1.10x, [redacted]

Looking to the financial health of the Company in order to determine its ability to operate as a going concern and continue to service C-PACE assessment payments, [redacted]

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[7] Subject to Adjustment for Actual/360 days methodology

[redacted] “ [redacted]

Given the adequate LiTV and LTV of the proposed investment, and sufficient projected cash flow and financial health of Borrower, staff recommends the project for approval.

Project Name: **CL Realty Partners LLC. – 409 Lake Ave**

Amount: **$132,647**

Comprehensive Plan: **CPACE**

Description

The property at 409 Lake Ave is a 15,925 square foot commercial building (the "Property") owned by CL Realty Partners LLC. (the "Borrower") and occupied by Royal Screw Machine Products Co ("Royal Screw" or the "Occupier") since 2013. The Occupier is a manufacturer specializing in mechanical parts for microwaves, with a history of operations dating back to 1943. Royal Screw moved to the property at 409 Lake Ave because the facility provided more modern amenities for its equipment and employees, as compared to the Waterbury, CT facility occupied by Royal Screw for over 70 years.

The proposed investment is a C-PACE transaction under which the Connecticut Green Bank (the "Green Bank") will provide construction financing in the amount of **$132,647,** at a per annum 5.0% interest rate, converting to a 10-year term loan post construction, at an interest rate of 5.5% per annum. The financing will be used to fund 100% of the costs for energy efficiency measures including high efficiency compressors, LED lighting, window upgrades and roofing insulation.

[redacted]

The project's SIR over the useful life of measures is **1.66** and is expected to generate total gross savings of $221,609 over the effective useful life. [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

While the project qualifies for consideration by Hannon Armstrong (HA) under the HA C-PACE facility, there is a chance that HA may not agree to accept the project given the complexities arising from the cross collateralization. Accordingly, Green Bank anticipates that it may keep the full $132,647 loan on its books rather than selling to HA C-PACE. To avoid approval complexities internally, the project is being submitted for approval to account for the possibility that, as stated above, the entire $132,647 could be retained by the Green Bank.

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

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CONNECTICUT
GREEN BANK

Thompson Agricultural Anaerobic Digestion Project

Board Memo

December 15, 2017

Document Purpose: This document contains background information and due diligence on the Fort Hill Ag-Grid AD facility and the stakeholders involved, including Fort Hill Farms (multi-generation family owned and operated farm), Ag-Grid Energy LLC, developer and Fort Hill Ag-Grid LLC, a special purpose entity created for the sole purpose of this project. This information is provided to the Deployment Committee for the purposes of reviewing a Project Update Memo.

In some cases, this package may contain among other things, trade secrets, and commercial or financial information given to the Green Bank in confidence and should be excluded under C.G.S. §1-210(b) and §16-245n(D) from any public discourse under the Connecticut Freedom of Information Act. If such information is included in this package, it will be noted as confidential.

Project Qualification Memo

To: Green Bank Board of Directors

From: Rick Ross (Associate Director of Statutory and Infrastructure Programs) and Chris Magalhaes (Associate Director of Finance)

CC: Bryan Garcia (CEO), Bert Hunter (CIO), Dale Hedman (Managing Director of Statutory and Infrastructure Programs), and Brian Farnen (CLO)

Date: December 15, 2017

Re: Financing Proposal for Fort Hill Ag-Grid Anaerobic Digestion Facility

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Purpose

As a follow up to the May 23, 2017 Update Memo from Connecticut Green Bank ("Green Bank") Staff to the Green Bank Deployment Committee (the "Deployment Committee") summarizing a long term, below market loan to a special purpose entity (SPE) (wholly owned by both Fort Hill Farms and Ag-Grid Energy LLC ("Fort Hill Ag-Grid, LLC")) for a 450 kW anaerobic digestion facility to be built on the property at 260 Quaddick Road, Thompson CT (the "Project"), Staff is now recommending a revised structure for this project. Under the new structure, the Green Bank will provide a partial loan guaranty to Farm Credit East ("FCE") for the debt financing of the Project (the "Guaranty"), which is a condition of FCE's participation in the Project's financing structure.

The request for the use of a Guaranty differs from the initial anticipated financing request referenced in the Update Memo, which was originally planned as a subordinated project loan in a not-to-exceed amount of $750,000 to directly finance approximately 20% of the Project. The reason for the change in Green Bank financing structure is to preserve capital resources that have been impacted by the sweep of approximately 50% of the system benefit charge and all regional greenhouse gas initiative funds. Staff is bringing the transaction forward for approval in principle, subject to final confirmation of project parameters (which would be confirmed to the Board (or the Deployment Committee) at a subsequent meeting of the Board or Deployment Committee) to enable FCE and the grant parties (explained below) to proceed with their approvals for the project. Green Bank participation is critical to the other participants to obtain their approvals for the project. Staff is also concerned that due to the unpredictable nature of commitments at the Federal level, failure to act at this time could result in a loss of these resources to the Project.

The amount of the Guaranty, and thus the total risk exposure to Green Bank funds, would be up to $850,000, depending on the Project scenario pursued (as detailed below), and would be structured as a "Balance Sheet Guaranty" by the Green Bank, meaning that no operating funds would be used unless there is a default/non-payment event on FCE's loan. The Guaranty would also be contingent on the following project parameters (as summarized below, and described in more detail later in the Memo):

1.) Appropriate conditions precedent
2.) Confirmation of commitments for Grants, Tax Equity, and Debt
3.) Agreed upon capital charge fee pricing for Green Bank guaranty
4.) Determination of Base Case vs. Depackager Case (explained later), and ability to cover capital costs via mutually agreed upon pro forma model
5.) Completion of an After-Tax analysis, as described under Project Viability/Economics below
6.) Review of final language of the development fee structure in the Operating Agreement that confirms debt's priority over such fees

Project Summary

Background

Fort Hill Farms currently has over 390 cows, 200 milking, and is part of dairy farm cooperative named The Farmer's Cow, which supplies products to both large, big box groceries and local markets[1]. The farm has been regarded as "Best in New England" by Yankee Magazine, named Connecticut Tourism Ambassadors, and in 2013 was the first ever winner of Thompson's "Business of the Year" Award[2]. Ag-Grid Energy LLC is a project developer focused on anaerobic digestion technology, and with experience currently developing projects on dairy farms, including a 300 cow farm and a 150 cow farm, located in Massachusetts[3].

The Project will process manure from the farm, along with additional outside food waste, and will produce electricity, heat, and enriched organic byproducts, which will deliver direct energy savings to Fort Hill Farms and will provide value streams to Fort Hill Ag-Grid, LLC that will be monetized into cash flows for system and capital cost repayments.

Martin Energy Group Services, LLC ("MEGS"), a development and construction firm which has packaged and installed over four hundred gaseous-fueled engines in the United States, will provide both the EPC and tax equity for the Project, and FCE, a member of the Farm Credit System, a multi-state lending network to the agricultural industry[4], will provide the debt. In addition, the Project will be supported by grants from the Natural Resource Conservation Service ("NRCS") and the state of Connecticut.

Project Costs and Funding Sources

The base case project scope ("Base Case") includes a turnkey digester system, developed by Ag-Grid Energy LLC, that is capable of processing farm-produced manure and outside food waste in a liquid

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[1] Fort Hill Farms, http://forthillfarms.com/about-fhf/our-history/, (May 20, 2017).
[2] Ibid.
[3] AG Grid Energy, http://aggridenergy.com/our-projects/, (May 20, 2017).
[4] Farm Credit East, "About Us", https://www.farmcrediteast.com/about-us/, (December 11, 2017).

“slurry” form that is already partially broken down and separated from packaging/non-organic material. The projected all-in capital cost of the Base Case is approximately $3.5 million, as broken down below:

Base Case Project Costs: $3,492,954
- Digester Turnkey Construction Cost: $[redacted]
- Solid Separation System: $[redacted]
- Engineering & Permits: $[redacted]
- Construction Insurance: $[redacted]
- 3-phase Electricity Costs: $[redacted]
- Storage Cost: $[redacted]
- Developer Fee: $[redacted]
- Contingency: $[redacted]

Base Case project costs are expected to be funded by a variety of sources, invested directly into project SPE ownership structure, Fort Hill Ag-Grid, LLC:

Base Case Capital Sources: $3,492,954
- FCE – Senior Debt: $2,100,000 (~60% of Base Case Capital Costs)
- Martin Development Resources, LLC – Tax Equity: $661,125 (~19% of Base Case Capital Costs)
- State of CT and NRCS – Grants: $479,000 (~14% of Base Case Capital Costs
- Fort-Hill Ag-Grid – Equity: $125,000 (~4% of Base Case Capital Costs)
- *Unknown – Financing Gap: $129,238 (~4% of Base Case Capital Costs)

For the purposes of project financing, development, and ownership, Fort Hill Ag-Grid, LLC will be structured as a partnership, and the tax equity investment, which is predicated on the successful “Safe Harbor” of an Investment Tax Credit (“ITC”) for the project by Fort Hill Ag-Grid, LLC, will be structured as a “front-levered” partnership “flip”, wherein debt service payments are prioritized ahead of cash payments to tax equity in the cash flow distribution waterfall, and the terms dictating the sharing of tax benefits/liabilities and residual cash flows between the Fort-Hill Ag-Grid, LLC equity position and Martin Development Resources, LLC tax equity position are to be contained in an Operating Agreement (which Green Bank has reviewed, and the finalization/execution of which, in terms acceptable to the Green Bank, will be a condition of Green Bank’s participation).

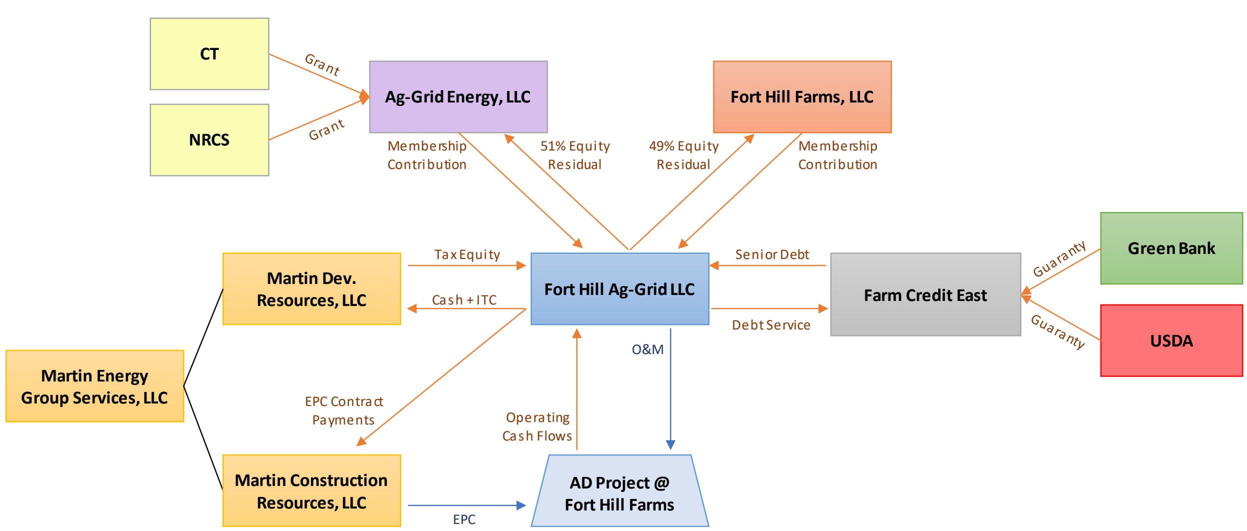
FCE is expected to have a portion of its loan principal balance outstanding covered by a loan guaranty from the USDA Rural Energy for America (“REAP”) program, up to $1.4 million of the beginning balance under the Base Case. The Green Bank’s participation in the Base Case financing structure will also be in the form of a guaranty, for the benefit of FCE, on the amount of FCE principal balance outstanding that is not otherwise covered by the USDA REAP guaranty, but limited to a maximum Green Bank exposure of 20% of the total project capital costs, or approximately $700,000 under the Base Case. The net result of the collective guaranties on the FCE debt is to reduce risk to the senior lender, thus making FCE’s participation in the capital stack possible and at an interest rate that project cash flows can support, which in turns makes the project a more viable option for the Fort Hill Farms and more likely to succeed.

Green Bank's participation in the capital structure has been a requirement of FCE's participation, because of the Green Bank's ability to credit enhance the project from FCE's perspective, and although Green Bank is no longer investing capital directly into the project, FCE has agreed to move forward with their loan commitment process on the basis of Green Bank's guaranty for a portion of FCE's outstanding loan balance in lieu of Green Bank's direct investment into the project as subordinated debt, as was originally envisioned.

In terms of compensating Green Bank for the risk exposure it faces, whereas for subordinated debt participation Green Bank would be paid interest on its capital outstanding, under the guaranty structure Green Bank will be paid a "capital charge" fee for its at-risk capital (which is similar, in concept, to interest accrued on principal outstanding). The amount and terms of the capital charge fee will be negotiated, and mutually agreed upon before any Green Bank capital is at risk, when the project is further developed and there is more certainty around expected cash flows. Green Bank's overall risk exposure will be limited to the terms of FCE's loan structure, which may be advanced during construction and is intended to be repaid over a 7-year term.

Importantly, as noted above in the Base Case Capital Sources table, there is currently $129,238 that the developer has not identified a source of capital for. The project investors, and any Green Bank participation, would be predicated on this gap being closed, either through reduced capital costs or additional capital participation. Because the $129,238 financing gap is less than the $[redacted] contingency, it is feasible that the gap is closed through a reduction in capital costs. It also possible that additional equity and/or debt participation could fill the gap, given appropriate levels of certainty associated with expected cash flows, as shown by the return analysis conducted in the "Project Viability/Economics" section below.

Below is a Capital Structure Diagram of the Base Case:



Ag-Grid Energy, LLC has also provided the Green Bank with an additional scenario, in which the Project includes a front-end depackager (further described below) that would allow the Project to process food waste that is not yet broken down into slurry form (the "Depackager Case"). The DePackager Case would cost an additional $750,000 (bringing the total projected Capital Cost up to approximately $4.25 million), and the net result of that additional cost is that the Project would have access to a wider variety of food waste options, meaning more potential revenue from food waste and less risk associated with that revenue stream. Under the Base Case, food waste tipping fees make up approximately 50% of expected annual Project revenues.

Implementation of the Depackager Case would require the Project to identify a capital source for the additional $750,000 cost, and that capital source would have to be confident in the additional value streams that materialize from the depackager. Regardless, the Green Bank would still require final approval of the project specifications and projections for its participation, and the Green Bank's risk exposure would still be limited to 20% of the Capital Cost. Thus, under the Depackager Case, the Green Bank's capital at risk could rise to $850,000, but all other required conditions (as mentioned above in the "Purpose" section of this Memo) would need to be in place and agreeable to Green Bank.

Project Viability/Economics

The Project is expected to benefit from an allocation of Virtual Net Metering Credits, and is currently in conversations with Eversource to verify the criteria needed to certify anaerobic under the program. The allocation will allow the Project to monetize excess electricity production (net of what is utilized on the farm) at rates that are materially higher than wholesale rates. Additional revenue streams include (i.) food waste tipping fees, (ii.) Class I REC sales, and (iii.) bedding and heat offsets to the farm via outputs produced from the Project.

The below pro forma cash flow excerpt provides Project cash flows under the assumptions provided by Ag-Grid Energy, LLC:

[**REDACTED**]

The Project Unlevered, Pre-Tax IRR is 23.7% and the Levered, Pre-Tax IRR (net of grants) is a strong [[redacted]]%. Such returns are robust enough to support a project without any need for financing, let alone low-cost financing. These assumptions do not tell the full story however, as for example from a structural perspective there is also tax equity participation, and from a risk perspective (a.) the project is still in development and certain revenues may not materialize or costs may be higher than expected, (b.) even cash flows that do materialize may have levels of volatility/uncertainty that result in higher capital costs or lower periodic cash flows, and (c.) grants may not materialize or there could be unexpected cash outflows due to tax equity participation as a result of financial structuring and/or regulatory risk. That all said, as the below sensitivity analysis shows, expected project cash flows have enough cushion to tolerate downside scenarios while still maintaining the ability to repay capital providers – the importance of flexible, low-cost financing becomes all the more important however under such scenarios. Furthermore, Green Bank staff will require, and complete, additional types of analysis to further mitigate downside risk, including an After-Tax, tax equity distribution/allocation waterfall, before any commitment of participation (guaranty) is made.

Sensitizing the Project for risk, food waste tipping fees account for approximately 50% of the expected revenues, and as such are an important focus of the Project's expected economic viability. Additionally, the ability to meet expected project milestones, such as obtaining the necessary Virtual Net Metering Credit allocations required to sell electricity at above wholesale rates to to-be-acquired beneficial accounts, will have a material impact on Project cash flows (as noted above, Eversource has received the Project's request for the allocation – and therefore the Project has reserved its space in the allocation queue – but the Project has not yet obtained approval from PURA certifying the Project's eligibility under the program).

Looking at the above-mentioned revenue streams under a more critical lens, if instead of being able to sell excess electricity at $0.11/kWh across the operating term to beneficial accounts (as the developer model suggests) the Project is only able to monetize excess electricity at $0.04/kWh, and if, at the same time, the Project is only able to acquire 50% of expected food waste volume, the Project Unlevered, Pre-Tax IRR drops to 2.5% and the Levered, Pre-Tax IRR (net of grants) drops to [[redacted]]%, which is still a healthy levered return, but predicated on debt terms that are in line with those being proposed by FCE:

[**REDACTED**]

Low-cost financing is an important feature of making the project work, given the uncertainty surrounding project cash flows. That said, it is also important to note that even under a highly distressed scenario, the project still has a very reasonable likelihood for repaying the project debt, which reduces the risk exposure to the Green Bank's position as a guarantor. The debt assumptions included in this analysis are based off of a Term Sheet provided by FCE for the Base Case, adjusted for (i.) an additional $700,000 of loan balance (bringing the FCE investment up to $2.1 million), and (ii.) [redacted] (the FCE Term Sheet states terms of a variable interest rate of [redacted]%, comprised of a base rate of the Prime Rate (which was [redacted]% at the time FCE delivered its Term Sheet) and a spread rate (which was [redacted]% at the time FCE delivered its Term Sheet), adjusted periodically with movements in the Prime Rate, over a 7 year term, and the pro forma shows debt assumptions under a fixed, 7% interest rate over a 7 year term[5]).

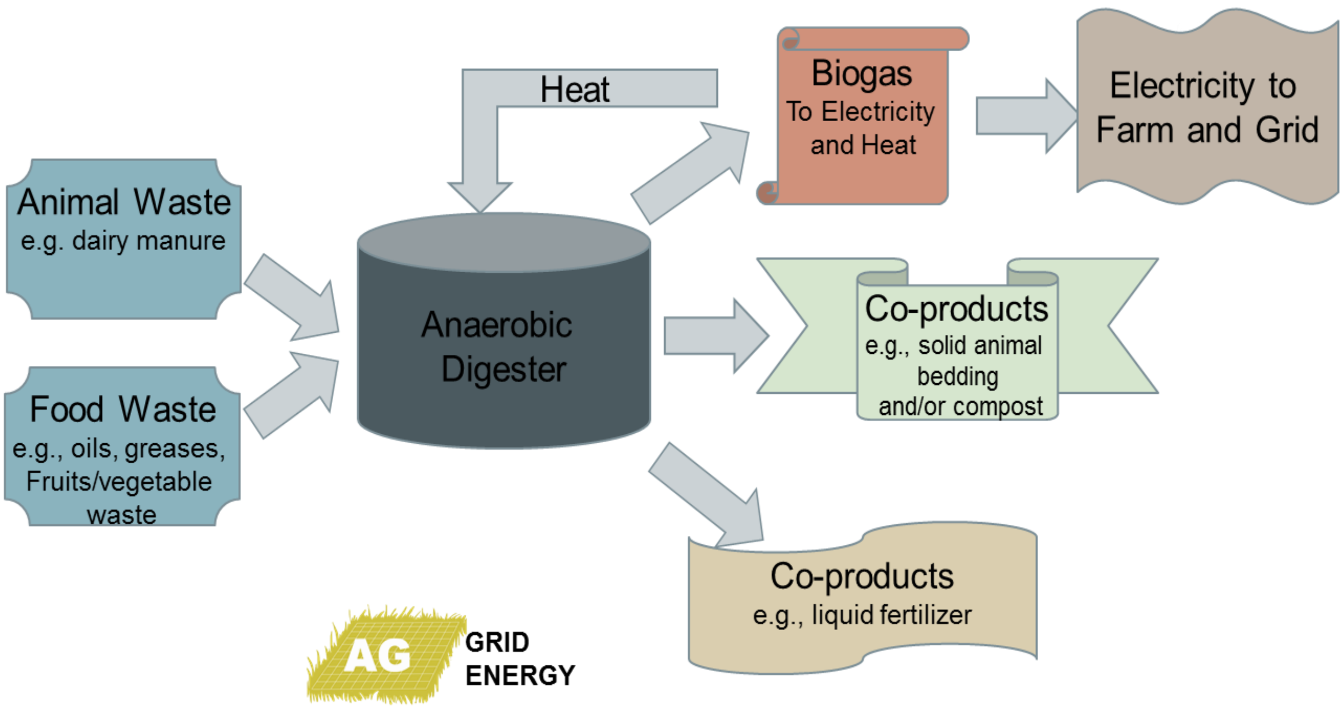
A similar analysis would be done under the Depackager Case, which is expected to add both additional costs and revenues to the Project, before any Green Bank participation is committed.

Project Details

[5] FCE debt may be advanced during construction, and if so, the interest rate will carry a slightly higher interest rate than the terms listed above – but that construction debt will then convert to term debt, which will carry the interest rate methodology described above.

The digester to be used on Fort Hill Farms will be a co-digester, able to take animal waste, cow manure in this case, as well as organic food waste. This waste is pumped into the tank of the anaerobic digester (AD) where the manure and food waste are continuously mixed. The digester produces a substance called digestate, of which the solid form is used by the farm as animal bedding and the liquid form as fertilizer for the crops. The biogas generated in the digester tank is then converted into electricity to be used on the farm and the excess electricity sold to the utility grid.

Simplified Concept of Belden Ag-Grid Anaerobic Digester System



The Fort Hill Ag-Grid, LLC business plan involves receiving organic food waste, in a processed slurry form acceptable by the digester, providing an opportunity to large food manufacturers, local companies, or universities to dispose of their waste in compliance with Connecticut's new recycling laws. The new Connecticut statute for recycling of source-separated organic materials states that all large food waste generators with a projected annual volume of 104 or more tons per year (greater than 2 tons per week) of source separated organic material that are located within 20 miles of a permitted recycling facility must send their organic materials to such a recycling facilty. In 2020, the projected annual volume triggering regulation decreases to 52 tons per year.

The rationale behind this new recycling policy stems from the fact that commercial businesses find it difficult to dispose of the food waste they generate and such food waste causes problems within the traditional waste stream. Consequently, a large amount of food waste is either not getting recycled or is being hauled to states not yet affected by a food waste ban (i.e. Pennsylvania) and dumped in landfills. The Project will provide an option to nearby producers of food waste to not only meet the recycling requirements but also convert the food waste into useful clean renewable energy. Additionally, these large food waste generators can promote their business through advertisement, conveying the environmentally friendly nature of their food waste disposal procedures as well as the resulting production of clean energy.

Raw Materials and Revenue Sources

The input raw materials for the anaerobic digester are cow manure and organic food waste. The outputs of the digester are digestate and electricity. Project revenue comes from the tipping fees for recycling the organic food waste as well as sales from the excess electricity generated by the plant. In addition, the Class I, Renewable Energy Credits (REC) can be sold to generate additional revenue.

<u>Cow Manure</u>: The cow manure is generated at the Fort Hill Farm, where the digester is situated. Fort Hill Farm has 200 cows onsite currently and hopes to grow the operation to 350 cows in the next 5 years. The farm estimates that the dairy cow manure produced on the farm is about [redacted]. Including the wash water from the milking parlor, the total amount of manure-related material to be treated by the AD system is estimated to be [redacted], or roughly [redacted]. Assuming growth in the next few years this number would grow to [redacted] or [redacted].

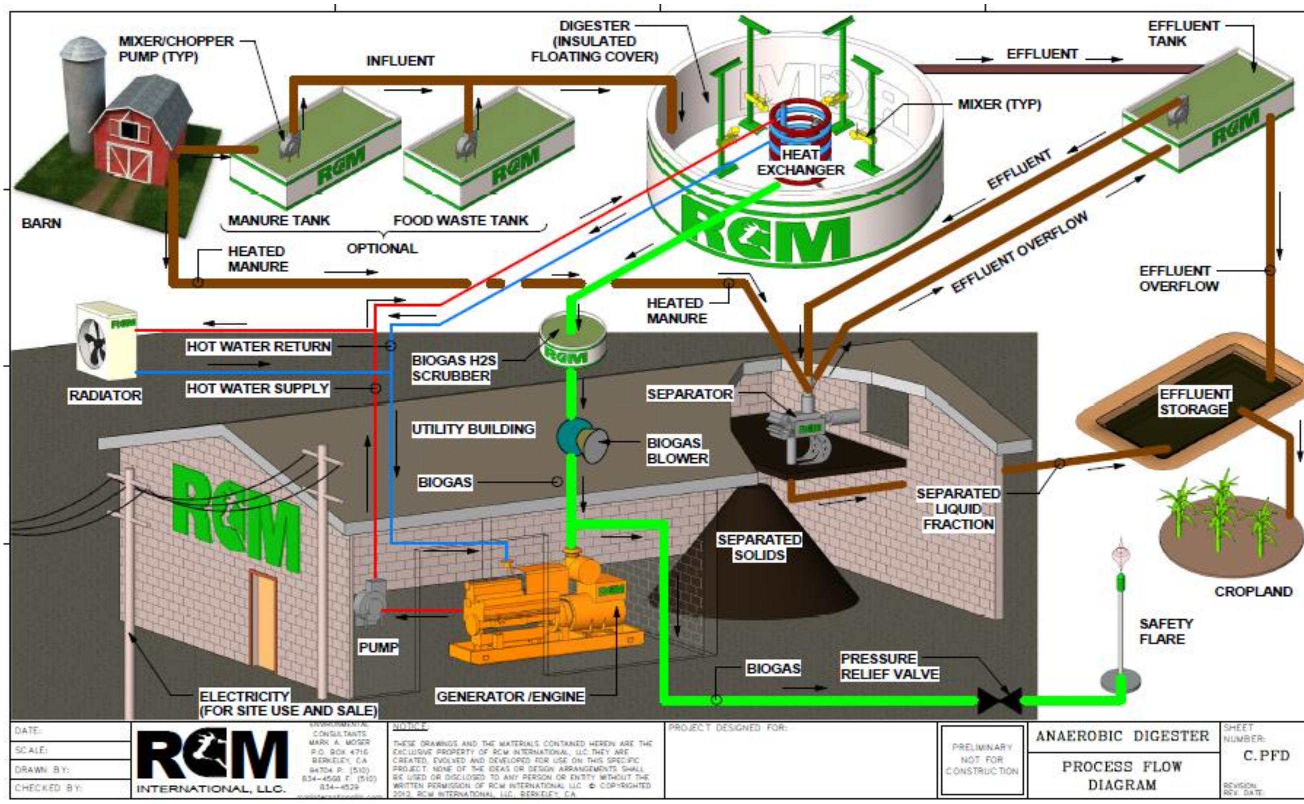
<u>Food Waste</u>: The AD facility system will incorporate a building with a depackager, allowing the farm to increase its diversity of off-farm food waste intake from traditional pumpable slurry, delivered by tanker trucks, to a feedstock stream that would also include both solids and packaged food waste, delivered by dump style trucks. This onsite frontend depackager would ensure that the facility was properly supplied with the correct amount of feedstock, as well as mixture consistency, to fully optimize the digesters biogas production. The depackager's additional throughput capacity would also allow for additional surplus feedstock to be sold to other area farm-based digesters. Based on the design of the anaerobic digester, 168,000 gallons of food waste can be processed by the digester each week. Based on these assumptions Fort Hill Ag-Grid, LLC estimates 8.7 million gallons or ~30,000 tons per year of food waste can be recycled by the AD system along with the manure from the farm. Fort Hill Ag-Grid, LLC will receive a tipping fee for taking in the organic waste. This is one of the significant revenue streams for the project.

The liquid food waste and cow manure will be converted into electricity for use on the farm with the excess electricity being sold back to the utility grid. It is estimated that the 450 kW AD system will produce approximately 3.5 million kWh/year of electricity, of which ~200,000 kWh will be consumed at Fort Hill Farms. The remaining 3.1 million kWh of electricity will be fed back into the grid. If the Project is eventually accepted into the agricultural VNM pool, it will allow Fort Hill Ag-Grid, LLC to be able to put in place long term power purchase agreements (PPA's). These PPA contracts will only bolster the projects economics by securing the revenue stream over a longer period of time.

Item	Fort Hill Farms Summary	Waste Quantity
Milk Cows (existing)	200 cows	[redacted]
Milk Cows (5 yr. expansion plan)	150 cows	[redacted]
Dry Cows	96 cows	[redacted]
Replacements	100 cows	[redacted]
Process Water		3,500 gal/day (14 ton/day)
Food Waste	4-6 truckloads each day	18,000 gal/day (72 ton/day)
TOTAL		[redacted]

Fort Hill Ag-Grid, LLC believes that the potential demand for anaerobic digestion could grow significantly in the coming years. Connecticut is 1 of 4 New England states along with Vermont, Massachusetts, and Rhode Island currently restricting commercial food waste from landfills; however, it could soon become a national trend. If so, more and more states will be less willing to accept food waste from other states, including Connecticut, driving up demand for sites that can recycle organic food waste. These 3 states are a bit ahead of Connecticut all have successful digester programs in place. With fewer landfills and waste management facilities to dispose of their excess food waste, commercial food waste producers will need to develop alternative disposal mechanisms. The anaerobic digester at Fort Hill Farms acts as a beneficial substitute to traditional practices like incineration by giving businesses a green, environmentally friendly option to recycle their waste.

The Technology



This application will have an engine-generator rated at 450 kW. A heated complete mix digester will be fed by a new manure transfer system that will incorporate the existing manure collection system as much as possible. The manure and food waste mixture reaching the digester is expected to be 8-10 % total solids. The hydraulic retention time of the digester will be between 22-30 days.

The AD facility will also incorporate a Scott's Thor system de-packager to process the feedstock to a suitable consistency for the digester, with a throughput capacity of 16-20 tons/hour. The digesters capacity is approximately 144,000 gallons a day with an additional feedstock reception holding tank capacity of 3-day (54,000 gallons). Therefore, once both the digester and holding tank are at capacity any additional feedstock can be pumped into tanker trucks and sold to other local farm-based digesters.

The digester will be a complete mix round concrete tank digester, tank volume is 750,000 gallons measuring 90' in diameter with a depth of 18'. The tank will be partially buried. This unit is similar to other operating MEGS systems in the US. MEGS purchased RCM International in 2016, supplier of approximately 80% of all agricultural digesters built in the US. The digester cover will be an inflated high-density polyethylene (HDPE) top.

Digester effluent will flow through an effluent tank and then be pumped to a solids separation system. Separated liquid will flow to the existing manure storage. Separated solids will be stacked in a covered solids stacking area where it will be dried and used for cow bedding.

The biogas collected from the digester will be piped underground from the pipe chase to the engine room, to be located near the existing electrical service entry point or the milking parlor. The biogas will be metered, pressurized, and pumped to a natural gas engine-generator, modified to utilize biogas.

Hot water will be recovered from the engine cooling jacket and exhaust, and circulated to a heat exchanger to heat the digester. A portion of the engine cooling water will be available for hot water heating should the dairy need additional hot water.

Engine-generator will be procured from MEGS. At the time of this application a Guascor engine with a 450 kW generator nameplate rating has been selected for the project.

System Parameters

MCR digester type	Heated complete mix
Digester volume	750,000 gal
Feedstock reception tank 3 day holding capacity	54,000 gal
Manure reception tanks 1 day holding capacity	12,000 gal
Solid separator unit	Doda Screw Press separator
Engine	Martin Energy Group – Guascor 1200 rpm SFGLD 360
Generator	Martin Energy Group – Stamford model with 450 kW output

Strategic Plan

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

The Project conforms to the Anaerobic Digestion ("AD") pilot program, as defined in PA 11-80, Section 103, which is a key component of the Green Bank comprehensive plan and budget for FY 2016/2017. The project as proposed meets all of the criteria of the program and therefor is consistent with Green Bank's Comprehensive Plan. Statutorily, Green Bank is permitted to use its resources for expenditures (i.e. grants, loans, and PPA's) that promote investment in clean energy in accordance with Green Bank's Comprehensive Plan – this project is a loan guaranty.

Ratepayer Payback

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

The Project is expected to produce approximately 35,478,000 kWh of electricity and 164,688 MMBtu of thermal energy over the 10-year initial operating term. The maximum Green Bank exposure is $850,000.

The objective function for this project is up to 42 kWh per $1 of ratepayer funds at risk for clean electricity produced and up to 193,751 Btu per $1 of ratepayer funds at risk for clean thermal energy produced.

Terms and Conditions

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

The Green Bank guaranty of up to $850,000 will not result in any outflow of capital, unless there is an event of default on the project. The compensation to the Green Bank for taking on this risk, in the form of a capital charge fee, is not yet determined.

Capital Expended

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

No ratepayer or other Green Bank capital will be expended unless there is an event of default on the project. The maximum capital at risk under such a scenario is $850,000.

Risk

What is the maximum risk exposure of the ratepayer funds the project?

$850,000.

Risks and Mitigation Strategies

The major risks of the Project is that it is unable to perform as expected (i.e. technology risk), the overall project development is more costly or time-consuming than expected (i.e. development risk), the Project is more costly to run that expected or is unable to monetize revenue streams as expected (i.e. operating risk), and/or that key federal, state, or local laws and regulation, ranging from tax law to environmental regulations, somehow inhibit or impair the Project (i.e. regulatory risk).

Green Bank's mitigation strategy is to require that as many variables associated with the project as possible are confirmed or mitigated before Green Bank capital is put at risk. For the avoidance of doubt, the Green Bank will not agree to enter into any arrangement unless all of the conditions listed in the "Purpose" section of this Memo are met in a way satisfactory to the Green Bank.

In addition, Green Bank will monitor the ongoing performance of the Project closely, and will work closely with the facility owners and senior lender as an advisor and development partner, in order to help give the Project the best prospects for success (and in doing so, provided Green Bank with reduced risk to its capital exposure).

Resolutions

WHEREAS, in early 2013, Green Bank released a rolling Request for Proposals in the third round of solicitations for anaerobic digestion projects to participate in a statutorily mandated AD Pilot program, an initiative aimed at reducing landfill waste through the recycling of organics and helping to promote sustainable practices and economic prosperity of Connecticut farms and other businesses by using organic waste with on-site anaerobic digestion facilities to generate electricity and recoverable heat;

WHEREAS, Ag-Grid Energy, LLC submitted the Fort Hill Ag-Grid Anaerobic Digestion Facility proposal to develop in the City of Thompson a 450 kW anaerobic digestion project and, after a thorough review, was selected as a project that is consistent with the AD Pilot Program, Green Bank Comprehensive Plan and in the best interests of ratepayers;

NOW, therefore be it:

RESOLVED, that the President of Green Bank and any other duly authorized officer of Green Bank is authorized to execute and deliver definitive documentation materially based on the term sheet set forth in this due diligence package for financial support in the form of up to $850,000 of a loan guaranty, contingent on confirmation to the Board (or the Deployment Committee), at a subsequent meeting of the Board or Deployment Committee, and based on updated project details and financing contingencies, and as he or she shall deem to be in the interests of Green Bank and the ratepayers;

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

RESOLVED, that the Board's approval is conditioned upon the completion of Green Bank staff's due diligence review, including Green Bank's review and reasonable satisfaction with all project documentation that Green Bank is not a party to.

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CONNECTICUT GREEN BANK

Memo

To: Connecticut Green Bank Board of Directors

From: Ben Healey, Director, Clean Energy Finance

CC: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Brian Farnen, General Counsel and CLO; Kerry O'Neill, Vice President, Residential Programs

Date: December 8, 2017

Re: Extension of PosiGen Bridge Loan

Background

At its June 9, 2017 meeting, the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") authorized the extension of a "bridge loan" to PosiGen, Inc. (together with its affiliates and subsidiaries, "PosiGen") to account for the scarcity of new tax equity available in the market for much of the first half of calendar year 2017. Under the terms of the Board's approval, the Green Bank was authorized to advance up to $3.5 million as part of this bridge loan, to be repaid by PosiGen out of the closing of a new tax equity facility (or facilities) prior to the end of this year.

From a market perspective, the bridge loan has been successful, as PosiGen has used the Green Bank's capital to continue to expand its operations in Connecticut, with nearly 1,300 rooftop solar installations now installed across the state (compared to approximately 900 at the time of the bridge loan request, representing a nearly 45% increase in systems deployed), primarily serving low- and moderate-income ("LMI") customers, as indicated in the FY 2017 Comprehensive Annual Financial Report.

Table 95. Low Income Solar Lease Activity in Metropolitan Statistical Area (MSA) Area Median Income (AMI) Bands Above or Below 100% by FY Closed[130]

	# Project Units				MW				Investment (Gross Cost)			
Fiscal Year Closed	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below	Total	Over 100% AMI	100% or Below AMI	% at 100% or Below
2012	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2013	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2014	0	0	0	0%	0.0	0.0	0.0	0%	$0	$0	$0	0%
2015	4	1	3	75%	0.0	0.0	0.0	76%	$109,380	$27,000	$82,380	75%
2016	330	78	252	76%	2.1	0.5	1.6	76%	$9,450,354	$2,236,208	$7,214,146	76%
2017	627	142	485	77%	3.8	0.9	2.9	76%	$17,336,078	$4,137,937	$13,198,141	76%
Total	**961**	**221**	**740**	**77%**	**6.0**	**1.4**	**4.5**	**76%**	**$26,895,812**	**$6,401,145**	**$20,494,667**	**76%**

In addition, from a financing perspective, PosiGen has succeeded in raising new tax equity, closing first two small funds (to clear a backlog of systems), and later a single large fund with significant ongoing capacity that will serve as a key source of capital heading into 2018. However, due to the timing of tax equity payments and the company's ongoing cash needs as it continues to grow in Connecticut, PosiGen is not well-positioned to repay the Green Bank's bridge loan by the end of this year and is looking to amend our existing credit agreement so that repayment of the bridge loan aligns more closely with the company's actual cash flow profile.

Staff Recommendation

PosiGen's momentum in Connecticut continues to be a significant Green Bank success story, and from a risk perspective, the growing number of PosiGen systems deployed serve as an increasingly broad and diverse collateral pool for our outstanding loans to the company. Staff regularly monitors this collateral and its performance and remains committed to ensuring that cash flows from PosiGen's existing deployed systems can cover all outstanding debt (over the lifetime of those systems) in a downside scenario.

That is to say, *even when including* the bridge loan (which we expect to be repaid in 2018) in PosiGen's long-term obligations, the company has outstanding just over $16MM from the Green Bank's Connecticut lending syndicate (broken down about equally between the Green Bank itself and senior lenders Enhanced Capital and Stonehenge), whereas the company has installed 1,285 systems across Connecticut to date. Nominal net cash flows from these systems total approximately [redacted] over 20 years. Thus, per the table below, in the event that the Green Bank were ever forced to take action against PosiGen and foreclose on the project collateral, we would still be able to make both Enhanced Capital and Stonehenge whole and nonetheless recoup our investment at an effective rate of 3.5%.

REDACTED

Further, with respect to capital structuring, PosiGen's ability to secure tax equity in 2017 sets the company up nicely for the deployment of a significant number of new systems in 2018, and the Green Bank – of course – has an interest in balancing our desire for repayment with the goal of having the company use its cash flow for continued growth in Connecticut.

Regardless, since the originally conceived bridge loan has now evolved into a facility that is effectively providing working capital to PosiGen, staff recommends that while the Board authorize the extension of the existing facility beyond a December 31, 2017 maturity date (for up to but no longer than another 12 months), staff also requests the flexibility to negotiate a higher interest rate (not-to-exceed an additional 200 basis points, excluding default scenarios) that is commensurate with the longer tenor and moderately elevated risk profile associated with the Green Bank's revised lending position.

Finally, as a point of full disclosure, staff wants the Board to be aware that PosiGen made its most recent quarterly payment to the Green Bank – in the amount of approximately [redacted] – 29 days after the due date, which is indicative of PosiGen's cash management issues as they seek to better align sources and uses of capital with respect to their growth in Connecticut.

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, 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 finance offering to LMI households in Connecticut, which includes a Green Bank debt capital facility (the "Loan") advanced as a bridge loan towards PosiGen closing on tax equity financing in 2017;

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 amend the Loan with terms and conditions consistent with the memorandum submitted to the Board dated December 8, 2017, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from 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: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Kerry O'Neill, Vice President, Residential Programs; Ben Healey, Director, Clean Energy Finance

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Memo

To: Connecticut Green Bank Board of Directors

From: Ben Healey, Director, Clean Energy Finance

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

Date: December 14, 2017

Re: Use of SCRF to Support CREBs Issuance for CSCU Solar

Background

At its September 28, 2017 meeting, the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") authorized the issuance of Clean Renewable Energy Bonds ("CREBs") to support the installation of over 4.6 MW of solar to benefit the Connecticut State College and University ("CSCU") system across a number of campuses around the state.

Based on feedback from the proposed CREBs purchaser – Banc of America Public Capital Corp. ("BAPCC") – it is clear that recent developments associated with the state budget, including both the sweep of Green Bank funds and cuts to the CSCU system, have left the BAPCC with significant concerns. Specifically, they worry that a "revenue bond" approach (that is, with bond repayment based principally on project cash flows, with limited Green Bank support) will leave them exposed from a credit perspective, given the uncertainties introduced by the recent budget.

As such, BAPCC has requested that – as was the case with our recently completed Hanover Pond hydro transaction in Meriden – we support the proposed CREBs issuance with the Special Capital Reserve Fund ("SCRF"), to ensure bondholders are repaid regardless of the performance of the solar installations or the long-term prospects of either the Green Bank or the CSCU. As a reminder to the Board, bonds secured by the SCRF require amongst other things (1) State of Connecticut Office of Policy and Management approval; (2) an opinion of sufficiency as set forth in the Connecticut General Statutes ("CGS"); and (3) approval by the Office of the State Treasurer and other documentation required under the CGS.

Beyond the request for the SCRF "wrap," due to uncertainty at the federal level about the viability of certain tax-advantaged bonds heading into 2018, BAPCC has further suggested that the Green Bank seek to issue the CREBs now (that is, in calendar year 2017), fund to escrow, and then release funds for the various solar projects once all conditions precedent to approval of the SCRF have been met.

Staff Recommendation

Given the importance of this set of projects to the state – not just for the CSCU system but as a model that can be replicated and scaled across a much broader portfolio of State of Connecticut buildings going forward – Green Bank staff recommends that the BOD authorize the issuance of CREBs materially consistent with our previous BOD authorization with two modifications. The modifications are: (1) CREBs will be issued immediately but to be funded into an escrow account and (2) with the additional inclusion of a SCRF “wrap” for the benefit of the bondholders, including allocating the minimum capital reserve required of the Green Bank for the use of such.

Resolutions

WHEREAS, at its September 28, 2017 meeting, the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") previously authorized the issuance of Clean Renewable Energy Bonds ("CREBs") to support the installation of various solar projects for the benefit of the Connecticut State College and University ("CSCU") system;

WHEREAS, Banc of America Public Capital Corp. ("BAPCC"), as the proposed purchaser of the CREBs, has requested that this issuance incorporate the support of the Special Capital Reserve Fund ("SCRF"); and

WHEREAS, uncertainty at the federal level makes it advantageous to issue the CREBs in calendar year 2017;

NOW, therefore be it:

RESOLVED, that the Board affirms the previous approvals granted at its September 28, 2017 meeting with respect to this proposed CREBs transaction;

RESOLVED, that the President of the Green Bank and any other duly authorized officer is authorized to take appropriate actions to secure the issuance of CREBs utilizing the SCRF, 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, (2) an opinion of sufficiency as set forth in the Connecticut General Statutes ("CGS"), and (3) approval by the Office of the State Treasurer and other documentation required under the CGS; and

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

Submitted by: Bryan Garcia, President and CEO; Bert Hunter, EVP and CIO; Ben Healey, Director, Clean Energy Finance

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CONNECTICUT GREEN BANK

Memo

To: Connecticut Green Bank Board of Directors

From: Bryan Garcia (President and CEO)

CC: George Bellas (VP of Finance and Administration), Mackey Dykes (VP of CI&I and Officer), Brian Farnen (General Counsel and CLO), Bert Hunter (EVP and CIO), and Eric Shrago (Director of Operations)

Date: December 15, 2017

Re: Sustainability Pathway – FY 2018, FY 2019, and Beyond

The State of Connecticut has significant long-term liabilities, including $74 billion in unfunded retirement obligations and bonded debt.[1] With a $41.3 billion biennial budget for FY 2018 and FY 2019 addressing more than $3.5 billion in deficits, Governor Malloy signed a bipartisan budget brought forth by the Connecticut General Assembly on October 31, 2017. This budget would soon be further out of balance only a month later with an increase in the deficit by $207.8 million.[2] This budget sweeps $14.0 million a year of ratepayer funds through the Clean Energy Fund (CEF) and $2.3 million a year of Regional Greenhouse Gas Initiative (RGGI) allowance proceeds for a total of $32.6 million over FY 2018 and FY 2019 – more than 50% of the current level of support from public sources for the Connecticut Green Bank (Green Bank), including:

- **Clean Energy Fund** – $14 million each year for FY 2018 and FY 2019 for a total of $28 million from electric ratepayers (the system benefit charge); and

- **Regional Greenhouse Gas Initiative** – $10 million each year for FY 2018 and FY 2019, of which the Green Bank receives 23%, or $2.3 million each year for a total of $4.6 million from allowance proceeds.

Despite the Green Bank mobilizing nearly $1.1 billion of investment into Connecticut's economy over the past six years by using $175 million of public funds to attract $915 million of private investment, creating over 13,000 new jobs in our communities, reducing the burden of energy costs on nearly 25,000 families and businesses, and winning the prestigious "Innovations in American Government Awards" by the Harvard Kennedy School,[3] the Green Bank is faced with the unfortunate reality that it now needs to adjust its strategy and implement a plan to manage within more limited resources to make investments, while modestly maintaining its statutory mission and purpose (see Appendix I). It

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[1] Hartford Courant Editorial "How Could They Be Surprised?" (November 21, 2017)

[2] Hartford Business Journal "Lembo: Latest Projected Budget Shortfall Requires Deficit Mitigation Plan" (December 1, 2017)

[3] The Innovations in American Government Awards is the nation's preeminent program devoted to recognizing and promoting excellence and creativity in the public sector. The program highlights exemplary models of government innovation and advances efforts to address the nation's most pressing public concerns. Since its inception in 1985, the Program has received over 27,000 nominations and recognized nearly 500 government initiatives since it was established in 1985 with funding from the Ford Foundation.

must also consider a pivot away from a strategy since inception geared towards maximizing leverage of private capital towards one focused on earning a return on its investments to become sustainable.

Given the significance of the budget sweeps in FY 2018 and FY 2019, in an effort to manage within resources, the Connecticut Green Bank needs to break down its cash flows (i.e., revenues and expenses) in terms of different aspects of the businesses units that it manages, including:

1. **Incentives** – providing incentives administered through the Residential Solar Investment Program (RSIP) that are statutorily recovered through a portion of the system benefit charge and the sale of Solar Home Renewable Energy Credits (SHRECs); and

2. **Investments** – providing clean energy finance through its core business of credit enhancements, co-investments, investments, warehouses and securitizations.

By looking at its business units this way – in terms of incentives and investments – the Connecticut Green Bank is better able to discern how to restructure itself through the current situation. With the incentive business isolated (see Attachment 1 – Projected Annual Cash Flow from RSIP-SHREC), and discussed at the last Board of Directors meeting on December 1, 2017, the core business unit of investments through clean energy finance can be put on a pathway to self-sustainability (i.e., breakeven operations that deliver lower impact should budget sweeps persist) through the implementation of a sustainability plan.

For the Green Bank to operate with less public resources being made available to clean energy investment, it will strategically lower its operating expenses immediately and over time, limiting as best as possible the impact to its mission, while at the same time increasing its revenues through steady and sound investments to support and encourage efforts by Connecticut businesses and residents to become more energy efficient and use clean energy resources. As a result, the Green Bank will make sustainability of the organization a core objective which will lead to less leveraging of private capital as we make more direct investments, a significant departure from the way the organization has operated up until now.

Pathways to Breakeven in a Future with "Full" or Persistently Less Ratepayer Support

The Green Bank is going to have to make some difficult decisions in order to put the core business of clean energy finance on a pathway to breakeven and self-sustainability as a precaution against a future without any ratepayer support (with less impact) from that point forward.

The recommendation includes a set of alternative actions that allows the Green Bank to continue to serve its mission and purposes (albethey modestly), while at the same time living within more limited public support to investments by Connecticut businesses and residents in energy efficiency and clean energy and putting the core business on a path towards breakeven where the revenues it receives from its investments and other non-public revenue cover its operating expenses and modest levels of investment over time.

The staff used a cash flow model provided by Commissioner Smith, and modified it to allow for various breakeven scenarios varying the level of ratepayer support in an interim period to solve for how many years before the Green Bank could sustain itself in the event ratepayer support were to be permanently reduced (see Attachment 2 – Projected Annual Cash Flow for Sustainability Pathway with Change in Law for example).

The model focuses on the following assumptions:

- **Revenues** – investment of the remaining CEF and RGGI funds into assets (i.e., not investing the CEF and RGGI resources into operating expenses) that generate principal and interest (e.g., weighted average return of 5% over 10 years);

- **Operating Expenses** – reducing personnel and non-personnel related operating expenses over time.

- **Sweeps** – the current law sweeps $14 MM from the CEF and $2.3 MM from RGGI allowance proceeds from the Connecticut Green Bank for FY 2018 and FY 2019.

To achieve breakeven over time, the revenues from principal and interest that are generated from the investments we make in assets (i.e., loans), must be greater than or equal to the operating expenses and incremental investment made annually. The following is a breakdown of the various scenarios using the model.

Baseline Business as Usual Scenarios
The baseline scenarios assume two things:

1. **Business as Usual (BAU)** – that the Connecticut Green Bank would continue its current FY 2018 operating expense budget into the future; and

2. **BAU with Change in the Law** – the BAU case with a change in the law in FY 2020 that results in the FY 2018-19 level of sweeps the Clean Energy Fund and RGGI funds continues into the future.

The following is a summary of the findings of these two scenarios (see Table 1). These business as usual scenarios are for reference only on the current state of affairs and not the actual recommendation.

Table 1. BAU and BAU with Change in the Law Scenarios for Self-Sufficiency

Scenarios	**FY 2019 Operating Expenses** ($MM's)	**% Reduction from FY 2018 Operating Expense Budget**	**Years to Self-Sufficiency**	**Year of Self-Sufficiency**	**Cumulative Cash Flow prior to Self-Sufficiency** ($MM's)
Business as Usual (BAU)	($16.45)	0%	6	2024	($37.7)
BAU with Change in Law	($16.45)	0%	Never	Never	n/a

The Business as Usual Scenario shows a 6-year period to self-sufficiency with a cumulative cash flow deficit of $37.7 million, while the BAU with Change in Law Scenario shows that we are never self-sufficient with the current ratepayer support – as reduced for the budget sweeps – continuing on a permanent basis.

What these baseline scenarios tells us is that the business as usual scenario for the core business of clean energy finance is unsustainable if there is the potential for a future change in the law that continues to sweep the CEF and RGGI funds from the Connecticut Green Bank. With this take-away, it is necessary to reduce operating expenses in order to achieve sustainable operations as a precaution against persistent budget sweeps.

Sustainability Pathway Strategy and Scenarios

The sustainability pathway scenarios (our recommendation) assume significant operating expense reductions of 27%, for the following scenarios:

1. **Sustainability Pathway (SP)** – 27% reduction in operating expenses (or $4.58 million reduction from FY 2018 to FY 2019);

2. **SP with Change in the Law** – 27% reduction in operating expenses and a change in the law in FY 2020 that results in a continuation of the FY 2018-19 level of sweeps of the CEF and RGGI funds.

The following is a summary of the findings of these two scenarios (see Table 2).

Table 2. SP and SP with Change in the Law Scenarios for Self-Sufficiency

Scenarios	**FY 2019 Operating Expenses** ($MM's)	**% Reduction from FY 2018 Operating Expense Budget**	**Years to Self-Sufficiency**	**Year of Self-Sufficiency**	**Cumulative Cash Flow prior to Self-Sufficiency** ($MM's)
Sustainability Pathway	($11.87)	27%	4	2022	($14.3)
SP with Change in Law	($11.87)	27%	7	2025	($21.6)

The Sustainability Pathway Scenario shows a 4-year period to self-sustainability with a cumulative cash flow loss of $14.3 million, while the SP with Change in Law Scenario (see Attachment 2 – Projected Annual Cash Flow for Sustainability Pathway with Change in Law) shows a 7-year period to self-sustainability with a cumulative cash flow deficit of $21.6 million. Note – we have included an example of the projected annual cash flow for the Sustainability Pathway with Change in the Law, which we will go over during the board meeting.

The sustainability pathway scenarios tell us that there is a prudent pathway towards self-sufficiency for the core business of clean energy finance whereby key programs and initiatives of the Connecticut Green Bank can be maintained, albethey modestly, with a 27 percent operating expense reduction. To provide the Board of Directors with a sense of the magnitude of this proposed reduction, President Trump proposed reducing the budget of the US EPA by 31 percent! Green Bank staff recommend this Sustainability Pathway approach set forth above. This will result in a four-year path to self-sufficiency. Additionally, if there is a change in law, the Green Bank is now well positioned to pivot and decrease expenses at that time if there is such a change in law if we want to expedite our path to self-sufficiency based on such new development.

Deeper Cuts to Core Scenarios

The deeper cuts to core scenarios assume extraordinary operating expense reductions of 40%, for the following scenarios:

1. **Deeper Cuts to the Core (DCC)** – 40% reduction in operating expenses (or $6.58 million reduction from FY 2018 to FY 2019);

2. **<u>DCC with Change in the Law</u>** – 40% reduction in operating expenses, and a change in the law in FY 2020 that results in the level of FY 2018-19 sweeps of the Clean Energy Fund and RGGI funds.

The following is a summary of the findings of these two scenarios (see Table 3).

Table 3. DCC and DCC with Change in the Law Scenarios for Breakeven

Scenarios	**FY 2019 Operating Expenses** ($MM's)	**% Reduction from FY 2018 Operating Expense Budget**	**Years to Self-Sufficiency**	**Year of Self-Sufficiency**	**Cumulative Cash Flow prior to Self-Sufficiency** ($MM's)
Deeper Cuts to Core	($9.87)	40%	3	2021	($8.1)
DCC with Change in Law	($9.87)	40%	4	2022	($9.7)

The Deeper Cuts to Core Scenario shows a 3-year path to self-sufficiency with a cumulative cash flow deficit of $8.1 million, while the DCC with Change in Law Scenario shows a 4-year path to self-sufficiency with a cumulative cash flow deficit of $9.7 million.

The deeper cuts to core scenarios assume extraordinary cuts to key programs, including the elimination of the Smart-E Loan for local community banks and credit unions.

The objective of the Connecticut Green Bank should be to defend the CEF and RGGI funds from a change in the law in FY 2020 that would continue to sweep them from their statutory purpose and not going towards the General Fund. Despite the significant proposed operating expense budget reductions of the Sustainability Pathway, this option provides the best pathway forward for the Green Bank to continue advancing its mission and purpose, while responsibly shifting its focus from leverage to self-sufficiency and sustainability.

Sustainability Plan – Revenues and Profitability

Going forward, by putting the Green Bank on a pathway to self-sufficiency and sustainability, the organization will have to adjust its model from using limited public funds to attract and leverage private investments, towards seeking investment opportunities in its core business that maximizes financial returns in its pursuit of its own profitability at the expense of markets that aren't yet profitable (e.g., low income single family and multifamily affordable housing).

The sustainability plan assumes that the Connecticut Green Bank invests the public resources it receives (i.e., at least $12.3 million less the requirement of maintaining $4 million on our balance sheet in cash for prudent operations and covenants with partners) into a portfolio of projects for the core business that together deliver a weighted average return of 5 percent over a weighted average term of 10-years.It further assumes that an independent non-profit Affiliate will be established to achieve operating leverage and attract mission-oriented investors for a set of products serving underserved market segments (e.g., low-to-moderate income and credit-challenged customers and unconventional credits) that need additional investment and more scale to be able to achieve sustainability. If left at the Green Bank, these products would be a drag on the timeline to sustainability and would be starved for resources – both investment resources and operating support – at the very juncture when they need the next level of investment. The Green Bank can house some of its investment activity focused on underserved markets (e.g. PosiGen and SL4) in the Affiliate in a way that will provide revenues (e.g. returns) to the Green Bank. This is discussed below in greater detail.

To provide an overview of investment opportunities that would fall within the sustainability plan, the following is a breakdown of various projects, programs, and products in terms of the expected return on investment and term of the investment that were a part of the FY 2018 investment budget (see Table 5):

Table 3. Breakdown of Investment Opportunities for Sustainability Plan – Return and Term

Programs	Return	Term	Within Sustainability Plan?
Anaerobic Digester Pilot	2%	20	No
Combined Heat and Power Pilot	2%	20	No
C-PACE	6.25%	20	Yes
LMI – Solar PV Lease and EE ESA	5%	6	Yes
Microgrids	3-7%	15-20	No
Multifamily Health & Safety Loan	0%	15	Yes
Multifamily Affordable Predev. Loan	0%	2	Yes
Multifamily Market Predev. Loan	2.99%	2	Yes
Multifamily Catalyst Loan	3%	15	Yes
Project Finance	5-7%	15-20	Yes
Shared Clean Energy Facility	TBD	TBD	No
Small Business Energy Advantage	3.5%	4	Yes
Smart-E Loan	-	-	Yes
Solar Lease III (Commercial)	7.5%	20	Yes

The Connecticut Green Bank would focus its public resources on investments that deliver a profitable return, including:

- Continuing to administer C-PACE;
- Continuing investments in PosiGen's "Solar for All" campaign, through the Affiliate, to provide low-to-moderate income families with access to solar PV and energy efficiency,
- Continuing to identify opportunities for project-level financing (e.g., energy savings agreements, fuel cells, battery electric busses for the state, etc.);
- Supporting the replacement of public resources with private capital through the Small Business Energy Advantage (SBEA) on-bill program administered by the utilities; and
- Continuing investments in commercial solar PV, through the Affiliate, for underserved market segments (e.g., non-profits, municipalities, and small businesses).

It would also cease to pursue financing programs that are more grant-like pilots, as well as innovative financing programs that have yet to prove themselves viable, including:

- Anaerobic digester pilot;
- Combined heat and power pilot;
- Microgrids for critical facilities;[4] and

[4] Note, DEEP can provide capital to the Connecticut Green Bank to invest in the financing of microgrid projects should resources be available, and financing be warranted.

- Shared clean energy facilities, with a focus on low-to-moderate income family participation in subscriptions.

Also, notice that there are programs that are part of the sustainability plan – Health & Safety Loan,[5] various Multifamily Loans,[6] and the Smart-E Loan – because they are important to continuing the deployment of clean energy in underserved market segments and continuing to encourage local lenders to provide easy access to affordable capital to support the energy policy of Connecticut. These programs do not have the same return profile as other investments and are also at a critical juncture of needing the next level of investment to get to the next level of scale. For these reasons, we are proposing that these investments take place in a non-profit Affiliate that would help the Connecticut Green Bank not only continue to deliver impact in these important market segments by attracting more private capital (i.e., foundation Program Related Investments, commercial bank funding that satisfies Community Reinvestment Act obligations, etc.), but also reducing the operating expenses of the Connecticut Green Bank given a more efficient structure in the Affiliate – see section below on "Sustainability Plan – Non-Profit Affiliate".

In order to ensure the success of the self-sufficiency strategy of the Sustainability Pathway, with the focus of the Green Bank shifting from maximizing private capital leverage to one that focuses on organizational sustainability, the core business of the Connecticut Green Bank will need to deliver higher returns (in absolute dollars) from its capital investments than it has done in the past.

Sustainability Plan – Operating Expenses

In order to put the core business of the Connecticut Green Bank on a pathway to self-sufficiency, it is going to have to reduce its operating expenses by 27 percent from FY 2018 to FY 2019 budget.

For personnel and non-personnel related operating expenses for FY 2018, $7.9 MM and $8.5 MM were budgeted respectively for the core business for a total of $16.4 million. The following are actions that, after review with the officers and various directors, I am proposing we take in order to reduce operating expenses by $4.6 million (or 27 percent) from FY 2018 to $11.9 million in FY 2019 (see Attachment A – FY 2018 Proposed Operating and Program Budget Revisions):

1. **<u>Non-Personnel Related</u>** – reducing non-personnel related operating expenses by $3.2 MM (or 38 percent) from the following key budget areas:

    a. Marketing
    b. Inspections
    c. Technical Administration
    d. Program and New Product Development
    e. Evaluation, Measurement, and Verification; and
    f. Other.

    Reducing non-personnel related operating expenses in these areas means less engagement, loan volume, consumer protections, innovation, and evaluation, including:

[5] $1.5 MM provided by DEEP to support health and safety improvements in underserved communities
[6] $5.0 MM provided by DEEP to provide continued support for financing programs for low income single family (i.e., LMI – PosiGen) and multifamily programs

- The Connecticut Green Bank we will have less interaction with its customers through various marketing channels;
- Customers installing clean energy will have less protections as a result of less inspections;
- New products, market development, and innovation will cease to be a core feature of the Connecticut Green Bank; and
- Assessing the performance our products and programs are having on the market outside of the data collection we do, will be limited.

2. **Personnel Related** – eliminating open positions approved by the Board of Directors (i.e., staff accountant and senior manager of CI&I), removing merit pool for FY 2018 (i.e., 3.0% of salary), and reducing promotion pool for FY 2018 (i.e., from 1.5% to 0.5%). Given the nature of the situation, there will also need to be a transition and reduction in staff that will need to be handled in a compassionate, thoughtful, and methodical manner, which we can discuss in executive session;

3. **Office Space** – working with Connecticut Innovations (CI), we will seek to determine what options we have for managing our subletting spaces at 845 Brook Street and 865 Brook Street. You should note that our leases end at the end of 2020; and

4. **Initiatives** – there will be a cancellation of many of our research and development initiatives that are intended to open-up new markets (e.g., renewable heating and cooling, green bonds, etc.) by $560K (or 68% percent).

With these operating expense reductions beginning in FY 2018 and continuing into FY 2019, the operating expense budget will be reduced by $4.6 million (or 27 percent).

Sustainability Plan – Non-Profit Affiliate

On January 5, 2017, the Board of Directors of the Green Bank met at Yale University for a strategic retreat. An aspect of that retreat was a discussion as to how the Green Bank would improve operational efficiencies by investigating how a private entity created by it (e.g., Community Development Financial Institution permitted in statute) could help achieve more impact. The Board of Directors directed the staff to look into how a private entity could help advance its mission in Connecticut, with a particular focus on low-to-moderate income communities.

With philanthropic support from the Hampshire Foundation, to assess how the private entity could increase impact in Connecticut, the Connecticut Green Bank issued a Request for Proposals and hired Forsyth Street Advisors to:

- Conduct a market scan and overview of entity structure options;
- With staff recommend an approach for moving forward; and, if moving forward,
- Develop a business plan.

The market scan identified significant gaps for segments of the market – the broader needs of buildings in low-to-moderate income (LMI) communities, unconventional credits, community assets, projects below utility scale – that do not have access to appropriately priced or structured capital for clean energy and that no single energy finance intermediary plays an effective proactive demand-generation and capital provider role. It found that Connecticut Green

Bank's proven products and approaches are uniquely suited to meet these needs, particularly its "ecosystem" approach to matching capital supply with project demand, and is already operating at a scale in underserved market segments that far surpasses other actors..

The recommended approach to realizing this opportunity is to create a mission-aligned affiliated entity, an independent non-profit, to efficiently deliver capital to underserved segments of the clean energy market in Connecticut and beyond. The Affiliate would house a collection of products incubated by the Green Bank and ready for the next level of scale – including the multifamily product suite, a next generation scalable commercial solar lease program, and the Smart-E loan – and would run these products in Connecticut on behalf of the Green Bank via a professional services agreement. Certain staff would become employees of the Affiliate, allowing the Green Bank to reap immediate operating savings on staff expenses involved in these programs, due to a significantly lower overhead rate in the Affiliate.

The Affiliate would be seeded by a Connecticut-dedicated loan fund that would likely include a grant from the Department of Energy and Environmental Protection and a mix of mission-oriented investors, private capital providers, and, as available, other state and municipal funds. Any Connecticut Green Bank or state funds housed at the Affiliate must only be used for Connecticut activities of the Affiliate, not for any potential out of state activities. . If left at the Green Bank, these products would be a drag on the timeline to sustainability and would be starved for resources – both investment resources and operating support – at the very juncture when they need the next level of investment. In an Affiliate, these products can garner the needed additional investment and scale to be able to achieve sustainability.

Conclusion

Given the significance of the budget sweeps in FY 2018 and FY 2019, the Green Bank is going to have to make some difficult decisions in order to put the core business of clean energy finance on a pathway to breakeven and self-sustainability as a precaution against a future without any ratepayer support (with less impact) from that point forward.

The Sustainability Pathway recommendation includes a set of alternative actions that allows the Green Bank to continue to serve its mission and purposes (albethey modestly), while at the same time living within more limited public support to investments by Connecticut businesses and residents in energy efficiency and clean energy and putting the core business on a path towards breakeven where the revenues it receives from its investments and other non-public revenue cover its operating expenses and modest levels of investment over time.

For the Green Bank to operate with less public resources being made available to clean energy investment, it will strategically lower its operating expenses immediately and over time by 27 percent, limiting as best as possible the impact to its mission, while at the same time increasing its revenues through steady and sound investments to support and encourage efforts by Connecticut businesses and residents to become more energy efficient and use clean energy resources. As a result, the Green Bank will make sustainability of the organization a core objective which will lead to less leveraging of private capital as we make more direct investments, a significant departure from the way the organization has operated up until now.

The Green Bank is faced with the unfortunate reality that it now needs to adjust its strategy and implement a plan to manage within more limited resources to make investments, while modestly maintaining its statutory mission and purpose. It must also consider a pivot away from a strategy since inception geared towards maximizing leverage of private capital towards one focused on earning a return on its investments to become sustainable.

The recommendation being brought forth for your review is the Sustainability Pathway.

Resolution

Resolved, that the Board of Directors of the Connecticut Green Bank (Green Bank) approve of the budget mitigation strategy consistent with the Sustainability Pathway Strategy as set forth in this memorandum dated December 15, 2017 and **Attachment A**.

Resolved, that the Board of Directors of the Green Bank direct the Green Bank staff to present a detailed business plan, budget and transition plan for certain employees to a non-profit affiliate for the review and consideration of the Board no later than the end of the First Quarter of 2018.

Resolved, that the Board of Directors of the Green Bank authorize the President of the Green Bank and any other duly authorized officer of the Green Bank to (i) permanently eliminate positions from the Green Bank workforce consistent with the Sustainability Pathway Strategy as set forth in this memorandum dated December 15, 2017 and **Attachment A** and (ii) offer a severance package consistent with the Green Bank's Severance Policy to employees that are not transitioning to the non-profit affiliate.

Appendix I

Connecticut Green Bank Resolution of Purpose

PURSUANT TO

Section 16-245n of the
Connecticut General Statutes

As Revised and Adopted on September 29, 2011

In accordance with Section 16-245n(d)(1) of the Connecticut General Statutes, the Board of Directors of the Connecticut Green Bank [Clean Energy Finance and Investment Authority] hereby adopts the resolution of purposes.

The Connecticut General Assembly has found and determined that stimulating, supporting and increasing the use of clean energy, investment in clean energy projects and sources, demand for clean energy, and the development of the state's energy-related economy are important state policy objectives. To achieve those objectives, the General Assembly, among other things, created the Connecticut Green Bank.

The purposes of the Connecticut Green Bank [Authority] are to achieve the foregoing objectives to the fullest extent authorized or permitted by Section 16-245n of the Connecticut General Statutes, as amended, or any other provisions of the Connecticut General Statutes pertaining to the responsibilities or activities of the Connecticut Green Bank [Authority]. Such purposes include but are not limited to: (1) implementing the Comprehensive Plan developed by the Connecticut Green Bank [Authority] pursuant to Section 16-245n(c) of the Connecticut General Statutes, as amended; (2) developing programs to finance and otherwise support clean energy investment in residential, municipal, small business and larger commercial projects, and such others as the Connecticut Green Bank [Authority] may determine; (3) supporting financing or other expenditures that promote investment in clean energy sources and related enterprises; and (4) stimulating demand for clean energy and the deployment of clean energy sources within the state that serve end-use customers in the state.

For the Connecticut Green Bank's [Authority's] purposes, "clean energy" has the meaning as provided in Connecticut General Statutes Section 16-245n(a), as amended from time to time.

The Connecticut Green Bank [Authority] may seek to qualify as a Community Development Financial Institution under Section 4702 of the United States Code. If approved as a Community Development Financial Institution, then the Authority would be treated as a qualified community development entity for the purposes of Section 45D and Section 1400N9M) of the Internal Revenue Code.

ATTACHMENT 1 - PROJECTED ANNUAL CASH FLOW FROM RSIP-SHREC

Connecticut Green Bank - Incentive Business

		FY 2018 Full Yr Budget	Partial FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1. Cash On Hand														
[Beginning of month]			$ -	$ 153	$ 55	$ 839	$ 611	$ 820	$ 1,155	$ 1,555	$ 1,939	$ 2,308	$ 2,663	$ 3,002
2. Cash Receipts														
REC Sales - Non-SHREC			$ 427	$ 839	$ 853	$ 923	$ 918	$ 914	$ 909	$ 905	$ 900	$ 896	$ 891	$ 887
REC Sales - SHREC (not securitized)			$ 2,527											
SHREC Securitization "release"			$ 18,000	$ 15,000	$ 18,000	$ 16,500	$ 15,000	$ 8,425	$ 6,683	$ 4,531	$ 2,817	$ 1,115	$ 129	$ -
SBC for Non-SHREC PBIs net of REC			$ 3,369	$ 3,523	$ 2,995	$ 1,894	$ 44	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3. Total Cash Receipts			**$ 24,323**	**$ 19,362**	**$ 21,848**	**$ 19,317**	**$ 15,963**	**$ 9,338**	**$ 7,593**	**$ 5,435**	**$ 3,717**	**$ 2,010**	**$ 1,020**	**$ 887**
4. Total Cash Available			**$ 24,323**	**$ 19,515**	**$ 21,903**	**$ 20,156**	**$ 16,574**	**$ 10,158**	**$ 8,748**	**$ 6,990**	**$ 5,656**	**$ 4,319**	**$ 3,683**	**$ 3,889**
5. Cash Paid Out														
Compensation and Benefits	2 % inflation	$1,657	$ 1,130	$ 1,563	$ 1,595	$ 1,626	$ 1,659	$ 350	$ 357	$ 364	$ 371	$ 379	$ 386	$ 394
Interest														
Other administrative expenses	2 % inflation	$2,573	$ 377	$ 2,133	$ 2,176	$ 2,219	$ 2,263	$ 150	$ 153	$ 156	$ 159	$ 162	$ 166	$ 169
Total Administrative Expenses		$4,230	$ 1,508	$ 3,696	$ 3,770	$ 3,845	$ 3,922	$ 500	$ 510	$ 520	$ 531	$ 541	$ 552	$ 563
Financial Incentives PBI SHREC			$ 2,401	$ 4,362	$ 8,202	$ 9,901	$ 9,869	$ 8,425	$ 6,683	$ 4,531	$ 2,817	$ 1,115	$ 129	$ -
Financial Incentives PBI NON SHREC			$ 3,796	$ 4,362	$ 3,848	$ 2,817	$ 963	$ 78	$ -	$ -	$ -	$ -	$ -	$ -
Financial Incentives EPBB			$ 2,965	$ 5,040	$ 4,243	$ 1,982	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Incentives			$ 9,163	$ 13,764	$ 16,294	$ 14,699	$ 10,832	$ 8,503	$ 6,683	$ 4,531	$ 2,817	$ 1,115	$ 129	$ -
Subtotal			**$ 10,670**	**$ 17,461**	**$ 20,064**	**$ 18,545**	**$ 14,754**	**$ 9,003**	**$ 7,193**	**$ 5,051**	**$ 3,347**	**$ 1,656**	**$ 681**	**$ 563**
Reimburse CORE for RSIP expenses paid			$ 13,500	$ 2,000	$ 1,000	$ 1,000	$ 1,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6. Total Cash Paid Out			**$ 24,170**	**$ 19,461**	**$ 21,064**	**$ 19,545**	**$ 15,754**	**$ 9,003**	**$ 7,193**	**$ 5,051**	**$ 3,347**	**$ 1,656**	**$ 681**	**$ 563**
7. Net Cash Position			**$ 153**	**$ 55**	**$ 839**	**$ 611**	**$ 820**	**$ 1,155**	**$ 1,555**	**$ 1,939**	**$ 2,308**	**$ 2,663**	**$ 3,002**	**$ 3,325**

		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Financial Incentives PBI NON SHREC (for formula above)		$ 3,796	$ 4,362	$ 3,848	$ 2,817	$ 963	$ 78						
SHREC Reserve brought Forward			$ 7,329	$ 15,830	$ 14,950	$ 17,030	$ 19,786	$ 14,549	$ 8,337	$ 4,035	$ 1,291	$ 187	$ 62
Securitization Proceeds @6%		$ 24,914	$ 22,605	$ 16,274	$ 17,616	$ 16,636	$ 2,364						
SECURITIZATION RELEASE OF PROCEEDS		$ (18,000)	$ (15,000)	$ (13,000)	$ (15,500)	$ (14,000)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Pay PBI Expense				$ (5,000)	$ (1,000)	$ (1,000)	$ (8,425)	$ (6,683)	$ (4,531)	$ (2,817)	$ (1,115)	$ (129)	$ -
Interest on reserve	**6.0%**	$ 415	$ 896	$ 846	$ 964	$ 1,120	$ 824	$ 472	$ 228	$ 73	$ 11	$ 3	$ 4
Reserve Balance		$ 7,329	$ 15,830	$ 14,950	$ 17,030	$ 19,786	$ 14,549	$ 8,337	$ 4,035	$ 1,291	$ 187	$ 62	$ 65

ATTACHMENT 2 - PROJECTED ANNUAL CASH FLOW FOR SUSTAINABILITY PATHWAY WITH CHANGE IN LAW

Connecticut Green Bank - Core Business

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Further Non-Personnel Related Operating Expense Reductions	$ -										
Personnel Related Operating Expense Reductions from Affiliate	$ 1,150	$ 1,240	$ 1,240	$ 620	$ 620	$ 620	$ -	$ -	$ -	$ -	$ -
Current Law (if yes, then "x")											

		FY 2018 Full Yr Budget	Partial FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
1. Cash On Hand														
[Beginning of month]			$13,500.00	$14,838.51	$10,970.79	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00
2. Cash Receipts														
Receipts based on investments thru FY18	0.10%		$4,066.00	$5,226.00	$5,231.23	$5,236.46	$5,241.69	$5,246.94	$5,252.18	$5,257.43	$5,262.69	$5,267.95	$5,273.22	$5,278.50
Receipts (P&I) on investmentsmade in FY19 and forward	5.00%				$1,424.55	$2,947.11	$3,879.03	$5,223.24	$6,589.00	$8,102.26	$9,861.81	$11,624.38	$13,584.00	$15,959.81
Payment Amortization (Years)	10.00													
SBC, net of sweep			$2,315.80	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00	$12,300.00
Growth rate for SBC	0.00%													
Repayment of SL I WC Loan			$2,900.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Kresge Loan			$0.00	$3,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
DEEP Grant for Low Income and Multifamily			$5,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Repayment of RSIP expenses paid by CORE			$13,500.00	$2,000.00	$1,000.00	$1,000.00	$1,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
3. Total Cash Receipts			$27,781.80	$22,526.00	$19,955.78	$21,483.56	$22,420.72	$22,770.18	$24,141.19	$25,659.70	$27,424.50	$29,192.34	$31,157.22	$33,538.30
4. Total Cash Available	$0.00		$41,281.80	$37,364.51	$30,926.57	$25,483.56	$26,420.72	$26,770.18	$28,141.19	$29,659.70	$31,424.50	$33,192.34	$35,157.22	$37,538.30
5. Cash Paid Out														
Compensation and Benefits	2.00%	7,893.50	$ 4,738.37	$ 5,463.42	$ 5,572.69	$ 5,684.14	$ 5,797.83	$ 5,913.78	$ 6,032.06	$ 6,152.70	$ 6,275.75	$ 6,401.27	$ 6,529.29	$ 6,659.88
Interest Expense														
Other administrative expenses	2.00%	8,472.80	$ 4,726.41	$ 5,257.00	$ 5,362.14	$ 5,469.38	$ 5,578.77	$ 5,690.34	$ 5,804.15	$ 5,920.23	$ 6,038.64	$ 6,159.41	$ 6,282.60	$ 6,408.25
Financial Incentives - non RSIP			$ 265.00											
Investments per Year	$8,000.00		$8,344.46	$11,000.00	$11,756.78	$7,196.06	$10,379.66	$10,546.05	$11,684.98	$13,586.77	$13,610.11	$15,131.66	$18,345.33	$20,470.17
Investments visa vis Affiliate			$ 5,000.00											
CGB/Affiliate PSA for services				$1,150.00	$1,240.00	$1,240.00	$620.00	$620.00	$620.00	$0.00	$0.00	$0.00	$0.00	$0.00
Subtotal		$16,366.30	$23,074.24	$22,870.42	$23,931.60	$19,589.58	$22,376.25	$22,770.18	$24,141.19	$25,659.70	$25,924.50	$27,692.34	$31,157.22	$33,538.30
Loan Principal Payment (Kresge)											$1,500.00	$1,500.00		
Capital Purchases														
SBC for Non-SHREC PBIs net of REC recovery			$3,369.05	$3,523.31	$2,994.96	$1,893.98	$44.47							
6. Total Cash Paid Out			$26,443.29	$26,393.72	$26,926.57	$21,483.56	$22,420.72	$22,770.18	$24,141.19	$25,659.70	$27,424.50	$29,192.34	$31,157.22	$33,538.30
7. Cash Position			$14,838.51	$10,970.79	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00
Required $4 million cash														
CORE BUSINESS NET			-$5,398.78	-$6,644.42	-$5,519.05	-$4,209.96	-$2,875.87	-$1,753.95	-$615.02	$1,286.77	$2,810.11	$4,331.66	$6,045.33	$8,170.17

Connecticut Green Bank
FY 2018 Operating and Program Budget - REVISED
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Connecticut Green Bank
FY 2018 Operations and Program Budget - REVISED
Statement of Revenues and General Operations and Program Expenses

	FY18 Budget			FY18 Budget Revised			FY17 Actuals
	General Operations	Programs	Total Operations & Programs	Total Operations & Programs	$ Incr / (Decr)	% Incr / (Decr)	Total Operations & Programs
Revenues							
Utility customer assessments	$ 26,311,000	$ -	$ 26,311,000	$ 26,311,000	$ -	0 %	$ 26,404,349
Utility customer assessments - Sweep	-	-	-	(14,000,000)	(14,000,000)	0 %	-
RGGI auction proceeds - renewables	2,043,200	-	2,043,200	2,043,200	-	0 %	2,392,647
RGGI auction proceeds - Sweep	-	-	-	(1,077,666)	(1,077,666)	0 %	-
Interest Income, cash received	219,847	2,127,797	2,347,644	2,347,644	-	0 %	2,189,248
Interest Income, capitalized	-	416,570	416,570	416,570	-	0 %	340,025
Grant income (Federal Programs)	-	49,326	49,326	49,326	-	0 %	73,486
Grant income (Private Foundations)	-	-	-	-	-	0 %	25,000
REC sales, general	-	1,303,734	1,303,734	676,979	(626,755)	(48)%	2,214,000
REC Sales, SHREC program	-	4,476,577	4,476,577	2,526,583	(1,949,994)	(44)%	-
CPACE Loan closing fees	-	100,000	100,000	100,000	-	0 %	73,003
Other income	100,000	150,620	250,620	250,620	-	0 %	167,368
Total Revenues:	$ 28,674,047	$ 8,624,624	$ 37,298,671	$ 19,644,256	$ (17,654,415)	(47)%	$ 33,879,126
Expenses							
Employee compensation	$ 955,220	$ 4,434,200	$ 5,389,420	$ 5,173,801	$ (215,619)	(4)%	$ 5,054,763
Employee benefits/payroll taxes	732,016	3,406,452	4,138,468	3,970,285	(168,183)	(4)%	3,757,008
Temporary Employees	-	22,150	22,150	22,150	-	0 %	53,738
Pension Expense	-	-	-	-	-	0 %	1,746,587
Program development and administration	-	3,942,726	3,942,726	2,758,419	(1,184,307)	(30)%	2,782,993
Marketing	1,217,850	1,888,446	3,106,296	1,178,367	(1,927,929)	(62)%	1,961,338
EM&V	265,000	461,000	726,000	430,600	(295,400)	(41)%	315,477
Consulting & advisory fees	135,500	235,000	370,500	220,500	(150,000)	(40)%	281,764
R&D expenditures	825,000	-	825,000	265,000	(560,000)	(68)%	102,325
Professional fees: legal and accounting	161,950	316,000	477,950	477,950	-	0 %	412,168
Bond Issuance Costs	-	-	-	-	-	0 %	50,000
Rent and location related expenses	113,538	527,091	640,629	640,629	-	0 %	569,692
Office, computer & other expenses	313,963	657,932	971,895	971,895	-	0 %	694,853
Expenses before Financial Incentives:	$ 4,720,037	$ 15,890,996	$ 20,611,034	$ 16,109,596	$ (4,501,438)	(22)%	$ 17,782,706
Financial Incentives							
RSIP Financial Incentives	$ -	$ 14,169,079	$ 14,169,079	$ 13,329,079	$ (840,000)	(6)%	$ 15,492,955
Financial Incentives - Grants	-	265,000	265,000	265,000	-	0 %	2,074,767
Interest Rate Buydowns - ARRA	-	1,570,800	1,570,800	1,570,800	-	0 %	522,799
Interest Rate Buydowns - CGB Funds	-	100,000	100,000	100,000	-	0 %	37,763
Financial Incentives:	$ -	$ 16,104,879	$ 16,104,879	$ 15,264,879	$ (840,000)	(5)%	$ 18,128,285
Non-Operating Expenses							
Provision for Loan Loss	$ -	$ 2,489,760	$ 2,489,760	$ 1,195,560	$ (1,294,200)	(52)%	$ 956,488
Interest Expense	-	92,500	92,500	50,000	(42,500)	(46)%	20,000
Bad Debt Expense	-	-	-	-	-	0 %	81,422
Unrealized (Gain) / Loss	-	-	-	-	-	0 %	999,998
Realized (Gain) / Loss	-	-	-	-	-	0 %	93,711
Non-Operating Expenses:	$ -	$ 2,582,260	$ 2,582,260	$ 1,245,560	$ (1,336,700)	(52)%	$ 2,151,619
Total Expenditures:	$ 4,720,037	$ 34,578,136	$ 39,298,173	$ 32,620,035	$ (6,678,138)	(17)%	$ 38,062,610
Total Revenues over (under) Expenditures:			**$ (1,999,502)**	**$ (12,975,780)**	**$ (10,976,278)**		$ (4,183,484)

Connecticut Green Bank
FY 2018 Operations and Program Budget - REVISED
Statement of Revenues and General Operations and Program Expenses - CORE

	FY18 Budget			FY18 Budget Revised			FY17 Actuals
	General Operations	Programs	Total Operations & Programs	Total Operations & Programs	$ Incr / (Decr)	% Incr / (Decr)	Total Operations & Programs
Revenues							
Utility customer assessments	$ 26,311,000	$ -	$ 26,311,000	$ 26,311,000	$ -	0 %	$ 26,404,349
Utility customer assessments - Sweep	-	-	-	(14,000,000)	(14,000,000)	0 %	-
RGGI auction proceeds - renewables	2,043,200	-	2,043,200	2,043,200	-	0 %	2,392,647
RGGI auction proceeds - Sweep	-	-	-	(1,077,666)	(1,077,666)	0 %	-
Interest Income, cash received	219,847	2,127,797	2,347,644	2,347,644	-	0 %	2,189,248
Interest Income, capitalized	-	416,570	416,570	416,570	-	0 %	340,025
Grant income (Federal Programs)	-	49,326	49,326	49,326	-	0 %	73,486
Grant income (Private Foundations)	-	-	-	-	-	0 %	25,000
REC sales, general	-		-		-	0 %	-
REC Sales, SHREC program	-		-		-	0 %	-
CPACE Loan closing fees	-	100,000	100,000	100,000	-	0 %	73,003
Other income	100,000	150,620	250,620	250,620	-	0 %	167,368
Total Revenues:	$ 28,674,047	$ 2,844,313	$ 31,518,360	$ 16,440,693	$ (15,077,666)	(48)%	$ 31,665,126
Expenses							
Employee compensation	$ 955,220	$ 3,496,228	$ 4,451,448	$ 4,218,736	$ (232,712)	(5)%	$ 4,091,454
Employee benefits/payroll taxes	732,016	2,687,890	3,419,905	3,238,390	(181,516)	(5)%	3,048,044
Temporary Employees	-	16,075	16,075	16,075	-	0 %	27,439
Pension Expense	-	-	-	-	-	0 %	1,746,587
Program development and administration	-	2,092,726	2,092,726	1,418,419	(674,307)	(32)%	1,354,252
Marketing	1,217,850	1,549,946	2,767,796	1,124,864	(1,642,932)	(59)%	1,888,902
EM&V	265,000	334,000	599,000	405,600	(193,400)	(32)%	312,477
Consulting & advisory fees	135,500	210,000	345,500	220,500	(125,000)	(36)%	276,451
R&D expenditures	825,000	-	825,000	265,000	(560,000)	(68)%	102,325
Professional fees: legal and accounting	161,950	286,000	447,950	447,950	-	0 %	363,166
Bond Issuance Costs	-	-	-	-	-	0 %	50,000
Rent and location related expenses	113,538	415,596	529,134	522,369	(6,765)	(1)%	458,026
Office, computer & other expenses	313,963	531,732	845,695	839,858	(5,837)	(1)%	616,560
Expenses before Financial Incentives:	$ 4,720,037	$ 11,620,192	$ 16,340,229	$ 12,717,760	$ (3,622,469)	(22)%	$ 14,335,682
Financial Incentives							
RSIP Financial Incentives	$ -	$ -	$ -		$ -	0 %	
Financial Incentives - Grants	-	265,000	265,000	265,000	-	0 %	2,074,767
Interest Rate Buydowns - ARRA	-	1,570,800	1,570,800	1,570,800	-	0 %	522,799
Interest Rate Buydowns - CGB Funds	-	100,000	100,000	100,000	-	0 %	37,763
Financial Incentives:	$ -	$ 1,935,800	$ 1,935,800	$ 1,935,800	$ -	0 %	$ 2,635,330
Non-Operating Expenses							
Provision for Loan Loss	$ -	$ 2,489,760	$ 2,489,760	$ 1,195,560	$ (1,294,200)	(52)%	$ 956,488
Interest Expense	-	92,500	92,500	50,000	(42,500)	(46)%	20,000
Bad Debt Expense	-	-	-	-	-	0 %	81,422
Unrealized (Gain) / Loss	-	-	-	-	-	0 %	999,998
Realized (Gain) / Loss	-	-	-	-	-	0 %	93,711
Non-Operating Expenses:	$ -	$ 2,582,260	$ 2,582,260	$ 1,245,560	$ (1,336,700)	(52)%	$ 2,151,619
Total Expenditures:	$ 4,720,037	$ 16,138,252	$ 20,858,289	$ 15,899,120	$ (4,959,169)	(24)%	$ 19,122,631
Total Revenues over (under) Expenditures:			**$ 10,660,070**	**$ 541,573**	**$ (10,118,497)**		$ 12,542,495

Connecticut Green Bank
FY 2018 Operations and Program Budget - REVISED
Statement of Revenues and General Operations and Program Expenses - RSIP

	FY18 Budget			FY18 Budget Revised			FY17 Actuals
	General Operations	Programs	Total Operations & Programs	Total Operations & Programs	$ Incr / (Decr)	% Incr / (Decr)	Total Operations & Programs
Revenues							
Utility customer assessments	$ -	$ -	$ -	$ -	$ -	0 %	$ -
Utility customer assessments - Sweep		-	-		-	0 %	-
RGGI auction proceeds - renewables		-	-		-	0 %	
RGGI auction proceeds - Sweep	-	-	-		-	0 %	-
Interest Income, cash received			-		-	0 %	
Interest Income, capitalized			-		-	0 %	
Grant income (Federal Programs)			-		-	0 %	
Grant income (Private Foundations)	-	-	-	-	-	0 %	
REC sales, general	-	1,303,734	1,303,734	676,979	(626,755)	(48)%	2,214,000
REC Sales, SHREC program	-	4,476,577	4,476,577	2,526,583	(1,949,994)	(44)%	-
CPACE Loan closing fees			-		-	0 %	
Other income			-		-	0 %	
Total Revenues:	$ -	$ 5,780,311	$ 5,780,311	$ 3,203,562	$ (2,576,749)	(45)%	$ 2,214,000
Expenses							
Employee compensation		$ 937,972	$ 937,972	$ 955,065	$ 17,093	2 %	$ 963,309
Employee benefits/payroll taxes		718,562	718,562	731,895	13,333	2 %	708,963
Temporary Employees		6,075	6,075	6,075	-	0 %	26,299
Pension Expense		-	-	-	-	0 %	
Program development and administration		1,850,000	1,850,000	1,340,000	(510,000)	(28)%	1,428,742
Marketing		338,500	338,500	53,503	(284,997)	(84)%	72,437
EM&V		127,000	127,000	25,000	(102,000)	(80)%	3,000
Consulting & advisory fees		25,000	25,000	-	(25,000)	(100)%	5,313
R&D expenditures		-	-	-	-	0 %	-
Professional fees: legal and accounting		30,000	30,000	30,000	-	0 %	49,002
Bond Issuance Costs		-	-	-	-	0 %	-
Rent and location related expenses		111,495	111,495	118,260	6,765	6 %	111,666
Office, computer & other expenses		126,200	126,200	132,037	5,837	5 %	78,293
Expenses before Financial Incentives:	$ -	$ 4,270,804	$ 4,270,804	$ 3,391,836	$ (878,969)	(21)%	$ 3,447,024
Financial Incentives							
RSIP Financial Incentives	$ -	$ 14,169,079	$ 14,169,079	$ 13,329,079	$ (840,000)	(6)%	$ 15,492,955
Financial Incentives - Grants	-		-		-	0 %	
Interest Rate Buydowns - ARRA	-		-		-	0 %	
Interest Rate Buydowns - CGB Funds	-		-		-	0 %	
Financial Incentives:	$ -	$ 14,169,079	$ 14,169,079	$ 13,329,079	$ (840,000)	(6)%	$ 15,492,955
Non-Operating Expenses							
Provision for Loan Loss	$ -		$ -		$ -	0 %	
Interest Expense	-		-		-	0 %	
Bad Debt Expense	-	-	-	-	-	0 %	
Unrealized (Gain) / Loss	-	-	-	-	-	0 %	
Realized (Gain) / Loss	-	-	-	-	-	0 %	
Non-Operating Expenses:	$ -	$ -	$ -	$ -	$ -	0 %	$ -
Total Expenditures:	$ -	$ 18,439,883	$ 18,439,883	$ 16,720,915	$ (1,718,969)	(9)%	$ 18,939,979
Total Revenues over (under) Expenditures:			**$ (12,659,572)**	**$ (13,517,353)**	**$ (857,780)**		$ (16,725,979)

Connecticut Green Bank
FY 2018 Program Budget - REVISED
Program Loans

Program Type - CGB portfolio loan (Asset) advances

Dept	Prg Code	Prg Name	Description		Interest Rate	Term	FY18 Budget Q1	Q2	Q3	Q4	Total	FY18 Budget Revised	FY17 Total Budget	FY17 Actuals
MultiFamily	52250	MF Programs	Pre Development Loan Fund-affordable and market rate housing-Sherpa		0%	2	$ 32,250	$ 32,250	$ 32,250	$ 32,250	$ 129,000	$ 129,000		
MultiFamily	52250	MF Programs	Pre Development Loan Fund-marketrate housing-Navigator Loan		2.99%	2	250,000	250,000	250,000	250,000	1,000,000	750,000		
MultiFamily	52250	MF Programs	Catalyst Fund		TBD		1,250,000	1,250,000	1,250,000	1,250,000	5,000,000	2,500,000		
MultiFamily	52250	MF Programs	Health and Safety Revolving Loan Fund		TBD		375,000	375,000	375,000	375,000	1,500,000	1,125,000		
				Total MultiFamily Program Loans:			***$ 1,907,250***	***$ 1,907,250***	***$ 1,907,250***	***$ 1,907,250***	***$ 7,629,000***	***$ 4,504,000***		
Resi 1-4	52220	LMI Programs	Posigen - LMI solar PV Lease and EE financing - Term Loan 1		5%	6yr	$ 619,000	$ -	$ -	$ -	$ 619,000	$ 619,000		
Resi 1-4	52220	LMI Programs	Posigen - LMI solar PV Lease and EE financing - Bridge to Term Loan 2 -				-	(3,500,000)	-	-	(3,500,000)	(3,500,000)		
Resi 1-4	52220	LMI Programs	Posigen - LMI solar PV Lease and EE financing - Term Loan 2		TBD		-	3,500,000	1,500,000	-	5,000,000	5,000,000		
Resi 1-4	52220	LMI Programs	Posigen - LMI solar PV Lease and EE financing - Possible Term Loan 3		TBD		-	-	-	1,253,600	1,253,600	1,253,600		
				Total Resi 1-4 Program Loans:			***$ 619,000***	***$ -***	***$ 1,500,000***	***$ 1,253,600***	***$ 3,372,600***	***$ 3,372,600***		
S&I	51200	AD Pilot	Anaerobic Digester Pilot	Covanta Energy/Turning Earth LLC (Southington)			$ -	$ 4,013,000	$ -	$ -	$ 4,013,000	$ -		
S&I	51300	MicroGrid/CHP	MicroGrid program	Bridgeport MicroGrid LLC (Bridgeport Town Hall)			503,000	-	-	-	503,000	503,000		
				Total S&I Program Loans:			***$ 503,000***	***$ 4,013,000***	***$ -***	***$ -***	***$ 4,516,000***	***$ 503,000***		
CI&I	51800	CPACE	CGB Portfolio	Projects to be determined			$ 238,600	$ 238,700	$ 238,600	$ 238,700	$ 954,600	$ 954,600		
CI&I	51800	CPACE	Hannon Portfolio - CGB Subordinated Debt	Projects to be determined			131,250	262,500	262,500	262,500	918,750	918,750		
CI&I	51810	New Product Dev.	ESA & CI&I pilot loans	Projects to be determined	TBD		-	-	500,000	500,000	1,000,000	-		
CI&I	51810	New Product Dev.	DEEP MicroGrid Prog	Projects to be determined	3-7%	15-20yr	-	-	1,250,000	1,250,000	2,500,000	-		
CI&I	53002	CGB SBEA LLC	Working Capital Loan	CGB SBEA LLC	0%		500,000	-	-	-	500,000	500,000		
CI&I	53002	CGB SBEA LLC	Subordinated Debt	CGB SBEA LLC			-	-	1,500,000	1,500,000	3,000,000	1,500,000		
CI&I	51800	CPACE	Take out of Enhanced Capital position	CPACE-Cargill Falls Mill			1,200,000	-	-	-	1,200,000	1,200,000		
				Total CI&I Program Loans:			***$ 2,069,850***	***$ 501,200***	***$ 3,751,100***	***$ 3,751,200***	***$ 10,073,350***	***$ 5,073,350***		
Finance	52200	CE Finance Prg	EV Bus Fleet	Bridgeport - twelve buses			$ -	$ -	$ 1,500,000	$ 1,500,000	$ 3,000,000	$ -		
Finance	52200	CE Finance Prg	Subordinated Debt - Fuel Cell	FCE/ Triangle Street Danbury			-	5,047,000	-	-	5,047,000	5,047,000		
Finance	52200	CE Finance Prg	Subordinated Debt - DEEP SCEF Pilot	Community Solar sites - TBD			-	-	2,500,000	2,500,000	5,000,000	-		
Finance	52200	CE Finance Prg	District Heating Loop	NuPower Thermal LLC			-	272,000	-	-	272,000	-		
Finance	52200	CE Finance Prg	Working capital loan to CEFIA Services	Capital contribution to CT SL3			3,632,275	3,632,275	3,632,275	3,985,819	14,882,644	14,882,644		
				Total CE Finance Program Loans:			***$ 3,632,275***	***$ 8,951,275***	***$ 7,632,275***	***$ 7,985,819***	***$ 28,201,644***	***$ 19,929,644***		
				Total of all Program Loans:			***$ 8,731,375***	***$ 15,372,725***	***$ 14,790,625***	***$ 14,897,869***	***$ 53,792,594***	***$ 33,382,594***	***$ 17,799,880***	

Program Type - CGB Loans: Provisions for Loan Losses

	Prob.	Ratio	FY18 Budget Q1	Q2	Q3	Q4	Total	FY18 Budget Revised	FY17 Total Budget	FY17 Actuals
Total MultiFamily Program Loans:	60%	10%	$ 114,435	$ 114,435	$ 114,435	$ 114,435	$ 457,740	$ 270,240		107,011
Total Resi 1-4 Program Loans:	100%	10%	61,900	-	150,000	125,360	337,260	337,260		370,250
Total S&I Program Loans:	100%	10%	50,300	401,300	-	-	451,600	50,300		343,368
Total CI&I Program Loans:	85%	10%	31,437	42,602	85,094	85,102	244,235	159,235		(265)
Total CE Finance Program Loans:	75%	10%	-	398,925	300,000	300,000	998,925	378,525		-
Total Other Program Loans:			-	-	-	-	-	-		124,893
Total Provision for Loan Losses:			***$ 258,072***	***$ 957,262***	***$ 649,529***	***$ 624,897***	***$ 2,489,760***	***$ 1,195,560***	***$ 1,969,000***	***$ 945,257***

Program Type - Projected BAML Loan Drawdowns

Dept	Prg Code	Prg Name	Description	Interest Rate	Term	FY18 Budget Q1	Q2	Q3	Q4	Total	FY18 Budget Revised	FY17 Total Budget	FY17 Actuals
CI&I	53002	CGB SBEA LLC	Subordinated Debt - SBEA	1%	10	$ -	$ -	$ 1,500,000	$ 1,500,000	$ 3,000,000	$ -	$ -	$ -
CI&I	51800	CPACE	Take out of Enhanced Capital position	1%	10	1,200,000	-	-	-	1,200,000	-	-	-
Finance	52200	CE Finance Prg	EV Bus Fleet	1%	10	-	-	1,500,000	1,500,000	3,000,000	-	-	-
Resi 1-4	52220	LMI Programs	Posigen loans	1%	10	800,000	-	-	-	800,000	-	-	-
						$ 2,000,000	$ -	$ 3,000,000	$ 3,000,000	$ 8,000,000	$ -	$ -	$ -

Program Type - Interest Expense

Dept	Prg Code	Prg Name	Description	Interest Rate	Term	FY18 Budget Q1	Q2	Q3	Q4	Total	FY18 Budget Revised	FY17 Total Budget	FY17 Actuals
Multi	52251	Multifamily	Multifamily-HDF/MacArthur Interest Expense - current $2.0m draw	1%	15	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 20,000	$ 20,000	$ -	$ 20,000
Multi	52251	Multifamily	Multifamily-HDF/MacArthur Interest Expense- remaining $3.0m draw	1%	15	7,500	7,500	7,500	7,500	30,000	30,000	-	-
CI&I	53002	CGB SBEA LLC	Subordinated Debt - SBEA	1%	10	-	-	3,750	7,500	11,250	-	-	-
CI&I	51800	CPACE	Take out of Enhanced Capital position	1%	10	3,000	3,000	3,000	3,000	12,000	-	-	-
Finance	52200	CE Finance Prg	EV Bus Fleet	1%	10	-	-	3,750	7,500	11,250	-	-	-
Resi 1-4	52220	LMI Programs	Posigen loans	1%	10	2,000	2,000	2,000	2,000	8,000	-	-	-
						$ 17,500	$ 17,500	$ 25,000	$ 32,500	$ 92,500	$ 50,000	$ -	$ 20,000

Connecticut Green Bank
FY 2018 Program Budget - REVISED
Credit Enhancements

Credit Enhancements - Loan Loss Reserves - ARRA Funds

Dept	Prg Code	Prg Name	Description	FY18 Budget Q1	FY18 Budget Q2	FY18 Budget Q3	FY18 Budget Q4	FY18 Budget Total	FY18 Budget Revised	FY17 Budget	FY17 Actual
Multi	52230	CHIF PEL	CHIF/MPEL product	$ -	$ -	$ -	$ -	$ -	$ -	$ 625,000	$ -
Resi	52210	SmartE	CGB/Smart E loans	-	-	-	-	-	-	-	20,277
				$ -	$ -	$ -	$ -	$ -	$ -	$ 625,000	$ 20,277

Credit Enhancements - Loan Loss Reserves - DEEP Funds

Dept	Prg Code	Prg Name	Description	FY18 Budget Q1	FY18 Budget Q2	FY18 Budget Q3	FY18 Budget Q4	FY18 Budget Total	FY18 Budget Revised	FY17 Budget	FY17 Actual
CI&I	51810	New Product Dev.	DEEP MicroGrid Prog	$ -	$ -	$ 250,000	$ 250,000	$ 500,000	$ -	$ -	$ -
				$ -	$ -	$ 250,000	$ 250,000	$ 500,000	$ -	$ -	$ -

Credit Enhancements - Loan Loss Reserves - CGB Funds

Dept	Prg Code	Prg Name	Description	FY18 Budget Q1	FY18 Budget Q2	FY18 Budget Q3	FY18 Budget Q4	FY18 Budget Total	FY18 Budget Revised	FY17 Budget	FY17 Actual
Resi	52210	SmartE	CGB/Smart E loans	$ 182,153	$ 215,280	$ 139,545	$ 160,107	$ 697,086	$ 697,086	$ 759,276	$ -
Multi	52230	CHIF PEL	CHIF/MPEL product	81,250	81,250	81,250	81,250	325,000	325,000	-	-
GenOp	99999	GenOps	Solar Lease 1 Promissory Notes	-	-	-	-	-	-	-	(9,045)
Resi	52215	Resi New Products	Smart-e for EV's	-	166,667	166,667	166,667	500,000	500,000	-	-
				$ 263,403	$ 463,197	$ 387,461	$ 408,024	$ 1,522,086	$ 1,522,086	$ 759,276	$ (9,045)

Credit Enhancements - Interest rate Buydowns - ARRA Funds

Dept	Prg Code	Prg Name	Description	FY18 Budget Q1	FY18 Budget Q2	FY18 Budget Q3	FY18 Budget Q4	FY18 Budget Total	FY18 Budget Revised	FY17 Budget	FY17 Actual
Resi	52210	SmartE	CGB/Smart E loans	$ 411,600	$ 487,200	$ 315,000	$ 357,000	$ 1,570,800	$ 1,570,800	$ 664,740	$ 522,799
Resi	52101	CT Solar Lease 2	CT Solar Lease 2 LLC/Residential Solar PV leases	-	-	-	-	-	-	316,600	-
				$ 411,600	$ 487,200	$ 315,000	$ 357,000	$ 1,570,800	$ 1,570,800	$ 981,340	$ 522,799

Credit Enhancements - Interest rate Buydowns - CGB Funds

Dept	Prg Code	Prg Name	Description	FY18 Budget Q1	FY18 Budget Q2	FY18 Budget Q3	FY18 Budget Q4	FY18 Budget Total	FY18 Budget Revised	FY17 Budget	FY17 Actual
CI&I	51800	CPACE	Buydown of interest rate on CPACE loans/Energy on the Line program	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 100,000	$ 100,000	$ 100,000	$ -
CI&I	51800	CPACE	Discount on sales of loans to Hannon Armstrong	-	-	-	-	-	-	-	263
Multi	52220	Multifamily	Multifamily Interest Rate Buydowns	-	-	-	-	-	-	-	37,500
				$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 100,000	$ 100,000	$ 100,000	$ 37,763

Connecticut Green Bank
FY 2018 Program Budget - REVISED
Financial Incentives - Grants and Rebates

Dept	Program Code	Program Name	Description	FY18 Budget Q1	FY18 Budget Q2	FY18 Budget Q3	FY18 Budget Q4	FY18 Budget Total	FY18 Budget Revised	FY17 Actual	FY17 Budget
SI	51100	RSIP	HOPBI Incentives	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,410,926	$ 1,597,504
SI	51100	RSIP	PBI Incentives	1,207,222	786,930	1,091,033	1,560,005	4,645,191	4,645,191	9,241,985	6,881,499
SI	51100	RSIP	PBI Early Pay-offs	2,500,000	-	-	-	2,500,000	1,660,000	-	-
SI	51100	RSIP	EPBB Incentives	2,025,229	1,658,980	1,628,871	1,710,808	7,023,888	7,023,888	3,840,044	4,070,007
SI	50800	Grid-Tied RE	Legacy projects	-	-	-	100,000	100,000	100,000	158,005	100,000
SI	52600	Sunshot	Sunshot federal grant - contractors	-	-	-	50,000	50,000	50,000	46,777	-
CI&I	50820	CEBS Prg	Clean Energy Business Solutions	-	-	-	-	-	-	1,000,000	1,000,000
Multi	52220	LMI Programs	Hampshire Foundation Grant Spending	7,500	7,500	-	-	15,000	15,000	10,000	-
Other Prg	50400	CEC	Clean Energy Communities	-	-	-	-	-	-	847,350	980,000
Other Prg	FY2012	Pre-FY2013 Programs	Legacy projects	25,000	25,000	25,000	25,000	100,000	100,000	12,636	-
				$ 5,764,952	$ 2,478,410	$ 2,744,904	$ 3,445,813	$ 14,434,079	$ 13,594,079	$ 17,567,722	$ 14,629,010