CONNECTICUT
GREEN BANK

Board of Directors

Meeting Date

April 26, 2019

Board of Directors

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

CONNECTICUT
GREEN BANK

April 18, 2019

Dear Connecticut Green Bank Board of Directors:

We have a regularly scheduled meeting of the Board of Directors scheduled on **Friday, April 26, 2019 from 3:00 to 5:00 p.m.** in the Colonel Albert Pope Board Room of the Connecticut Green Bank at 845 Brook Street, Rocky Hill, CT 06067.

Please forgive us for the late afternoon Friday meeting! We will be in New York City in the morning to announce the winner of the Aspen Institute's International MBA Case Study Competition which features the Connecticut Green Bank – and Governor Lamont will be giving the keynote address!

On the agenda we have the following items:

- **Consent Agenda** – review and approval of prior meeting minutes for February 22, 2019 and March 29, 2019.

- **Investment Business** – we are proposing several investments, as well as a restructuring of a prior grant. On the investments, we are proposing several improvements to the Small Business Energy Advantage (SBEA) terms and partnership with Eversource and Amalgamated Bank. On Capital for Change, we are looking to provide support for their residential financing program.

  And on the restructuring, we have a request for a waiver from Naugatuck High School on fees associated with a prior grant through the On-Site Distributed Generate Program of the Connecticut Clean Energy Fund.

- **Other Business** – we have a number of updates including Inclusive Prosperity Capital, Q1-Q3 progress to targets, progress on our Electric Efficiency Partners (EEP) Program applications, final results of the Aspen Institute competition, and other items.

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

Have a Happy Earth Day!

Sincerely,

Bryan Garcia
President and CEO

AGENDA

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

Friday, April 26, 2019
3:00-5:00 p.m.

Staff Invited: Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Jane Murphy, Selya Price, Eric Shrago, and Kim Stevenson

1. Call to order

2. Public Comments – 5 minutes

3. Consent Agenda – 5 minutes

   a. Meeting Minutes from February 22, 2019 and March 29, 2019
   b. Extension of Resolution – FuelCell Energy Triangle Project

4. Investment Business Updates and Recommendations – 60 minutes

   a. Small Business Energy Advantage
   b. Capital for Change – Capitalization
   c. Loan Loss Decision Framework – Transactions

      i. OSDG Program (Building Integrated Solar PV) – Naugatuck High School

5. Other Business – 45 minutes

   a. Inclusive Prosperity Capital – Update
   b. Progress to Targets – Update
   c. Comprehensive Plan – FY 2020 and Beyond
   d. Electric Efficiency Partners Program – Update
   e. Aspen Institute International MBA Case Study Competition
   f. Other

6. Adjourn

Join the meeting online at https://global.gotomeeting.com/join/581157541

Or call in using your telephone:
Dial (408) 650-3123

Access Code: 581-157-541

Next Regular Meeting: Friday, June 28, 2019 from 9:00-11:00 a.m.
Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT

RESOLUTIONS

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

Friday, April 26, 2019
3:00-5:00 p.m.

Staff Invited: Craig Connolly, Mackey Dykes, Brian Farnen, Bryan Garcia, Bert Hunter, Jane Murphy, Selya Price, Eric Shrago, and Kim Stevenson

1. Call to order

2. Public Comments – 5 minutes

3. Consent Agenda – 5 minutes

   a. Meeting Minutes from February 22, 2019 and March 29, 2019

Resolution #1

Motion to approve the meeting minutes of the Board of Directors for February 22, 2019 and March 29, 2019.

   b. Extension of Resolution – FuelCell Energy Triangle Project

Resolution #2

WHEREAS, the Connecticut Green Bank Board of Directors ("Board") has previously approved a loan to support FuelCell Energy, Inc.'s ("FCE") development of a 3.7 megawatt high efficiency fuel cell project in Danbury, Connecticut (the "Term Loan"), as recommended and requested in the due diligence memorandum dated March 10, 2017 with terms and conditions for the Term Loan contained in the draft term sheet which accompanied the memorandum (the "Term Sheet"); and

WHEREAS, staff set forth in the project qualification memo dated January 26, 2018 a request for the Board to approve, and the Board as of that date did approve, updates to the previously-approved Term Sheet, to set a new deadline for advance of May 1, 2018, and the ability to sell off all, or a portion, of the Term Loan to 3rd party investors and the ability to guaranty all (for a fee or additional consideration), or a portion, of the amount of the Term Loan sold subject to subsequent Board approval on the terms and conditions thereof;

Whereas, staff set forth in the project qualification memo dated April 27, 2018 a request for the

Board to approve, and the Board as of that date did approve, a request for an additional extension of the deadline for advance from May 1, 2018 to December 31, 2018; and

Whereas, staff has set forth in the project qualification memo dated April 23, 2019 a further request for the Board to approve an additional extension of the deadline for advance from December 31, 2018 to September 30, 2019.

NOW, therefore be it:

RESOLVED, that the Green Bank Board of Directors hereby approves the new deadline for advance of the Term Loan be extended to September 30, 2019.

4. Investment Business Updates and Recommendations – 60 minutes

   a. Small Business Energy Advantage

<u>Resolution #3</u>

WHEREAS, pursuant to Conn. Gen. Stat. Section 16-24n the Connecticut Green Bank ("Green Bank") has a mandate to develop programs to finance clean energy investment for small business, industrial, and municipal customers in the State;

WHEREAS, recapitalizing the Small Business Energy Advantage ("SBEA") program with private sector capital is a recognized priority in the Green Bank's Comprehensive Plan and is a goal of the CT Energy Efficiency Board and Green Bank Joint Committee;

WHEREAS, The Connecticut Light and Power Company d/b/a Eversource Energy and The United Illuminated Company (together, the "Utilities") have requested the Green Bank's assistance sourcing low cost private sector capital;

WHEREAS, the Green Bank released a Request for Proposals for Small Business Energy Advantage Program Alternative Financing Solutions (the "RFP") on May 2, 2018;

WHEREAS, Amalgamated Bank responded to the RFP with a comprehensive and flexible solution offering the lowest cost capital to recapitalize the SBEA program;

WHEREAS, Green Bank staff, together with Utility staff and the EEB, selected Amalgamated's proposal to recapitalize the SBEA program and the Green Bank's Board of Directors (the "Board") approved at its October 26, 2018 meeting Green Bank's $5,000,000 participation as a subordinated lender in a Master Purchase and Servicing Agreement (the "Master Agreement") and entered into by Green Bank, AB, each as a purchaser, and The Connecticut Light and Power Company ("CL&P"), as seller on December 20, 2018; and

WHEREAS, staff recommends the Board approve an amendment of the Master Agreement (the "Amendment") substantially in the form attached hereto as Exhibit A in order to bring the Master Agreement in line with the mutual expectations and understandings of Green Bank, AB and CL&P;

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Amendment materially consistent within the memorandum submitted to the Board dated April 18, 2019 and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 270 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.

b. Capital for Change – Capitalization

Resolution #4

WHEREAS, the Connecticut Green Bank ("Green Bank") entered into a Smart-E Loan program financing agreement with Capital for Change ("C4C");

WHEREAS, C4C is the largest and fastest growing Smart-E lender on the Green Bank Smart-E platform;

WHEREAS, C4C and Green Bank are negotiating with private third party capital to fund C4C's Smart-E Loan portfolio growth;

WHEREAS, Green Bank staff recommend a short term bridge loan facility (the "C4C Bridge Loan") in order to fund C4C's Smart-E Loan growth which C4C and Green Bank complete negotiations and documentation for a loan facility to fund C4C's Smart-E loan portfolio on a longer term basis; and

WHEREAS, Green Bank staff recommend "in principle approval" by the Green Bank Board of Directors (the "Board") for a medium term revolving loan facility for CEEFCo (the "CEEFCo Revolving Loan") in order to fund CEEFCo's energy efficiency and Smart-E Loan portfolio in partnership with private capital.

NOW, therefore be it:

RESOLVED, that the Board approves the C4C Bridge Loan in an amount of up to $1.5 million in capital from the Green Bank balance sheet in support of Smart-E Loans to be originated by C4C from and after March 31, 2019;

RESOLVED, that the Board approves "in principle" the CEEFCo Revolving Loan in an amount of up to $4.5 million in capital from the Green Bank balance sheet in support of energy efficiency and Smart-E Loans in partnership with private capital generally consistent with the memorandum submitted to the Board on April 23, 2019 and directs staff to submit the CEEFCo Revolving Loan for final approval once major terms and conditions have been agreed;

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the C4C Bridge Loan on such terms and conditions as are materially consistent with the memorandum submitted to the Board on April 23, 2019; and

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

c. Loan Loss Decision Framework – Transactions

i. OSDG Program (Building Integrated Solar PV) – Naugatuck High School

Resolution #5

WHEREAS, the Connecticut Green Bank ("Green Bank") is the successor to the Connecticut Clean Energy Fund (CCEF);

WHEREAS, Connecticut Innovations, Incorporated, acting solely as the administrator of the CCEF, entered into a Standard Financial Assistance Agreement ("Agreement") dated January 6, 2009 with The Borough of Naugatuck ("Naugatuck"), to provide Naugatuck with a grant for the deployment of a building-integrated solar PV system based on amorphous silicon, thin-film technology, located at 543 Rubber Avenue, Naugatuck, Connecticut, which is the Naugatuck High School;

WHEREAS, on June 13, 2018, the Green Bank Board of Directors ("Board") approved the Loan Loss Decision Framework and Process, set forth in that certain memo to the Board dated June 13, 2018 (the "Loss Process"), which established the process of dealing with provisional loss reserves, restructurings, and write-offs for assets on Green Bank's balance sheet; and

WHEREAS, the established Loss Process governs this Grant Revision Proposal; and

WHEREAS, in accordance with the Loss Process, Green Bank staff seeks the Green Bank Board of Directors' ("Board") approval to waive any potential defaults under the Agreement based on the "Force Majeure" circumstances described in the body of the memorandum circulated to the Board dated April 18, 2019 ("Memo").

NOW, therefore be it:

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

5. Other Business – 45 minutes

   a. Inclusive Prosperity Capital – Update
   b. Progress to Targets – Update
   c. Comprehensive Plan – FY 2020 and Beyond
   d. Electric Efficiency Partners Program – Update
   e. Aspen Institute International MBA Case Study Competition
   f. Other

6. Adjourn

CONNECTICUT GREEN BANK℠

Board of Directors Meeting

April 26, 2019

Colonel Albert Pope Board Room

Board of Directors

Agenda Item #1

Call to Order

Board of Directors

Agenda Item #2

Public Comments

Board of Directors

Agenda Item #3

Consent Agenda

Consent Agenda
Resolutions 1 and 2

1. **<u>Meeting Minutes</u>** – approval of the meeting minutes of February 22, 2019 and March 29, 2019

2. **<u>Approval Extension</u>** – approval of extension to prior approved resolution for the FuelCell Energy Triangle project

Statement of Financial Interest

CONNECTICUT GREEN BANK

All 2018 SFI filings with the Office of State Ethics are due by April 30, 2019.

Click to File: **Online SFI Filing System**

https://www.oseapps.ct.gov/SFI

Call Brian Farnen @ 860.257.2892 with any questions.

Board of Directors

Agenda Item #4a

Investment Business

Small Business Energy Advantage

Small Business Energy Advantage

Financing Facility with Eversource and Amalgamated Bank

- **<u>Status</u>** - Staff provided Deployment Committee with update on "growing pains" of facility in March. Issues identified are near resolution with Eversource and Amalgamated Bank.
- **<u>Key Amendments to Master Purchase & Servicing Agreement</u>**
  - Allow for qualifying SBEA loans to public sector customers to aggregate to a maximum of $1,000,000 (increased from $500,000)
  - Permit Green Bank to manage any deficiencies in repayments from Eversource to ensure Amalgamated Bank is paid not less than 100% of the amounts the Parties expected Amalgamated Bank to be paid. Green Bank will continue to receive timely reimbursement from CEEF.
  - Make non-material amendments to the Agreement to resolve operational issues related to purchases of loans and payments
- **<u>Next Steps</u>** – Continue to receive repayment on initial loan portfolio purchase and close on second loan portfolio purchase in Q2 2019

Board of Directors

Agenda Item #4b

Investment Business

Capital for Change

Capital for Change

Capitalization for Smart-E & EE Loans

- $1.5M Bridge Loan (unsecured) to Capital 4 Change ("C4C")
  - Request for Full Approval
    - Smart-E Only
    - Repaid via larger recapitalization of their current CEEFCo funding
    - 6 month bridge

- $4.5M Medium Term Revolving Loan (secured & subordinated) to CEEFCo (100%-owned subsidiary of C4C)
  - Request for "Approval in Principle"
    - Smart-E as well as Energy Efficiency loans under the utility C&LM Plan
    - Part of a larger recapitalization of funding for CEEFCo
    - Expected closing in July or August 2019

Capital for Change

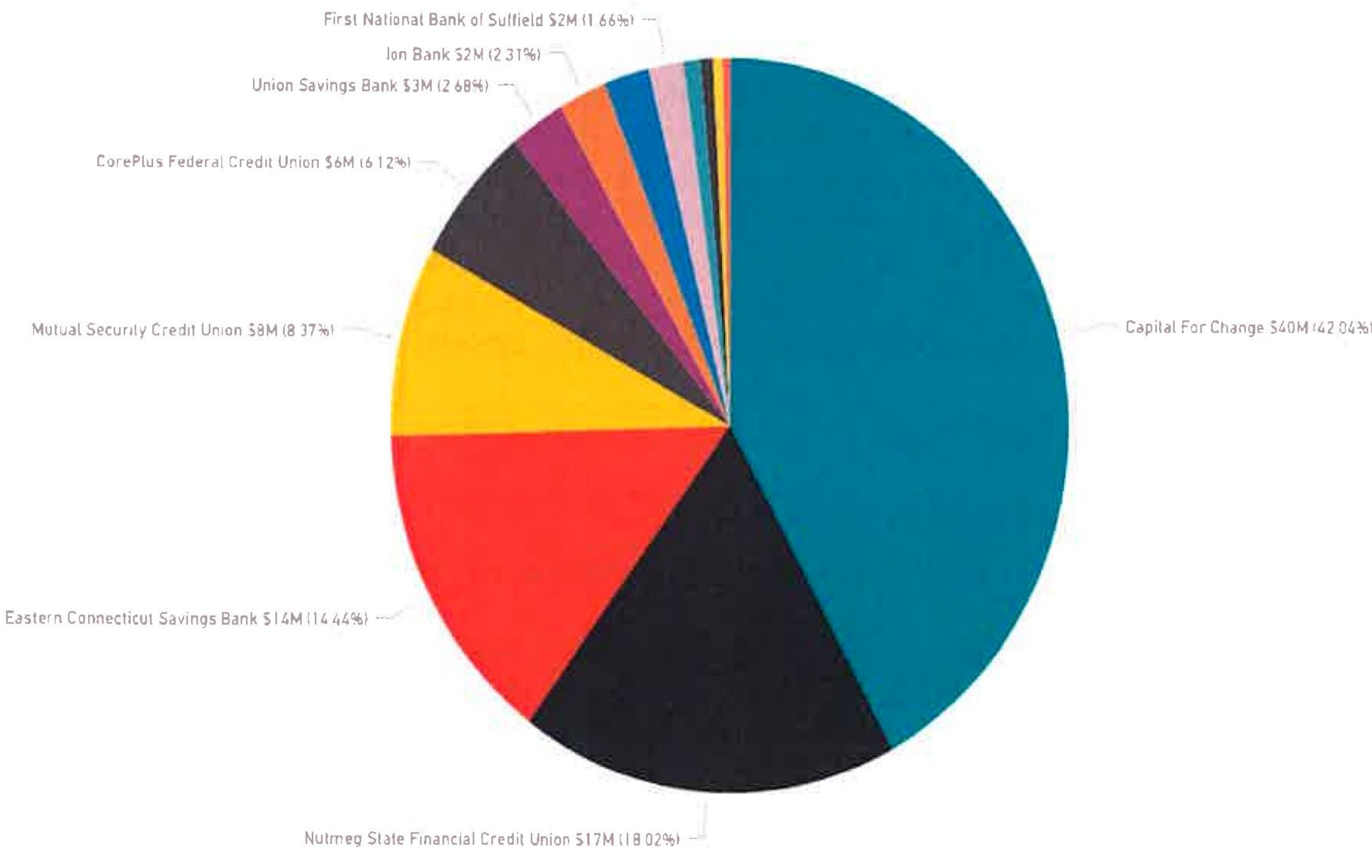
Capitalization for Smart-E & EE Loans

- Joined Smart-E late 2016
- Loan growth exceeding expectations
- Largest Smart-E lender
- Good dispersion of credits
  - As a CDFI, attracts more low / moderate income households
- Reasonable credit losses (approx. 1.75% … in line with nat'l avg)
- Problem is with Current Funding Line
  - Webster Bank LOC is amortizing (5 yrs vs 10 yrs for program loans)
  - Consequently – program loan growth (Smart-E and C&LM loans) are draining CEEFCo liquidity, stressing resources
  - If unaddressed, would need to stop originating loans until refinancing

Capital for Change

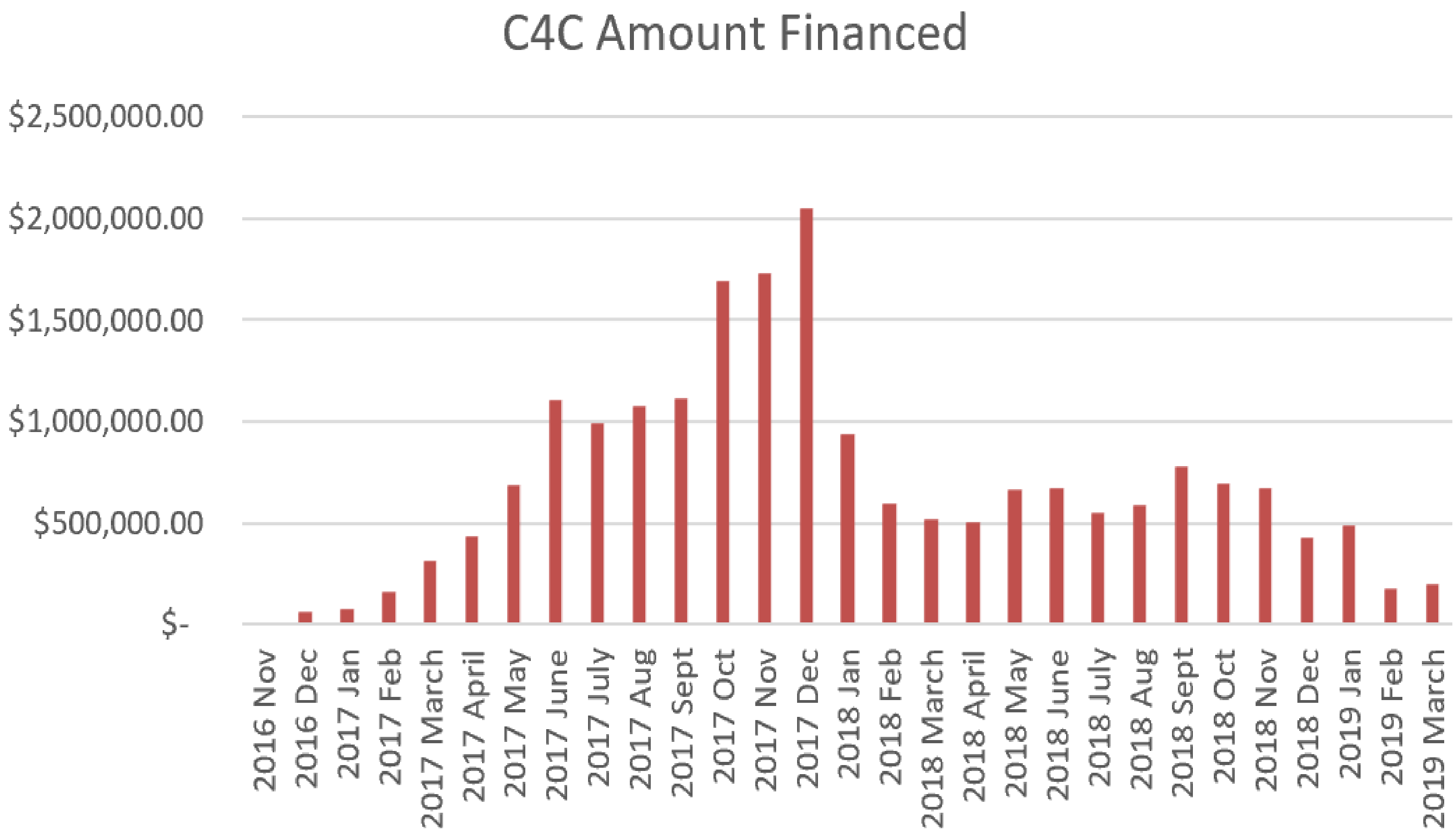
Capitalization for Smart-E & EE Loans

CLOSED CAPITAL DEPLOYED BY LENDER



Capital for Change

Capitalization for Smart-E & EE Loans



Capital for Change

Capitalization for Smart-E & EE Loans

	FYE 3/31/2017	FYE 3/31/2018	YTD 2/28/2019
Total Revenue & Support	$ 5,499,107	$ 7,098,692	$ 7,158,490
Total Expenses	$ 4,895,024	$ 5,781,970	$ 6,456,456
Change in Unrestricted Net Assets	$ 604,083	$ 1,316,722	$ 702,034
Cash	$ 4,548,090	$ 1,223,116	$ 1,531,232
Restricted Cash	$ 11,151,667	$ 7,361,837	$ 5,746,933
Loans	$ 35,901,299	$ 42,810,090	$ 49,343,728
Other	$ 2,506,426	$ 12,010,354	$ 24,351,619
	$ 54,107,482	$ 63,405,397	$ 80,973,512
Liabilities	$ 37,007,748	$ 46,000,689	$ 62,866,770
Net Assets			
Unrestricted	$ 9,412,496	$ 10,729,218	$ 11,431,252
Temporarily Restricted	$ 4,533,382	$ 3,521,634	$ 3,521,634
Permanently Resticted	$ 3,153,856	$ 3,153,856	$ 3,153,856
	$ 17,099,734	$ 17,404,708	$ 18,106,742
Liabilities & Net Assets	$ 54,107,482	$ 63,405,397	$ 80,973,512

Capital for Change

Capitalization for Smart-E & EE Loans

$1.5 million Bridge

- Deployment of up to $1.5M to C4C on an unsecured basis
- Finance incremental Smart-E loan growth
- Maturity six months from the initial draw date
- Interest rate of 1-month LIBOR + 1.75%
- Funding for incremental Smart-E loan activity vs. 3/31/19 levels
- The parent would be permitted to make intercompany advances to CEEFCo for this incremental activity using advances from Green Bank.

Capital for Change

Capitalization for Smart-E & EE Loans

$4.5 million medium term revolver

- "In principle approval"
- Up to a $4.5 million secured and subordinated medium term revolving loan to CEEFCo in partnership with private capital
- Satisfy C4C/CEEFCo's funding needs for energy efficiency and Smart-E loans booked by CEEFCo ("CEEFCo Revolving Loan")
- CEEFCo Revolving Loan will be a 1 to 3 year medium term revolving loan facility.
- The sole source of repayment for the CEEFCo Revolving Loan will be the proceeds from consumer loan payments of the CEEFCo loan portfolio and CEEFCo equity.
- Pricing is to be negotiated, but Green Bank interest yield would be equal to Senior Loan pricing, possibly with a small incremental margin to compensate Green Bank for its subordinate position.
- Staff would return to the Board once major terms and conditions have been agreed.

Capital for Change

Capitalization for Smart-E & EE Loans

RESOLVED, that the Board approves the C4C Bridge Loan in an amount of up to $1.5 million in capital from the Green Bank balance sheet in support of Smart-E Loans to be originated by C4C from and after March 31, 2019;

RESOLVED, that the Board approves "in principle" the CEEFCo Revolving Loan in an amount of up to $4.5 million in capital from the Green Bank balance sheet in support of energy efficiency and Smart-E Loans in partnership with private capital generally consistent with the memorandum submitted to the Board on April 23, 2019 and directs staff to submit the CEEFCo Revolving Loan for final approval once major terms and conditions have been agreed;

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the C4C Bridge Loan on such terms and conditions as are materially consistent with the memorandum submitted to the Board on April 23, 2019; and

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

CONNECTICUT GREEN BANK

Board of Directors

Agenda Item #4c

Investment Business

Loan Loss Decision Framework

Loan Loss Decision Framework
Restructuring ≥$100,000 and <$1,000,000

Type of Loss Anticipated	Amount of Principal Outstanding		
	<$100,000	$100,000-$1,000,000	>$1,000,000
Provisional Loss Reserve	Staff (with review and reporting from the Auditor)		
Restructuring	Staff	**Deployment**	BOD
Write-Off	Staff	ACG	BOD

Loan Loss Decision Framework is based on (1) amount of principal outstanding on a transaction, and (2) type of loss anticipated, with monthly (i.e., financials) and quarterly reports (i.e., Deployment Committee)

Given circumstances and safety issues with project, we need quick resolution

Naugatuck High School
Request for Waiver

- **Grant Agreement**
  - Jan. 6, 2009 agreement between Connecticut Innovations, Inc., acting as the administrator of the Connecticut Clean Energy Fund (CCEF), and Borough of Naugatuck.
  - $926,655 grant for a 385.4 kW-STC solar PV system at Naugatuck High School, 543 Rubber Ave, Naugatuck, through former On-Site Distributed Generation (OSDG) Program.
  - 518 amorphous silicon thin-film panels, integrated into the roof of the building, provided by Solar Integrated Technologies, Inc. (SIT), which went out of business in 2012.
- **Problem**
  - Ongoing equipment failures and shut-down October 2018 when solar PV inspector determined that the system was no longer repairable and had become a safety hazard.
  - Integrated solar panels were delaminating, allowing water to enter electrical junction boxes in the roof, causing small fires and damage to system and roof.
- **Resolution**
  - Based on “Force Majeure,” requesting waiver of any potential defaults under Agreement so that Naugatuck may move forward with removal of the solar panels and roof.
  - Naugatuck exploring financing for installation of new solar PV system.

Board of Directors

Agenda Item #5a

Other Business

Inclusive Prosperity Capital Update

Inclusive Prosperity Capital
Update

- **Progress to Targets**– Smart-E, Multifamily and LMI Single Family on track to meet or exceed targets. Commercial Solar PPA (jointly owned w/ Green Bank staff) lagging as overall commercial solar market is soft.

Product	# of Projects	Projects Target	% to goal	Total Financed $'s	Financed Target	% to goal	MW Installed	MW Target	% to goal
Smart-E Loan	577	540	107%	$7,359,982	$8,775,00	84%	0.60 MW	1.30 MW	47%
Multifamily	14	19	74%	$34,725,729	$2,570,000	1351%	0.3 MW	0.10 MW	261%
Solar PPA	17	25	68%	$6,332,283	$14,062,500	45%	3.6	6.3 MW	58%
LMI Single Family	566	586	96.6%	$16,367,234	$15,565,855	105%	4.00 MW	3.60 MW	110%

- **Use of DEEP Proceeds**– $5M capital grant received in November, $4.1M immediately deployed into PosiGen transaction alongside CT Green Bank; $1.5M Health and Safety Revolving Loan Fund assigned in November, $165K loan to Success Village approved.

- **General** – set up corporate infrastructure; received 501c3 designation; closed $10M Kresge guaranty and $300K/3-yr operating grant; closed $250K Hewlett grant; in diligence for $35-$40M of capital with 4 providers

Board of Directors

Agenda Item #5b

Other Business

Progress to Targets Update

C&I Progress to Targets
Through Q3 of FY 2019

Key Metrics	Program Performance Original Targets	Program Performance Revised Targets	Program Progress	% of Goal Achieved
Capital Deployed	$33,082,500	$33,082,500	$20,106,792	60%
Investment at Risk			$2,664,602	
Private Capital			$17,442,190	
Deployed (MW)	10.6	10.6	7.0	66%
# of Loans/Projects	73	73	42	57%
Leverage Ratio			7.6:1	

Take-Away Message – Collaborations with CT energy utilities are growing deployment and helping us reach new customer segments. Early demand for C-PACE New Construction projects under development is encouraging.

REFERENCES
Power BI through April 11, 2019

Residential Progress to Targets
Through Q3 of FY 2019

CONNECTICUT GREEN BANK

Key Metrics	Program Performance Original Targets	Program Performance Revised Targets	Program Progress	% of Goal Achieved
Capital Deployed	$26,910,855	$26,910,855	$58,452,945	217%
Investment at Risk			$5,103,375	
Private Capital			$53,349,570	
Deployed (MW)	5.0	5.0	4.8	97%
# of Loans/Projects	1,145	1,145	1,157	101%
Leverage Ratio			11:1	

Take-Away Message – steady progress with Smart-E Loan product with local contractors support for EE projects, “Solar for All” program delivering steady results for solar PV installs (including EE through ESAs), and multifamily programs supporting owners install solar along with roof repairs/ replacements, high efficiency heating and cooling systems as well as other energy and health and safety improvements.

REFERENCES
Power BI through March 31, 2019

Please note that capital deployed does not include all credit enhancements and uses amount financed rather than cost of the measures. Investment at Risk includes loss reserves and interest rate buydowns as well as capital.

Infrastructure Progress to Targets
Through Q3 of FY 2019

Key Metrics	Program Performance Original Targets	Program Performance Revised Targets	Program Progress	% of Goal Achieved
Capital Deployed	$168,000,000	$203,000,000	$167,083,383	82%
Investment at Risk			$12,503,978	
Private Capital			$154,579,405	
Deployed (MW)	48.0	58.0	47.9	83%
# of Loans/Projects	6,000	7,250	5,660	78%
Leverage Ratio			13:1	

Take-Away Message – FY19 volume higher than in prior years and is ahead of schedule on the updated target of 58 MW. Incentives are still low at ~8% of installed cost, resulting in a leverage ratio of 13:1.

REFERENCES
Green Bank Power BI data through March 31, 2019

Board of Directors

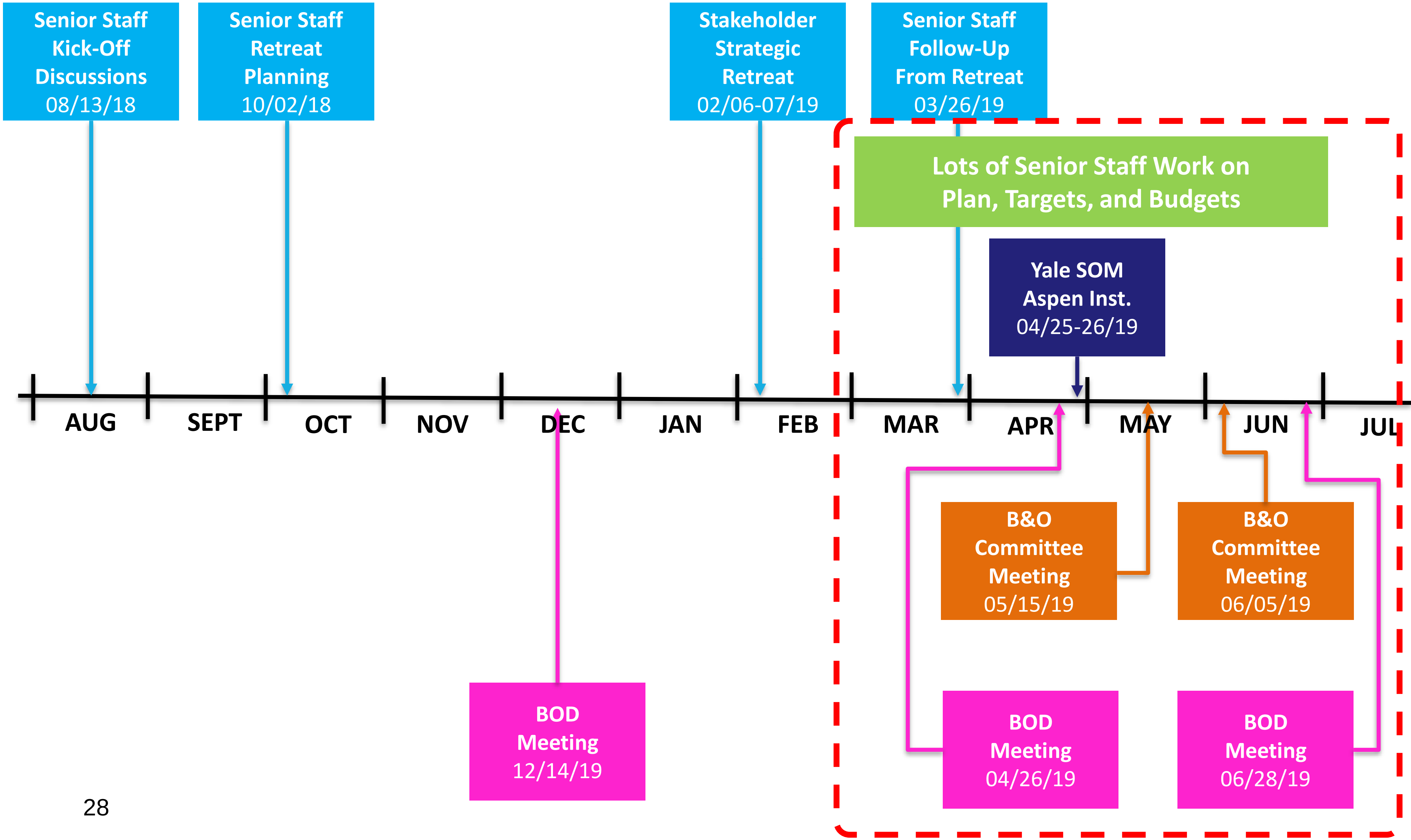
Agenda Item #5c

Other Business

Comprehensive Plan – FY 2020 and Beyond

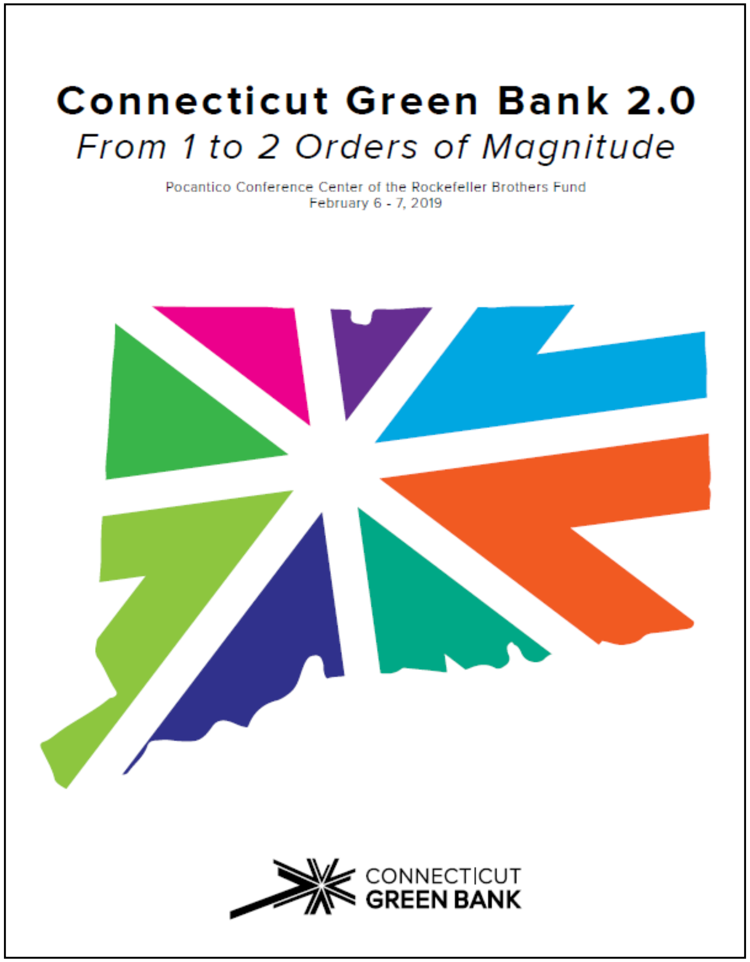
Strategic Planning

Timeline (FY 2019)



Comprehensive Plan
Components – PowerPoint Format

- Executive Summary
- Vision and Mission Statements
- Goals
- Governance and Organizational Structure
- Community Engagement and Climate Change Mitigation and Adaptation
- Business Lines – Incentive Business, Investment Business, and Research & Development
- Targets and Budget
- References


Connecticut Green Bank 2.0
From 1 to 2 Orders of Magnitude
Pocantico Conference Center of the Rockefeller Brothers Fund
February 6 - 7, 2019
CONNECTICUT GREEN BANK

Board of Directors

Agenda Item #5d

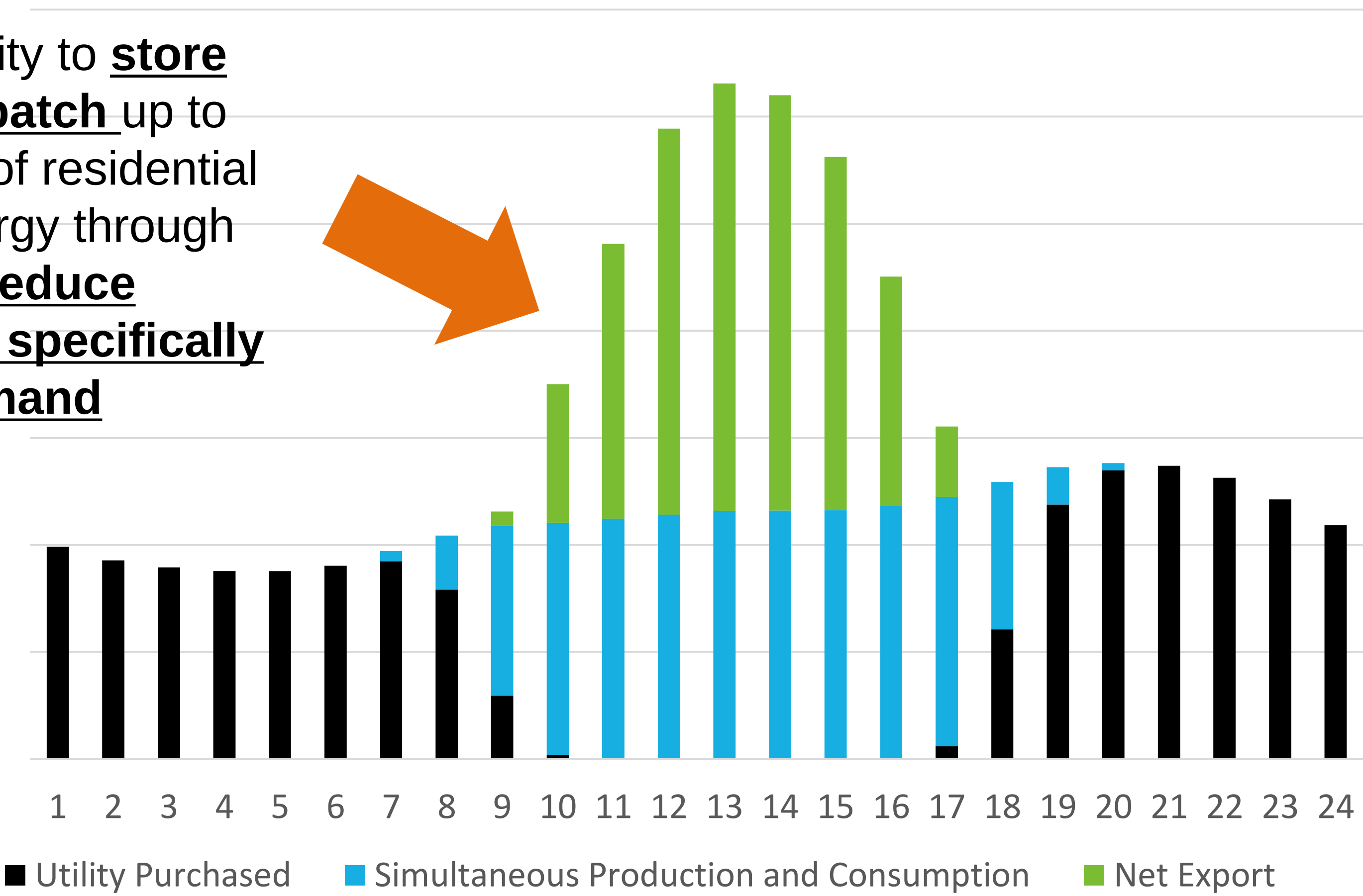
Other Business

Electric Efficiency Partners Program – Update

Residential Solar PV

Production, Consumption, and Net Export (Annual)

Opportunity to **store then dispatch** up to 150 MW of residential solar energy through RSIP **to reduce demand, specifically peak demand**



51% simultaneous production and consumption vs. 49% net export …turn net export into battery storage to reduce peak demand and for back-up

Incentive Structure

Proposed Declining Incentive Blocks

Incentive Block No.	Battery Storage Capacity Block (kW)	Utility or Program Benefit/Cost Ratio (UCT or PACT) (3.0% discount rate)	Incentive ($/kWh)
1	5,000	2.42	$500
2	5,000	2.85	$450
3	5,000	3.32	$400
4	5,000	3.74	$375
5	5,000	4.12	$350
6	5,000	4.55	$325
Total	**30,000**	**3.38**	

Next Steps
Timeline

- **<u>Partner Application</u>** – file an application to become a Partner under the EEP Program (September 28, 2018) – Docket No. 18-09-34 [Final Decision – Certificate of Public Convenience **– Approved**]

- **<u>Technology Application</u>** – file an application to seek approval of Technology under the EEP Program (December 21, 2018) – Docket No. 18-12-35 [Interrogatories – nearly 80 to date from PURA and DEEP – **In Process**]

- **<u>Program Launch</u>** – assuming the Technology Application is approved by July 1, 2019, launch the program by January 1, 2020 for battery storage.

Board of Directors

Agenda Item #5e

Other Business

Aspen Institute International MBA Case Study Competition

Aspen Institute

International MBA Case Study Competition

- **Business and Society Programs** – works with business executives and scholars to align business decisions and investments with the long-term health of society – and the planet.

- **Case Study Competition** – in its 10th year, the competition brings together 25 MBA programs and 1,000 students from around the world to compete on relevant "Business and Society" case studies – IBM's Corporate Service Corps, Walmart in Mexico, Trina Solar Manufacturing in the US, and Tata Group Sustainability Strategy in India. Three (3) rounds – on campus, "Top 25", and "Top 5" – and then "winner" announced at Yale Club in NYC.

- **Connecticut Green Bank and Inclusive Prosperity Capital** – the 2019 case study focuses on helping (1) the Green Bank formulate new programs or expansion of existing programs to meet new financial goals, and (2) IPC to outline strategy that will allow it to scale-up its programs while leveraging its association with the Green Bank to establish an independent identify.

CONNECTICUT GREEN BANK

Participating Schools

2019 Aspen Institute Case Study Competition

ΟΠΑ AUEB

Baruch COLLEGE

QUESTROM SCHOOL OF BUSINESS

Columbia Business School

1900 TUCK

DUQUESNE UNIVERSITY Palumbo-Donahue School of Business

East Carolina University College of Business

Gabelli School of Business

Griffith UNIVERSITY Griffith Business School

JOHNS HOPKINS CAREY BUSINESS SCHOOL

INCAE BUSINESS SCHOOL

CHICAGO BOOTH

MELBOURNE BUSINESS SCHOOL

NEW YORK UNIVERSITY NYU STERN LEONARD N. STERN SCHOOL OF BUSINESS

NORTHWESTERN UNIVERSITY Kellogg School of Management

Queen's Smith SCHOOL OF BUSINESS

THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, DC

1864 UNIVERSITY of DENVER DANIELS COLLEGE OF BUSINESS

JYVÄSKYLÄN YLIOPISTO UNIVERSITY OF JYVÄSKYLÄ

M ROSS

VILLANOVA BUSINESS

LAZARIDIS School of Business & Economics

Competitor Concepts

Main Areas of Recommendation for CGB and IPC

CONNECTICUT GREEN BANK

INCLUSIVE PROSPERITY CAPITAL

Expand Existing	Develop New Programs
1. **C-PACE** – H_2, **DR**, **Manufacturing**, and Multifamily	1. EV's (**Fleets – EVIP**, Bundles, **Recharging Stations**, **Metro North Upgrades**, Offsets)
2. H_2 Fuel Cells – Stationary and **MG**	2. **Green Bonding**, **UNSDG**, Crowdfunding, **Emission Markets**
	3. **Grid Modernization** –AI, **Data**, Block Chain, Smart Meters, Battery Storage, **Vehicle to Grid**

Strategies
1. **Smart-E** – **DR**, **expand to other states**, fuel cells
2. **Environmental Education** – workforce development, **fellows**, online education, **campaigns (EfficientNE)**
3. **National Expansion** – franchise, partner, **consult**, **certification**

Student-led teams identified a number of opportunities for CGB and IPC, including those from the **"Top 5" finalists**

Connecticut Green Bank

2019 Aspen Winner – Boston University

QUESTROM SCHOOL OF BUSINESS

Board of Directors

Agenda Item #5f

Other Business

Governor Lamont

Executive Order 1 – Lead by Example

STATE OF CONNECTICUT

BY HIS EXCELLENCY

NED LAMONT

EXECUTIVE ORDER NO. 1

CONNECTICUT SECRETARY OF THE STATE CAPITOL OFFICE

2019 APR 24 A 11:54

WHEREAS, Connecticut's leadership in planning and implementing a comprehensive, integrated strategy for sustainability is well established and has set an example for other states in integrating environmental, clean energy, and economic goals while reducing the cost of government operations; and

WHEREAS, the Global Warming Solutions Act of 2008, Public Act 08-98, and Public Act 18-82 established Connecticut as a leader in reducing harmful greenhouse gas (GHG) emissions by requiring a transition to more sources of low- and zero-carbon power generation in order to cut economy-wide GHG emissions to 10 percent below 1990 levels by 2020, to 45 percent below 2001 levels by 2030, and to 80 percent below 2001 levels by 2050; and

WHEREAS, the Comprehensive Materials Management Strategy provides a roadmap for achieving the state's goal, established pursuant to Public Act 14-94, of 60 percent diversion of materials from disposal by 2024; and

WHEREAS, the Final Draft of the State Water Plan recognizes the statutory establishment of water as a public trust, emphasizes the importance of water conservation for both natural resource protection and energy reduction, and recommends strategies to conserve water throughout the State; and

WHEREAS, reducing resource consumption and waste, while increasing the use of renewable energy, will help preserve our State's and our planet's environment for future generations and save taxpayer dollars through avoided energy costs, increased efficiency, improved health outcomes, and greater resiliency, while ensuring that Connecticut's facilities continue to perform their public service missions; and

WHEREAS, Connecticut has succeeded in reducing energy consumption and increasing energy efficiency in state facilities through its Lead By Example program since 2012, reducing electric consumption at state facilities by 8.3 million kilowatt hours and more than 100,000 MMBTUs through state participation in the Small Business Energy Advantage Program and bond-funded efficiency improvements, avoiding approximately $5.1 million in costs; and

WHEREAS, the 2018 report of the Governor's Council on Climate Change, established by Executive Order No. 46, called for a 45 percent reduction in GHG emissions below 2001 levels by

milestones, and responsible parties to achieve the sustainability goals and targets established by this Order, as well as the progress on achieving such goals and targets.

6. **Accountability and Authority.** Each Department Head, executive director, or agency chief executive shall be accountable for his or her department's or agency's compliance with this Order and the policies promulgated by the Steering Committee pursuant to it, provided that each agency head shall maintain all authority provided by law and may vary compliance with this Order when required by an emergency or the exigent need to protect public safety. Any action or variance as a result of any such emergency shall be reported to the Steering Committee by its next meeting, and shall be authorized only as long as necessary or as directed by the Governor.

This Order shall take effect immediately.

Dated at Hartford, Connecticut this 24th day of April, 2019.

Ned Lamont

Ned Lamont
Governor

By His Excellency's Order

Denise W. Merrill

Denise W. Merrill
Secretary of the State

Board of Directors

Agenda Item #6

Adjourn

Board of Directors of the
Connecticut Green Bank
Special Meeting Minutes

Friday, February 22, 2019
9:00 – 11:00 a.m.

A meeting of the Board of Directors of the **Connecticut Green Bank (the "Green Bank")** was held on Friday, February 22, 2019 at the office of the Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope Board Room.

Note - Since Governor Lamont was sworn in to office in January, there are new representatives assigned to the Board of Directors of the CT Green Bank and a new Chairperson has yet to be voted on or assigned. As such, Mr. Garcia deferred to the Committee asking if anyone was opposed to him acting as non-voting Chair for today's meeting—all gave their approval.

1. Call to order

Mr. Garcia called the meeting to order at 9:06 a.m.

Board members participating: Bettina Bronisz (by phone), Binu Chandy (representing DECD), , John Harrity (by phone), Mary Sotos (representing DEEP), Betsy Crum (by phone), Thomas Flynn (by phone), and Matt Ranelli (by phone)

Members Absent: Eric Brown, Kevin Walsh, Betsy Crum

Staff Attending: Emily Basham, George Bellas (by phone), Mackey Dykes, Brian Farnen, Bryan Garcia, Isabelle M. Hazlewood, Dale Hedman, Bert Hunter, Alex Kovtunenko, Jane Murphy, Selya Price, Cheryl Samuels, Eric Shrago and Barbara Waters

2. **Public Comments**

None – Only Board Members and staff in attendance

3. Consent Agenda

Mr. Garcia reviewed items in Consent Agenda including the retirement of Dale Hedman and George Bellas and the employees newly promoted: Selya Price and Jane Murphy respectively. Mr. Garcia asked if there was any discussion of items in the Consent Agenda whereupon Mr. Ranelli asked if there was any dissent on approving the revised position description would {the respected and esteemed} Dale and George stay on (no offense to Ms. Price and Ms. Murphy, of course.)

Resolution #1
Motion to approve meeting minutes of the Board of Directors for December 14, 2018.

Resolution #2
Motion to approve the position descriptions for Director of Infrastructure Programs.

Upon a motion made by John Harrity and seconded by Matt Ranelli the Consent Agenda was approved unanimously.

4. Cash Flow Update of the Connecticut Green Bank – presented by Bert Hunter

Mr. Hunter began stating there was no material change since the December report to the Board. He reviewed the actuals thru January 2019 prepared by Jane Murphy and George Bellas and although the projected cash balance for June 2019 indicates a slight downward revision to the prior estimate, the forecast that the Board will review at its next meeting may see this year end balance increase somewhat due to additional sources of income the Green Bank may realize. Mr. Hunter went on to say that there has been some adjustment to the monthly cash movements, indicating that a major cash use would have been for the New London subbase fuel cell project, but FCE made other financing available for that project and Green Bank funds were not necessary. Mr. Hunter noted that Finance and Legal are moving ahead to complete and submit the documentation to secure the $5 million working capital facility from Amalgamated Bank. The timing for the SHREC securitization closing is expected to be toward the end of March with some of the funds being utilized to retire the Webster-Liberty SHREC warehouse funding facility and for a C-PACE portfolio re-acquisition. If the closing of the securitization should slip, both the repayment to Webster and Liberty as well as the portfolio reaquisition are tied to the securitization closing, so any delay will have a nil effect on cash. The working capital funds will be available in April 2019 (and the closing for the Amalgamated facility will be following the closing of the securitization and the repayment of the Webster-Liberty loan).

5. Governance

a. Welcome to New Members
Mr. Garcia welcomed new Board members. Mr. Shawn Wooden was elected as Connecticut's new Treasurer and he has appointed Bettina Bronisz to continue to represent the Treasurer's office and serve on the Green Bank Board of Directors. Mrs. Katie Dykes was appointed by Governor Lamont to head the Department of Energy and Environmental Protection ("DEEP"). Mrs. Dykes has designated Mary Sotos, Deputy Commissioner of Energy, to serve as her representative on the Green Bank Board of Directors. Mr. Garcia stated that having worked in other capacities with Ms. Sotos he looks forward to her contributions to the Green Bank. Ms. Sotos shared that she looks forward to the integration of teams and programs, reviewing

the policy landscape for moving forward new initiatives and looks forward to getting up to speed. Mr. David Kooris, Acting Commissioner of DECD has designated Binu Chandy to serve as the Department of Economic & Community Development (DECD) representative on the Green Bank Board of Directors. Ms. Chandy has served in the brownfields department at DECD within the Office of Engineering and has a public administration background. She was appointed less than 24 hours before the Board meeting to represent DECD Commissioner Lehman and looks forward to getting up to speed and is excited about working with the Green Bank team.

b. Election of Vice-Chair

Mr. Farnen and Mr. Garcia presented nomination of the Vice-Chair position of the Green Bank Board to Ms. Sotos. In the past the DEEP representative serving on the Board has been the Vice-Chair and Mr. Farnen recommended employing that practice in the future.

Resolution #3

Motion to elect a Director to serve as the Vice-Chair of the Board of Directors pursuant to the Connecticut Green Bank bylaws.

Upon a motion made by John Harrity and seconded by Matt Ranelli, Resolution 3 was approved unanimously.

6. Incentive Business Updates and Recommendations

a. SHREC Update

Mr. Hunter related to Board that the Royal Bank of Canada (RBC) has provided structure options that maximize the value of the issuance meaning they are able to maximize the funds the Green Bank will receive at a reasonable, market appropriate interest rate. Mr. Hunter and Ms. Louise Venables (not in meeting) had a conference meeting with RBC and have arranged for the Green Bank Finance team members to meet with investors at the end of February 2019 to discuss the proposed bond issuance.

The rating agency (Kroll) is currently reviewing the structure options. Mr. Hunter expects feedback from Kroll on the rating (for the transaction) in the first week of March 2019.

Mr. Hunter explained that the SHREC program includes the revenues from renewable energy credits generated by solar PV systems on homes of Connecticut households participating in the RSIP. These SHRECs are sold to the utility over 15 years. The SHREC's are being securitized as 'ABS Notes' (asset backed securities). He further explained that the issuer of the notes will be a new LLC that will be established under the Green Bank.

Mr. Hunter presented marketing information to the Board that is similar to the information to be discussed with investors. He thanked all who contributed including Selya and the Deployment Team, as well as Eric and Lucy for putting the information together to be able to market the note to investors appropriately. Mr. Hunter further thanked Brian Farnen Loyola French and outside legal counsel for their contributions to ensuring the legal documents are in order.

Mr. Hunter also presented a SHREC transaction diagram for further edification of the plan and timeframes for funding. The "A/B" structure would secure a $36 million (expected) "A-" rated Senior Note and an (expected) "BB-" rated $4Mil Junior Note. Mr. Hunter pointed out that if rate for the Junior Note is raised (to "BBB-"), the bond buyers may provide less (e.g., $3.0 to $3.5 million) in funding.

Mr. Garcia asked if there were any questions from the Board. Ms. Bronisz had a question about bonds. Mr. Hunter related that bond maturity is 15 years with a weighted average life just inside 8 years. Mr. Garcia pointed out that these funds will enable the Green Bank to pay back the Webster-Liberty warehouse.

b. RSIP Update – Program and Policy Program - Ms. Hazlewood presented a February 2019 analysis of RSIP performance in reaching minority households. Ms. Hazlewood explained that Green Bank programs focused on reaching low-to-moderate income (LMI) households, such as the *Solar for All* program with PosiGen, had resulted in a 187% increase in solar adoption in LMI communities since 2015. However, Green Bank had not yet analyzed whether this progress also resulted in increased solar penetration in minority communities, which according to a 2019 study from Tufts University was low nationally. The team looked at the distribution of minority populations in CT by census tract to determine the distribution of owner-occupied 1-4 unit homes in predominantly minority census tracts and compared these figures to RSIP performance. Ms. Hazlewood explained that RSIP distribution is on par or in some cases exceeds the distribution of 1-4 unit Owner Occupied Homes (OOH) in minority census tracts—inclusive of income. Ms. Hazlewood also showed that PosiGen installations in particular show strong representation in LMI and minority communities. Therefore, the study finds that the RSIP has achieved success in reaching both low-income and minority communities but that there are additional opportunities in LMI and minority communities for solar projects and green initiatives.

Mr. Ranelli commented that this information is a huge accomplishment and effort that all are bringing forth. He recommends reaching out to the Fair Housing Authority with these results so they may assist with future challenges. Mr. Hunter and Mr. Garcia have attended events with the Black and Puerto Rican Caucus to market and network within those communities. Mr. Hunter stated that this is great work by staff to bring the results of solar PV not penetrating to minority communities to light – and the success of the Green Bank's program in changing this in Connecticut. Mr. Hunter further stated that these results should possibly be brought to CBEY at Yale as they have more reach in order to publicize this research. Ms. Sotos asked what ingredients have been met to meet the goals of marketing to these LMI and minority communities? Ms. Basham addressed her question by relating the strong marketing style of PosiGen; they work within the communities with strong outreach to community organizations, religious leaders/organizations which has fostered an obvious confidence by the community. Mr. Hunter further related that PosiGen hires locally and has plans for a call-in center that could be established in an LMI community (this is in discussions with officials of DECD).

Mr. Garcia thanked everyone for the hard work and asked all to keep it up!
Ms. Price thanked Ms. Hazlewood and Ms. Basham for their work and contributions to today's meeting. Ms. Price also thanked Mr. Hedman (retiree) for setting up a solid basis on which to move forward; thanked him for staying on to assist as well. Ms. Price stated the Green Bank is getting close to the RSIP goal of 300 megawatts (MW). Currently about 5-6 MW per month is being approved and the program could reach the statutory RSIP target of 300 MW by September-October 2019. As RSIP phases out, the focus will be on the policy objective to support and foster the sustained orderly development of the local solar industry as provided for in the RSIP governing statute. As the RSIP may end by September-October 2019, the

legislature and stakeholders are considering what to do. Since the utilities do not have all the needed metering and billing systems in place to fully implement the tariff; UI is about 6-9 months out and Eversource is likely about 2 years out, an interim policy is needed. Possible options are maintaining net metering but without ongoing RSIP incentives (once RSIP reaches 300 MW) or buying more time by increasing the RSIP target by 50-100 MW. Mr. Ranelli asked why we don't have a position on the best option for this transition. Ms. Price stated that there are multiple options that may achieve the objective of sustained orderly development. She also added that the Green Bank team had provided a lot of input to PURA on the interim tariff policy. New tariffs could be in place by 2021-2022 and the ITC would phase out by 2022; the tariff structure provided for in PA 18-50 allows for the tariff rate to account for an increased cost to the customer as the ITC phases out. Mr. Ranelli stated he understood the tariff issue and asked how the legislature is going to make a decision on the transition policy? Ms. Price stated Mr. (Matt) Macunas (not in meeting) and Mr. Farnen are engaging legislators and offering possible transition options. Mr. Ranelli stated he wants to understand more about this transition and asked that a presentation be made at the next Deployment Committee meeting. Mr. Garcia stated that staff will present the legislative and policy information and current position for the review of the Deployment Committee. Ms. Sotos asked if we feel ready to step down from incentives for solar installation for LMI customers. Mr. Hunter provided a 'punch bowl' analogy – suggesting that just when LMI customers are discovering and acquiring the benefits of solar PV, state policymakers are, in effect, saying "the party is over – sorry you didn't get here sooner". Mr. Ranelli agreed - stating we should over-incentivize the LMI programs to close the gap on those projects and area. Mr. Garcia stated they would look proportionally at those figures (i.e., the added PBI incentive to LMI participants). Ms. Price shared that the Green Bank has only had significant deployment in LMI communities in recent years and she does not want to lose that. She thanked Mr. Ranelli for giving us a pause to look further at the transition plan.

7. Investment Business Updates and Recommendations

a. <u>C-PACE Transaction – Fairfield</u>

Mr. Dykes presented that this project is for property owned by]a owner with a large portfolio in the Fairfield/CT area.

Ms. Hazlewood related that this project will be the first in the ConnectSun program, a "Pilot Program" for testing avoiding grid infrastructure cost by using distributed energy resources.

Mr. Dykes reviewed the terms and conditions and key financial metrics with the Board .

<u>Resolution #4</u>

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

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

WHEREAS, the Green Bank seeks to provide a **$645,286** construction and (potentially) term loan under the C-PACE program to 1305 Post Road, LLC., the building owner of 1305 Post Road, Fairfield, Connecticut (the “Loan”), to finance the construction of specified clean energy measures in line with the State’s Comprehensive Energy Strategy and the Green Bank’s Strategic Plan; and

WHEREAS, the Green Bank may also provide a short-term unsecured loan (the “Feasibility Study Loan”) from a portion of the Loan amount, to finance the feasibility study or energy audit required by the C-PACE authorizing statute, and such Feasibility Study Loan would become part of the Loan and be repaid to the Green Bank upon the execution of the Loan documents.

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank is authorized to execute and deliver the Loan and, if applicable, a Feasibility Study Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Committee dated February 20, 2019, 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 of Directors.

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

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

Upon a motion made by Matt Ranelli and seconded by Mary Sotos, Resolution 4 was approved unanimously.

b. FuelCell Energy Project Financings (Updates)

Mr. Hunter explained that great progress has been made since last board meeting for the New London Subbase project. There is $23 million in construction financing that has been arranged from 5th 3rd Bank as well as $18 million in term loans from two community banks. Staff expects the closing on the construction loan to happen in a matter of days.

For the Bridgeport FuelCell Park Acquisition; FuelCell Energy is re-acquiring a fuel cell project they built in Bridgeport and sold to Dominion in 2012. The Green Bank is assisting and providing financing for the re-acquisition. A facility totaling $31 million (including $6 million from the Green Bank) has been committed. The closing is set for March 2019.

For both transactions, final terms of the subordinated loan amortization profiles are being negotiated but will have ultimate maturity dates in line with prior Green Bank Board approval.

Ms. Sotos asked about the FuelCell program attaching to micro-grid which Mr. Hunter stated is scheduled for construction to commence after the fuel cell is completed – which would suggest the microgrid would be completed in late 2020 or early 2021.

8. **Other Business**

a. Strategic Retreat (Update)

Mr. Garcia presented an update of the retreat and the FY2018 – FY2019 Plan. The goals were to re-envision the types of investments to make in the future in the $250-$300Mil per year clean energy economy that the Green Bank is involved in and how to scale up by 10-fold. Facilitated by Jonathan Rabb there were 28 participants at the retreat of which half were stakeholders and other half employee or board members. They had a "Green"-storming agenda which included; the lifecycle of projects, when to exit a market, inclusive capitalism—with which speaker inspired team, current and potential funding, headline exercise. Mr. Garcia is drafting a memo summarizing the retreat to be issued to the Board next week.

The CT wedges include how we can reduce greenhouse gas emissions. We should believe in CT's role and punch above our 'weight'. Having an impact not just in CT but across the country.

Within IPC; consider Green Bank's continued leadership focus, Commissioner Smith joined retreat to share how Green Bank can be financially sustainable—needing to keep our 'piece of the pie' but also grow the 'pie'. Also look at bonding by starting small; some internal employees and Board members to build on and build a team to determine how bonding moves forward. On a positive note, Governor Lamont expressed in his budget speech that he will not propose a budget that sweeps funds from the Energy Efficiency Fund and the Green Bank The Green Bank should be reviewing criteria to build out green initiatives. Take the powerful words of Mary Tucker to make a vision. Engaging the community more to build demand for green energy and residents who would support Green Bank initiatives.

Mr. Garcia related that in the past the Green Bank has made more achievements than expected and he feels that can continue. Mr. Harrity related he feels good about his grandson's future. There were good sessions at the retreat which only built his esteem in the Green Bank and he feels we can do more and enjoys participating in the Green Bank initiatives. Ms. Sotos shared that the retreat included a great program, beautiful location and great progress.

Mr. Garcia related the next steps are to; 1) prepare summary memo, 2) make individual meeting with Board members for feedback, 3) "in pursuit of inclusive prosperity" case study done by Yale – what should be next for the Green Bank, 4) Budget Plan process and 5) Budget, Operations and Board.

b. Legislative Update

Mr. Farnen provided a legislative update and solicited feedback.

Mr. Garcia added one more note that Mr. (Eric) Brown (not in meeting) is utilizing the new marketing tool of a joint fact sheet between the Green Bank and the Energy Efficiency Fund to disseminate information on joint initiatives to legislators and others at legislative meetings.

9. Adjourn

Upon a motion made by John Harrity, and seconded by Matt Ranelli, the meeting was adjourned at 10:47am.

Respectfully submitted,

Matthew Ranelli, Secretary

Board of Directors of the
Connecticut Green Bank
Special Meeting Minutes

Friday, March 29, 2019
8:00 – 9:00 a.m.

A special meeting of the Board of Directors of the **Connecticut Green Bank (the "Green Bank")** was held on Friday, March 29, 2019 at the office of the Connecticut Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope Board Room.

Note - Since Governor Lamont was sworn in to office in January, there are new representatives assigned to the Board of Directors of the CT Green Bank and a new Chairperson has yet to be voted on or assigned. As such, Mr. Garcia deferred to the Board asking if anyone was opposed to him acting as Chair for today's meeting—all gave their approval.

1. Call to order

Mr. Garcia called the meeting to order at 8:04 a.m.

Board members participating: Bettina Bronisz (by phone), Binu Chandy (by phone), Thomas M. Flynn (by phone), John Harrity (by phone), Mary Sotos (by phone), Matt Ranelli (by phone)

Members Absent: Eric Brown, Betsy Crum, Kevin Walsh

Staff Attending: Brian Farnen, Bryan Garcia, Bert Hunter, Jane Murphy, Cheryl Samuels, Eric Shrago, Louise Venables (by phone)

Others Attending: Bob Lamb (by phone)

2. Public Comments

None – Only Board Members and staff in attendance

3. Incentive Business Recommendation

a. SHREC Securitization Sale

Mr. Garcia stated this is a milestone moment for the Connecticut Green Bank ("Green Bank") and its implementation of the Sustainability Plan as the team presents to the Board the SHREC securitization sale.

Mr. Bert Hunter began by acknowledging that this program came together with the approval of the Board and recognized the following staff for their hard work:

Mike Yu – Finance Team
Louise Venables – Finance Team (while Mike Yu on Paternity Leave)
Brian Farnen – Legal
Loyola French – Legal
Dale Hedman (retiree) – Infrastructure Programs
Selya Price – Infrastructure Programs
Eric Shrago – Operations
Lucy Charpentier – Operations
George Bellas (retiree) – Accounting
Jane Murphy – Accounting

Ms. Louise Venables began presentation with the transaction highlights; the Green Bank expects to issue its inaugural ABS transaction, backed by cash flows received from Solar Home Renewable Energy Credits ("SHREC's".) A SHREC is created when a qualifying residential solar PV system participating in the Green Bank's Residential Solar Incentive Program ("RSIP") generates 1 MW hour of electricity. Under a Master Purchase Agreement, the Green Bank sells SHREC tranches to Connecticut's two investment grade utilities at a predetermined price over a 15-year tranche lifetime. The SHREC 2019-1 is a verified green bond certified by Kestrel Verifiers. The Climate Action Reserve organization provides an impact statement and the transaction has a senior-subordinate structure rated by Kroll. Ms. Venables reviewed the capital structure displayed in the table on the slide. Credit enhancement will consist of subordination of the Class B note, overcollateralization and a liquidity reserve. During the marketing of the issuance, it was determined that both levels of Class A and Class B having an investment grade rating was preferred as advised by the Royal Bank of Canada Capital Markets team ("RBC"). This structure includes investor friendly features including a DSCR Early Amortization Event trigger to accelerate notes in the event of lower than expected production of SHRECs and cash flow and a DSCR Sequential Interest Amortization Event trigger providing additional protection for the Class A notes. Ms. Venables stated there is a strong historical performance of usage and production and SHREC's have a fixed price for Tranche 1 and Tranche 2 over the next 15 years – there is strong evidence of growth.

Ms. Venables continued with a review of the transaction diagram identifying that the LLC created to take ownership of the SHRECs from its Green Bank parent providing security for the noteholders. She also reviewed the Priority of Payments slide regarding the securitization and payments with the priority of the SHREC payments. Mr. Hunter pointed out there are many cash flows uses along the cash flow waterfall (13-15 steps) that need to be addressed. Ms. Bronisz asked about distribution waterfall to which Ms. Venables pointed out the liquidity reserve in place at Level 4 of the priority of payments schedule.

Mr. Hunter added that deal is funded to $1 million reserve up front and has confirmation of final investment grade rating from Kroll.

Ms. Venables reviewed the final approval, rating and structure of sale; there is a single investor from Global Atlantic Financial Investor Group which has an S&P rating of A- (excellent/strong.) It is $2.5 million to fund the transaction and the scheduled closing is Tuesday, April 2, 2019. The bond is structured in two 'Classes'; Senior Notes, Class A, valued at $36.8 million and Subordinate Notes, Class B valued at $1.8 million. The Kroll ratings are A- on the Class A and BBB- on the Class B denoting a fully investment grade transaction and no use of the Special Capital Reserve Fund (SCRF.) The pricing was agreed upon on March 26, 2019 with investor with 5.15% on the Class A and 7.15% on the Class B. The investor has placed its order for the full $38.6 million Notes.

Mr. Hunter reviewed the gross proceeds of the transaction and reiterated that RBC is the structuring agent on this transaction. He further advised there were minor out of pocket transaction expenses (as detailed in page 2 slide of the Final Approval). He also walked the Board through the other cash reconciliation items on the allocation of proceeds slide. The accounting firm KPMG performed the agreed upon procedures engagement and performed the necessary due diligence. There is also an Indenture Trustee who ensures the funds are transferred where appropriate. Ms. Bronisz questioned if all the expenses should be $800,000 and Mr. Hunter agreed – pointing out some slight confusion in the slide line items.He also observed that the expenses for the transaction are pretty "eye-popping". However Mr. Hunter feels that—after going through this process for the first time—future expenses will be lower for these types of transactions. Mr. Farnen pointed out that there was a cap on fees if deal closed in 2018 but since transaction is closing in 2019 and due to the unique and first of its kind securitization, expenses were somewhat higher. Mr. Farnen stated future agreements will have applicable caps in place and be less expensive since the structure between the parties has been established.

Mr. Hunter stated that the team is quite pleased with the overall deal and outcome of 5¼% as the Finance team's target was not to exceed 6%. Improvement in the bond market helped with the interest rate and team did not need to proceed with the SCRF.

Mr. Farnen stated that Ms. Cheryl Samuels has issued a slightly revised copy of the resolution and requests a motion to approve Resolution 1.

Both Ms. Bronisz and Mr. Flynn noted a "job well done" to staff/team. Ms. Mary Sotos asked how often for future Bond offering to which Mr. Farnen responded that team working on first and second Tranches now and for future Tranches the structure is already set up. Mr. Hunter added that team now knows how to market and the infrastructure for future issuances is there. It was pointed out that Tranche 3 is currently being reviewed by PURA for future sale which Mr. Hunter confirmed is accurate and hopeful for future transactions but it was also pointed out that the Green Bank may only be able to complete one sale transaction a year.

Mr. Garcia asked if there were any other questions and moved for a vote on the motion.

Resolution #1

WHEREAS, pursuant to Connecticut's Residential Solar Incentive Program ("**RSIP**"), the Green Bank provides incentives to homeowners and third-party system owners ("**TPOs**") to deploy residential photovoltaic ("**PV**") systems (each, a "**SHREC System**"); and

WHEREAS, pursuant to Public Act No. 16-212 and Public Act No. 15-194, the Green Bank acquires a specific type of Renewable Energy Credit ("**REC**") called a "solar home renewable energy credit" and the related environmental attributes (collectively, a "**SHREC**") from the homeowners and TPOs receiving RSIP incentives and producing PV energy, and then sells such SHRECs to each of The Connecticut Light and Power Company d/b/a Eversource Energy ("**Eversource**") and The United Illuminating Company ("**United Illuminating**" and together with Eversource, each, a "**Utility**" and together, the "**Utilities**") pursuant to two 15-year contracts dated as of February 7, 2017 and amended as of July 30, 2018 (each, a "**Master Purchase Agreement**" and together, the "**Master Purchase Agreements**"); and

WHEREAS, the SHRECs are divided into tranches based on the calendar year in which the related SHREC System was installed (each, a "**SHREC Tranche**"), and the revenue received from the Utilities under each Master Purchase Agreement for SHRECs actually produced at the price determined by Green Bank for each SHREC (the "**SHREC Receivables**") is established for each SHREC Tranche; and

WHEREAS, the SHRECs related to SHREC Systems for which a tranche was created in 2017 are referred to as "**SHREC Tranche 1,** and the SHRECs related to SHREC Systems for which a tranche was created in 2018 are referred to as "**SHREC Tranche 2**"; and

WHEREAS, as the Green Bank acquires the SHRECs from the homeowners and TPOs and before selling the SHRECs to the Utilities, the Green Bank desires to fund its cost recovery under the RSIP by selling notes secured by the SHREC Receivables under the Master Purchase Agreements and other assets of the Issuer; and

WHEREAS, the Board of Directors has determined that it is in the best interest of the Green Bank to form a special purpose Delaware limited liability company that is a wholly-owned subsidiary of the Green Bank to enter into a base indenture that will allow the Green Bank to issue one or more series of notes pursuant to one or more series indenture supplements thereto, with the obligations under each separate series of notes secured by SHREC Receivables from one or more of the SHREC Tranches and other assets of the issuer of the notes; and

WHEREAS, the Green Bank has formed SHREC ABS 1 LLC (the "**Issuer**") as a special purpose Delaware limited liability company that is a wholly-owned subsidiary of the Green Bank for the purpose of issuing the notes; and

WHEREAS, the Green Bank considers it necessary, appropriate and desirable to offer for sale, and to sell two classes (each, a "**Class**") of Series 2019-1 Notes as follows: (i) approximately $36,800,000 of Class A Notes (the "**Series 2019-1 Class A Notes**") and (ii) approximately $1,800,000 of Series 2019-1 of Class B Notes (the "**Series 2019-1 Class B Notes**", and together with the Series 2019-1 Class A Notes, the "**Series 2019-1 Notes**") in offerings intended to be exempt from registration under the Securities Act of 1933, as amended (the "**Securities Act**") or registered or qualified under any state securities laws, by virtue of the Series 2019-1 Notes not being offered or sold within the United States to U.S. persons except to "qualified institutional purchasers" as defined in Rule 144A under the Securities Act or offered or sold only to non-U.S. persons in transactions outside of the United States and in reliance on Regulation S (the "**Offering**"); and

WHEREAS, the Board of Directors of the Green Bank has determined that it is in the best interest of the Green Bank to enter into and approve the Offering;

NOW, therefore be it:

RESOLVED, that the form, terms and provisions of the Preliminary Offering Memorandum for the Offering dated as of or about March 11, 2019 and the Final Offering Memorandum for the Offering dated as of or about March 27, 2019 be, and they hereby are, approved; and further

RESOLVED, that in connection with the Offering, the President and any Officer the Green Bank (each, a "**Proper Officer**") be, and each of them acting individually hereby is, authorized and directed in the name and on behalf of the Green Bank to prepare and deliver, or cause to be prepared and delivered, a Preliminary Offering Memorandum and a Final Offering Memorandum relating to the Offering, including any revisions thereof and amendments and supplements thereto containing such information and including any and all exhibits and other documents relating thereto, and to prepare and deliver, or cause to be prepared and delivered, any other certificates, instruments, papers and other documents, and to take any and all such further action, as may be deemed necessary, appropriate or desirable by any Proper Officer of the Green Bank in connection with the foregoing; and further

RESOLVED, that the Green Bank enter into a Limited Liability Company Agreement for the Issuer that provides for an independent manager and special member with the intention of creating a bankruptcy remote subsidiary to acquire, own, hold, administer, finance, manage, sell and pledge a pool of renewable energy credits generated under the Green Bank's Solar Home Renewable Credit program and the issuance of one or more classes or series of notes to be paid solely from, and secured by, such assets pursuant to the terms of a base indenture and one or more supplements thereto between the Green Bank and The Bank of New York Mellon Trust Company, N.A., as Trustee; and further

RESOLVED, that the form, terms and provisions of the Limited Liability Company Agreement be, and they hereby are, approved; and further

RESOLVED, that the Green Bank enter into a Management Agreement with the Issuer, under which the Manager will act on behalf of the Issuer with respect to certain actions relating to the Collateral (as defined in the Base Indenture), including managing the Issuer's rights and obligations under the Master Purchase Agreements, the purchase and sale of SHRECs on behalf of the Issuer and exercising certain other rights and perform certain other duties on behalf of the Issuer; and further

RESOLVED, that the form, terms and provisions of the Management Agreement be, and they hereby are, approved; and further

RESOLVED, that the Green Bank enter into the Sale and Contribution Agreement between the Green Bank and the Issuer under which the Green Bank will sell and transfer to the Issuer all of the Green Bank's right, title and interest in and to the SHREC Receivables in respect of SHRECs in SHREC Tranche 1 and SHREC Tranche 2 under the Master Purchase Agreements, all related assets, all payments made or to be made by any Person on or after the related Series 2019-1 cut-off date in respect of such SHRECs, and the "**SHREC Assets**" (consisting of any additional SHRECs and the SHREC Receivables in respect of the Series 2019-1 SHRECs, and all rights and obligations of the Green Bank relating to the Series 2019-1 SHRECs and SHREC Tranche 1 and SHREC Tranche 2 under the Master Purchase Agreements and all related assets), and all proceeds of any of the and all of the related assets generated under the

Master Purchase Agreements (the “**Series 2019-1 Collateral**”) and such additional SHRECs and related rights as may be transferred by the Green Bank to the Issuer at a later transfer date; and further

RESOLVED, that the form, terms and provisions of the Sale and Contribution Agreement be, and they hereby are, approved; and further

RESOLVED, that the Green Bank, as Manager of the Issuer, enter into a Base Indenture and a series indenture supplement thereto (the “**Series 2019-1 Indenture Supplement**”), between the Issuer and The Bank of New York Mellon Trust Company, N.A., as Trustee (the “**Indenture**”), pursuant to which the Issuer will assign to the Trustee for the benefit of the holders of the Series 2019-1 Notes all of the Series 2019-1 Collateral; and further

RESOLVED, that the form, terms and provisions of the Base Indenture and the Series 2019-1 Indenture Supplement be, and they hereby are, approved; and further

RESOLVED, that the Series 2019-1 Notes be sold to the RBC Capital Markets, LLC, as the initial purchaser (the “**Initial Purchaser**”), under the terms and conditions of a Note Purchase Agreement entered into by the Issuer in connection with the issuance of the Series 2019-1 Notes; and further

RESOLVED, that the form, terms and provisions of the Series 2019-1 Notes be, and they hereby are, approved; and further

RESOLVED, that certain of the Series 2019-1 Collateral shall be pledged pursuant to the Collateral Account Control Agreements with The Bank of New York Mellon Trust Company, N.A., as securities intermediary, pledgee or trustee (the “**Account Control Agreements**); and further

RESOLVED, that the form, terms and provisions of the Account Control Agreements be, and they hereby are, approved; and further

RESOLVED, that the Proper Officers be, and each of them individually hereby is, authorized and empowered, in the name and on behalf of the Green Bank, to execute and deliver each of the Limited Liability Company Agreement, the Management Agreement, the Sale and Contribution Agreement, the Base Indenture, the Series 2019-1 Indenture Supplement, the Note Purchase Agreement, the Account Control Agreements and the Series 2019-1 Notes, with such modifications, amendments or changes therein as the Proper Officer executing the same may approve, such approval and the approval thereof by such Proper Officer, to be conclusively established by such execution and delivery; and to execute and deliver any and all instruments, certificates, receipts, undertakings, commitments, consents, representations, financing statements, control agreements and other ancillary documents contemplated by any of the foregoing agreements; and to take any and all actions that any of such Proper Officers may deem necessary or advisable in order to obtain a permit, register or qualify the Series 2019-1 Notes issuable in the Offering for issuance and sale or to make any and all required filings with respect to, or request an exemption from registration of, the Series 2019-1 Notes issuable in the Offering or to register or obtain a license for the Green Bank as a dealer or broker under the securities laws of such of the states of the United States of America as the Proper Officers may deem advisable, and in connection with such permits, registrations, qualifications, notice filings, exemptions and licenses; and to execute, acknowledge, verify, deliver, file and publish all such applications, reports, notices, issuer’s covenants, resolutions, irrevocable consents to service of process, powers of attorney and other papers and instruments and pay all such fees and expenses as may be required under such laws, and to take any and all further action which they may deem necessary or advisable in order to maintain any such registration in effect for as long as they deem to be in the best interests of the Green Bank; and further

RESOLVED, that if any such jurisdiction in which any applications, statements or other documents are filed requires a prescribed form of resolution or resolutions, such resolution(s) shall be deemed to have been, and each of them hereby is, expressly adopted and made a part of these resolutions as if such resolutions were expressly set forth herein, and that the Secretary or any Assistant Secretary of the Green Bank be, and each of them individually hereby is, authorized, empowered and directed, in the name and on behalf of the Green Bank, to certify the adoption of any and all such resolutions as though such resolutions were expressly set forth herein and adopted hereby; and further

RESOLVED, that Bryan Garcia, as President of the Green Bank hereby is, authorized, empowered and directed for and on behalf of the Green Bank, in its own capacity and as member and manager of SHREC ABS 1 LLC, to take or cause to be taken all such action and to execute and deliver or cause to be executed and delivered, and, if appropriate, file or record, or cause to be filed and recorded, all such applications, agreements, contracts, undertakings, commitments, consents, certificates, reports, affidavits, statements, and other documents, instruments or papers as such officer deems necessary, and to make such payments desirable or appropriate to carry out and consummate the intent and purposes of the foregoing resolutions and/or all of the transactions contemplated therein or thereby, the authorization therefor to be conclusively evidenced by the taking of such action or the execution and delivery of such agreements, amendments to agreements, certificates, instruments, agreements or documents; and further

RESOLVED, that to the extent that any act, action, filing, undertaking, execution or delivery authorized or contemplated by these resolutions has been previously accomplished, all of the same is hereby ratified, confirmed, accepted, approved and adopted by the Board of Directors as if such actions had been presented to the Board of Directors for its approval before any such action's being taken, agreement being executed and delivered, or filing being effected.

Upon a motion made by John Harrity and seconded by Thomas M. Flynn, the Board unanimously voted to approve Resolution 1.

4. Investment Business Updates and Recommendations

a. Proposed Reallocation of Exposure to FuelCell Energy Credit Exposure

Mr. Hunter began this presentation with a review of the New London Subbase 7.4MW fuel cell project. There has been $10 million in funding to begin the project from an agreed upon $23 million loan commitment from Fifth Third Bank. Another $18 million term loan "take out" commitment from Liberty Bank and Amalgamated Bank and finally, a $5 million subordinated term loan commitment from Green Bank. The Fifth Third facility has already closed and the Liberty, Amalgamated and Green Bank facilities will close in the next few weeks.

Mr. Hunter continued with an update of the Bridgeport project which includes the acquisition financing for FCE to acquire the Bridgeport Fuel Cell Project ("BFCP") from Dominion Energy ("Dominion".) There is a $25 million term loan commitment from senior co-lenders Liberty Bank and Fifth Third Bank and a $6 million subordinated term loan (reallocated from existing loan BFCP) commitment from Green Bank. Final terms of amortization profile are being negotiated and might involve some "sculpting" of the Green Bank's amortization but with ultimate maturity dates in line with prior Board approval. The closing for these loans is scheduled for April 12, 2019.

Dominion realized all tax benefits to this sale and now wishes to proceed to sell the project to FCE. The existing transaction requires the Project SPV to place "performance assurance" with Eversource as required under the Energy Purchase Agreement ("EPA".) Dominion currently satisfies the performance assurance with a corporate guaranty but FCE's SPV will need to source a letter of credit—to be cash collateralized at $1.8 million—to satisfy this requirement.

Similar to the existing loan to FCE (the $6 million being reallocated from cash collateral for O&M), proposal is to fund the cash collateral needed to backstop the letter of credit for Eversource by reallocating exposure from the Triangle project. Reducing Triangle project exposure from $5 million to $3.2 million, for a reduction of $1.8 million. Mr. Hunter reviewed the Proforma cash flows detailing the Green Bank's exposure by moving funds from the 'Triangle' project.

The Green Bank has successfully repositioned the Bridgeport and Groton/New London projects from higher cost—"private equity" and "specialty lender" capital—to "mainstream" local and regional bank lenders (Liberty Bank, Fifth Third Bank and Amalgamated Bank.) The reallocation of funds regarding the credit exposure and working with local banks for funding keeps interest rate a moderate single-digits for FCE. Also, the use of Green Bank capital subordinated to senior lenders has resulted in $66 million sourced using $11 million of Green Bank capital (6:1). The Bridgeport project repays in 6 years to the senior lenders and 7 years to Green Bank. The proposal is to lend at the parent level approximately $1.8 million to cash collateralize the letter of credit for Eversource; security is FCE parent resources, additional security at the Project SPV level (subordinated to senior lenders) and the cash flow sweep (after Green Bank subordinated loan.) With anticipated cash flow and 50% sweep, the Green Bank performance assurance financing facility is expected to repay 9 months before $6 million subordinated loan (6¼ years.) Both facilities will be repaid with an additional $40 million of free cash flow (last 3-4 years of Eversource contract) after full repayment to all lenders including Green Bank.

Mr. Harrity asked to know how projects are working. Mr. Hunter related that while there had been some early operational issues related to ancillary equipment rather than the fuel cells themselves, technical advisors have reviewed the fuel cell equipment to ensure that the issues that had arisen early in the project are now resolved. He advised that more recent performance was in the 90% of maximum expected output, in line with FCE's expectations.

Mr. Garcia asked if there were any other questions from the Board? There were none and so he moved for a motion to approve Resolution 2.

Resolution #2

WHEREAS, in early 2008, the Connecticut Clean Energy Fund ("CCEF") released a Request for Proposals in the third round of solicitations for renewable energy projects to participate in statutorily mandated Project 150, an initiative aimed at increasing clean energy supply in Connecticut by at least 150MW of installed capacity and the program is designed to encourage financing of renewable energy projects through the stability of long-term energy purchase agreements for grid-tied projects;

WHEREAS, FuelCell Energy, Inc. ("FCE") submitted proposal for the 14.9 MW fuel cell project located in Bridgeport, CT (the "Project") in response which, after thorough review, was ultimately selected and ranked by CCEF as the number one project out of the nine projects submitted in the third round;

WHEREAS, CCEF, by Board resolution dated October 27, 2008, approved grant funding for the Project in an amount of $1,550,000 subject to conditions set forth in the Project 150 Program;

WHEREAS, the Connecticut Green Bank ("Green Bank"), by Board resolution dated November 30, 2012, approved loan financing for the Project in an amount not to exceed $5.8 million for the purposes of funding Project development costs and an operational and performance reserve account;

WHEREAS, the Green Bank has maintained its commitment to the growth, development, and commercialization of renewable energy sources and related enterprises, and to stimulate demand for renewable energy and the deployment of renewable energy sources that serve end use customers in Connecticut, including projects that utilize fuel cell technology;

WHEREAS, the in December 2018, the Green Bank Board of Directors (the "Board") approved a repurposing of the original $5.8 million loan approved for the Project (the "Original Use Loan"), which has since increased in principal to $6,026,165 due to capitalized interest, as a subordinate loan secured by all Project assets and cash flows for the purpose of participation in a financing facility that facilities FCE's acquisition of the Project from its current owner (the "Refinanced Loan"); and

WHEREAS, staff requests that the Green Bank Deployment Committee (the "Deployment Committee") recommend to the Board the approval of a Performance Assurance Finance Facility (the "PAFF") in the amount not to exceed $1.8 million to FuelCell Energy, Inc. on a full recourse basis and secured by all Project assets and cash flows, subordinated to the Senior Lenders and pari passu with the Refinanced Loan for the purpose of participation in a financing facility that facilitates FCE's acquisition of the Project from its current owner.

NOW, therefore be it:

RESOLVED, that the Deployment Committee hereby recommends that the Board approve the PAFF substantively in the form described in the Project Qualification Memo submitted by the staff to the Deployment Committee and dated March 21, 2019 (the "Memorandum") as a Strategic Selection and Award pursuant to the Green Bank Operating Procedures Section XII given the special capabilities, uniqueness, strategic importance, urgency and timeliness, and multi-phase characteristics of the Bridgeport Fuel Cell Project.

Upon a motion made by Bettina Bronisz and seconded by Thomas M. Flynn, the Board unanimously voted to approve Resolution 2.

5. Adjourn

Upon a motion made by John Harrity, and seconded by Bettina Bronisz, the meeting was adjourned at 8:50am.

Respectfully submitted,

Matt Ranelli, Secretary

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Danbury Fuel Cell Project

A Fuel Cell Debt Credit Facility

Credit Facility Advance Date Extension

April 23, 2019

Document Purpose: This document contains background information and due diligence on a proposed credit facility for the FuelCell Energy, Inc. (NASDAQ: FCEL) fuel cell project located at 64 Triangle Street, Danbury, CT 06810. The information herein is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

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

Program Qualification Memo

To: Connecticut Green Bank Board of Directors

From: Bert Hunter, EVP & CIO

Cc: Bryan Garcia, President & CEO; Brian Farnen, General Counsel & CLO; Selya Price, Director, Statutory & Infrastructure Programs

Date: April 23, 2019

Re: Danbury Fuel Cell Project – Credit Facility Advance Date Extension

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Purpose

On January 26, 2018 the Connecticut Green Bank ("Green Bank") Board of Directors (the "Board") approved a revision to the timing restrictions on the Advance Date (as defined in the Term Sheet) of the $5,000,000 Senior Secured Credit Facility (the "Credit Facility") for the proposed 3.7 megawatt FuelCell Energy, Inc. ("FCE") fuel cell project located at 64 Triangle Street, Danbury, CT 06810 (the "Project") to extend the deadline for the Advance Date from December 31, 2017 to May 1, 2018. In April 2018, the Board further extended the deadline to December 31, 2018 to account for:

(i.) updated Project development timelines,
(ii.) FCE to source tax equity for the facility given that the federal Business Investment Tax Credit ("ITC") was reinstated for fuel cell technology in December 2017, and
(iii.) the impact to the Green Bank of the October 2017 budget sweeps by the Connecticut General Assembly ("CGA") resulting in the reallocation of $33 million, over FY18 and FY19 of Green Bank funds to the General Fund.

While the Project remains eligible for the ITC, FCE has delayed financing for the Project in order to focus on the Bridgeport and Groton facilities (being financed with the assistance of the Green Bank, Inclusive Prosperity Capital and private lenders). Green Bank staff supports focus on these other projects and the continued consideration of placing Green Bank debt with the Project with the ITC monetization.

Accordingly, staff requests approval for a further extension of the Advance Date deadline, from December 31, 2018 to September 30, 2019, to allow Green Bank and FCE time to complete the financings for Bridgeport and Groton and to work together to restructure the Credit Facility in order to optimize for the monetization of the ITC.

Resolutions

WHEREAS, the Connecticut Green Bank Board of Directors ("Board") has previously approved a loan to support FuelCell Energy, Inc.'s ("FCE") development of a 3.7 megawatt high efficiency fuel cell project in Danbury, Connecticut (the "Term Loan"), as recommended and requested in the due diligence memorandum dated March 10, 2017 with terms and conditions for the Term Loan contained in the draft term sheet which accompanied the memorandum (the “Term Sheet”); and

WHEREAS, staff set forth in the project qualification memo dated January 26, 2018 a request for the Board to approve, and the Board as of that date did approve, updates to the previously-approved Term Sheet, to set a new deadline for advance of May 1, 2018, and the ability to sell off all, or a portion, of the Term Loan to 3rd party investors and the ability to guaranty all (for a fee or additional consideration), or a portion, of the amount of the Term Loan sold subject to subsequent Board approval on the terms and conditions thereof;

Whereas, staff set forth in the project qualification memo dated April 27, 2018 a request for the Board to approve, and the Board as of that date did approve, a request for an additional extension of the deadline for advance from May 1, 2018 to December 31, 2018; and

Whereas, staff has set forth in the project qualification memo dated April 23, 2019 a further request for the Board to approve an additional extension of the deadline for advance from December 31, 2018 to September 30, 2019.

NOW, therefore be it:

RESOLVED, that the Green Bank Board of Directors hereby approves the new deadline for advance of the Term Loan be extended to September 30, 2019.

Submitted by: Bryan Garcia, President and CEO and Bert Hunter, EVP and CIO

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Small Business Energy Advantage

Amendment of Master Purchase and Servicing Agreement

Approval Request

April 18, 2019

Document Purpose: This document contains background information and a request for aa amendment to the Master Purchase and Servicing Agreement between the Connecticut Green Bank ("Green Bank"), Amalgamated Bank ("AB"), each as a purchaser, and The Connecticut Light and Power Company ("CL&P"), as seller and as servicer approved by Green Bank Board of Directors during 2018. This information is provided to the Connecticut Green Bank Board of Directors for the purposes of reviewing and approving recommendations made by the staff of the Connecticut Green Bank.

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

Program Qualification Memo

To: Connecticut Green Bank Board of Directors

From: Anthony Clark, Associate Director, Commercial, Industrial and Institutional Programs

Bert Hunter, EVP & Chief Investment Officer

Cc: Bryan Garcia, President & CEO; Mackey Dykes, Vice President, Commercial, Industrial and Institutional Programs

Date: April 18, 2019

Re: Recapitalization of Small Business Energy Advantage Program
Amendment Request

Background & Summary

In October 2018, the Connecticut Green Bank ("Green Bank") Board of Directors approved a request for a $5MM commitment to support a facility to recapitalize the Small Business Energy Advantage (SBEA) program and deliver lower-cost capital to support financing for The Connecticut Light and Power Company ("CL&P") (d/b/a Eversource) SBEA customers in Connecticut. Green Bank's co-lender, Amalgamated Bank ("AB"), committed to making available a maximum of $50MM for this facility. In order to make use of the full AB commitment and abiding by the 90/10 split (between AB and Green Bank), in December 2018 Green Bank Board approved an increase in Green Bank commitment to $5.56M and a total facility size of approximately $55.56M.

Pursuant to these approvals granted by Green Bank Board, Green Bank, AB, each as a purchaser, and The Connecticut Light and Power Company ("CL&P"), as seller and as servicer entered into a Master Purchase and Servicing Agreement (the "Master Agreement") as of December 20, 2018. Also, on December 20, 2018, in accordance with the Master Agreement, Green Bank and AB purchased a portfolio of loans from CL&P that CL&P originated under the SBEA Program.

Amendment Approval Request

Following the purchase, Green Bank, AB and CL&P (the "Parties") discussed the need to amend the Master Agreement in order to bring the Master Agreement in line with the mutual expectations and understandings of the Parties. The Parties expect to enter into an amendment of the Master Agreement (the "Amendment") materially in the form attached hereto as Exhibit A. The intent of the Amendment is to:

1. Permit qualifying SBEA loans to municipal customers to aggregate to a maximum of $1,000,000 (increased from $500,000);
2. Permit the Green Bank to manage any deficiencies in the repayments from CL&P by averaging any deficient receipts from CL&P in order for AB to be paid not less than 100% of the amounts the Parties had expected AB to be paid; and
3. To make such non-material amendments to the Master Agreement to resolve operational issues related to purchases of loans and payments by CL&P.

Resolutions

WHEREAS, pursuant to Conn. Gen. Stat. Section 16-24n the Connecticut Green Bank ("Green Bank") has a mandate to develop programs to finance clean energy investment for small business, industrial, and municipal customers in the State;

WHEREAS, recapitalizing the Small Business Energy Advantage ("SBEA") program with private sector capital is a recognized priority in the Green Bank's Comprehensive Plan and is a goal of the CT Energy Efficiency Board and Green Bank Joint Committee;

WHEREAS, The Connecticut Light and Power Company d/b/a Eversource Energy and The United Illuminated Company (together, the "Utilities") have requested the Green Bank's assistance sourcing low cost private sector capital;

WHEREAS, the Green Bank released a Request for Proposals for Small Business Energy Advantage Program Alternative Financing Solutions (the "RFP") on May 2, 2018;

WHEREAS, Amalgamated Bank responded to the RFP with a comprehensive and flexible solution offering the lowest cost capital to recapitalize the SBEA program;

WHEREAS, Green Bank staff, together with Utility staff and the EEB, selected Amalgamated's proposal to recapitalize the SBEA program and the Green Bank's Board of Directors (the "Board") approved at its October 26, 2018 meeting Green Bank's $5,000,000 participation as a subordinated lender in a Master Purchase and Servicing Agreement (the "Master Agreement") and entered into by Green Bank, AB, each as a purchaser, and The Connecticut Light and Power Company ("CL&P"), as seller on December 20, 2018; and

WHEREAS, staff recommends the Board approve an amendment of the Master Agreement (the "Amendment") substantially in the form attached hereto as Exhibit A in order to bring the Master Agreement in line with the mutual expectations and understandings of Green Bank, AB and CL&P;

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to execute and deliver the Amendment materially consistent within the memorandum submitted to the Board dated April 18, 2019 and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 270 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; Mackey Dykes, Vice President, Commercial, Industrial & Institutional Programs; Anthony Clark, Associate Director, Commercial, Industrial & Institutional Programs

EXHIBIT A

AMENDMENT NO. 1 TO MASTER PURCHASE AND SERVICING AGREEMENT

THIS AMENDMENT NO. 1 TO MASTER PURCHASE AND SERVICING AGREEMENT (this "Amendment") is entered into as of March __, 2019, among AMALGAMATED BANK ("AB"), CONNECTICUT GREEN BANK ("CGB"), each as a purchaser, and THE CONNECTICUT LIGHT AND POWER COMPANY ("CL&P"), as seller and as servicer. Capitalized terms that are defined in the Master Agreement referred to below and are not otherwise defined herein shall have the respective meanings given them in the Master Agreement.

Recitals

WHEREAS, AB, CGB and CL&P have entered into that certain Master Purchase and Servicing Agreement dated as of December 20, 2018 (the "Master Agreement"), governing the purchase and servicing of a portfolio of outstanding energy efficiency loans of CL&P by AB and CGB; and

WHEREAS, the parties wish to amend the Master Agreement upon the terms and conditions set forth herein.

NOW, THERFORE, in consideration of the mutual covenants and agreements herein contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

Agreement

1. Amendments to the Master Agreement.

(a) Subsections (g) and (h) of the definition of "Qualifying Loan" of the Master Agreement are hereby amended by deleting the amount "$500,000" contained therein and replacing it with "$1,000,000";

(b) Section 2.01(b) of the Master Agreement is hereby amended by deleting the phrase “originated by the Seller” contained therein and inserting the phrase “available for sale by Seller”; and

(c) Section 2.01(b)(i) of the Master Agreement is hereby deleted in its entirety and replaced with the following:

(i) AB shall have no obligation to purchase such Qualifying Loans if (A) after giving effect to the payment of the Purchase Price for such Qualifying Loans, its Exposure would exceed its Commitment, (B) CGB does not concurrently purchase its Percentage Interest of such Qualifying Loans, or (C) the aggregate Discounted Value of all Qualifying Loans offered to the Purchasers on the applicable Purchase Date is less than $1,000,000, or (D) the aggregate amount of Qualifying Loans is less than ten (10); and

(d) Section 2.04(a) of the Master Agreement is hereby amended by deleting the phrase “(including principal and late payment fees)” contained therein and inserting the phrase “(not including late payment fees)”.

Commented [AK1]: Reason for proposed change – For the rather insignificant amount of money it does not seem worth it to try to operationalize this distribution of late fees, which Eversource is currently unable to do in their system. More importantly we need to iron out any issues regarding how delinquent accounts will be treated in the repayment schedule, collection and reimbursement from CEEF.

(e) Section 2.04(a)(i)(C) of the Master Agreement is hereby deleted in its entirety and replaced with the following:

“An amount equal to AB’s Percentage Interest of all scheduled payments due on the Purchased Loans during the applicable Collection Period.”

(f) Section 2.04(a)(i)(D) of the Master Agreement is hereby deleted in its entirety.

(g) Section 2.04(a)(ii)(C) of the Master Agreement is hereby deleted in its entirety and replaced with the following:

“An amount equal to CGB’s Percentage Interest of any delinquent payments collected on the Purchased Loans in any prior Collection Period(s).”

Commented [AK2]: Reason for proposed change – This section, 2.04(a), deals with distribution of payments when there is no event of default. Therefore, AB should simply get all its scheduled payments and CGB should get (if any funds are left) its schedule payments and any delinquent payments received in the previous month. AB should not be getting a share of the delinquent payments received in that month because they are already made whole in previous months by CGB subordinated share.

If on any Payment Date there is insufficient money to cover the AB Installment, that would trigger a default and future distributions of funds would be governed by 2.04(b) – where AB’s Exposure takes complete priority.

(h) Section 2.05 is hereby added to the Master Agreement and shall read as follows:

“Timeliness Payments.

In the event that (a) the Collected Amount remitted to the Purchasers by the

CL&P on any Payment Date is less than the applicable AB Installment (herein called a "Deficient Collected Amount"), and (b) the sum of such Deficient Collected Amount and the previous five (5) Collected Amounts is greater than or equal to the sum of the AB Installments for such applicable six (6) Collection Periods, CGB shall remit to AB, within [number] ([x]) Business Days, an amount equal to the difference between the Deficient Collected Amount and the AB Installment for the applicable Collection Period in which the deficiency occurred. For the avoidance of doubt, CL&P shall reimburse CGB, using CEEF funds, pursuant to Section 5.01 hereof for any such payments from CGB to AB."

Commented [AK3]: Reason for proposed change – Proposed solution with potential timeliness issues that would otherwise trigger a default (when a Collected Amount is insufficient to cover the AB Installment).

(i) Section 6.01(b) of the Master Agreement is hereby deleted in its entirety and replaced with the following:

> "CL&P shall fail to (i) remit to AB on any Payment Date for any Collection Period an amount equal to the AB Installment for such Collection Period, unless such deficiency was cured by CGB pursuant to Section 2.05 hereof; or (ii) remit to CGB on any Payment Date for any Collection Period an amount equal to the excess, if any, of the Collected Amount over the AB Installment for such Collection Period; or(iii) to reimburse CGB on a timely basis for any losses incurred by it pursuant to Section 5.01 hereof; or (iv) comply with its loan origination, credit or collection procedures; or (v) comply with the Servicing Standard; or (vi) comply with any material term or condition of the SBEA Program; or (vii) maintain eligibility to lend under the SBEA Program for any reason; or (viii) comply with its obligation to sell all Qualifying Loans to the Purchasers in accordance with the terms hereof; or (ix) duly observe or perform any other term, covenant or agreement contained herein or in any related document, which failure is not cured within 30 days after the earlier of (A) the date it knew or should have known of such failure or (B) its receipt of notice from another party hereto of such failure; or (x) fail to comply in any material respect with any law, rule or regulation applicable to it."

Commented [AK4]: Reason for proposed change – Clarification, since CGB is not expecting to the full CGB Installment each Collection Period, however CGB does expect timely reimbursement from the CEEF

2. Reaffirmation; Consistent Changes. Each party hereby ratifies, confirms, and reaffirms all terms and conditions of the Master Agreement and other documents executed in connection therewith. Except as expressly modified pursuant to this Amendment, the terms of the Master Agreement remain unchanged and in full force and effect.

3. Representations and Warranties. Each party represents and warrants that:

(a) Each and every representation and warranty made by it in the Master Agreement is on the date hereof true and correct, unless such representation or warranty relates to an earlier date in which case such representation or warranty shall have been true and correct as of such earlier date, and that it is in full compliance with all covenants and agreements in the Loan Documents.

(b) No Event of Default has occurred and is continuing.

(c) The execution, delivery and performance by such party of this Amendment (i) has been duly authorized by all necessary action on the part of such party, (ii) will not violate any applicable law or regulation or the organizational documents of such party, (iii) will not violate or result in a default under any indenture, agreement or other instrument binding on such party or any of its assets, and (iv) do not require any consent, waiver or approval of or by any Person which has not been obtained.

4. Conditions to Effectiveness. The effectiveness of this Amendment is subject to the satisfaction of each of the following conditions precedent, which shall be deemed satisfied upon the Bank's execution and delivery hereof absent conclusive evidence to the contrary:

(a) *This Amendment*. The parties shall have received from each other an executed counterpart of this Amendment, executed and delivered by an authorized signatory of such party.

5. Governing Law. **THIS AMENDMENT SHALL BE GOVERENED BY AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CONNECTICUT.**

6. Counterparts. This Amendment and any amendment hereof may be executed in several counterparts and by each party on a separate counterpart, each of which when so executed and delivered shall be an original, but all of which together shall constitute one instrument. Delivery of an executed signature page to this Amendment by facsimile transmission and delivery of a scanned copy of an executed signature page in pdf. format by email shall be as effective as delivery of a manually signed counterpart hereof.

[*Signature page follows*]

IN WITNESS WHEREOF, the undersigned have duly executed this Amendment No. 1 to Master Purchase and Servicing Agreement under seal as of the date first above written.

AMALGAMATED BANK, as a Purchaser

By: ____

Name:
Title:

CONNECTICUT GREEN BANK, as a Purchaser

By: ____

Name:
Title:

THE CONNECTICUT LIGHT AND POWER COMPANY, doing business as Eversource Energy, as Seller, Servicer and as Agent for The Connecticut Energy Efficiency Fund

By: _________________________________
Name:
Title:

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CONNECTICUT GREEN BANK

Memo

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

From: Bert Hunter, EVP & Chief Investment Officer

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

Date: April 23rd, 2019

Re: Authorization of $1.5M Bridge Loan (unsecured) to Capital 4 Change ("C4C") for Interim Funding for C4C's funding for Smart-E Loans

Authorization "in principle" of up to $4.5M Medium Term Revolving Loan (secured & subordinated) to CEEFCo (100%-owned subsidiary of C4C) for Funding CEEFCo's investment in Energy Efficiency Loans (including Smart-E Loans) in partnership with Private Capital

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Background & Summary of Request for Approval

Capital for Change (formerly, the Connecticut Housing Investment Fund) ("C4C"), in partnership with the Green Bank, provides loans to Connecticut single family property owners seeking to finance solar PV and other renewable energy systems and energy efficiency upgrades under Green Bank's Smart-E loan program.[1] As will be more fully explained in this memorandum, the growth of C4C's Smart-E loan portfolio has greatly exceeded both the expectations of C4C staff and the capabilities of C4C's underlying capital facility that supports its Smart-E loan portfolio. In fact, C4C is Green Bank's largest and most active Smart-E lender, with approximately $20 million in loan originations since joining Smart-E in 2016. As a result of this growth, C4C's funding source for Smart-E is no longer keeping pace with its Smart-E loan expansion; capital availability under that facility is contracting instead of expanding due to factors exogenous to the actual portfolio performance and economics. Consequently, C4C and Green Bank are working to source – on an expedited basis – a financing facility to accommodate C4C's current Smart-E loan portfolio as well as expected loan growth over the next 18-24 months (with renewal and expansion options with the selected lender).

The purpose of this memorandum is to request

[1] Pursuant to the Green Bank Sustainability Plan passed by the Board in December 2017 and to a Professional Services Agreement, beginning August 3, 2018, certain aspects of the Smart-E Loan program are being managed by Inclusive Prosperity Capital, Inc. ("IPC")

A. Approval for a $1.5 million unsecured “balance sheet” loan to C4C which will bridge C4C’s funding needs exclusively for Smart-E loans originated by C4C in its 100%-owned subsidiary: CEEFCo (“C4C Bridge Loan”). The C4C Bridge Loan will enable C4C to continue to originate loans for the Smart-E loan program, which is critically important during the spring and summer residential HVAC sales cycle. The primary source of repayment for the C4C Bridge Loan will be the revolving credit facility being sourced jointly by C4C and Green Bank, with secondary and tertiary sources of repayment being C4C itself and/or the underlying loan portfolio, respectively, should a revolving credit facility fail to materialize.

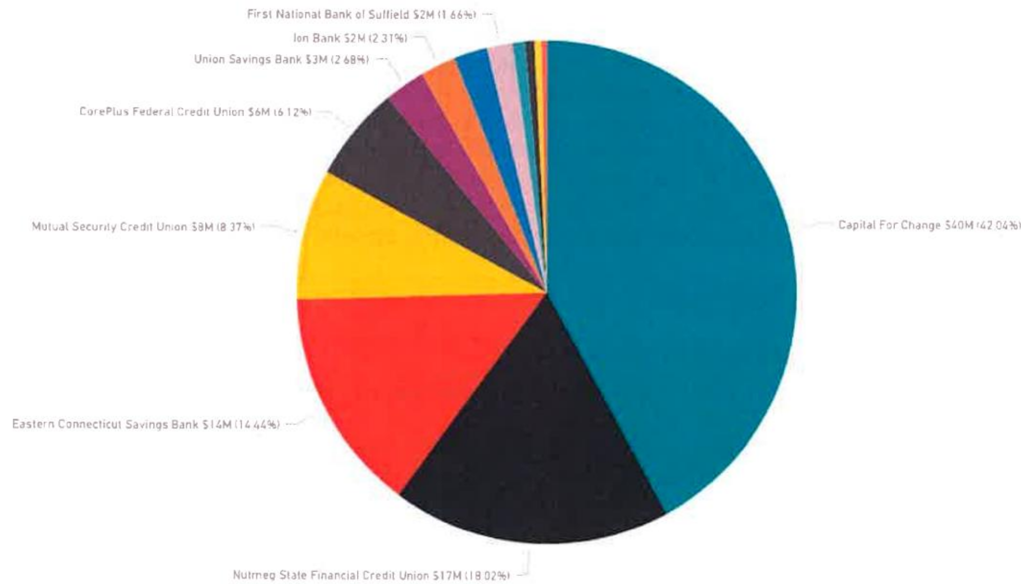
B. “In principle approval” for up to a $4.5 million secured and subordinated medium term revolving loan to CEEFCo in partnership with private capital which will satisfy C4C/CEEFCo’s funding needs for energy efficiency and Smart-E loans booked by CEEFCo (“CEEFCo Revolving Loan”). The CEEFCo Revolving Loan will enable CEEFCo to originate loans for the CEEF and Smart-E loan programs. The facility would refinance the current outstanding Webster amortizing loan facility into a 1 to 3 year medium term revolving loan facility. The sole source of repayment for the CEEFCo Revolving Loan will be the proceeds from consumer loan payments of the CEEFCo loan portfolio and CEEFCo equity.

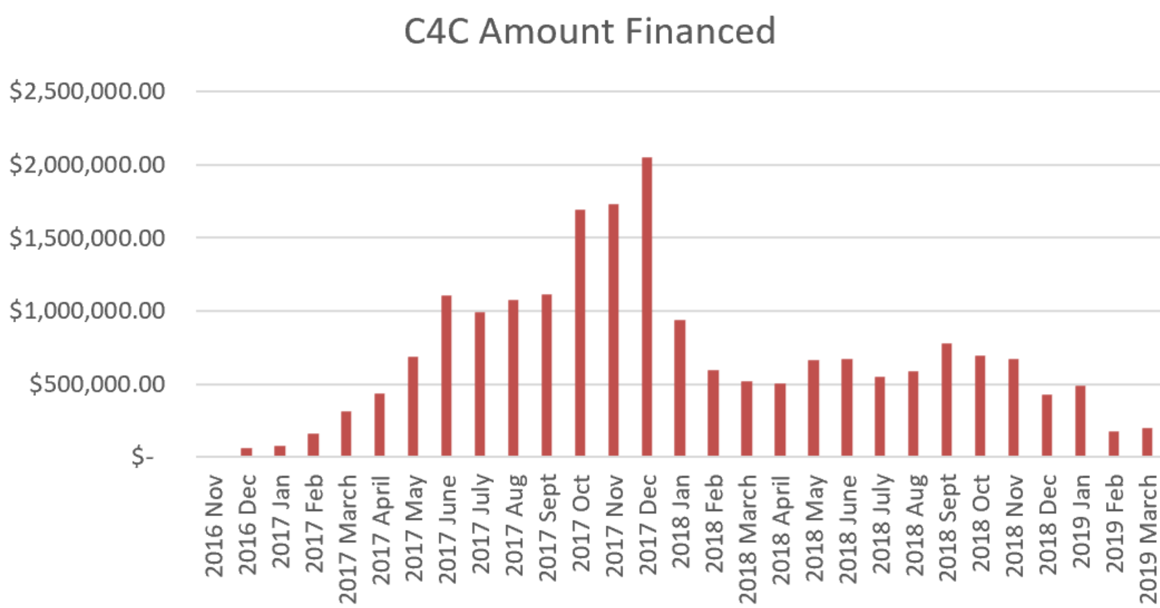
C4C and Green Bank Partnership

C4C and Green Bank have mission-alignment and longstanding programmatic relationships, particularly for multifamily programs. In April 2014, the Board approved the Low Income Multifamily Energy Loan (formerly, the Multifamily Permanent Energy Loan, - or “LIME”), under which C4C, in partnership with the Green Bank, provides loans to Connecticut multifamily property owners seeking to finance solar PV and other renewable energy systems and energy efficiency upgrades. In June 2016, the Board reauthorized the LIME program under amended guidelines and authorized the Green Bank’s provision of $1,000,000 in capital financing and $625,000 of repurposed ARRA-SEP funds for a loan loss reserve to support an initial capital pool of $3,000,000. In February 2017, the Board approved deployment of an additional $2.5M from Green Bank balance sheet capital to C4C to finance those additional properties in the LIME pipeline. This $3.5M in total funding capacity is provided to C4C by Green Bank on terms that are for a maturity of up to 20 years and at an interest rate of 3% per annum. There is currently $3.1 million outstanding under this facility with recourse to C4C.

C4C joined the Smart-E loan program in late calendar 2016. C4C quickly became Green Bank’s leading originator of Smart-E loans as demonstrated by the chart below.

CLOSED CAPITAL DEPLOYED BY LENDER





Since joining Smart-E, C4C has originated $20 million in loans for just over 1,500 residential projects. As per the chart above, Smart-E volume for C4C (as well as for other Smart-E lenders) declined in early 2018 with the end of the interest rate buydown (IRB). The IRB had brought program rates down to 2.99%. However, even without the IRB, C4C's loan growth remains strong with monthly volume that can fluctuate from $250,000 to $500,000. Accordingly, the $1.5M C4C Bridge Loan is expected to provide funding for C4C's Smart-E loans until mid-summer, by which time a more permanent revolving credit facility will have been sourced, negotiated and documented.

Existing Funding for C4C Smart-E Loans

Smart-E is funded from C4C's CEEFCo, a wholly-owned subsidiary purposed to finance residential clean energy measures – primarily for Smart-E as well as for the Connecticut Energy Efficiency Fund (the "CEEF"). At present, CEEFCo's portfolio funding for its loans has been sourced as follows:

CEEFCo Portfolio Balances				
3/31/19 Balances		$	26.9	Million
Smart-E Loans		$	19.0	Million
All other CEEFCo Loans		$	7.9	Million
Funded By:				
	Webster	$	12.4	Million
	CEEFCo Equity	$	14.5	Million

The Webster line of credit is amortizing – originally over seven years but recently reduced to five years – which means that it is contracting while the underlying loan portfolio of growing. This facility structure is partially a construct of the portfolio growth exceeding expectations (as noted above), and it creates a fundamental mismatch between the CEEFCo business model – whereby its loan portfolio grows over time –and the Webster line which amortizes over a shorter period than underlying loan amortizations. So not only is the Webster line not funding future loan growth, but it is draining cash resources of CEEFCo as the amortization of the Webster line exceeds the principal amortization of the underlying portfolio of assets. This fundamental mismatch is to be resolved with a new facility from another lender, better suited to the loan portfolio's characteristics, sourced by very encouraging discussions that C4C and Green Bank have had with a bank well known to Green Bank by means of other financing facilities. This lender has received all diligence materials and the underwriting process is proceeding positively. All parties expect a new revolving line of credit to be approved and closed by mid-summer. The expected C4C Smart-E portfolio growth for the April – September period is as follows:

C4C Smart-E Loan Balance Projections				
		Original Balances	Loan Count	Remaining Balances
4.49% Loan Projections				
3/31/2019	$	4,772,040	552	$ 3,493,056
6/30/2019	$	5,204,290	602	$ 3,809,456
9/30/2019	$	5,636,540	652	$ 4,125,856
12/31/2019	$	6,068,790	702	$ 4,442,256
4.99% Loan Projections				
3/31/2019	$	4,181,485	385	$ 2,982,595
6/30/2019	$	4,420,427	407	$ 3,153,029
9/30/2019	$	4,659,369	429	$ 3,323,463
12/31/2019	$	4,898,311	451	$ 3,493,897
5.99% Loan Projections				
3/31/2019	$	12,699,000	830	$ 11,311,240
6/30/2019	$	13,387,500	875	$ 11,924,500
9/30/2019	$	14,076,000	920	$ 12,537,760
12/31/2019	$	14,764,500	965	$ 13,151,020
6.99% Loan Projections				
3/31/2019	$	1,288,855	85	$ 1,163,735
6/30/2019	$	1,410,159	93	$ 1,273,263
9/30/2019	$	1,531,463	101	$ 1,382,791
12/31/2019	$	1,652,767	109	$ 1,492,319
$ 2,419,244		Smart-E next 6 months		
$ 403,207		Volume per month		
$ 1,500,000		Bridge Loan		
3.7		Months of Capital		

Accordingly, the C4C Bridge Loan from Green Bank is expected to cover loan growth through July, which should be adequate time to close the new loan facility for C4C. Given that the Green Bank arranged the previous facility for C4C and is quite familiar with C4C and its portfolio of loans, loan performance, etc., Green Bank is confident the new funding can be sourced during this time frame.

Medium Term Revolving Credit Facility for CEEFCo

As explained above, C4C and Green Bank are in discussions with a major financial institution concerning a medium term revolving credit facility for CEEFCo ("CEEFCo Revolving Loan"). Green Bank would be subordinate in the capital stack as follows:

CEEFCo Equity in the loan pool:	10% (minimum)
Green Bank Subordinated:	10% - 15%
Financial Institution – Senior:	70% - 80%

A facility that would support a loan pool between $30 to $40 million is being discussed (current loan outstanding: $26.9 million). Green Bank would fund up to $4.0 to $4.5 million of this pool with CEEFCo providing at least 10% of the pool of loans outstanding and the senior lender providing the balance of funding.

Loss experience for the CEEFCo portfolio has been good, with non-performing loans equal to 1.9% of the $26.9 million portfolio. This non-performing ratio is in line for the industry – which tends to be in the 1.5% to 2.5% area.

C4C Financial Condition

C4C is in good financial health. Represented below is the parent-level company which is the entity to which the Green Bank loan would be made. Unrestricted cash decreased from 2017 to 2018 due to advances to CEEFCo (where the Smart-E advances are made) and about $1 million in building and equipment acquisition related to new office space. Restricted cash declined and liabilities increased tracing to loan growth. The proposed $1.5 million loan would represent approximately 2.4% of loans C4C at the parent level would have available from third parties.[2]

[2] Total outstanding loans to C4C at 12/31/18: $40.5M; total undrawn availability: $21.9M

	FYE 3/31/2017	FYE 3/31/2018	YTD 2/28/2019
Total Revenue & Support	$ 5,499,107	$ 7,098,692	$ 7,158,490
Total Expenses	$ 4,895,024	$ 5,781,970	$ 6,456,456
Change in Unrestricted Net Assets	$ 604,083	$ 1,316,722	$ 702,034
Cash	$ 4,548,090	$ 1,223,116	$ 1,531,232
Restricted Cash	$ 11,151,667	$ 7,361,837	$ 5,746,933
Loans	$ 35,901,299	$ 42,810,090	$ 49,343,728
Other	$ 2,506,426	$ 12,010,354	$ 24,351,619
	$ 54,107,482	$ 63,405,397	$ 80,973,512
Liabilities	$ 37,007,748	$ 46,000,689	$ 62,866,770
Net Assets			
Unrestricted	$ 9,412,496	$ 10,729,218	$ 11,431,252
Temporarily Restricted	$ 4,533,382	$ 3,521,634	$ 3,521,634
Permanently Resticted	$ 3,153,856	$ 3,153,856	$ 3,153,856
	$ 17,099,734	$ 17,404,708	$ 18,106,742
Liabilities & Net Assets	$ 54,107,482	$ 63,405,397	$ 80,973,512

Request

Green Bank staff requests:

A. Deployment of up to $1.5M from Green Bank balance sheet capital to C4C on an unsecured basis to finance incremental Smart-E loan growth. The loan would mature six months from the initial draw date and would carry an interest rate of 1-month LIBOR + 1.75% and would apply to the average balance outstanding during the monthly interest period. The loan facility would be made via draws from the Green Bank not more frequently than twice a month to the C4C parent-level based on evidence of the incremental Smart-E loan activity vs. March 31, 2019 levels. The parent would be permitted to make intercompany advances to CEEFCo for this incremental activity using advances from Green Bank.

B. "In principle approval" for up to a $4.5 million secured and subordinated medium term revolving loan to CEEFCo in partnership with private capital which will satisfy C4C/CEEFCo's funding needs for energy efficiency and Smart-E loans booked by CEEFCo ("CEEFCo Revolving Loan"). The CEEFCo Revolving Loan will be a 1 to 3 year medium term revolving loan facility. The sole source of repayment for the CEEFCo Revolving Loan will be the proceeds from consumer loan payments of the CEEFCo loan portfolio and CEEFCo equity. Pricing is to be negotiated, but Green Bank interest yield would be equal to Senior Loan pricing, possibly with a small incremental margin to compensate Green Bank for its subordinate position. Staff would return to the Board once major terms and conditions have been agreed.

Green Bank Financial Statements

How is the project investment accounted for on the balance sheet and profit and loss statements? Upon execution of definitive documentation, the Green Bank will advance a portion of the bridge loan to C4C for Smart-E loan growth activity vs. March 31, 2019 levels, leading to a reduction in cash and cash equivalents on the asset side of the Green Bank's balance sheet and a concomitant increase in short-term loans. Subsequent draws will be made to C4C upon C4C's request and certifying loan growth levels (which IPC staff monitors based on data collected from all Smart-E lenders).

Resolutions

WHEREAS, the Connecticut Green Bank ("Green Bank") entered into a Smart-E Loan program financing agreement with Capital for Change ("C4C");

WHEREAS, C4C is the largest and fastest growing Smart-E lender on the Green Bank Smart-E platform;

WHEREAS, C4C and Green Bank are negotiating with private third party capital to fund C4C's Smart-E Loan portfolio growth;

WHEREAS, Green Bank staff recommend a short term bridge loan facility (the "C4C Bridge Loan") in order to fund C4C's Smart-E Loan growth which C4C and Green Bank complete negotiations and documentation for a loan facility to fund C4C's Smart-E loan portfolio on a longer term basis; and

WHEREAS, Green Bank staff recommend "in principle approval" by the Green Bank Board of Directors (the "Board") for a medium term revolving loan facility for CEEFCo (the "CEEFCo Revolving Loan") in order to fund CEEFCo's energy efficiency and Smart-E Loan portfolio in partnership with private capital.

NOW, therefore be it:

RESOLVED, that the Board approves the C4C Bridge Loan in an amount of up to $1.5 million in capital from the Green Bank balance sheet in support of Smart-E Loans to be originated by C4C from and after March 31, 2019;

RESOLVED, that the Board approves "in principle" the CEEFCo Revolving Loan in an amount of up to $4.5 million in capital from the Green Bank balance sheet in support of energy efficiency and Smart-E Loans in partnership with private capital generally consistent with the memorandum submitted to the Board on April 23, 2019 and directs staff to submit the CEEFCo Revolving Loan for final approval once major terms and conditions have been agreed;

RESOLVED, that the President of the Green Bank; and any other duly authorized officer of the Green Bank, is authorized to execute and deliver, any contract or other legal instrument necessary to effect the C4C Bridge Loan on such terms and conditions as are materially consistent with the memorandum submitted to the Board on April 23, 2019; and

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

Submitted by: Bryan Garcia, President and CEO and Bert Hunter, EVP and CIO

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CONNECTICUT GREEN BANK

To: Connecticut Green Bank Board of Directors

From: Selya Price, Director, Infrastructure Programs, and Bill Colonis, Project Manager, Statutory and Infrastructure Programs

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

Date: April 18, 2019

Re: 2009 Grant Revision Proposal Under the Loan Loss Decision Framework and Process –Solar PV Project at Naugatuck High School Deployed through the On-Site Renewable Distributed Generation (OSDG) Program

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Introduction

On June 13, 2018, the Connecticut Green Bank ("Green Bank") Board of Directors ("Directors") approved the "Loan Loss Decision Framework and Process". Although the transaction summarized below is not a loan (which is the focus of the loan loss decision framework) – it was a grant – given that the possible principal value outstanding on the grant is between $100,000 and $1,000,000 based on default provisions, the proposal to revise the grant agreement requires review and approval by the Deployment Committee. Given that time is of the essence due to safety considerations related to the equipment failure for this particular solar PV project, Green Bank staff are bringing this request to the next available meeting, in this case a Board of Directors meeting.

Summary

The proposed amount of principal outstanding value for Staff approval of provisional, restructuring, and write-offs is intended to be overly conservative with respect to Staff authority, while appropriately reporting out any unusual activity or trends to the Deployment Committee and Board of Directors.

The Connecticut Green Bank ("Green Bank") staff is requesting approval for a Grant Revision Proposal ("Proposal"), specifically a waiver on a potential default by the Borough of Naugatuck ("Naugatuck") with respect to the Standard Financial Assistant Agreement ("Agreement") dated January 6, 2009 between Connecticut Innovations, Incorporated, acting solely as the administrator of the Connecticut Clean Energy Fund (CCEF), and Naugatuck. The Agreement provided Naugatuck with a total grant of $926,655.00 for a 385.4 kW-STC solar PV system at 543 Rubber Avenue, Naugatuck, Connecticut, which is the Naugatuck High School. The grant was provided through the

On-Site Renewable Distributed Generation (OSDG) Program administered by CCEF, the Green Bank's predecessor. The total cost of the project was approximately $2.9 million.

The project consists of 518 amorphous silicon thin-film panels, integrated into the roof of the building, provided by Solar Integrated Technologies, Inc. (SIT), which went out of business in 2012. The solar project recently experienced ongoing equipment failures culminating in a shut-down of the system in October 2018 when a solar PV inspector determined that the system was no longer repairable and had become a safety hazard.

Green Bank staff are requesting Board approval of Naugatuck's request to waive any potential defaults under the Agreement so that Naugatuck may move forward with removal of the solar panels and roof into which the panels are electrically integrated. Naugatuck is also exploring installation of a new solar PV system using more traditional, current solar PV technology.

<u>Background</u>

The Green Bank retained ownership of the RECs for the Naugatuck solar project and collected production data from inception of the project through most of calendar year 2018 and monetized these RECs – the RECs were submitted along with those for a large number of other Green Bank commercial and residential projects, so the revenues associated with this specific project were not tracked separately (though Green Bank records contain this information and this could be analyzed in further detail if it is deemed a worthwhile allocation of staff time). As reported by Green Bank staff who collected the data for this project, the project consistently underperformed during this time period relative to the original first year estimate of 421,558 kWh.

On November 1, 2018, a contractor that was called out to inspect the project by Naugatuck reported the following information to Green Bank staff:

> Good morning. Are you still monitoring this installation? I was recently called out to inspect a reported "burned" module and extremely low output. I've been maintaining the monitoring on this system for some time now, and also keeping the SatCon inverters operating.
>
> Over the last few years, I've been increasingly concerned about the condition of the rooftop array and questioning the safe operation of the DC source circuits. On Oct 9, I performed a thorough inspection of the array and found it to be in very poor condition, with many hazardous situations.
>
> As a result, I decided that the system is unsafe to operate and shows many potential arcing and possible fire hazards, and did not restore operation upon completion of the inspection. Attached is a letter explaining my findings. This letter is also being sent to Kevin Dion at Naugatuck Public Schools.

See attachment to this memo from Naugatuck that includes the letter from Brendan Owens of Summer Hill Solar (an RSIP-eligible installer) dated November 1, 2018, informing Naugatuck of his inspection findings referenced above and including 22 pictures showing details of prior repairs to the system and pervasive, ongoing occurrences of additional damage and unsafe electrical conditions.

The Green Bank team spoke with representatives of Verogy, another solar contractor providing advice to Naugatuck. Verogy summarized the following information by email on March 4, 2019 after the phone call:

> We talked about the history of the system and more recently since is shutdown.
>
> The overlying issue currently is the safety and liability concerns of the system due to its history and unpredictability. The system has been failing and burning out in areas leaving high probability of fire or electrical discharge.
>
> The fire marshal in the town is very concern with the systems issues and dangers involved with having this system still on the roof with 2,000 students in the building.
>
> Kevin talked about the towns concerns and that the towns priority at this moment is removing and de-energizing the Roof and PV system. This is something that needs to be done as soon as possible as there is no way to stop DC production within the modules.
>
> Secondary to the safety concerns and removing the system is understanding the Green Banks direction and position in relations to the agreement and contract. I believe you mentioned putting together information to give the board in order to get the process moving quickly. Here is the article link for your review to assist.
>
> https://www.sandiegouniontribune.com/news/watchdog/sdut-sun-sets-on-solar-panels-at-24-schools-2012sep13-story.html
>
> Lastly Kevin has a meeting tomorrow with the Mayor of the town and will bring up the discussion points we talked about in our meeting.
>
> 1) Removing the roof and pv system
> 2) Replacing the roof
> 3) Replacing solar and using it to potentially offset costs of the roof replacement

The above article referenced by Verogy provides information about numerous projects in San Diego with the same equipment that experienced the same failures. The following is an excerpt from this article, “Faulty solar panels pulled from 24 schools,” dated September 13, 2012, in The San Diego Union-Tribune:

> Solar panels were taken down from 24 San Diego Unified School District campuses over the summer after the products were found to have defects including premature corrosion causing a danger of roof fires.

> The manufacturer of the panels, Michigan-based Solar Integrated Technologies, has filed for bankruptcy protection. The district expects to pay $400,000 more annually for energy in the coming years because of the dismantling of the installations.

Green Bank staff asked its most experienced solar PV inspector for the RSIP to review the report from Summer Hill Solar to determine whether additional inspection was necessary. The assessment was that another inspection was not necessary and that the panels needed to be removed and the roofing replaced. He said: "The report from Summer Hill Solar is sound. These solar panels need to come off the roof."

Green Bank staff indicated verbally that Naugatuck should not wait on the Green Bank to address immediate safety concerns, if needed, and would bring the matter to the next available Board meeting. Naugatuck indicated that they plan to remove the existing panels and roof as soon as possible, most likely in the Summer when the school semester has completed, and asked Green Bank staff for information about possible financing for a new solar PV system.

On April 10, 2019, Naugatuck provided to the Green Bank a formal request to waive any potential repayment of the grant per their attached letter from Naugatuck Mayor N. Warren "Pete" Hess:

> The Borough of Naugatuck requests a waiver of all charges, costs, penalties and fees in connection with performance under the above agreement. The complete failure of the equipment was due to circumstances beyond the control of the Borough of Naugatuck. In addition, the solar panels cannot be repaired.

The request from Naugatuck is provided in an attachment to this memo and includes: (1) the formal request from the Mayor of Naugatuck to the Green Bank, (2) the inspection findings from Summer Hill Solar referenced earlier in this memo, (3) a letter from the Naugatuck Building Department summarizing their inspection and safety concerns, and (4) a letter from Naugatuck legal counsel providing background on the bankruptcy of SIT, the panel manufacturer.

Contractual and Financial Details

Section 4 of the Agreement provides provisions regarding defaults and remedies, with section 4.1.3. providing that any material default of any of the covenants made under the Agreement shall constitute an event of default. The Green Bank considered whether a default with respect to 3.1.4 (text provided below) occurred with respect to operation of the project and did not find that to be the case, given Naugatuck's unsuccessful efforts to repair the system and given the history of failure of the equipment in this and numerous locations.

> **3.1.4. Operation of the Project.** Owner, or its assignee(s) or transferee(s), shall maintain the Equipment at the Project Site and shall use and operate the Equipment solely to meet Owner's energy needs. Owner shall (a) operate the Equipment in accordance with the supplier's or manufacturer's instructions, consistent with warranty and insurance requirements; and (b) maintain the Equipment in good repair, working order and condition and make all needed and proper repairs, renewals, replacements, additions or improvements thereto and immediately notify CI of any event causing loss or depreciation in the value of the Equipment other than ordinary wear and tear.

The Green Bank agrees with Naugatuck that they are not in default under the terms of the Agreement, based on Section 4.3, Force Majeure. The PV system equipment failure was ultimately not repairable (even after multiple repair attempts), the system in its current condition is a safety hazard, and the equipment warranty from SIT could not be accessed for either repair, replacement or recovery of funds because SIT had filed for bankruptcy in 2012 followed by liquidation of its assets in 2015 (see last page of attachment from Naugatuck that provides letter dated April 10, 2019 from Attorney Edward G. Fitzpatrick).

> **4.3. Force Majeure.** It shall not be an Event of Default under this Agreement if the Equipment cannot operate as expected due to circumstances beyond Owner's reasonable control, and as long as Owner makes commercially reasonable efforts to repair or replace such Equipment, Owner shall be excused from performance as long as such circumstances remain in effect.

Section 4.2 of the Agreement provides for remedies upon event of default (text copied below) which could have required Naugatuck to repay 1/10th less of the grant amount, or 90% of the grant amount of $926,655.00 or $833,989.50, not including interest.

> **4.2. Remedies upon Event of Default.** Upon and during the continuation of an Event of Default, and if the default remains unremedied for a period of ninety (90) days after written notice from CI ("Cure Period"), CI may terminate any obligation on its part to make any further Grant payments to Owner under this Agreement and may seek repayment by Owner of the Grant payments received by Owner from CI according to the following schedule: If the Event of Default occurs within the first five (5) years of the Term of Agreement, then the repayment shall be the full amount of the Grant amounts paid by CI. If the Event of Default occurs after the 5th year of the Term of Agreement, then the repayment shall be reduced at a rate of 1/10th per year for the remaining ten (10) years under the Term of Agreement.

As described in the prior background section of this memo, the Green Bank does not believe a default event occurred based on circumstances that fall under section 4.3, Force Majeure, and therefore that no repayment should be requested from Naugatuck.

Conclusion

Green Bank staff recommends that the Green Bank Board of Directors approve this Proposal from Naugatuck to waive any potential charges, costs, penalties and fees in connection with performance under the Agreement. Green Bank staff agree that the failure of the equipment was due to circumstances beyond the control of Naugatuck and that the solar panels cannot be repaired. Accordingly, we agree no default has occurred that would trigger the default remedies and if a default did occur, it should be waived. Lastly, Naugatuck has indicated that it will need to focus on raising funds for removal of the existing solar panels and roof, and is interested in installing a new solar PV project in the future.

Resolutions

WHEREAS, the Connecticut Green Bank ("Green Bank") is the successor to the Connecticut Clean Energy Fund (CCEF);

WHEREAS, Connecticut Innovations, Incorporated, acting solely as the administrator of the CCEF, entered into a Standard Financial Assistance Agreement ("Agreement") dated January 6, 2009 with The Borough of Naugatuck ("Naugatuck"), to provide Naugatuck with a grant for the deployment of a building-integrated solar PV system based on amorphous silicon, thin-film technology, located at 543 Rubber Avenue, Naugatuck, Connecticut, which is the Naugatuck High School;

WHEREAS, on June 13, 2018, the Green Bank Board of Directors ("Board") approved the Loan Loss Decision Framework and Process, set forth in that certain memo to the Board dated June 13, 2018 (the "Loss Process"), which established the process of dealing with provisional loss reserves, restructurings, and write-offs for assets on Green Bank's balance sheet; and

WHEREAS, the established Loss Process governs this Grant Revision Proposal; and

WHEREAS, in accordance with the Loss Process, Green Bank staff seeks the Green Bank Board of Directors' ("Board") approval to waive any potential defaults under the Agreement based on the "Force Majeure" circumstances described in the body of the memorandum circulated to the Board dated April 18, 2019 ("Memo").

NOW, therefore be it:

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

Submitted by: Bryan Garcia, President and CEO, Bert Hunter, EVP and Brian Farnen, General Counsel and CLO.

BOROUGH OF NAUGATUCK

OFFICE OF MAYOR N. WARREN "PETE" HESS

229 Church Street
Naugatuck, CT 06770
TEL (203) 720-7009
FAX (203) 720-7099
www.naugatuck-ct.gov
nwhess@naugatuck-ct.gov

April 10, 2019

Ms. Selya Price, Director
Infrastructure Programs
Connecticut Green Bank
845 Brook Street
Rocky Hill, CT 06067

Email & Regular US Postal

Re: Grant Agreement dated January 6, 2009 between Connecticut Innovations, Incorporated and the Borough of Naugatuck-request for Waiver under Section 4.3 (Force Majeur)

Dear Ms. Price:

The Borough of Naugatuck requests a waiver of all charges, costs, penalties and fees in connection with performance under the above agreement. The complete failure of the equipment was due to circumstances beyond the control of the Borough of Naugatuck. In addition, the solar panels cannot be repaired.

The following documents are attached in support of the above request:

(1) Summer Hill Solar letter of November 1, 2018 previously forwarded to the Connecticut Green Bank.
(2) Letter from Bill Herzman, Building Inspector, Borough of Naugatuck, to the Department of Administrative Services dated April 5, 2019.
(3) Letter from Edward Fitzpatrick, Borough of Naugatuck legal counsel to the Department of Administrative Services dated April 10, 2019.

The Borough of Naugatuck has initiated projects to replace the NHS roof and solar systems as required under Section 4.3. We will provide updates on both projects as they proceed.

Your consideration of this request is greatly appreciated.

Sincerely,

N. Warren "Pete" Hess, Mayor

Cc: Allyson Bruce-Controller
Sharon Locke-Supt. Of Schools
Edward Fitzpatrick-Fitzpatrick, Mariano, Santos & Sousa

Summer Hill SOLAR
P.O. Box 755
Woodstock CT 06281
860-867-7027

CERTIFIED Solar PV Installer

Naugatuck Public Schools
Kevin Dion, Director of Facilities
497 Rubber Ave
Naugatuck, CT 06770

November 1, 2018

Dear Kevin,

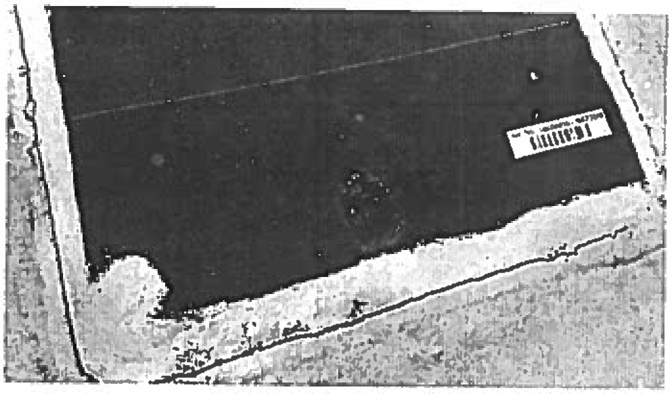
On Oct 9, 2018, I visited Naugatuck HS to inspect the rooftop PV array after a report from the High School maintainer, Todd Perrelli, that he had discovered a large burn hole in one of the roof integrated PV modules.

Over the last few years, I've become increasingly concerned about the condition of the rooftop array and questioning the safe operation of the DC source circuits. On Oct 9, I performed a thorough inspection of the array and found it to be in very poor condition, with many possible hazardous situations. As a result, I decided that the system is unsafe to operate and shows many potential arcing and possible fire hazards. I did not restore system operation upon completion of the inspection. Following are photos and explanations of my findings.

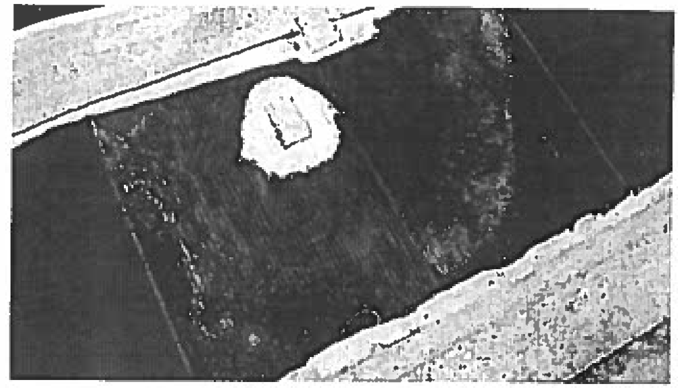
I have forwarded this letter to Connecticut Green Bank, as they are a stakeholder. They have been monitoring the power production of the system. I've recommended that they instigate a further inspection and evaluation of the system.

Respectfully,

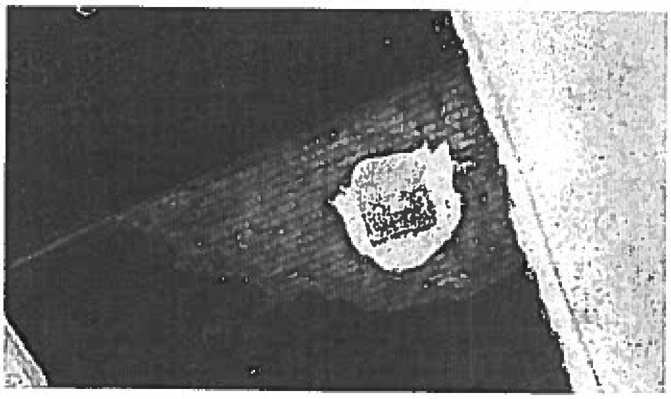
Brendan Owens
brendan@summerhillsolar.com



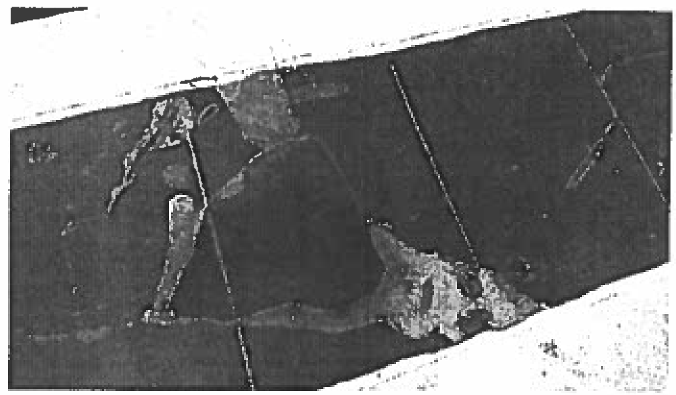
MELTED MODULE J-BOX. THIS IS OF EXTREME CONCERN SINCE THE MODULES ARE ROOF INTEGRATED AND THIS TYPE OF ARCING IS IN DIRECT CONTACT WITH THE FLAMABLE RIGID FOAM INSULATION



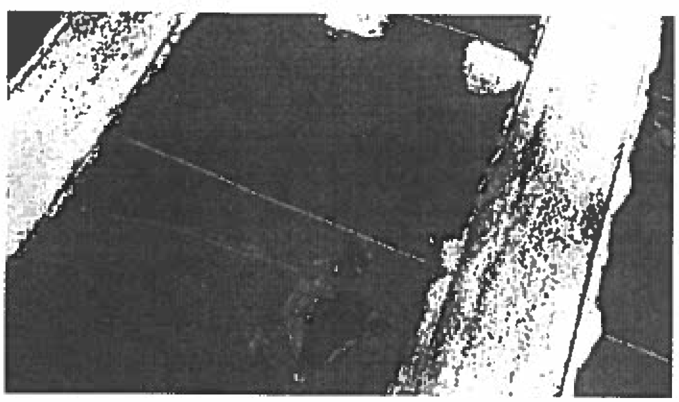
WATER ENTRANCE AND ARCING OR SEVERE CELL DAMAGE

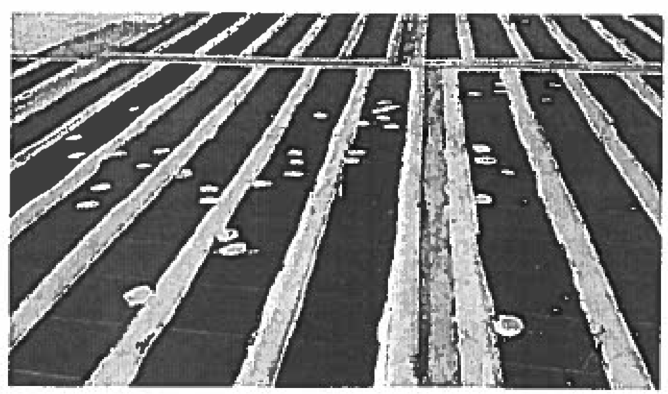


MANY ATTEMPS MADE TO "PATCH" THE DAMAGE

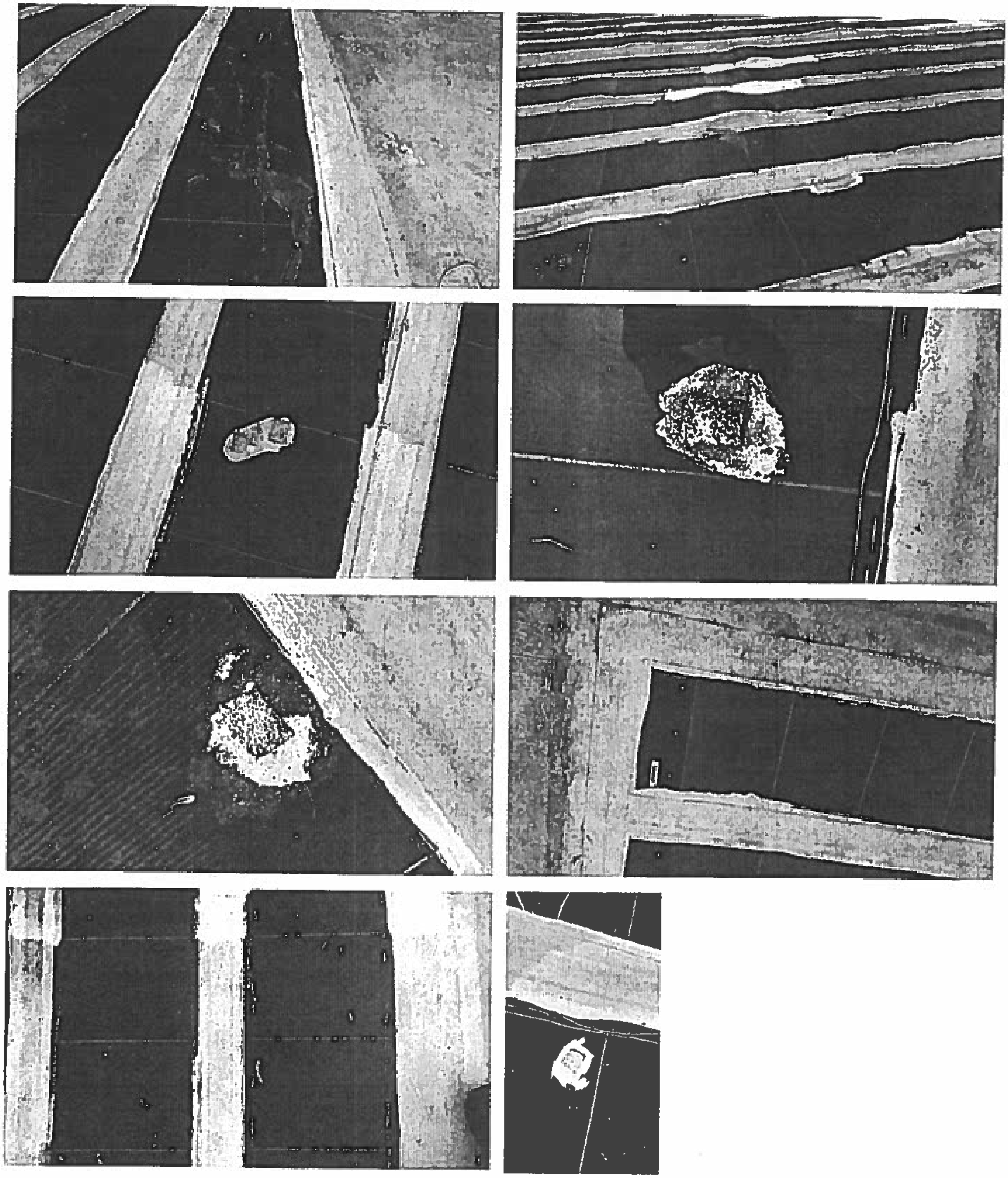


EXAMPLE OF DAMAGED PROTECTIVE LAYER AND EXPOSED CELLS

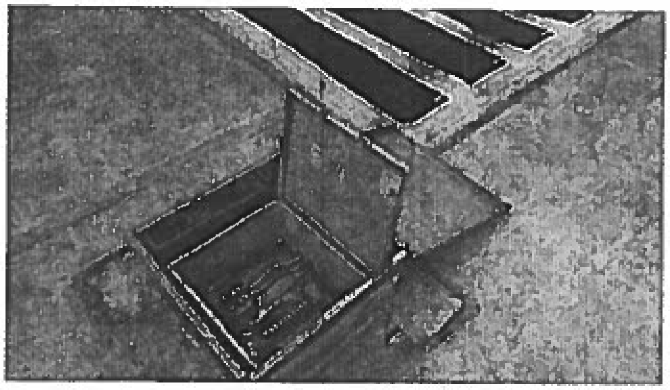




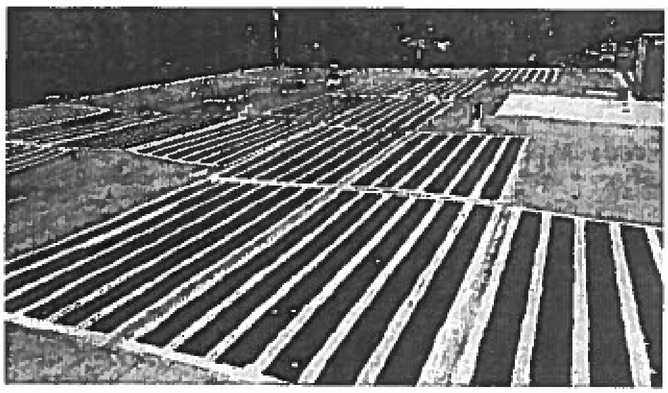
ENTIRE ARRAY HAS BEEN "PATCHED" AND RE-FASTENED TO ROOF SURFACE USING A SYSTEM OF GAUZE AND SEALANT AFTER MODULES HAD BEEN SEVERLY DELAMINATING FROM ROOF SURFACE AND REPORTEDLY CAUSING LEAKS. THIS RESULTED IN COVERING OF THE EDGES OF THE PV MODULES AND PARTIALLY BLOCKING THE CELLS ON EVERY MODULE.

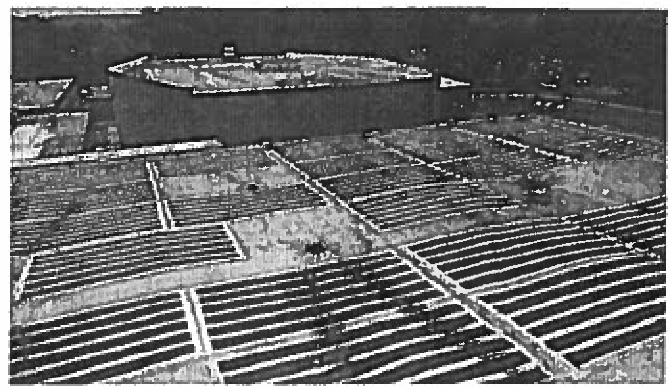


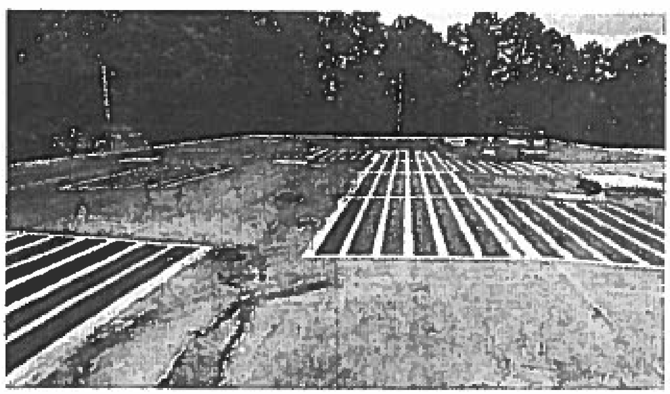
MORE EXAMPLES OF PATCHING AND SEALING WORK.

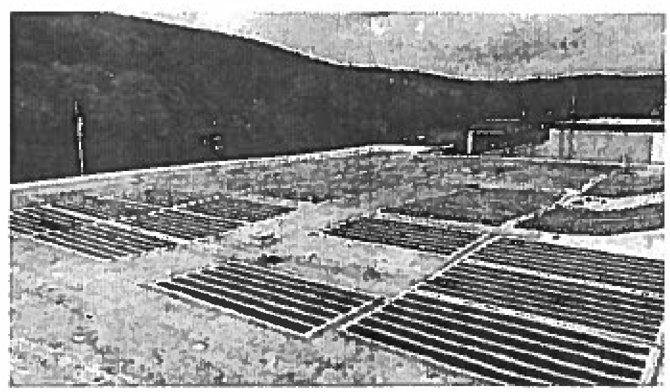


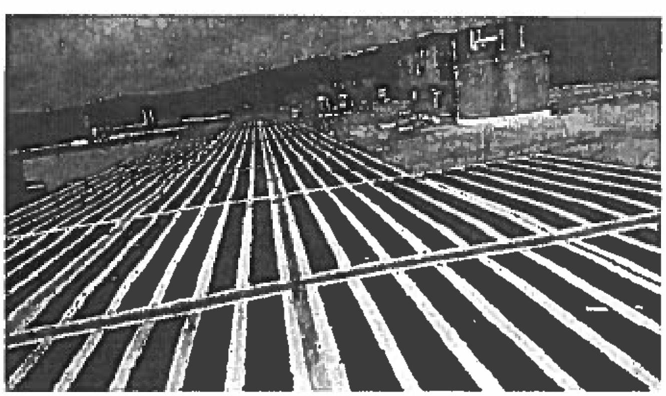
ALL COMBINER BOXES ARE "BURIED" IN ROOF SURFACE. ALL STRING WIRING FOR DC SOURCE CIRCUITS IS IN PVC CONDUITS BURIED IN ROOF SURFACE AND IS INACCESSIBLE. A CHECK OF THE INDIVIDUAL STRING VOLTAGES REVEALED THAT MANY IF NOT MOST STRINGS ARE OPERATING AT SEVERLY REDUCED VOLTAGES, WITH SOME "DEAD" CIRCUITS. SINCE ALL WIRING IS PERMANENTLY BURIED IN THE ROOF SURFACE, DIAGNOSIS AND REPAIR IS IMPOSSIBLE.

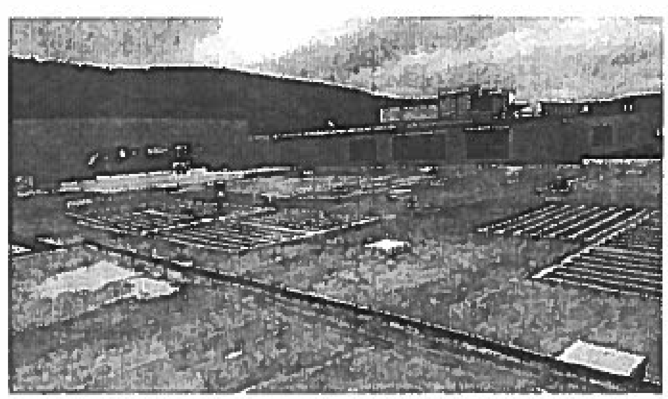












BOROUGH OF NAUGATUCK
BUILDING DEPARTMENT
229 Church Street • Naugatuck, CT 06770 • (203) 720-7035

April 5, 2019

Konstantinos Diamantis, Director
Department of Administrative Services
Office of School Construction Grants and Review
450 Columbus Blvd.
Hartford, CT. 06103

Re: Naugatuck High School Roof
Unsafe Condition

On February 26, 2019 the Naugatuck Building Department was notified of an unsafe condition on the roof of Naugatuck High School located at 497 Rubber Avenue Naugatuck CT. 06770.

The Naugatuck Building Department along with the Naugatuck Fire Marshal inspected the roof and found the intergraded solar panels that are heat welded to the vinyl roof membrane were delaminating, allowing water to enter the building and electrical junction boxes causing small fires. The photovoltaic system had been removed from service however the pv panels are still producing energy which can cause possible electrocution of anyone who walks on the roof in a damp or wet condition.

Pursuant to Section 116.1 of the State of Connecticut Building Code the roof of the Naugatuck High School has been deemed unsafe due to unsafe electrical equipment. 116.1 states in part; structures or existing equipment that are unsafe or deficient which constitutes a fire hazard, or are otherwise dangerous to human life shall be deemed unsafe.

Based on the conditions detailed above the Naugatuck Building Department feels the roof on the Naugatuck High School shall be replaced as soon as possible to avoid further risk to the building and persons working on the roofs mechanical systems.

Sincerely,

Bill H

Bill Herzman
Building Official
Borough of Naugatuck

cc: N.Warren (Pete) Hess, Mayor
Jim McGrath, Executive Assistant to the Mayor
Sharon Locke, Superintendent Naugatuck Public Schools

EDWARD G. FITZPATRICK
PETER E. MARIANO
CARLOS A. SANTOS
CESAR L. SOUSA
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ANTONIO A. NUNES
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44 Lyon Terrace
Bridgeport, CT 06604

Please Reply to Naugatuck Office

April 10, 2019

Konstantinos Diamantis, Director
Department of Administrative Services
Office of School Construction Grants and Review
450 Columbus Blvd.
Hartford, CT 06103

Re: Naugatuck High School Roof

Dear Mr. Diamantis:

This office is the legal counsel to the Borough of Naugatuck with regard to hazardous and unsafe conditions presented by the Naugatuck High School roof.

Our review of this matter reveals that the roof was substantially completed in February, 2009 by Solar Integrated Technologies, Inc. (SIT), a California- based entity. In addition, the construction contract was accompanied by a 20 year Installation Warranty furnished by SIT. This Warranty was the sole avenue available to the Borough for possible recovery of funds due to the failure of SIT's photovoltaic technology.

SIT filed for Chapter 11 Bankruptcy Protection in 2012 and a liquidation of all the company assets (Chapter 7) occurred on November 16, 2015 as the debts of the business far exceeded its assets and no proceeds were distributed to non-secured creditors.

Based on the above, it is my opinion that the Borough of Naugatuck is without a legal remedy against SIT for its breach of Warranty and the resulting damage to the Naugatuck High School roof.

If you have any questions or desire further information, please contact me directly.

Very truly yours,

Edward G. Fitzpatrick

845 Brook Street, Rocky Hill, CT 06067
T 860.563.0015
InclusiveProsperityCapital.org

INCLUSIVE
PROSPERITY CAPITAL

Memo

To: Bryan Garcia and Eric Shrago, Connecticut Green Bank

From: Inclusive Prosperity Capital Staff

Date: April 18, 2019

Re: IPC Quarterly Reporting – FY2019, Q3

Progress to targets from July 2018 through March 2019

Product	Number of Projects	Projects Target	% to goal	Total Financed Amount	Financed Target	% to goal	MW Installed	MW Target	% to goal
Smart-E Loan	577	540	107%	$7,359,982	$8,775,00	84%	0.60 MW	1.30 MW	47%
Multifamily	14	19	74%	$34,725,729	$2,570,000	1351%	0.3 MW	0.10 MW	261%
Solar PPA	17	25	68%	$6,332,283	$14,062,500	45%	3.6	6.3	58%
Low income single family	566	586	96.6%	$16,367,234	$15,565,855	105.15%	4.00 MW	3.60 MW	110.12%

PSA 5410 – Smart-E Loan*

- **Volume Update**
  - Closed Smart-E Loan volume exceeded the full FY19 target in the third quarter
  - Monthly volume was about 30 closed loans in Q3 – lighter than the two previous quarters which each had about 85 closed loans per month
  - HVAC volume is consistently strong, representing 78% of closed loans through Q3
  - Solar volume is less than originally anticipated, impacting targets for MW and amount financed
    - Notable exceptions are EcoSmart Home Services (offered contractor-funded IRBs through C4C) and Aegis Solar (standard rate loans through Mutual Security CU)

        - Program staff had conversations with several installers who were previously active in the Smart-E program and each mentioned the preference for financing that includes a 0% ITC option and a single statewide lender option (CED and other manufacturer financing options were mentioned often)

- **Lender Update**
    - In Q3, two Smart-E lenders stopped taking new Smart-E Loan applications: **First Suffield Bank** and **CorePlus Credit Union**
        - First Suffield Bank was acquired by Peoples Bank (of Massachusetts) and notified program staff that they would not take new loan applications until further notice.
            - Little impact to program – low volume overall; no closed loans following end of the 0.99% rate
        - CorePlus Credit Union's Asset and Loan Committee decided to stop taking new applications until the Green Bank raised Smart-E rates by 50 basis points, having gone through a rate adjustment on all of their unsecured products. Program staff denied request because no other lenders requested a rate increase, and it would put them at a disadvantage compared to other lenders.
            - CorePlus agreed to continue taking applications from only two of their highest volume contractors: R&W Heating and Duncklee Inc. (both local HVAC companies).
    - **Eastern CT Savings Bank** requested an adjustment in their loan loss reserve ("LLR") calculation to be based off principal outstanding rather than original principal. Change will decrease the total LLR amount, but also decreases their lender loss responsibility, thereby increasing the possibility of recovering some some losses from the reserve.
        - Program staff are working through processing an amendment to their Financing Agreement.
            - Program staff offered this change to CorePlus to attract them to stay in the program – they agreed to the change but not to staying.
    - **Capital for Change** continues to top the list of lenders with 63% of both capital deployed and closed loans

- **Contractor Update**
    - Program staff recognized 13 Smart-E contractors as "Top Performers" for calendar year 2018 in February 2019. Contractors were evaluated based on criteria including: having at least 10 clsoed loans, utilizing Smart-E marketing materials, offering the contractor-funded IRB, no inspection issues, etc. A recognition breakfast was held at the Energize CT Center.
    - New contractors continue to be trained weekly – mostly HVAC.

- **New platform update**

    - In collaboration with staff at Michigan Saves, IPC staff are developing a new, more robust, and cost-effective platform to manage Smart-E projects and contractors, named the NGEN platform. Development is ahead of schedule and the platform will be ready for new program partners around the country to access on July 1, 2019.

PSA 5411 – Multifamily

The Multifamily sector has continued to work to implement a wide array of pre-development and term projects with long development timelines. Although only a handful of projects closed in the first half of the fiscal year, nine projects have closed or been completed (with IPC & Green Bank-catalyzed technical assistance) within only the last month, with several other prospects potentially doing so in the coming weeks.

A revamped Sherpa Pre-Development has yielded two energy audit loans in this span, with at least one moving toward a design development loan and eventual permanent financing. We closed one large Navigator design development loan and have two others of similar magnitude from the same managing partnership under consideration.

On the term financing front, we have closed three LIME Loans, are awaiting the imminent closing of another, and was just notified of the approval of a third project that is seeking a rapid closing process. A number of previously-funded pre-development projects have moved to implementation, either via CHFA permanent financing packages or funded via reserves based on their pre-development analyses. Solar PPA projects continue to materialize in punctuated frequency with three projects having closed and several others far along in the negotiation process but delayed due to property owner or vendor bandwidth. Finally, IPC has approved one additional EnergizeCT Health & Safety Revolving Loan Fund, in addition to the two previously closed projects, which should close in the coming weeks.

Development of a Salesforce-based loan origination platform for the Multifamily product suite is under way and expected to launch in the 4th fiscal quarter.

PSA 5412 – Solar PPA

IPC staff assisted the Green Bank in the sale of an approximately 1.00 MW portfolio of projects to SunWealth in December, and is currently supporting the sale of a second, 2.26 MW portfolio expected to close in the fiscal 4th quarter.

On a go-forward basis IPC staff is leading, with support from Green Bank staff, on sourcing tax equity for a new fund that will be managed at IPC and will be capable of supporting projects originated by the Green Bank in Connecticut and by IPC nationally – such a construct should facilitate greater financing ability and options for Green Bank projects in Connecticut. IPC worked with Green Bank's general counsel to identify a law firm to assist in the corporate infrastructure set up for the new fund structure, and IPC intends to enter formal engagement for organizational and fund structure setups in the second calendar quarter of 2019. In addition to tax equity, IPC is in the process of sourcing debt capital that can be used for the new fund, which presents the Green Bank an opportunity to participate for financial gains/targets in Connecticut-based solar PPA projects. IPC is in discussions with Green Bank for the level of debt they might provide.

IPC supported Green Bank staff in the evaluation of PPA pricing and recommended adjustments. IPC also supported Green Bank in dealing with customer issues related to lack of snow guards on panel installations, resulting in a change in policy to include snow guards on projects going forward and developed a draft document that can be used with developers and customers outlining the process and timeline, as a means of setting appropriate expectations. By identifying snow guard options early on in the development and construction timeline of solar PPA projects, both IPC and Green Bank staff identified a means to save significant costs on a go-forward basis, while still providing the same level of customer benefits, relative to retro-fitting existing/developed projects with snow guards.

Development of a Salesforce-based project origination platform for the Solar PPA product suite is under way and expected to launch in the 4th fiscal quarter. Green Bank and IPC staff are jointly working on the specifications for this platform and Green Bank staff will have access to this platform for the origination of CT solar projects. Once implemented, the Solar PPA technology platform is expected to deliver productivity gains to both Green Bank and IPC.

PSA 5413 – Investment Management (LMI Solar and Green and Healthy Homes)

PosiGen Solar for All Program Management

PosiGen Solar is wrapping up their Solar For All campaign for greater Hartford. PosiGen was able to utilize their new Hartford sales office to have staff present at many local events to help drive demand. Targeting census tracts with high homeownership rates along with being 80% AMI has helped them to be very intentional in their outreach and marketing efforts. Decisions about new locations for campaigns will be based on communities raising their hands to participate to qualify for the Sustainable CT certifications and actions. In the remainder of the fiscal year, Mansfield and Windham will be running a joint campaign.

Green and Health Homes Project

The Green and Healthy Homes Program received 3 years of claims level Medicaid data to conduct an ROI analysis for the business case in CT of interventions related asthma, elevated blood levels, and injuries related to trips and falls. GHHI has conducted an initial analysis and presented findings to the Medicaid staff, who were very supportive of the work and the direction, including options for payments. The multi-agency partnership has briefed over 134 organizations, 230 people, and 20 presentations or briefings. With the new administration, project staff briefed several transition policy committees and were incorporated into recommendations from Energy and Housing. The project was also selected as on of just 5 innovative cross-cutting initiatives for the Governor. Updates for new commissioners of the partner agencies has begun and staff at all agencies remain supportive of the effort. The partnership is starting the working groups to help shape pilot design and implementation prior to a convening later in the summer.

Investment Management

IPC staff supported Green Bank staff on the following financings:

- <u>PosiGen</u>: Ongoing portfolio monitoring, payment verification and processing, and diligence/analysis on a refinancing with a 3rd party capital source on Green Bank collateral which will result in additional 3rd party capital being driven into PosiGen investment structures (expected to close the 2nd calendar quarter of 2019). Additionally, IPC continues to monitor, administer, and support the Green Bank's investment position in PosiGen through IPC's non-controlling participation in the Green Bank financing facility.

- FCE: IPC advised, alongside Green Bank, on 3rd party capital structuring and placement for two fuel cell projects in Connecticut, resulting in three separate 3rd party financing institutions providing capital into those projects. In addition, IPC supported the Green Bank's own capital placement into those projects.

Use of DEEP Proceeds

EnergizeCT Health & Safety Revolving Loan Fund

The assignment of this program from the Green Bank to IPC was completed on December 20th, 2018

To date, two projects have closed under this program and were assigned to IPC:

- Grove Street Mutual Housing c/o Mutual Housing of Greater Hartford
- St. Stephen's Townhouses, c/o Carrie P. Chandler Housing Development Corporation

IPC's loan committee approved a loan for a third project for $165,000 for Success Village in Bridgeport, the documents of which are out for execution.

$5M Capital Grant

This capital grant was closed on November 28, 2018 between DEEP and Green Bank, and in turn Green Bank closed with IPC on the same day.

A $4.1M financing facility was closed with PosiGen in December 2018to support their continued expansion in Connecticut, as part of larger $90M facility with LibreMax and the Green Bank.

At the end of the 3rd fiscal quarter, IPC was working to close an additional $650,000 facility with PosiGen.

General Updates

IPC commenced operations on August 3, 2018 and in its first several months accomplished the following:

- Stood up the organization including implementing a full suite of benefits for employees; the IT environment; banking, cash management, invoicing and accounts payables/receivable practices, corporate policies and procedures;
- Submitted the 1023 application to the IRS and received approval of tax-exempt status;
- Transitioned Green Bank responsibilities covered under the MOU and service agreements to operationalize under the outsourced arrangements;
- Executed an MOU, Joint Development Agreement and License Agreement with Michigan Saves for development and management of the national Smart-E Loan Platform including the cloud-based management system;

- Received a $250,000 operating grant from Hewlett Foundation to support development of the Smart-E cloud-based program management system with Michigan Saves;
    - Selected a vendor for the platform and commenced development
- Executed the capital grant agreements from DEEP through Green Bank ($5MM capital grant in November and $1.5M EnergizeCT Health & Safety Revolving in January);
- Secured Board approval for IPC's first investment into PosiGen using the $5MM capital grant from DEEP and made advances in December 2018 and March 2019 (as noted above);
- Closed a $10MM balance sheet guaranty facility with Kresge Foundation in January 2018;
- Held numerous informational meetings with potential capital providers including foundations, impact investors and missional aligned institutional investors
    - In diligence on a $25MM multi-draw credit facility with a senior debt provider
    - In diligence with two foundations for PRIs ($5M each)
    - Submitted a $200,000 operating grant request to a foundation for Midwest expansion, currently in diligence
    - Asked to submit a grant request to a foundation in partnership with Clean Energy Works and Southeast Energy Efficiency Association to support PAYS expansion in the Southeast and Midwest, with IPC's role being sourcing 3rd party capital
- Secured an advisory engagement with Fuel Cell Energy in conjunction with Green Bank to place capital into a large fuel cell project on a submarine base. The engagement provides IPC with short term fee income, the potential to participate in the capital stack down the road, and introductions to capital providers with whom IPC may participate in future transactions;
- Secured an advisory engagement with Spano Partners Holdings to source an inventory financing facility for Sonnen batteries for use in an LMI targeted solar + storage virtual power plant model;
- Began to build the pipeline for deployment of capital into projects:
    - Developed a partnership with Elevate Energy to bring our term loan product to IL for their nonprofit work
    - Signed an MOU with Michigan Saves to bring our multifamily/nonprofit pre-development and term loan products and commercial solar PPA products to MI
    - Developed a partnership with the DC Sustainable Energy Utility
    - Numerous conversations with other green banks, nonprofits, developers in other markets to discuss potential partnerships
    - Pricing commercial solar and community solar projects with developers across projects in RI, MA, NY, MD, IL, MI, VA, RI, CA, NC

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CONNECTICUT GREEN BANK

Memo

To: Connecticut Green Bank Board of Directors

From: Eric Shrago, Managing Director of Operations

CC: Bryan Garcia, President and CEO

Date: April 18, 2019

Re: Fiscal Year 2019 Q3 Progress to Targets

The following memo outlines Connecticut Green Bank (CGB) progress to targets for Fiscal Year (FY) 2019 as of March 31, 2019 (i.e., Q1, Q2, and Q3 performance for FY 2019).

Infrastructure Sector
The Infrastructure sector continues to have a strong year. Residential Solar Investment Program (RSIP) is ahead of its target, in terms of projects, capital and capacity. Year to date, we see installed costs of $3.49/watt which is in line with our original expectations of $3.50/watt, and less than the $3.97/watt we saw in the first quarter.

Table 1. Infrastructure Sector FY 2019 Progress to Targets

	Projects			Capital Deployed			Capacity (MW)		
Product/Program	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**
RSIP	5,660	7,250	78%	$167,083,383	$203,000,000	82%	47.9	58.0	83%
Infrastructure Total	**5,660**	**7,250**	**78%**	**$167,083,383**	**$203,000,000**	**82%**	**47.9**	**58.0**	**83%**

Residential Sector
Smart-E targets performance to date has exceeded expectations, due to strong volume and growth in new contractors using the product continuing from earlier this year. However, there has been a significant decline in loan size vs. projections due to a significantly higher proportion of HVAC and efficiency projects versus to solar. This is consistent with performance in the prior quarters this year.

The Low-to-Moderate-Income (LMI) lease program offered through PosiGen is on target to exceed its goals. The Green Bank staff continues to assist PosiGen in its outreach and is currently providing them operational support in clearing a backlog of projects waiting to energize.

The Multifamily Program has is on track to hit and or exceed its target for the year. This year's term loan activity shows is the result of prior year technical assistance and predevelopment loans.

MFH # of Units	Closed
Affordable	1,241

Market Rate	0
Total	**1,241**

The Multifamily Pre-development and Term lending projects closed year to date impact 1,241 housing units, all of which serve low- and moderate-income residents.

Table 2. Residential Sector FY 2019 Progress to Targets

	Projects			Capital Deployed			Capacity (MW)		
Product/Program	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**
Smart-E	577	540	107%	$7,359,982	$8,775,000	84%	0.6	1.3	47%
Low Income Loans/Leases	566	586	97%	$16,367,234	$15,565,855	105%	4.0	3.6	110%
Multi-Family Pre-Development	4	4	100%	$258,250	$70,000	369%	0.0	0.0	0%
Multi-Family Term	10	15	67%	$34,467,479	$2,500,000	1379%	0.3	0.1	261%
Residential Total	**1,157**	**1,145**	**101%**	**$58,452,945**	**$26,910,855**	**217%**	**4.8**	**5.0**	**97%**

Table 3. Smart-E Channels

Smart-E Loan Channels	**Closed**	**% of Loans**
EV	1	0%
Home Performance	51	9%
HVAC	447	77%
Solar	65	11%
(blank)	13	2%
Total	**577**	**100%**

Commercial, Industrial, & Institutional Sector

The Commercial, Industrial, & Institutional Sector is behind targets as both products continue to build pipelines. The C-PACE program closed 32 projects (56% of the annual target), while the amount of capital deployed was $14,069,285 (58% of the annual target).

The Commercial Lease products, CT Solar Lease III and Onyx, are behind their combined target.

Table 4. Commercial, Industrial and Institutional Sector FY 2019 Progress to Targets

	Projects			Capital Deployed			Capacity (MW)		
Product/Program	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**
CPACE	32	57	56%	$14,069,285	$24,082,500	58%	4.5	6.6	69%
Commercial Lease	17	25	68%	$6,332,283	$14,062,500	45%	3.6	6.3	58%
CI&I Total	**42**	**73**	**58%**	**$20,106,792**	**$33,082,500**	**61%**	**7.0**	**10.6**	**66%**

Strategic Investments

The Green Bank staff continues to work on two strategic fuel cell projects. The first has closed and is expected to fund in May and the second is expected to close this year and fund in FY20.

CGB Total

Table 5. CGB FY 2019 Progress to Targets

	Projects			Capital Deployed			Capacity (MW)		
Sector	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**	**Closed**	**Target**	**% to Target**
Infrastructure Sector	5,660	7,250	78%	$167,083,383	$203,000,000	82%	47.9	58.0	83%
Residential Sector	1,157	1,145	101%	$58,452,945	$26,910,855	217%	4.8	5.0	97%
Commercial, Industrial and Institutional Sector	42	73	58%	$20,106,792	$33,082,500	61%	7.0	10.6	66%
Other Strategic Investments	0	1	0%	$0	$15,000,000	0%	0.0	3.7	0%
CGB Total	**6,189**	**7,748**	**80%**	**$228,582,964**	**$258,917,500**	**88%**	**54.9**	**72.3**	**76%**

** CGB Totals have been adjusted to avoid double counting RSIP projects using residential financing products and commercial solar lease projects using CPACE.*

Connecticut Green Bank 2.0

From 1 to 2 Orders of Magnitude

Pocantico Conference Center of the Rockefeller Brothers Fund
February 6 - 7, 2019

CONNECTICUT
GREEN BANK

Pocantico Center of the Rockefeller Brothers Fund

In Attendance

Mark Allegrini, Sustainable Connecticut
Jessica Bailey, Greenworks Lending
David Cantor, Liberty Bank
Claire Coleman, Connecticut Fund for the Environment
Stuart Decew, Yale Center for Business and the Environment
Mackey Dykes, Connecticut Green Bank
Monica Eager, Dpict (co-facilitator)
Brian Farnen, Connecticut Green Bank
Bryan Garcia, Connecticut Green Bank
John Harrity, Roundtable on Climate and Jobs
John Humphries, Roundtable on Climate and Jobs
Bert Hunter, Connecticut Green Bank
Alex Kovtunenko, Connecticut Green Bank
Bob Lamb, Lamont Financial
Pat McDonnell, Avangrid
Jane Murphy, Connecticut Green Bank
Kerry O'Neill, Inclusive Prosperity Capital
Selya Price, Connecticut Green Bank
Dr. Jonathan Raab, Raab Associates (facilitator)
Cheryl Samuels, Connecticut Green Bank
Robert Schmitt, Connecticut Green Bank
Eric Shrago, Connecticut Green Bank
Catherine Smith, Connecticut DECD
Mary Sotos, Connecticut DEEP
Kim Stevenson, Connecticut Green Bank
Mary Evelyn Tucker, Yale University
Brenda Watson, Operation Fuel

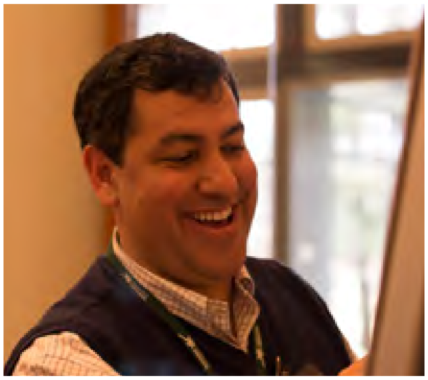
Connecticut Green Bank 2.0

From 1 to 2 Orders of Magnitude

The third aim of the Paris Agreement is "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development." With this in mind, the Connecticut Green Bank convened Connecticut leaders in February of 2019 to establish another ambitious strategy - for the Connecticut Green Bank to mobilize greater investment in Connecticut's green energy economy to combat climate change.

The conference was held with three objectives in mind:

1. Assessing progress achieved by Connecticut Green Bank to date;
2. Engaging staff, board members, and stakeholders in a facilitated dialogue to solicit insights and new ideas; and
3. Using key insights and ideas to help develop a framework for a multi-year comprehensive plan



Bryan Garcia, CT Green Bank

Through numerous "green storming" sessions, these leaders laid out a vision for an ideal sustainable future in Connecticut, exploring current and future products and programs and sources of funding, and identifying ways to "scale up" the Green Bank's impact. Their visions went beyond just growing the green energy economy, but encapsulated a better and more sustainable future for humanity. Together, we envisioned a future that not just recognizes the importance of green energy, but one that embraces the significance of inclusive prosperity.

In memorializing our discussions and outputs from this strategic retreat, we have the pieces needed to forge a clearer path forward to realize this future.

Bryan Garcia, President and CEO
Connecticut Green Bank

Participants in the main meeting room at the Pocantico Center of the Rockefeller Brothers Fund

Participants during the Welcome & Introductions session

Welcome & Introductions

Connecticut Green Bank staff and stakeholders first gathered at the Pocantico Center of the Rockefeller Brothers Fund in November 2011 to establish a vision for the Green Bank in 2020. More than seven years later, the Green Bank reconvened at the Pocantico Center to reflect on the past and envision an even bigger future. The Connecticut Green Bank 1.0 to 2.0 conference included stakeholders across a broad continuum, from senior staff and board members of the Green Bank, to leaders of financial service companies, utilities and state agencies, and other statewide leaders. Constant across this spectrum was a vision for a more sustainable future for Connecticut. Participants were asked what they saw as the most important ingredients for Connecticut to be on a glide path to a sustainable future by 2030 and the biggest potential impediments. While many themes emerged, the role the Green Bank can play in order to ensure such a future was woven throughout the conversation.

Ingredients for Success. Attendees identified a number of important ingredients for success including a sense of urgency, increased awareness and engagement, better access to capital and innovative financing, scalable and impactful ideas, smart transitions and more attractive markets for investors and innovators.

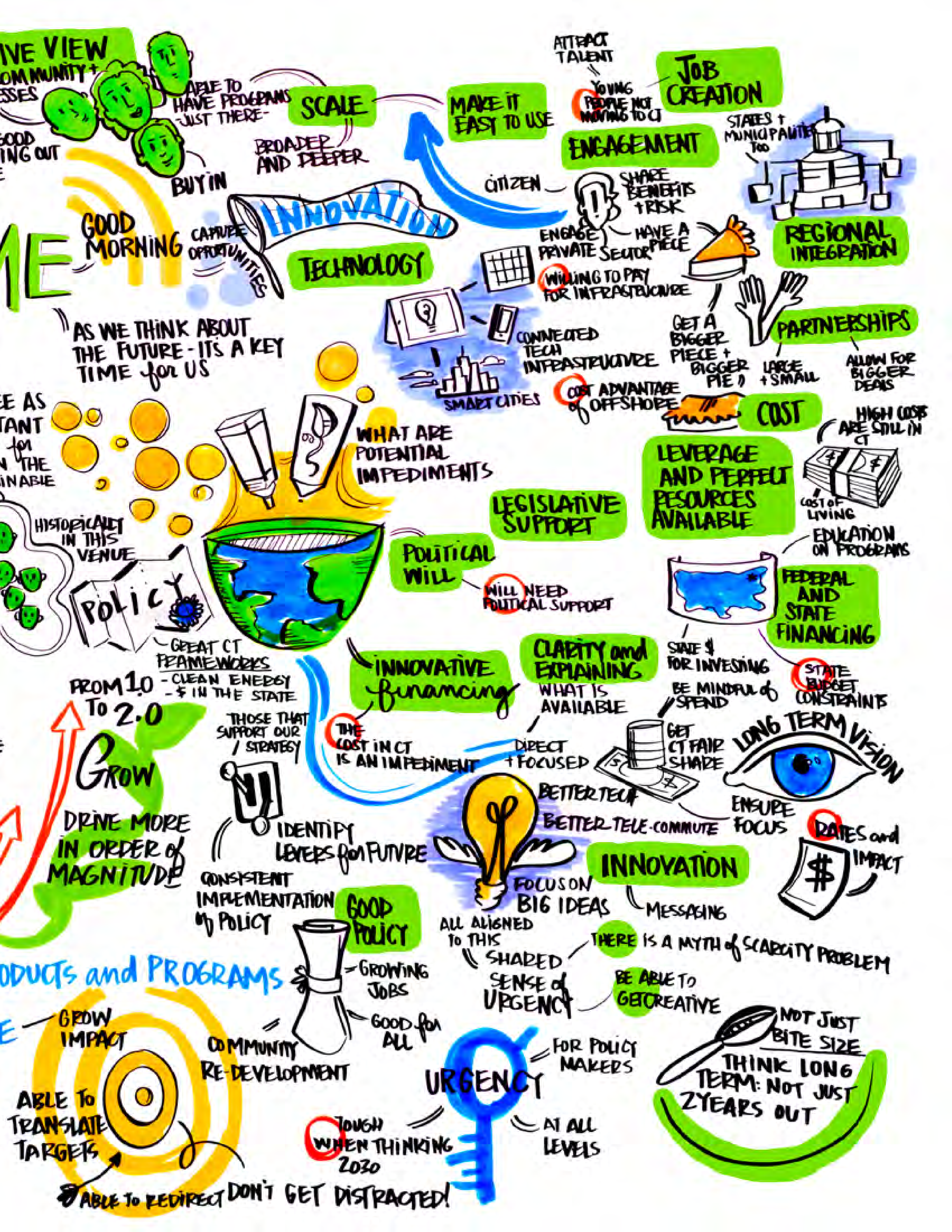
Potential Impediments. The State budget, political will, a focus on financial sustainability, a broadening scope, customer acquisition, rigid regulatory framework, and the myth of scarcity were all identified by the group as possible impediments to success and progress.

John Harrity, Roundtable on Climate and Jobs

Monica Eager, Dpict

Eric Shrago & Bryan Garcia, CT Green Bank, Dr. Jonathan Raab, Raab Associates

Claire Coleman, CT Fund for the Environment



IVE VIEW
OMMUNITY +
SSES
ABLE TO HAVE PROGRAMS -JUST THERE-
GOOD
ING OUT
BUY IN
SCALE
BROADER AND DEEPER
MAKE IT EASY TO USE
ATTRACT TALENT
YOUNG PEOPLE NOT MOVING TO CT
JOB CREATION
ENGAGEMENT
STATES + MUNICIPALITIES TOO
CITIZEN
SHARE BENEFITS + RISK
ENGAGE PRIVATE SECTOR
HAVE A PIECE
REGIONAL INTEGRATION
GOOD MORNING
CAPTURE OPPORTUNITIES
INNOVATION
TECHNOLOGY
WILLING TO PAY FOR INFRASTRUCTURE
AS WE THINK ABOUT THE FUTURE - ITS A KEY TIME for US
CONNECTED TECH INFRASTRUCTURE
SMART CITIES
GET A BIGGER PIECE + BIGGER PIE!
PARTNERSHIPS
LARGE + SMALL
ALLOW FOR BIGGER DEALS
COST ADVANTAGE of OFFSHORE
COST
HIGH COSTS ARE STILL IN CT
E AS
TANT
for
N THE
INABLE
WHAT ARE POTENTIAL IMPEDIMENTS
LEVERAGE AND PERFECT RESOURCES AVAILABLE
COST OF LIVING
LEGISLATIVE SUPPORT
HISTORICALLY IN THIS VENUE
POLICY
POLITICAL WILL
WILL NEED POLITICAL SUPPORT
EDUCATION ON PROGRAMS
FEDERAL AND STATE FINANCING
GREAT CT FRAMEWORKS
- CLEAN ENERGY
- $ IN THE STATE
FROM 1.0 To 2.0
INNOVATIVE financing
CLARITY and EXPLAINING
WHAT IS AVAILABLE
STATE $ FOR INVESTING
STATE BUDGET CONSTRAINTS
BE MINDFUL of SPEND
THOSE THAT SUPPORT OUR / STRATEGY
THE COST IN CT IS AN IMPEDIMENT
DIRECT + FOCUSED
GET CT FAIR SHARE
LONG TERM VISION
GROW
DRIVE MORE IN ORDER of MAGNITUDE
IDENTIFY LEVERS for FUTURE
BETTER TECH
BETTER TELE-COMMUTE
ENSURE FOCUS
RATES and IMPACT
INNOVATION
CONSISTENT IMPLEMENTATION of POLICY
GOOD POLICY
FOCUS ON BIG IDEAS
MESSAGING
ALL ALIGNED to THIS
SHARED SENSE of URGENCY
THERE IS A MYTH of SCARCITY PROBLEM
ODUCTS and PROGRAMS
GROWING JOBS
BE ABLE TO GET CREATIVE
E
GROW IMPACT
GOOD for ALL
COMMUNITY RE-DEVELOPMENT
NOT JUST BITE SIZE
THINK LONG TERM: NOT JUST 2 YEARS OUT
FOR POLICY MAKERS
URGENCY
ABLE To TRANSLATE TARGETS
TOUGH WHEN THINKING 2030
AT ALL LEVELS
ABLE To REDIRECT
DON'T GET DISTRACTED!

From Green Bank 1.0 to Green Bank 2.0

Following a review of Green Bank 1.0 - the history, purpose, vision, mission and goals, as well as the structure, business units and performance of Connecticut Green Bank from July 2011 through December 2018 - participants were presented with a vision for Green Bank 2.0. This vision included:

Increasing investment in Connecticut. Scaling up investment another order of magnitude from $80/person/year to $850/person/year for Connecticut to meet the level of investment highlighted by the UN Sustainable Development Goals;

Carbon neutrality by 2050. Supporting Governor Lamont's vision of carbon neutrality by 2050, building on the leadership of his predecessors in establishing policies and framework to support clean energy deployment and mitigate climate change; and

Environmental sustainability. Recognizing the work of others (NY, RI, UK, etc.) in adapting the green bank model to other environmental infrastructure sectors (waste and recycling, water, agriculture, land conservation, parks, resiliency, etc.).

Brian Farnen, CT Green Bank

Participants were enthusiastic about the ongoing leadership role that Connecticut Green Bank must play in creating innovative, scalable solutions that can be replicated in the state and around the world. The vision for Green Bank 2.0 sparked a discussion among participants with many themes emerging:

Financial sustainability. The Green Bank, now facing new constraints and under pressure to make financial returns that lead to organizational sustainability, needs to establish investment targets that 1) drive ROI and 2) continue to leverage public funds with multiples of capital investment.

Addressing climate change "wedges." The development of markets for technologies that have the potential to help Connecticut meet its 2050 climate change goals present big opportunities. These market "wedges" include zero emission vehicles, battery storage and carbon free clean energy, renewable heating and cooling, and resiliency infrastructure (such as fuel cells and microgrids).

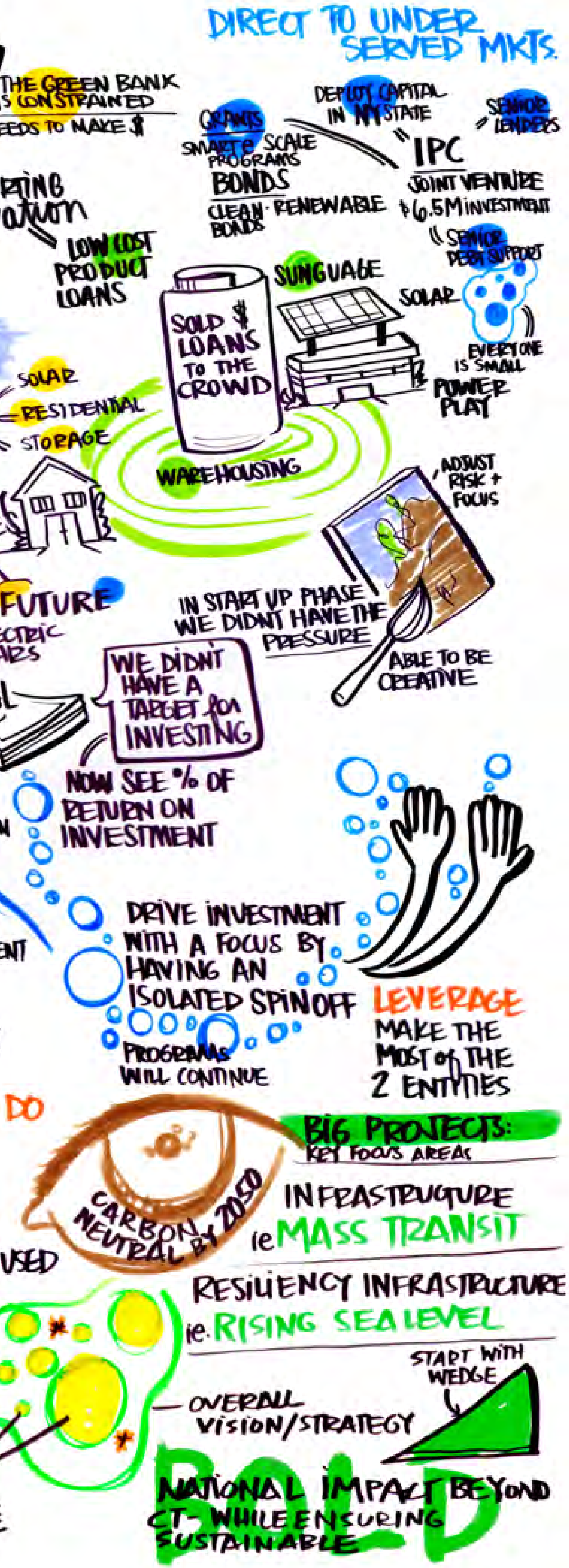
"Green" leadership and advocacy. Connecticut Green Bank's role as a catalyst and leader, raising awareness for and defining "green" in the U.S., will continue to be important. The ability to expand awareness of green bonding mechanisms, collect and analyze data, develop impact metrics, and communicate results to investors and citizens can have far-reaching effects.

Underserved Markets. Low income households, nonprofits, small businesses, and other underserved markets need the Green Bank's support in attracting private investment and ensuring inclusive prosperity. The Green Bank can make big impacts by reducing perceived risks by private investors, piloting and scaling programs, and eliminating barriers to clean energy improvements.

Scale and Scope. The Green Bank has a unique ability to evolve and adapt by building on its strength's in financing and clean energy policy to scale-up investments in clean energy. However, broadening scope to include new markets (e.g., environmental infrastructure) would present new challenges.

Mary Sotos, DEEP (foreground), Eric Shrago, CT Green Bank (background)


PROGRAMS
HARD TO GET GREEN CERTIFICATION SEEN AS $ INVESTMENT BENEFIT
MARGIN
SOME ARE WORKING ON VERY SLIM MARGINS
SUSTAINABILITY
- NOT JUST BANKING
POLICY
- INVESTMENT
PENSIONS
ETC.
BE GREEN ADVOCATES INTERNALLY
METRICS
ABLE TO ACCESS
DATA CONSOLIDATION
DELIVERED SUCCESS
THIS IS THE MOST IMPORTANT THING WE WILL DO!
ALL BANKS LIKE GREEN BANK OR
WE TAKE ON GREEN FUTURE
TOOLS
ABLE TO USE DATA TO INACT
Change
INCUBATE FOR NATIONAL APPLICATION
WIND + HYDRO FUEL CELLS
TECHNIQUES
TECH
IF WE DON'T LEAD NO ONE ELSE WILL
MODEL 1.0
WE ENVISIONED
CLEAN ENERGY AVAILABILITY
THINK ABOUT HOW WE BUILD THE PLANE WHILE FLYING
LEAD THE GREEN BANK MOVEMENT
ACCELERATING PRIVATE INVESTMENT and CAPITAL
IT'S AN AGE-THING PEOPLE ARE NOT ALWAYS PLUGGED IN
THINK ABOUT SCALE
MODEL THAT HAS BEEN USED for + by others
ATTRACT and DEPLOY
CAPITA
INTEREST IN GREEN: USA
LEVERAGE PUBLIC FUNDS
SEE THE NEED + DO THE CALCULATIO
SCALE OUT...
THINK ABOUT WHERE WE ARE HEADED
SCALE UP...
NEED FOR MORE KNOWLEDGE + EDUCATION INSIDE BANKS
TODAY + TOMORROW THINK BIG AGAIN
2.0
ENSURE OUR VISION IS BIG ENOUGH
NOTICE SHIFTS
ADAPT
BALANCE COMPETITION OF FOCUS
INVESTME CAPITAL + CLEAN ENERGY
NOT JUST CLEAN ENERGY
FLOOD CONTROL
PARKS + REC
FLEET PURCHASING
GO BEYOND WHERE WE think we can
WASTE + RECYCLING
CLEAN WATER
BE ABLE TO GROW TO/BY MAGNITUDE
MORE ON THE GROUND ie SOLAR IN CT
STILL TO
BEING USED WORLDWIDE
MODEL
CAN BE APPLIED TO MANY ARES
CLEAR VISION
FOCUSED ON GREEN
SPECIFICALLY WHAT WE CAN DO IN CT
CORE
ENSURE $ BEING DEPLOYED IS WELL
IS IT SHIFTS?
IS IT EVOLVE?
ENSURE CAPITAL INVESTMENTS APPEAR - EASY + ABLE TO INTEGRATE
EXPAND ON THE EDGES
EVOLVING TO MEET NEW + EVOLVING NEEDS
BUILD ON OUR STRENGTHS
- FINANCING
- POLICY
TOOLS NEEDED
- WHAT ADDS VALUE TO SOCIETY
ROLE FOR MULTIPLE ENTITIES



Bert Hunter, CT Green Bank

Brian Farnen, CT Green Bank

David Cantor, Liberty Bank

Existing Products and Programs

After participants had outlined both challenges and opportunities in transitioning to Green Bank 2.0, the focus turned to existing products and programs offered by Connecticut Green Bank in partnership with private investments, including:

- **Residential Solar Investment Program -** a statutorily required program that uses a declining incentive block structure to support 300 MW of behind-the-meter residential solar PV;
- **Solar for All -** an innovative solar PV lease and energy efficiency energy savings agreement financing product targeted at low-to-moderate income families using a special RSIP incentive;
- **Energize CT Smart-E Loan -** a credit enhancement program with community banks & credit unions offering low cost, long-term financing for measures supporting the Comprehensive Energy Strategy;
- **Multifamily Programs -** a program that includes a variety of pre-development and term loan financing products for affordable multifamily properties;
- **C-PACE -** a commercial, industrial and institutional financing program that uses a benefit assessment mechanism to provide low cost, long-term financing for measures supporting the Comprehensive Energy Strategy;
- **Green Bank Solar PPA -** a commercial, industrial and institutional financing product that uses an innovative power purchase agreement structure, in combination with C-PACE where appropriate, to reduce the burden of energy costs through the deployment of solar PV; and
- **Project Finance -** specific opportunities created to support in-state large-scale projects, including anaerobic digesters, small run-of-the-river hydro, grid tied fuel cells and combined heat and power projects requiring structured financial agreements.

Kerry O'Neill, Inclusive Prosperity Capital and Stuart Decew, CBEY

Following a discussion on the existing products and programs, participants tackled questions that will impact how the Green Bank considers future decisions regarding the existing product portfolio.

How should the Green Bank decide to expand programs vs. transitioning them to the private sector? What indicators can help make these decisions? How should sustainability factor into the process? Participants agreed that the Green Bank would need to consider investment criteria in order to determine when to enter, expand, or exit a product or program and introduced a number of other important themes:

Risk and Return. Participants recognized the importance of risk and return to ensure the Green Bank's financial sustainability, while at the same time ensuring that private capital is not crowded out as the Green Bank's leverage ratio may decline.

Speed and Penetration. The market potential across the Green Bank's suite of products and program is still substantial. Participants recognized that there are increasing customer acquisition challenges and costs, but that the Green Bank needs to accelerate activities and achieve deeper penetration in the markets it serves.

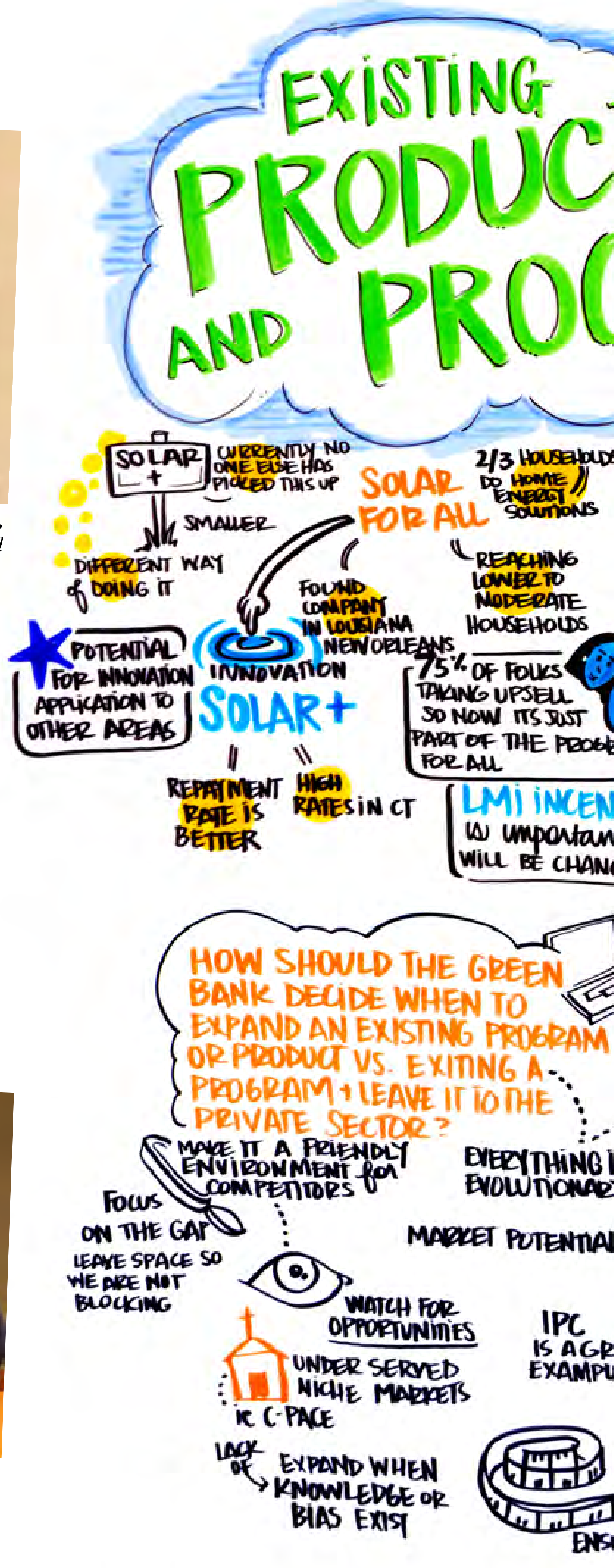
Replicability and Scalability. The climate crisis is an urgent one, and in order to make a substantial impact, participants acknowledged that products and programs needed to be replicable and scalable across the country.

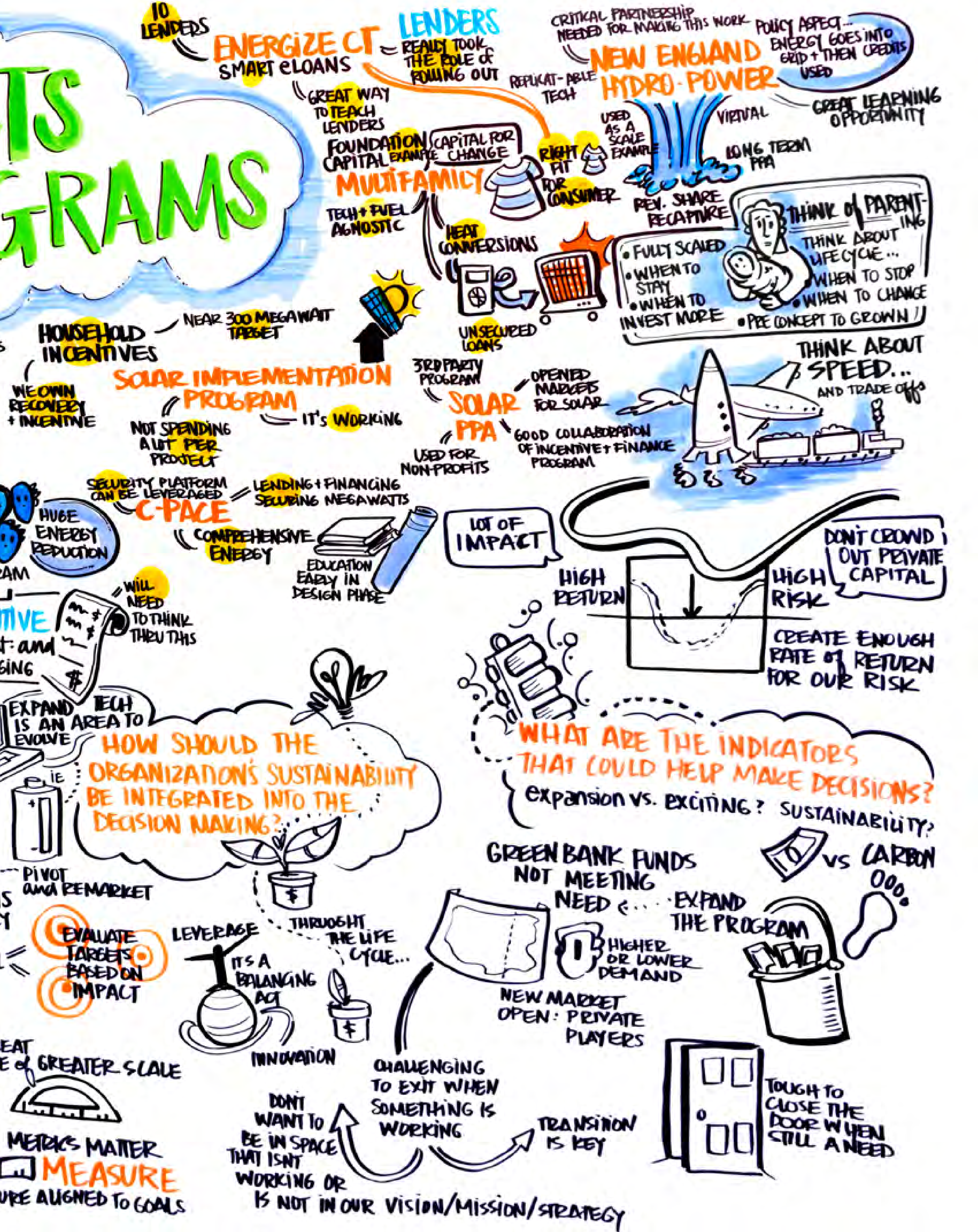
Catherine Smith, DECD

Kerry O'Neill, Inclusive Prosperity Capital and Brenda Watson, Operation Fuel

Alex Kovtunenko, CT Green Bank

Pat McDonnell, Avangrid and Stuart Decew, CBEY





TS
GRAMS
10 LENDERS
ENERGIZE CT SMART eLOANS
LENDERS
REALLY TOOK THE ROLE OF ROLLING OUT
GREAT WAY TO TEACH LENDERS
FOUNDATION CAPITAL EXAMPLE
CAPITAL FOR CHANGE
MULTIFAMILY
TECH + FUEL AGNOSTIC
HEAT CONVERSIONS
RIGHT FIT FOR CONSUMER
CRITICAL PARTNERSHIP NEEDED FOR MAKING THIS WORK
NEW ENGLAND HYDRO-POWER
POLICY ASPECT... ENERGY GOES INTO GRID + THEN CREDITS USED
REPLICAT-ABLE TECH
USED AS A SCALE EXAMPLE
VIRTUAL
GREAT LEARNING OPPORTUNITY
LONG TERM PPA
REV. SHARE RECAPTURE
THINK of PARENTING
THINK ABOUT LIFECYCLE...
• WHEN TO STOP
• WHEN TO CHANGE
• PRE CONCEPT TO GROWN
• FULLY SCALED
• WHEN TO STAY
• WHEN TO INVEST MORE
UNSECURED LOANS
HOUSEHOLD INCENTIVES
NEAR 300 MEGAWATT TARGET
WE OWN RECOVERY + INCENTIVE
SOLAR IMPLEMENTATION PROGRAM
IT'S WORKING
NOT SPENDING A LOT PER PROJECT
3RD PARTY PROGRAM
SOLAR PPA
OPENED MARKETS FOR SOLAR
GOOD COLLABORATION OF INCENTIVE + FINANCE PROGRAM
USED FOR NON-PROFITS
THINK ABOUT SPEED... AND TRADE OFFS
SECURITY PLATFORM CAN BE LEVERAGED
C-PACE
LENDING + FINANCING SECURING MEGAWATTS
COMPREHENSIVE ENERGY
HUGE ENERGY REDUCTION
AM
EDUCATION EARLY IN DESIGN PHASE
LOT OF IMPACT
DON'T CROWD OUT PRIVATE CAPITAL
HIGH RETURN
HIGH RISK
CREATE ENOUGH RATE of RETURN FOR OUR RISK
TIVE
t and
SING
WILL NEED TO THINK THRU THIS
EXPAND TECH IS AN AREA TO EVOLVE
IE
HOW SHOULD THE ORGANIZATION'S SUSTAINABILITY BE INTEGRATED INTO THE DECISION MAKING?
WHAT ARE THE INDICATORS THAT COULD HELP MAKE DECISIONS?
expansion vs. EXCITING? SUSTAINABILITY?
VS CARBON
PIVOT and REMARKET
GREEN BANK FUNDS NOT MEETING NEED
EXPAND THE PROGRAM
HIGHER OR LOWER DEMAND
NEW MARKET OPEN: PRIVATE PLAYERS
EVALUATE TARGETS BASED ON IMPACT
LEVERAGE
THROUGHT THE LIFE CYCLE...
IT'S A BALANCING ACT
INNOVATION
EAT
E of GREATER SCALE
CHALLENGING TO EXIT WHEN SOMETHING IS WORKING
DON'T WANT TO BE IN SPACE THAT ISN'T WORKING OR IS NOT IN OUR VISION/MISSION/STRATEGY
TRANSITION IS KEY
TOUGH TO CLOSE THE DOOR WHEN STILL A NEED
METRICS MATTER
MEASURE
URE ALIGNED TO GOALS

Potential New Products and Services

After discussing existing products and programs, participants turned to an exploration of potential new products and services. A couple of “big ideas” were presented to spark the discussion and push participant’s thinking outside of the box:

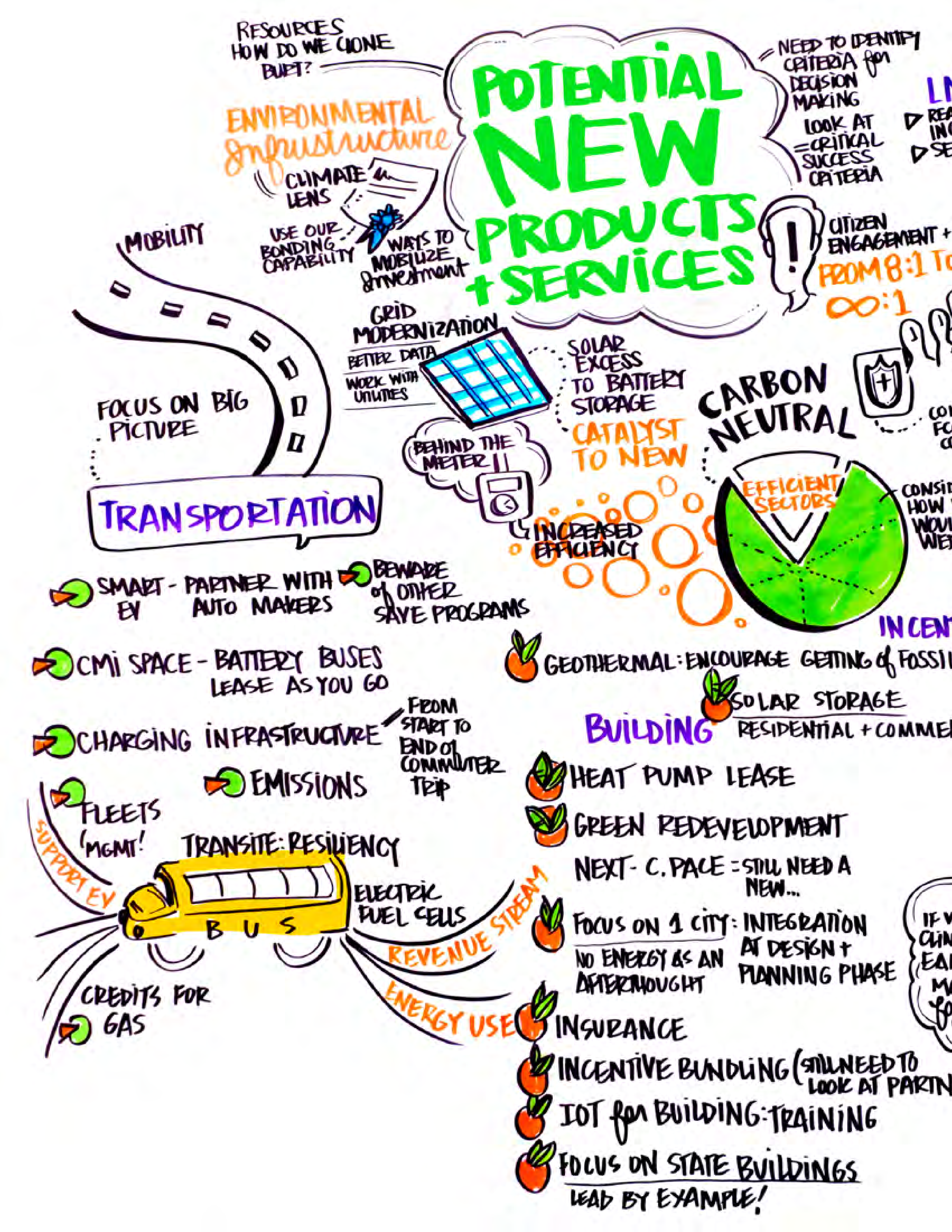
- **Grid Modernization and Decarbonization.** This technology-focused vision leverages behind-the-meter renewable energy resources such as solar PV in combination with battery storage to maximize benefits for customers and ratepayers. Including zero emission vehicles and zero emission heating and cooling technologies such as air source and ground source heat pumps could be integral in addressing climate change;
- **Citizen Engagement and Investment Platform.** By creating a public awareness and engagement program in partnership with Sustainable CT, the Green Bank could enlist local citizens to financially support community-based projects, building off the Green Bank’s crowd investing experience. This would providing impact investing opportunities that raise capital to support projects, while also defending the Green Bank through bond issuances and growing a supportive base of citizens;
- **Environmental Infrastructure.** Leveraging a public finance approach to scale-up the Green Bank’s investment model beyond “clean energy” through use of its public financing capabilities - such as bonding - that would support “environmental infrastructure” projects (water, waste, recycling, etc.).

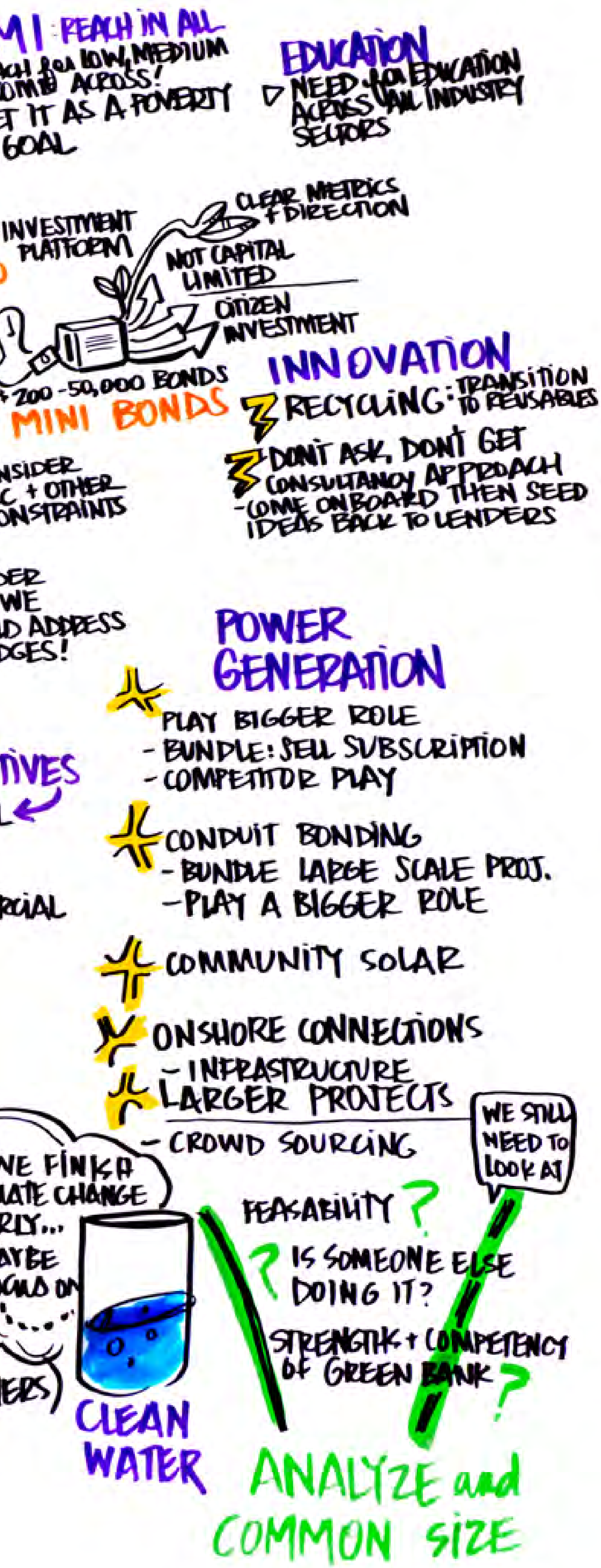
Stuart Decew, CBEY

Participants had no shortage of “big ideas” of their own. When asked what the best candidates for potential new Green Bank products and programs were and why, and whether these ideas could fit with the Green Bank’s needs for organizational sustainability, they outlined a number of concepts for further exploration regarding new products that would serve the Green Bank’s objectives:

- **Address Climate Change “Wedges” -** given the urgency of the climate change problem, solutions that address key, substantial market “wedges” with financial innovation including community solar, zero emission buses and refueling infrastructure and heat pumps;
- **Deploy Technologies that Empower and Motivate Customers -** energy usage meters and devices that can enable customers to better understand their needs based on season and time, supporting time of use rates and other strategies that help customers realize and verify savings opportunities;
- **Bonding -** use of the Green Bank’s bonding capability to raise capital, while ensuring that environmental infrastructure projects are viewed through the lens of mitigating climate change;
- **Insurance -** an insurance product that insures energy savings could help increase adoption among customers concerned about investment and technology risks;
- **Energy Savings Agreements -** pay as you save model can be more palatable to customers and could help with customer acquisition challenges;
- **Packages -** financing solutions and insurance or savings guarantees that increase customer confidence and reduce their risk;
- **Bundling -** technology and solution bundling (such as a Smart-E bundle);
- **R-PACE -** potential future solution requiring regulatory clarity at the federal level and comfort from the mortgage industry;
- **Investment Criteria -** an important next step for decision making in introducing new products.

John Humphries, Roundtable on Climate and Jobs


POTENTIAL NEW PRODUCTS + SERVICES
RESOURCES HOW DO WE CLONE BURT?
ENVIRONMENTAL Infrastructure
CLIMATE LENS
USE OUR BONDING CAPABILITY
WAYS TO MOBILIZE Investment
NEED TO IDENTIFY CRITERIA for DECISION MAKING
LOOK AT = CRITICAL SUCCESS CRITERIA
CITIZEN ENGAGEMENT +
FROM 8:1 TO ∞:1
MOBILITY
FOCUS ON BIG PICTURE
TRANSPORTATION
GRID MODERNIZATION
BETTER DATA
WORK WITH UTILITIES
BEHIND THE METER
SOLAR EXCESS TO BATTERY STORAGE
CATALYST TO NEW
INCREASED EFFICIENCY
CARBON NEUTRAL
EFFICIENT SECTORS
SMART - EV
PARTNER WITH AUTO MAKERS
BEWARE of OTHER SAVE PROGRAMS
CMI SPACE - BATTERY BUSES LEASE AS YOU GO
CHARGING INFRASTRUCTURE
FROM START TO END of COMMUTER TRIP
EMISSIONS
FLEETS 'MGMT'
SUPPORT EV
TRANSITE: RESILIENCY
BUS
ELECTRIC FUEL CELLS
REVENUE STREAM
ENERGY USE
CREDITS FOR GAS
GEOTHERMAL: ENCOURAGE GETTING of FOSSIL
SOLAR STORAGE
BUILDING
RESIDENTIAL + COMME
HEAT PUMP LEASE
GREEN REDEVELOPMENT
NEXT - C.PACE = STILL NEED A NEW...
FOCUS ON 1 CITY: INTEGRATION AT DESIGN + PLANNING PHASE
NO ENERGY AS AN AFTERTHOUGHT
INSURANCE
INCENTIVE BUNDLING (STILL NEED TO LOOK AT PARTN
IOT for BUILDING: TRAINING
FOCUS ON STATE BUILDINGS
LEAD BY EXAMPLE!



David Cantor, Liberty Bank and Bert Hunter, CT Green Bank

Mark Allegrini, Sustainable Connecticut

John Humphries, Roundtable on Climate and Jobs

Inclusive
CAPITALISM:
FAITH AND FINANCE IN
THE GREEN ECONOMY
· MARY EVELYN
TUCKER
THEY GO
HAND IN
ENVIRONMENTAL AND
HUMANITARIANISM
MET AT A
REAL NETWOR
EVENT.
NEW
APPROACH
NEED FRESH
APPROACHES
NEED VALUES
AND PHILOSOPHY
BECAUSE OF
PROGRAMS
ABLE TO
CONNECT
AND HEAL
CARE FO
THE PO
PROGRAMS
FOR THE ELDERLY
AND YOUNG
AS CHINA
+ INDIA
change
THE WORLD CHANGES
PRINCIPLES
STRATEGY
TACTICS
CREATE AN
INTER-GENERAT
HAND SHAKE
STEP
BACK and THINK...
WHAT KIND OF WORLD
DO WE WANT TO
CREATE
WE KNOW
TECHNOLOGY

Inclusive Capitalism: Faith and Finance in the Green Economy

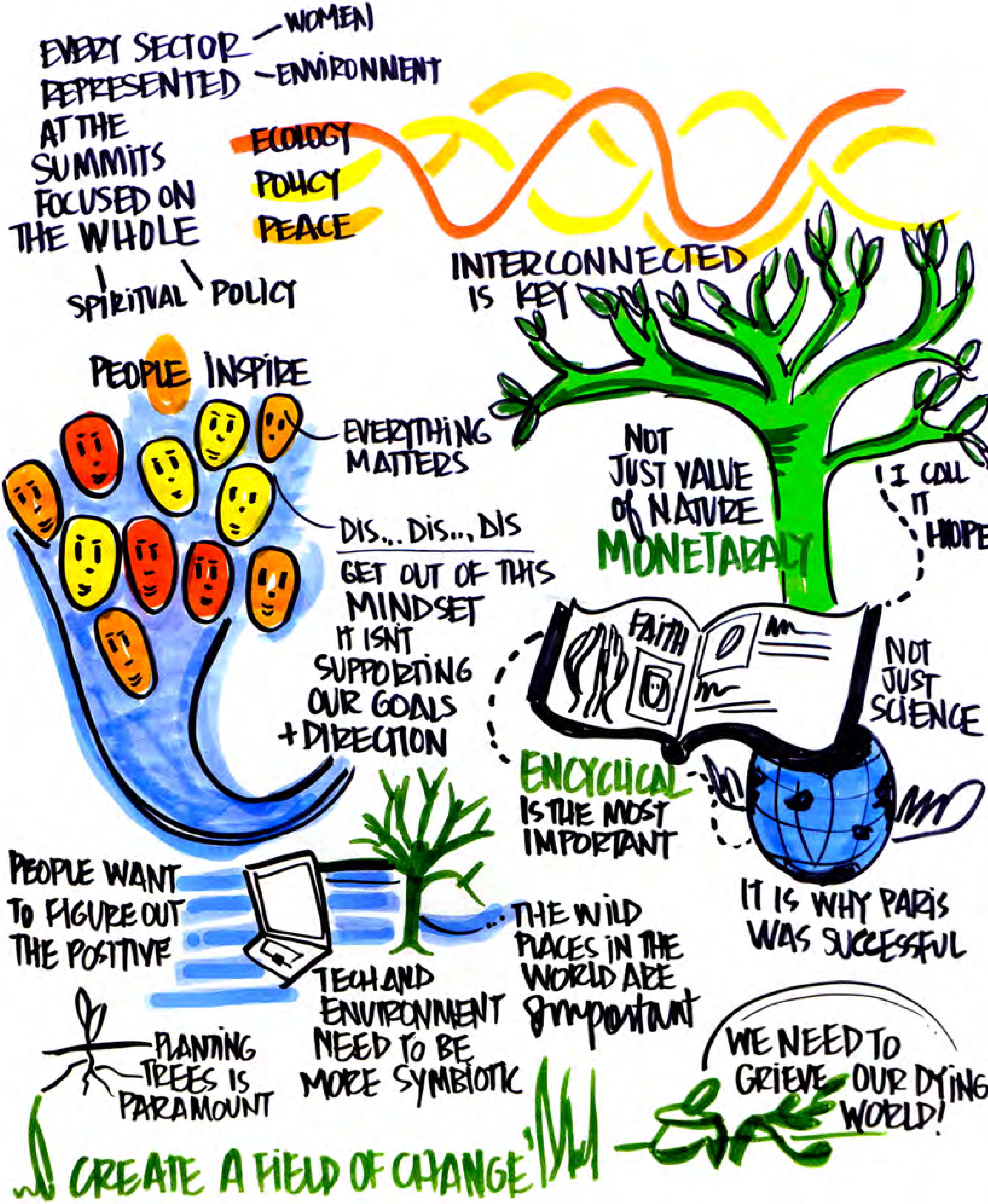
At the conclusion of the first day, Mary Evelyn Tucker, Senior Lecturer and Senior Research Scholar at Yale University delivered a keynote address entitled “Inclusive Capitalism: Faith and Finance in the Green Economy.” Drawing on her spiritual knowledge of the world’s religions, she provided a powerful vision of “hope.” The themes and messages delivered through this keynote will inform the creation of a vision statement for the Green Bank’s 2020 Comprehensive Plan. Mary Evelyn has been involved in ongoing conversations through the Renewable Energy and International Law Network on the role of faith and finance, and was uniquely positioned to discuss the convergence of faith, finance, and sustainability - energizing the group for the next day of the conference. A number of powerful themes wove through Mary Evelyn’s narrative:

Build
Care
Community
Compass
Compassion
Connectedness
Creativity
Earth
Hope

Humanity
Inclusive
Inspire
Intergenerational
Moral
Movement
Nature
Peace
Planet

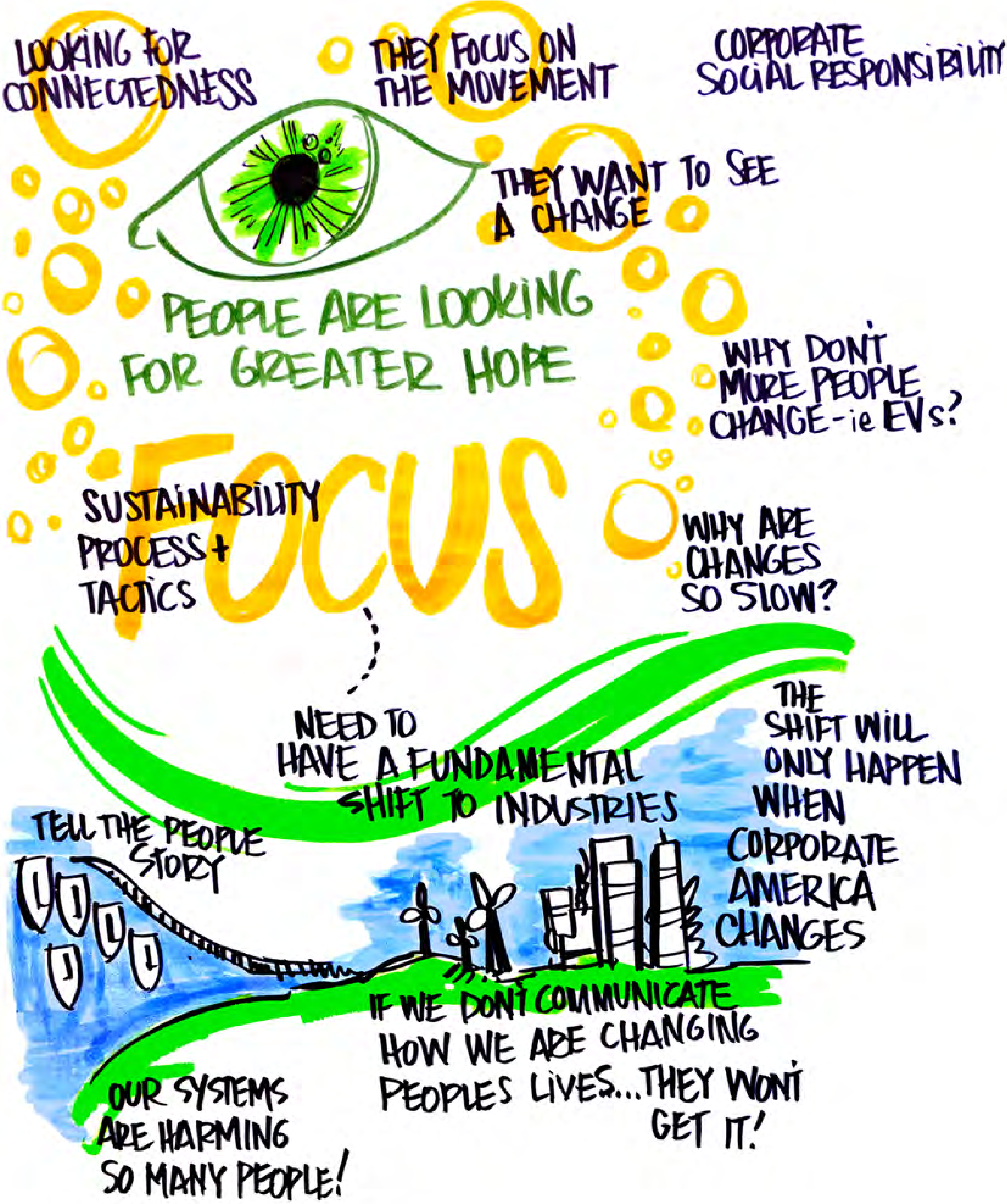
Prosperous
Responsibility
Spark
Spirit
Stories
Symbiotic
Together
Value
World

Bryan Garcia, CT Green Bank and Mary Evelyn Tucker, Yale University


EVERY SECTOR REPRESENTED AT THE SUMMITS FOCUSED ON THE WHOLE
- WOMEN
- ENVIRONMENT
SPIRITUAL
POLICY
ECOLOGY
POLICY
PEACE
INTERCONNECTED IS KEY
PEOPLE INSPIRE
EVERYTHING MATTERS
DIS... DIS..., DIS
GET OUT OF THIS MINDSET
IT ISN'T SUPPORTING OUR GOALS + DIRECTION
NOT JUST VALUE OF NATURE MONETARALY
I CALL IT HOPE
FAITH
NOT JUST SCIENCE
ENCYCLICAL IS THE MOST IMPORTANT
IT IS WHY PARIS WAS SUCCESSFUL
PEOPLE WANT TO FIGURE OUT THE POSITIVE
TECH AND ENVIRONMENT NEED TO BE MORE SYMBIOTIC
THE WILD PLACES IN THE WORLD ARE important
PLANTING TREES IS PARAMOUNT
WE NEED TO GRIEVE OUR DYING WORLD!
CREATE A FIELD OF CHANGE

DEATH of THE WORLD BEFORE DEATH of CAPITALISM
WE CANT IMAGINE END OF ENVIRO.
STRONG DRIVE FOR CHANGE
ENVIRONMENTAL + ECONOMIC GROWTH
EPA
WARNING
WE NEED A DOC. TO SIGN
CHARTER
ENVIRONMENTAL CHANGE
82" YES TO CHANGE
CONNECT BACK... TO KEY DATES
72'
62'
SPARKED CHANGE
NEED LONG TERM FOCUS AND LONG TERM CHANGE
THE SPARK
LIGHT THE FIRE
THE CREATIVITY
WHAT IS OUR MORALE COMPASS?
ENERGY IS KEY
WHAT WILL WE GIVE OUR LIVES TO...
WHAT DRIVES US?!
TAP INTO ENERGY
SUN
AIR
WATER
THE ENERGY OF THE EARTH
ALIGNING the ELEMENTS
BY THE SEASON
WORK + PLANT WITH THEM
CONNECT TO OUR SPIRIT
ASK THE ENVIRONMENTAL QUESTION
PEACE
SPIRIT
VALUE


COME TOGETHER IN HOPE
IT WON'T BE EASY
THIS IS THE WORK WE MUST BE CALLED TO DO!
THERE WILL BE THINGS THAT PULL US APART
WE NEED TO BUILD A COMMUNITY
POLITICAL
RELIGIOUS
GENERATIONAL
RACIAL
LEADERS
HAVE SOMETHING PAIRING
DOCTRINES
PEOPLE, SCIENCE, ECONOMICS + COMPASSION
NEED TO SHARE THE STORIES
THERE IS NO SILVER BULLET
THIS IS
WE NEED MORE
LITERATURE ON THE ENVIRONMENT
ENVIRO CHANGES
WHAT WILL THIS MEAN TO OUR CHILDREN AND THE NEXT GENERATIONS
SEEN AS MORE DIRE
PEOPLE ARE BAD ABOUT PLANNING FOR THE FUTURE
MAYBE THE MORE OBVIOUS IT IS-PEOPLE WILL ACT!
READ A MARY ELLIOTT POEM
SHE WAS THE POET of THE ENVIRONMENT


LOOKING FOR CONNECTEDNESS
THEY FOCUS ON THE MOVEMENT
CORPORATE SOCIAL RESPONSIBILITY
THEY WANT TO SEE A CHANGE
PEOPLE ARE LOOKING FOR GREATER HOPE
WHY DON'T MORE PEOPLE CHANGE - ie EVs?
FOCUS
SUSTAINABILITY PROCESS + TACTICS
WHY ARE CHANGES SO SLOW?
NEED TO HAVE A FUNDAMENTAL SHIFT TO INDUSTRIES
THE SHIFT WILL ONLY HAPPEN WHEN CORPORATE AMERICA CHANGES
TELL THE PEOPLE STORY
IF WE DON'T COMMUNICATE HOW WE ARE CHANGING PEOPLES LIVES...THEY WON'T GET IT!
OUR SYSTEMS ARE HARMING SO MANY PEOPLE!

Investment Criteria

Participants started the second day delving further into investment criteria, a reoccurring theme from the first day. Determining what investment criteria should be applied to discern when to enter, expand or exit a product or program was outlined as a critical next step.

The groups sough to rate (low, medium, high) four different investment criteria:

- **GHG reduction;**
- **Return on investment for the Green Bank; and**
- **Underserved populations (e.g., LMI), and**
- **Cost savings.**

The groups then applied these investment criteria to three addressable "wedges" for climate change:

- **Grid scale solar PV or wind;**
- **High efficiency heat pumps for buildings, including renewable heating and cooling; and**
- **Electric and fuel cell buses and infrastructure.**

The participants identified that it is difficult to prioritize and rate investment criteria with a simple rating system from high to low, as it did not allow for enough differentiation. In addition, the three examples given didn't allow for project or program level specificity (such as grid-scale solar PV vs. community solar).

Bert Hunter, CT Green Bank

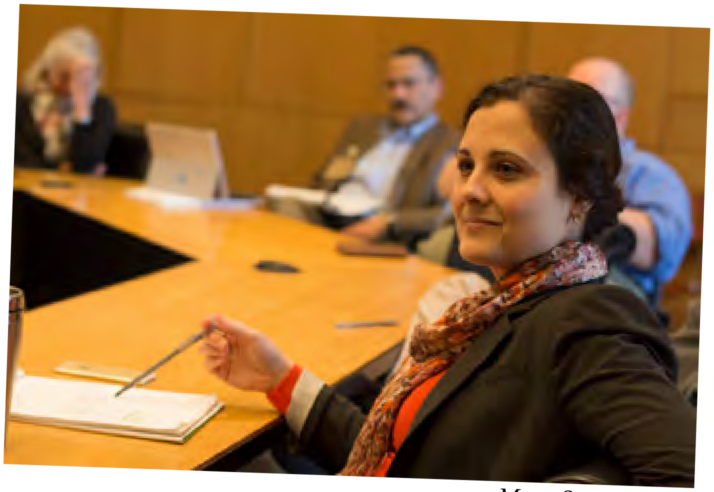
Participants also identified other potential challenges for the criteria themselves:

Investment Criteria	Challenges of Criteria
GHG Reduction	Total vs. Per Capita vs. Per $ Spent vs. Lifetime
Return on Investment for the Green Bank	Interest Rate and Tenor vs. Cash Flow vs. P&L
Underserved Populations	(none noted)
Cost Savings	• Customer or Ratepayer • Annual vs. lifetime • Positive cash flow

Throughout the discussions, participants came up with additional investment criteria that could be used to make decisions regarding products and programs in the future. Some of the criteria that participants believed should be considered included:

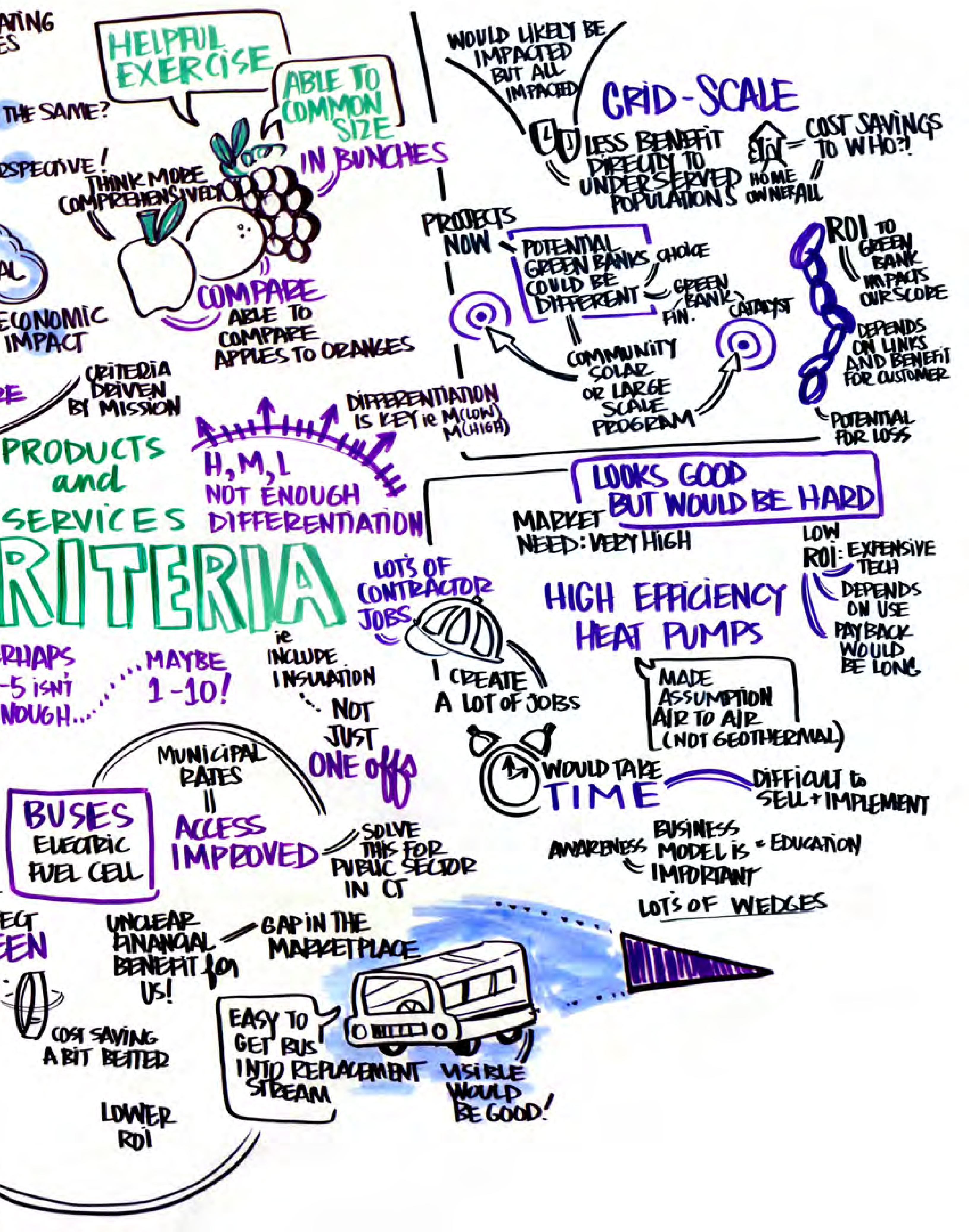
Additionality
Administrative Costs
Benefits
CO2 Reduced / $1
Catalytic
Cost / Benefit (e.g., $ / GHG)
Create Jobs
Demand
Development Costs
Ease
Economic Impact
Financial Risk
Generate political capital
Health impact
Human capital
Market need
Political risk
Reductions in “wedge”
Replicability
Reputational Risk
Reputational Benefit
Scalability
Speed
Time

Bryan Garcia, CT Green Bank (foreground), Kim Stevenson, CT Green Bank (background)


Mary Sotos, DEEP


Bert Hunter, CT Green Bank


Bryan Garcia, CT Green Bank



...ATING
...ES
HELPFUL EXERCISE
ABLE TO COMMON SIZE
IN BUNCHES
...THE SAME?
...SPECTIVE!
THINK MORE COMPREHENSIVELY
COMPARE
ABLE TO COMPARE APPLES TO ORANGES
...AL
ECONOMIC IMPACT
CRITERIA DRIVEN BY MISSION
DIFFERENTIATION IS KEY ie M(LOW) M(HIGH)
H, M, L NOT ENOUGH DIFFERENTIATION
PRODUCTS and SERVICES
...RITERIA
...RHAPS ...-5 ISN'T ...NOUGH...
...MAYBE 1-10!
ie INCLUDE INSULATION
NOT JUST ONE OFFS
LOT'S OF CONTRACTOR JOBS
CREATE A LOT OF JOBS
MUNICIPAL RATES
ACCESS IMPROVED
SOLVE THIS FOR PUBLIC SECTOR IN CT
BUSES ELECTRIC FUEL CELL
...ECT ...EEN
UNCLEAR FINANCIAL BENEFIT for US!
GAP IN THE MARKETPLACE
COST SAVING A BIT BETTER
EASY TO GET BUS INTO REPLACEMENT STREAM
VISIBLE WOULD BE GOOD!
LOWER ROI
WOULD LIKELY BE IMPACTED BUT ALL IMPACTED
GRID-SCALE
LESS BENEFIT DIRECTLY TO UNDERSERVED POPULATIONS
COST SAVINGS TO WHO?!
HOME OWNER ALL
PROJECTS NOW
POTENTIAL GREEN BANKS CHOICE COULD BE DIFFERENT
GREEN BANK FIN.
CATALYST
COMMUNITY SOLAR OR LARGE SCALE PROGRAM
ROI TO GREEN BANK IMPACTS OUR SCORE
DEPENDS ON LINKS AND BENEFIT FOR CUSTOMER
POTENTIAL FOR LOSS
LOOKS GOOD BUT WOULD BE HARD
MARKET NEED: VERY HIGH
LOW ROI: EXPENSIVE TECH
DEPENDS ON USE
PAYBACK WOULD BE LONG
HIGH EFFICIENCY HEAT PUMPS
MADE ASSUMPTION AIR TO AIR (NOT GEOTHERMAL)
WOULD TAKE TIME
DIFFICULT to SELL + IMPLEMENT
AWARENESS
BUSINESS MODEL IS IMPORTANT
+ EDUCATION
LOT'S OF WEDGES

Current and Potential Funding Sources

With several ideas for new products and programs, as well as suggestions for criteria to evaluate investment opportunities, participants turned their attention to funding future Green Bank activities. After reviewing existing funding sources and exploring how similar organizations are funded, participants were asked how reliable the current funding sources are and if there were ways to protect them. Participants agreed on many points:

Investment Criteria	Reliability	Risks	Actions to Protect
Clean Energy Fund	• Low fluctuation • Electrification of vehicles and heating/ cooling could increase	• Unreliable • Political Risk • Declining in Nature	• Securitization and blocking raids through CHFA-like bond indenture • Amend legislation based on the finds of lawsuit • Strengthen grassroots support • Mini-green bonds to build citizen investors
RGGI Allowance Proceeds	-	• Unreliable • Revenues are unpredictable • Low revenues	-
Grants	• Can't be raided • Strong relationships with foundations • Federal government increase opportunities	• High effort required to compete for	-
Investment Income (Interest)	• Steady portfolio growth • Predictable	• Cash could be swept • Subject to investment risk	• Securitize • Blocking raids through indenture
Investment Income (Fees)	-	• Volumetric • Cash could be swept	-
Investment Income (FCM)	• Market value in the future difficult to predict	• Cash could be swept • Subject to public policy changes	-
Investment Income (RECs)	• Market value in the future difficult to predict	• Cash could be swept • Subject to public policy changes	-

Considering the challenges facing current funding, participants were asked if there were other funding sources that would facilitate moving the Green Bank from 1 to 2 orders of magnitude. Several ideas were captured:

Bonding. Explore bonding capabilities to raise funds and protect income from existing sources (including mini-bonds, where the Green Bank sells a portion of a bond that encumbers revenue to the Green Bank to the citizens of Connecticut). This requires the Green Bank to identify uses of funds and be ready to deploy capital quickly.

Private Activity Bond Conduit. The Green Bank has statutory authority to issue bonds on behalf of others (while earning fees). This will require identifying borrowers with buyers that need this conduit.

USDA and Other Federal Funds. Continuing to pursue low cost capital for loans from USDA, DOT and DOD, and seeking legislative fixes that will make this process easier.

Impact Investment / Corporate Partners. Pursuing more impact investments and partner with corporations and community foundations and endowments seeking to make sustainability investments.

Electric Efficiency Partners Program. Bring additional programmatic solutions to PURA or use EEP funds as a sweetener alongside existing Green Bank or third-party investments.

Transportation Climate Initiative. Seek policy that directs a portion of these RGGI like funds to the Green Bank to fund transportation investments.

Transaction Fees. Build stream of income from investment banking-like transactions (e.g., Fuel Cell Energy deal).

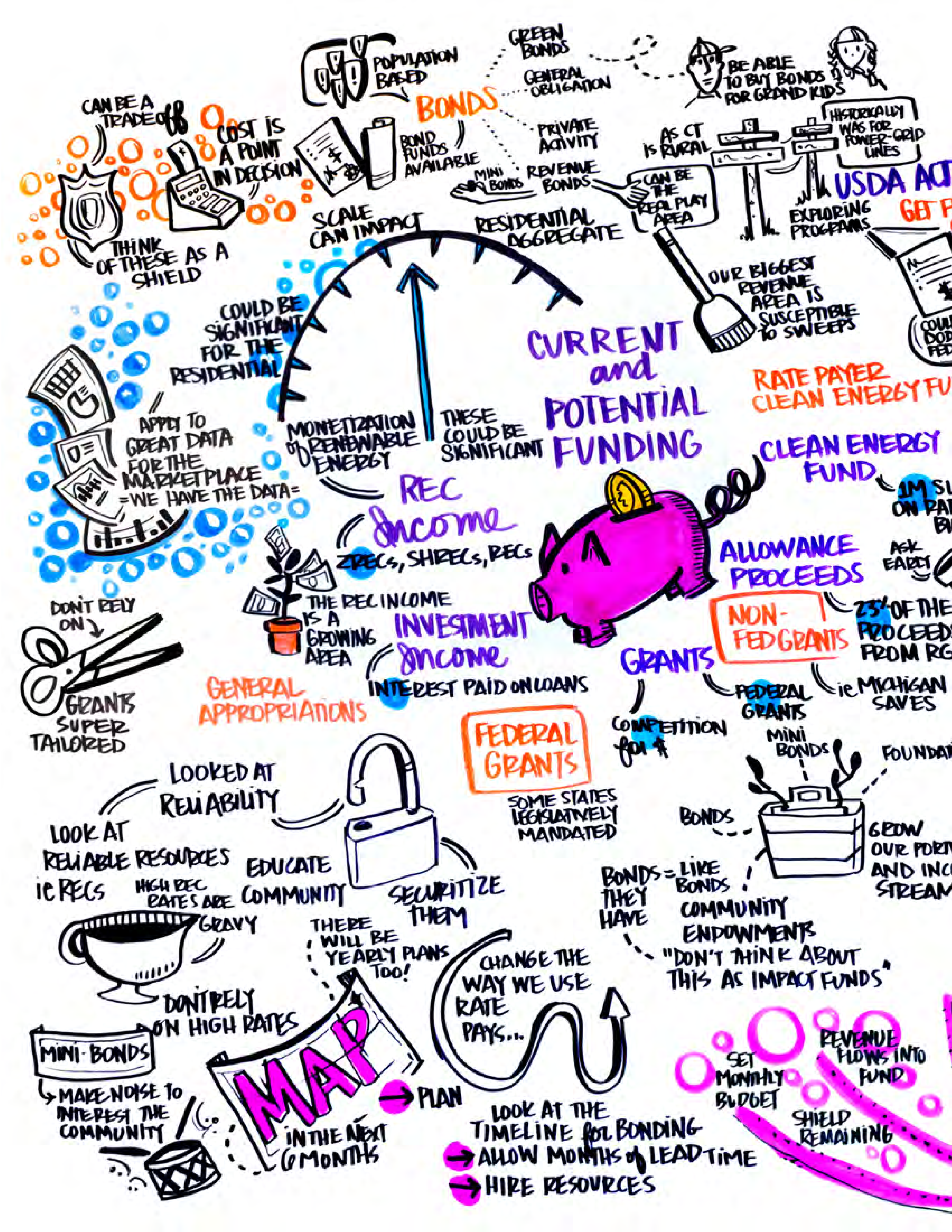
Community Reinvestment Act. Using Inclusive Prosperity Capital, attract capital from CRA lenders.

Alternative Compliance Payments. Pursue policy that redirects the ACP back to the Green Bank, reducing public policy cost exposure on ratepayers from the RPS

Opportunity Zone Fund. Launch a fund that attracts funds earmarked for opportunity zones.

Lockbox. Pursue a strategy that restricts investment of ratepayer funds towards their intended purpose (similar to Special Transportation Fund).

Mackey Dykes, CT Green Bank (foreground), Bryan Garcia, CT Green Bank (background)


CURRENT and POTENTIAL FUNDING
BONDS
POPULATION BASED
GREEN BONDS
GENERAL OBLIGATION
PRIVATE ACTIVITY
REVENUE BONDS
MINI BONDS
BE ABLE TO BUY BONDS FOR GRAND KIDS
BOND FUNDS AVAILABLE
CAN BE A TRADE OFF
COST IS A POINT IN DECISION
THINK OF THESE AS A SHIELD
AS CT IS RURAL
HISTORICALLY WAS FOR POWER-GRID LINES
CAN BE THE REAL PLAY AREA
EXPLORING PROGRAMS
USDA
OUR BIGGEST REVENUE AREA IS SUSCEPTIBLE TO SWEEPS
SCALE CAN IMPACT
RESIDENTIAL AGGREGATE
COULD BE SIGNIFICANT FOR THE RESIDENTIAL
MONETIZATION of RENEWABLE ENERGY
THESE COULD BE SIGNIFICANT
APPLY TO GREAT DATA FOR THE MARKETPLACE =WE HAVE THE DATA=
REC Income
ZRECs, SHRECs, RECs
THE REC INCOME IS A GROWING AREA
INVESTMENT Income
INTEREST PAID ON LOANS
RATE PAYER CLEAN ENERGY
CLEAN ENERGY FUND
ALLOWANCE PROCEEDS
NON-FED GRANTS
ie MICHIGAN SAVES
GRANTS
FEDERAL GRANTS
COMPETITION for $
DON'T RELY ON
GRANTS SUPER TAILORED
GENERAL APPROPRIATIONS
FEDERAL GRANTS
SOME STATES LEGISLATIVELY MANDATED
MINI BONDS
FOUNDA
BONDS
GROW OUR PORT AND INC STREAM
BONDS = LIKE BONDS THEY HAVE
COMMUNITY ENDOWMENTS
"DON'T THINK ABOUT THIS AS IMPACT FUNDS"
LOOKED AT RELIABILITY
LOOK AT RELIABLE RESOURCES ie RECs
HIGH REC RATES ARE GRAVY
EDUCATE COMMUNITY
SECURITIZE THEM
DON'T RELY ON HIGH RATES
THERE WILL BE YEARLY PLANS TOO!
CHANGE THE WAY WE USE RATE PAYS...
MINI-BONDS
MAKE NOISE TO INTEREST THE COMMUNITY
MAP
PLAN
IN THE NEXT 6 MONTHS
LOOK AT THE TIMELINE for BONDING
ALLOW MONTHS of LEAD TIME
HIRE RESOURCES
SET MONTHLY BUDGET
REVENUE FLOWS INTO FUND
SHIELD REMAINING

Bryan Garcia, CT Green Bank

Selya Price, CT Green Bank

Stuart Decew, CBEY

Headlines

As a wrap-up exercise, participants broke into groups for a session referred to as “Headlines,” where participants attempt to envision a future scenario by identifying a headline for a 2030 article in an in-state and out-of-state publication. Some examples included:

In-State Headlines:

“1 Million Connecticut Households Become ‘Carbon Neutral’ as a Result of Green Bank Programs” - Jan Ellen Spiegel, CT Mirror, 2030

“Connecticut Green Bank Makes Connecticut a Better Place to Live” - Hartford Courant, 2030

Jessica Bailey, Greenworks Lending (foreground), Matt Macunas, CT Green Bank (background)

Out-of-State Headlines:

"As a result of the National Green Bank, the U.S. is on track to exceed the Paris Agreement" - The Economist, 2030

"Last Diesel Bus Scrapped, Will Live in the Carriage Barn at Pocantico" - BuzzFeed News, 2030

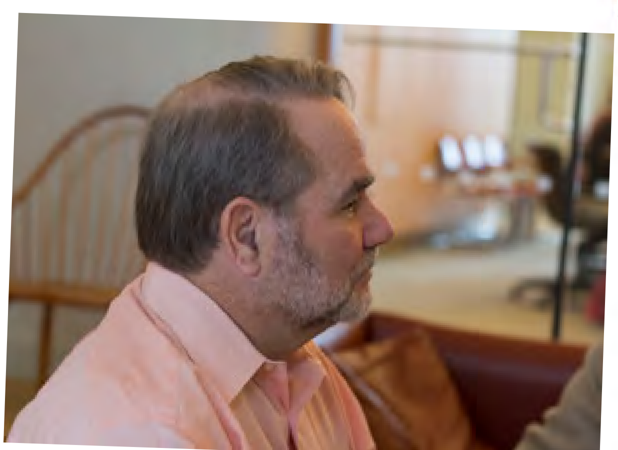
"New London Offshore Wind Port Manufactures and Assembles 10 GW of Power" - Wall Street Journal, 2030

"Connecticut Green Bank Teams up with Cows and Machinists to Power State's Fleet of Electric Buses" - New York Times, 2030

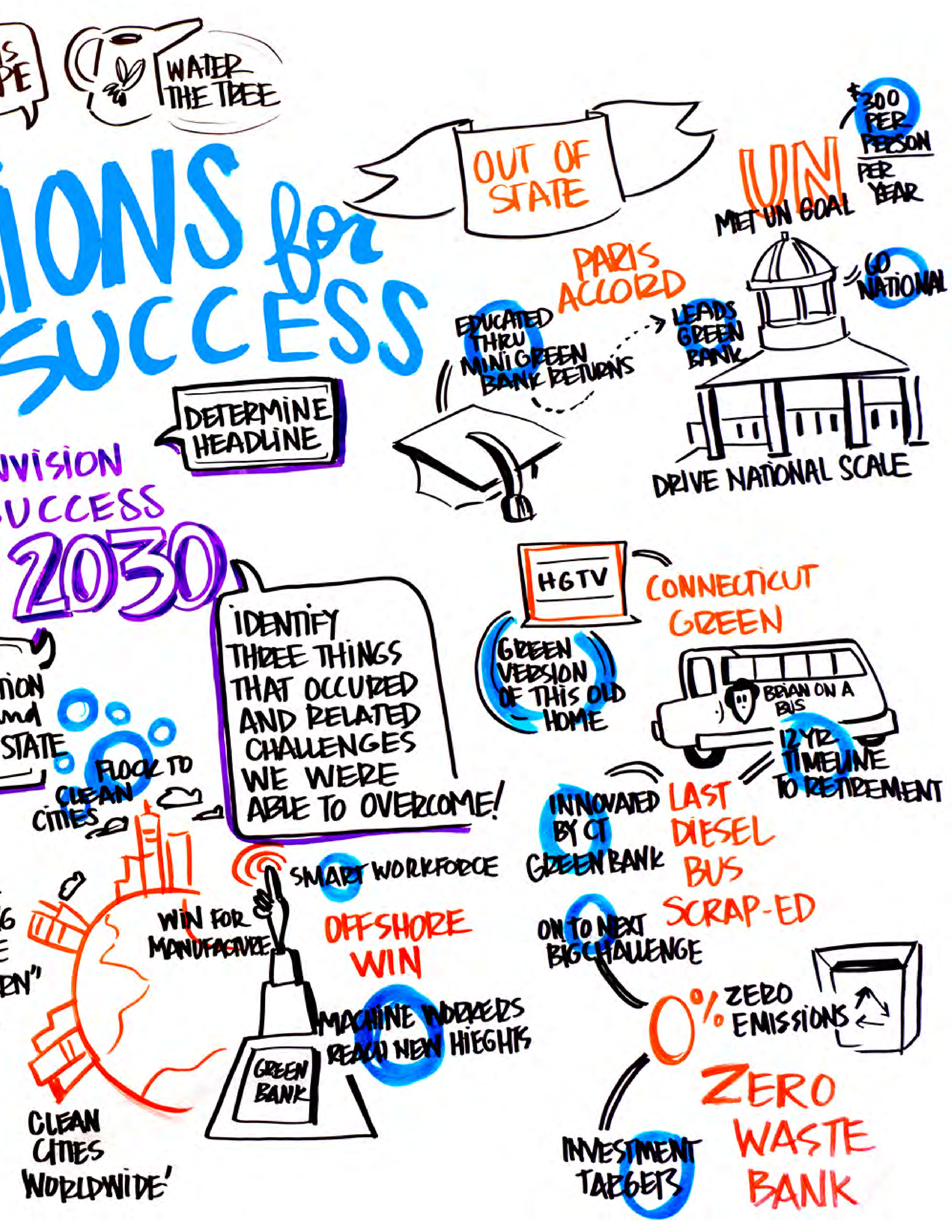
Eric Shrago, CT Green Bank

Matt Macunas, CT Green Bank

Kim Stevenson, CT Green Bank



Bob Lamb, Lamont Financial


WATER THE TREE
IONS for SUCCESS
OUT OF STATE
$300 PER PERSON PER YEAR
UN
MET UN GOAL
PARIS ACCORD
GO NATIONAL
EDUCATED THRU MINI GREEN BANK RETURNS
LEADS GREEN BANK
DETERMINE HEADLINE
DRIVE NATIONAL SCALE
NVISION
UCCESS
2030
HGTV
CONNECTICUT GREEN
IDENTIFY THREE THINGS THAT OCCURED AND RELATED CHALLENGES WE WERE ABLE TO OVERCOME!
GREEN VERSION OF THIS OLD HOME
BRIAN ON A BUS
12 YR TIMELINE TO RETIREMENT
STATE
FLOCK TO CLEAN CITIES
INNOVATED BY CT GREEN BANK
LAST DIESEL BUS SCRAP-ED
SMART WORKFORCE
WIN FOR MANUFACTURE
OFFSHORE WIN
ON TO NEXT BIG CHALLENGE
0% ZERO EMISSIONS
MACHINE WORKERS REACH NEW HIEGHTS
GREEN BANK
ZERO WASTE BANK
INVESTMENT TARGETS
CLEAN CITIES WORLDWIDE!

Key Findings and Recommendations

The two-day conference was an effective exercise, identifying several key pieces of information integral to moving from Green Bank 1.0 to 2.0:

Commitment to Address Climate Change.

Given the urgency of the issue (demonstrated by the onset of natural disasters, polar vortex, etc.) the Green Bank must be committed and focused on strategies to address climate change mitigation (such as addressing climate change wedges) and adaptation (resiliency)

Scaling Up Investment and Impact in Connecticut and Beyond.

In order to achieve Connecticut's climate change and economic goals, more investment from private capital sources which is sparked and leveraged by innovative public sector financing that is affordable and of long duration, will be needed in order for the state to realize the environmental, economic and job benefits and opportunities from the climate economy. While focusing on benefits to Connecticut, the Green Bank can also take actions that influence and increase investment in and help address climate change nationally and globally.

Pursuit of Financial Sustainability.

With the status of the long-term state budget situation creating ongoing challenges to ratepayer funds (i.e., Clean Energy Fund, RGGI, etc.) there is a pressing needed for the Green Bank to:

- Use its full suite of public policy tools (such as bonding capabilities) to access other sources of funding that will better ensure its financial sustainability
- Adopt investment criteria that allow for better tracking and measurement of the Green Bank portfolio with respect to multiple objectives including financial sustainability.
- Address customer acquisition challenges to increase transaction volumes to levels needed for sustainability.

As a follow-up to the conference, the following recommendations will be pursued in order to facilitate progress towards Green Bank 2.0:

Bonding.

The Green Bank will develop a bond indenture, including the incorporation of non-impairment, to begin to develop its bond rating while accessing capital through public finance markets that can be used to augment its investment strategy. This recommendation will require 3 to 6 months to execute and include:

- **Building a Team.** Identifying legal counsel, financial advisor, underwriter and trustee for bond issuances;
- **Developing a Bond Indenture.** Including provisions to protect the Green Bank's assets and sources of revenues (such as system benefit funds); and
- **Issuing Bonds.** Leading the "green bond movement" across the U.S. through use of proceeds, best-in-class EM&V, and innovation of mini-green bonds to engage all citizens in investment to confront climate change.

Investment Strategy.

Integrating the bond funding structure into the investment planning and operations of the organization, while developing the following:

- **Portfolio Investment Target.** Establishing a near and midterm portfolio investment target (i.e., amount, interest, risk and maturity);
- **Leverage Ratio Target.** Determining a reasonable leverage ratio target that supports the pursuit of financial sustainability, while at the same time leveraging public funds with multiples of private capital investment; and
- **Investment Criteria.** Defining and prioritizing investment criteria to serve as a screen for supporting the investment strategy.

Comprehensive Plan.

Developing the Green Bank 2.0 Comprehensive Plan that reflects the key findings of the conference, while providing guidance and direction to the operation of the organization, including:

- **Vision Statement.** Develop a short and powerful vision statement, from the powerful words used in the keynote address, that inspires our current and future supporters;
- **"Wedges" Structure.** Build the plan around the three key climate change GHG emission mitigation wedges (zero carbon grid, zero emission vehicles, and zero emission heating) and climate change adaptation (microgrid and grid modernization); and
- **Community Engagement.** Rebuild our ability to engage and inspire the citizens of Connecticut in taking action to confront climate change through innovative campaigns (e.g. Clean Energy Communities, Solarize, etc.) products (e.g., mini green bonds, community solar, etc.), and programs (e.g. Solar for All). Evolve our messaging and communications in a way that our customers and stakeholders can more easily understand and connect with what we do.

CONNECTICUT
GREEN BANK SM