

AGENDA

Joint Committee of the CT Energy Efficiency Board and the Connecticut Green Bank Board of Directors

Energize CT Center 122 Universal Drive N, North Haven, CT

Wednesday, July 20, 2016 1:30-3:30 p.m.

- 1. Call to Order
- 2. Public Comments
- 3. Review and approval of Meeting Minutes for April 20, 2016 meeting (5 min)
- 4. Brief Report-Outs on Sub-Sectors (20 min)
 - a. Residential Single Family
 - b. Residential Multi-family
 - c. C&I-Small Business
 - d. C&I-Med/Large Business
- 5. In-Depth Report Out on C&I- Government Sub-Sector (45 min)
- 6. Issues to Address/Resolve (5 min)
- 7. Other Business (40 min)
 - a. C&LM Plan Update Process
 - b. Draft Comprehensive Plan CT Green Bank
 - c. Draft Evaluation Framework CT Green Bank
 - d. EEB Rules and Roadmap Update
- 8. Planning for Next Meeting October 17, 2016 1:30 p.m. 3:30 p.m. (5 min)
- 9. Adjourn

Join the meeting online at: <u>https://global.gotomeeting.com/join/976739997</u>

Or call in using your telephone: Dial: (312) 757-3121 Access Code: 976-739-997



Joint Committee

Connecticut Energy Efficiency Board and the Connecticut Green Bank Board of Directors

Connecticut Green Bank July 20, 2016



Agenda Item #1 Call to Order



Agenda Item #2 Public Comments



Agenda Item #3 Approval of Meeting Minutes for January 20, 2016 and April 20, 2016



Agenda Item #4a and #4b Brief Report Outs from Residential Working Group Single Family and Multifamily



Agenda Item #4c and #4d Brief Report Outs from C&I Working Group Small and Med/Large Business



Agenda Item #5 In-Depth Report Out from C&I Working Group Government



Agenda Item #6 Issues to Address and Resolve

Issues to Address and Resolve

- Integrating energy efficiency and solar PV
- Others?





Agenda Item #7 Other Business

C&LM 2017 Plan Update Process

- Planning discussions at August, September, and October EEB meetings (public input on June 8th)
- Proposed EEB vote on C&LM Plan Update at October 13th EEB meeting
 - Plan update schedule will be formally voted on at August 10th EEB meeting
- Proposed filing by the Companies after the October 13th EEB meeting, and no later than November 1st
- EEB Consultants have set up informal discussions with CGB staff over the next few weeks
- Financing priorities will also be discussed in C&I Committee and residential financing working group



Draft Comprehensive Plan – CT Green Bank Key Components

- <u>Goals</u> approved four (4) goals, including a revision of an old goal focused on transitioning market reliance on subsidies towards financing and introduced a new goal which focuses on energy burden and health and safety issues for LMI and distressed communities
- <u>Targets</u> approved sector targets and overall organization (e.g., no less than 7,500 projects, \$325 million of investment, and 70 MW)
- <u>Budget</u> approved the operations budget (i.e., revenues and expenses) and the program budget (i.e., investments and incentives)
- <u>Document</u> contents of the Comprehensive Plan document, including Joint Committee inclusions and new R&D section



Draft Comprehensive Plan – CT Green Bank Contents



- <u>Executive Summary</u> "big picture" on the role of the CT Green Bank
- Organizational Overview vision, mission, goals (approved), stakeholders, governance, organizational structure, and CAFR
- <u>Public Policy Overview</u> key policies to support the implementation of clean energy deployment
- <u>Evaluation Framework</u> new framework designed for green bond reporting
- <u>Financing</u> from capitalization to Green Bank Network
- Marketing from brand to Green Bank Playbook
- Program Sectors Infrastructure, Residential, and Commercial, Industrial, and Institutional policy, TAM-SAM, programs and products, and targets (approved)
- <u>Research and Development</u> understand new market opportunities to become a catalyst
- <u>Budgets</u> FY 2017 budget (approved)
- Key Definitions to aid the reader

Draft Comprehensive Plan – CT Green Bank Joint Committee of EEB and CGB

- <u>Governance</u> voting members include Eric Brown (Chair), Diane Duva (Vice Chair), Amanda Fargo Johnson, John Harrity, and Norma Glover; non-voting members include Bryan Garcia, Bert Hunter, Ron Araujo, and Pat McDonnell
- 2. <u>Principle</u> the EEB and CGB have a shared goal to implement state energy policy throughout all sectors and populations of Connecticut with continuous innovation towards greater leveraging of ratepayer funds and a uniformly positive customer experience.
- 3. <u>Revised Goal</u> To reduce the reliance on grants, rebates, and other subsidies and move towards innovative low cost financing of clean energy deployment. <u>To leverage limited public funds to attract multiples of private capital investment while returning and reinvesting public funds in clean energy deployment over time.</u>
- 4. <u>Joint Goals</u> around five (5) areas, including single family, multifamily, government, small business, and medium and large business



Draft Comprehensive Plan – CT Green Bank Research and Development

- <u>Concept</u> identify emerging markets to better understand potential, initiate pilots, and determine opportunities for investment
 - Community Development Financial Institution investigate creation of a CDFI (jointly funded foundation study)
 - Grid Modernization pilots with utility companies to scale-up DER
 - AFV and Infrastructure study market potential and identify opportunities to scale-up investment
 - RTT study market potential and identify opportunities to scale-up investment
 - Sustainability apply the green bank model to other areas like vehicle fleet purchasing and performance contracts, water infrastructure, and waste reduction facilities (note – would require broadening of "clean energy" definition)



Draft Evaluation Framework – CT Green Bank Contents

- <u>Contributors and Acknowledgements</u>
 who helped put this together
- Introduction objectives and framework elements
- Program Logic Model three components, including Energize CT, green bank model, and societal impacts
- Evaluation Plan Development from market baselines to evaluations
- <u>Net Impact Analysis and Cost Benefit</u> <u>Analysis</u> – what impact are we having with the resources and approaches that we are using
- <u>Appendices</u> statutorily required reporting, indicators, data release forms, and sample cost-benefit analysis



EEB Rules and Roadmap Update

• "The endorsement or implementation of opportunities" examined by the Joint Committee requires action by the Energy Efficiency Board. The Energy Efficiency Board's representatives to the Joint Committee shall not vote on any measure before the Joint Committee that would commit the Board to any action or support, or constitute the Joint Committee taking a position on any matter before any local, state, regional or federal legislative or administrative body, without first bringing the matter to the Board for review and approval." Adopted 4/13/16.





Agenda Item #8 Planning for Next Meeting October 17, 2016



Agenda Item #9 Adjourn



Joint Committee of the CT Energy Efficiency Board and the Connecticut Green Bank Board of Directors

Connecticut Green Bank, 845 Brook Street, Rocky Hill

Wednesday, January 20, 2016 1:30-3:30 p.m.

MINUTES

In Attendance

<u>Voting Members</u>: Norma Glover, John Harrity, Eric Brown, Amanda Fargo-Johnson (phone), Diane Duva

Non-Voting Members: Bryan Garcia, Pat McDonnell, Matt Gibbs, Ron Araujo

<u>Others</u>: Brian Farnen, Steve Bruno, Donna Wells, Evan Seretan, Kim Stevenson, Chris Kramer (phone), Jeff Schlegel (phone), Andy Brydges, Genevieve Sherman (phone), Kerry O'Neill, Marcus Smith, Colette Slover

1. Call to Order

Eric Brown called the meeting to order at 1:30 pm.

2. Public Comments

None.

3. Review and approval of Meeting Minutes for October 28, 2015 meeting

Ms. Glover suggested that the Joint Committee invite a few small businesses to attend a Joint Committee meeting (comment not related to the minutes). Mr. Harrity moved to approve, and Ms. Glover 2nd. All voted in favor to approve the 10/28/15 meeting minutes.

4. Brief Report-Outs from Sector Working Groups

a. <u>Government</u>. Mr. Brydges provided an update. He said that an important challenge was getting the first big project's scope of work completed; doing that would set a precedent for additional projects. He said the University of Connecticut Phase I project was moving along and could end up being the first project moving to

implementation. Mr. Garcia said that the Green Bank would be recommending approval of revenue Bonds on April 22.

- <u>Small Business</u>. Mr. Bruno provided an update. He said that the Green Bank and the Companies had held several meetings to discuss a path forward for small business.
 Ms. Sherman discussed potential additions to the SBEA program, perhaps for larger customers. She also noted the possibility of combining different loan types.
- c. <u>Med-Large Business</u>. Ms. Wells provided an update. Ms. Glover asked how customer experience has been in this customer segment. Mr. Bruno said that this customer segment's experience does not run as smoothly in the SBEA program, and said that they are working to remove impediments in the process. He said that the medium-size customer segment (above 200KW) is the most challenging segment. Ms. Glover said that we need to continue focusing on improving financing offerings for that market. Mr. McDonnell suggested that the program managers speak at the next Joint Committee meeting to discuss the challenges with the program.

5. In-Depth Report Out from the Residential Single Family and Multifamily Working Groups

Mr. Araujo discussed the format of the update developed by the Residential working groups. Ms. O'Neill provided an overview of the single family update. Ms. O'Neill and Mr. Farnen noted that there was a good chance that the Green Loan Guarantee Fund would be make it on to the agenda of the Bond Commission by the end of the 2nd guarter. Regarding the multi-family update, Mr. Araujo and Ms. Stevenson noted the good progress in working with the Department of Housing on integrating energy efficiency into public housing renovations. Ms. Stevenson said that their process could be looked at by other states as a model. Mr. Araujo provided an overview of the multi-family update. He and Ms. Stevenson said that they had identified key multi-family financing needs and would be developing an action plan by the end of the 2nd quarter. Ms. Slover from the CT Department of Housing (DOH) said that it is important for the DOH to leverage other resources for energy efficiency. She said that she is working on standardizing the application process with Eversource, UI, and contractors. She said that a new application likely will be completed by the end of March. Ms. Slover also noted that she is working on enhancing coordination between the DOH and contractors earlier in the process. Mr. Araujo noted that the Green Bank has pre-development financing available. Ms. Stevenson said that the coordination with the DOH grew out of the process in May 2015 on multifamily housing financing. Mr. Harrity commented that it was very encouraging to see the DOH, Green Bank, utilities working together very effectively.

6. Issues to Address and Resolve. Review meeting preparation process.

It was noted that the Joint Committee had identified liaisons/coordinators for each of the five working groups. Joint Committee members said that they supported the proposed process, and it that Mr. Diamond and Mr. Garcia would follow the process from this point forward. Mr. Harrity moved to approve the proposed process, and Ms. Fargo-Johnson 2nd. All voted in favor to approve the process. Mr. Brown said that he likes the matrix format proposed by Mr. Araujo for the Residential updates. Mr. Brown suggested that the matrix include a column called "Satisfies" to indicate which Joint Committee goals are addressed by the working group's actions. It was agreed that all working groups would follow the proposed format for the updates.

7. Planning for Next Meeting

For the April Joint Committee meeting, it was agreed that the Committee would do a "deep dive" on the Small Business and Med/Large Business working groups. It was also agreed that the location for April meeting would be DEEP in Hartford. The Committee also agreed

that the deep dive for the July meeting would be Government, and that the location of the July meeting would be the Energize CT Center in North Haven. It was proposed that the October Joint Committee meeting be held at Eversource in Berlin.

8. Other Business

<u>Green Bank Model–Program Logic Input Model, other financing evaluation</u>. Mr. Garcia and Mr. Brydges provided a presentation on the Program Logic Model (PLM). Mr. Gibbs commented that PLM can be applied to energy efficiency market transformation, not only financing market transformation. He asked if the Committee should flesh out the left side of the PLM graphic (CGB and Utility/Government) - not only incentives/rebates. Mr. Kramer said the model was a good way to understand financing, but agreed that it could be applied to market transformation for energy efficiency. Mr. Garcia noted that the PLM will be incorporated into the CGB's next two-year Plan. Mr. Garcia commented that the PLM can show how green banks and energy efficiency programs can work together in market transformation. Mr. Kramer said that there are two key metrics: 1) the level of savings; 2) how much can savings be increased by using financing?

9. Meeting adjourned at 3:30 pm

Respectfully Submitted,

Eric Brown, Chairperson



Joint Committee of the CT Energy Efficiency Board and the Connecticut Green Bank Board of Directors

DEEP, 79 Elm Street, Hartford, CT

Wednesday, April 20, 2016 1:30-3:30 p.m.

MINUTES¹ (Draft)

In Attendance

Voting Members: Amanda Fargo-Johnson (by phone) & Diane Duva.

Non-Voting Members: Ron Araujo, Pat McDonnell, Bryan Garcia, and Bert Hunter

<u>Others</u>: Kerry O'Neill, Craig Diamond, Chris Kramer (by phone), Anthony Clark, Julia Dumaine, Paul Horowitz, Donna Wells, Ricardo, Jordan, Mackey Dykes, George Lawrence (by phone), Kim Stevenson, Taren O'Connor, & Les Tumidaj (by phone)

1. Call to Order

Diane Duva called the meeting to order at 1:42 p.m.

2. Public Comments

There were no public comments.

3. Review and approval of Meeting Minutes for January 20, 2016 meeting

The Committee was unable to approve the meeting minutes from the January 20, 2016 meeting due to no quorum.

Resolution #1

Motion to approve the meeting minutes for January 20, 2016

4. Brief Report-Outs from Sector Working Groups

a. Government

Diane Duva provided an update regarding CEEF and CT Green Bank support for energy management in state buildings which includes additional technical support for

¹ Materials for this meeting can be accessed at Box.net.

the government sector. She discussed the need for additional low cost capital sources for municipal loans and the SBEA financing. She explained that there is a need to discuss financing products that fill the gaps between small and large projects, and to address the rationing of government sector participation in the SBEA program. She explained that the CT Valley Hospital Energy Savings Performance Contract (ESPC) project is advancing toward execution using General Obligation bond funds, the next ESPC is DMV, also using General Obligation bond funds. The Department of Correction ESPC is using CT Green Bank financing, which is likely to be a Green Bond though that needs to wait until the state's bond cap limitation is addressed. Pat McDonnell questioned if this limitation on financing and Green Bonds just affects state properties. Bert Hunter explained that yes, it is a state issue and that Green Bonds or other financing products are fine for all other customers at this point.

b. Residential – Single Family

Ron Araujo provided an update on Single Family. He explained they have fully integrated CHIF and that CHIF is an approved Smart E lender. He advised that they have been trained on the Connecticut Green Bank processes. He advised that the dashboard will include their activity under the Smart E Loan Portfolio. Kerry O'Neill advised that they are waiting for CHIF to execute the financing agreement. Ron Araujo explained that they are tracking loan activity versus goals and component cost. He explained that they have created drafts and will circulate those. He explained that they need to track the add-on measures and make sure that they're using the dashboard data and show the information graphically. He explained that a draft had been created and that it had already been shared with the residential financing working group. He explained that they need to secure Green Loan Guaranty Fund proceeds from the Bond Commission for the Smart E Loan. He explained that it is on the list to get to the Bond Commission Agenda. Bryan Garcia advised that the Bond Commission has had two meetings and that it has not been included. He advised that they are at least on the list, but the goal is to get on the agenda.

c. Multifamily

Ron Araujo provided an update on Multifamily. He explained that this has been lagging a bit, but that they are starting to do similar activity. He advised that they have created a tracking matrix and that it has been circulated to the working group. He advised that they should have it available for demo purposes. He explained that they will begin tracking the information and looking at things such as MMBTUs per unit and per square foot. He also explained that they are creating a matrix that aligns the funding for programs and the gaps that need to be filled. He explained that they are going to fund a market analysis to quantify and qualify in a meaningful way. He explained that the RFP is still being developed. Kim Stevenson explained that they are continuing with the LEAN streamlining process. Ron Araujo explained that they are working on how to get incentive planning involved earlier in the financing process.

5. In-Depth Report Out from Small Business and Med/Large Business Working Groups

Ron Araujo provided an update on the goals. He explained that they are working on an improved customer experience and examine ways to couple the small business program with C-PACE and other offerings. He explained that one of the upcoming opportunities is oil heating equipment. He explained that that does not get packaged in at this point. He explained that they are working on how well they can package those products together. He explained that the Connecticut Green Bank has put together a boiler light program. If a customer is looking to bundle they could package that energy efficiency with the boiler light program. Donna Wells explained that this is also about how to integrate the two loans.

Ron Araujo discussed the need for identifying low cost capital for small business loans. Mackey Dykes explained that some contractors are doing SBEA, but when the project is larger than \$100,000 they are using C-PACE for the difference. He stated that it's very complicated and that they are in discussions regarding combining the two financing products. He explained that it appears that there will be opportunities for savings for everyone.

Ron Araujo discussed the need to get lower cost capital into the small business program. He explained that currently they are using the utility capital. He explained that there are a lot of challenges and cost this way. He explained that Eversource has been trying to get some alternative funds and remove the small business loan from their balance sheet. Bert Hunter advised that the Connecticut Green Bank is in talks with United Illuminating. He explained that United Illuminating is challenged on how much capital they can put out for the SBEA loan program. The Connecticut Green Bank has come up with a structure to bring in private capital to fund the loans. He explained that they're trying to structure this to get it off the utility balance sheet. He explained that at the right stage Eversource will be brought in. He advised that this might require some regulatory adjustment since at the present time the interest rate buydown and coverage for credit losses is for the benefit of UI and would need to extend to private capital providers. He explained that it cuts through the credit risk for the utility. He explained that it would bring the cost of financing down and certainly considerably below the present utility cost of capital. He explained that depending on the terms and interest rates, interest rate risk could be guite contained.

Bert Hunter also discussed better rates for the 501C 3's for municipalities. He stated that if it can be worked out correctly the interest that they pay will be non-taxable for the lenders. He explained that they would be able to funnel in cheaper money for that portion of the portfolio. He explained that they should be able to bring the cost of capital down. Chris Kramer questioned whether or not the new originations are being at the utility cost of capital currently. Ron Araujo advised that in 2016 they have some of their carryover funds that they plan to use for financing. He explained that they are putting \$3 million into self-funding. He explained that this is being added to additional funding that's already out there. He explained that this has the potential to increase that pool of self-funding. He explained that the structure that they're talking about is all behind the scenes and the program interface will remain the same for consumers. Pat McDonnell explained that the opportunity is beyond the small business sector. He explained that they can potentially extend this.

Amanda Johnson stated that there was a recent project that the client didn't qualify for the SBEA. She explained that they were referred to a third party. She questioned what

the cost is on the utility side versus a third party instead of keeping it in house. Ron Araujo explained that they are essentially shedding the risk. He explained that some other lenders are willing to take a greater risk. He explained that they work with them for the interest rate buy down. He explained that he's not certain on the cost. Bert Hunter explained that the credit risk is moved off of the utility's balance sheet, but that in any case the credit losses are absorbed by the fund.

Ron Araujo explained that Eversource and United Illuminating provide stats on the current small business portfolio. He explained that the data includes both small business and municipal loans. He stated that the cost of the last three year plan and volume of the loans has been roughly the same. He advised that the average loan amount is \$15,000. He advised that looking statewide from a loan perspective that it falls right in line with the 80/20. Bert Hunter questioned what the total loan amount outstanding was. Anthony Clark stated that it is approximately \$34 million for Eversource. Pat McDonnell stated that it's about \$13 million for United Illuminating. Donna Wells stated that the loan volume follows the budget for small business.

Donna Wells discussed medium and large business. She explained that one of the goals is to improve the understanding of the opportunities, along with increase the customer savings and benefits. She explained that they want to cross leverage energy and efficiency funds along with the Connecticut Green Bank programs. She explained that they want to target segments to identify financing options. She discussed the recent workshop on nursing homes. Anthony Clark stated that this had represented a big step for collaboration between the Connecticut Green Bank and the utilities. He explained that this was a test for them to pitch CT Green Bank and Energy Efficiency Fund assistance together to a group of nursing homes. He explained that the nursing homes get hounded by contractors and that they've frequently gotten bogus proposals. He explained that since DEEP opened up the conversation it had caught their interest. He explained that they're taking advantage of the DEEP integrations.

Donna Wells explained that they are attempting to develop a tool to provide more simplified and unified options to their customers. She explained that they are developing a flow model to see what they can do differently to help each other. Mackey Dykes explained that they both need to understand how the other works and flows behind the scenes.

Donna Wells provided a flow chart. Chris Kramer questioned if there is a way to ensure that the processes are followed. Ron Araujo explained that the first thing is to make sure that we each understand and align the processes as much as possible. Donna Wells explained that they will add some additional action items to keep moving through.

Amanda Johnson questioned in terms of C-PACE if there is a protocol in place for when a customer can't qualify. Mackey Dykes explained that right now there is no alternative product for projects over \$100,000. Anthony Clark explained that they are in the process of working on an alternative.

6. Issues to Address and Resolve

a. Role/Authority of Joint Committee

Diane Duva stated that in the absence of Eric Brown, the committee should wait to discuss the role/authority of the Joint Committee.

7. Other Business

a. CT Green Bank Comprehensive Plan

Bryan Garcia discussed the comprehensive plan for the Connecticut Green Bank. He provided an update on their budget process and a timeline. He explained that the draft plan has to go through the CT Green Bank's Budget and Operations Committee. He advised that the first meeting is May 25, 2016 with a follow-up meeting on June 7, 2016. He explained that the hope is that at the second meeting there is a recommendation to go to the full Board. He explained that this will be a two-year plan.

Bryan Garcia explained that they are working on two new studies. One is what the market potential is for alternative fuel vehicles and infrastructure for transportation in Connecticut. He explained that passenger vehicles represent 90% of the vehicles. He explained that there is an outstanding piece for the 10% of the market that are of larger vehicles. He explained that a study is being done. He explained that the second part is to see what can be done about it through the tools of the Connecticut Green Bank. He explained that the second study is a renewable thermal technology study in partnership with Yale, UI, and Eversource.

Bryan Garcia explained that they will get the plan out to everyone to look at once it's completed. He advised that the draft should be done by June.

b. Draft Evaluation Framework – CT Green Bank

Bryan Garcia discussed the evaluation framework. He advised that per the bylaws this has to go through the CT Green Bank's Audit Compliance and Governance Committee. He explained that they are focused on what the Connecticut Green Bank's role is. He explained that they are also focused on transparency and making all of the data available so that financing investors understand the risks better. He explained that they are trying to build this out. He explained that the societal impacts are what they're trying to put together.

Bryan Garcia discussed the evaluation plan. He stated that each sector director lays out the problems they're trying to resolve and what they're trying to achieve. He discussed what data is being collected and how it is being evaluated. He explained that they have a new accounting system and that everything talks and communicates with each other. He explained that this is how the lifecycle for how they implement programs and how they report the outcomes. He explained that they are attempting to issue their first Green Bonds and that they'd like to have all the data prior to issuing the bonds.

Bryan Garcia explained that they will have a customer data privacy policy. He explained that every transaction that they do goes to the Comptroller through Open Connecticut. He explained that it is a very transparent process. He explained that they are working with DEEP on how to quantify the associated environmental benefits. He explained that they are looking into how they can start to track public health benefits. He explained that the hope is that this can serve as a foundation for reporting on the Green Bond proceeds.

Diane Duva asked if the program indicators will describe how the CT Green Bank closes the financing and technical assistance gap in unaddressed markets. Bryan Garcia explained that the goal is to show that there are limited risks in this space. He explained that this is definitely part of the focus, and that they're trying to be a catalyst to bring in the private investment to fill those gaps.

8. Planning for Next Meeting

There was no input regarding planning for the next meeting. Diane Duva advised that the next meeting would be July 20, 2016.

9. Adjourn

The meeting was adjourned at 3:30 p.m.

Respectfully Submitted,

Eric Brown, Chairperson

Residential Metrics for Single Family and Multi-Family

July 20, 2016

Residential Sector: Single-Family

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

Residential Sector: Multi-family

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

Action Item	Measurement of Success	Challenges	Target Completion Date	Status	Satisfies Item
Single Family					
Fully Integrate CHIF into the Smart-E lending program.	CHIF is a Smart-E approved lender. CHIF will have been trained/integrated by the CGB. CHIF will be providing loans for both non- credit and credit challenged customers statewide and will be offering the Bundle. CHIF will be included in the dashboard, website and all marketing materials.	Additional Requirements of Webster Bank to provide \$6M line of credit (i.e., CT Green Bank Loan Guarantee, ES Utility Inter creditor Agreement required DEEP/PURA approval)	Original Target Q1- 2016; Estimated May 2, 2016	Launched July 2, 2016	1, 2
Track loan activity vs. goals monthly (all loans, comprehensive loans, measures, etc.)	Utilizing the monthly financing cost comparison report data and the energy efficiency dashboard – graphically show an increase in Smart-E loan activity (quantity) for single measure and comprehensive loans.		Ongoing monthly	Ongoing/ Monthy Review	2,3
Track component costs on a monthly basis (average incentives, buy-down costs, financing costs, program costs, etc.)	Utilizing the monthly financing cost comparison report data – graphically show a decrease in overall financing costs for single measure and comprehensive loans.		Ongoing Monthly spreadsheet	Ongoing/ Monthy Review	1,2,3

Residential Metrics for Single Family and Multi-Family

Track add-on measures monthly, including which ones receive financing	Utilizing the energy efficiency dashboard data, graphically show an increase in add-on measures and comprehensive jobs.	Ongoing monthly	Ongoing/ Monthy Review	2, 3
Secure GLGF bond proceeds for Smart-E	CGB has successfully secured GLGF bond proceeds to provide further support for Bundle/comprehensive loan buy- downs	Original target Q2- 2016; Estimated – unknown, due to current budget environment	Did not make Bond Commission Agenda so far in 2016; will continue to pursue	3

Action Item	Measurement of Success	Challenges	Target Completion Date	Status	Satisfies Item
Multi-Family					
Develop a Tracking Matrix for multi-family (similar to residential) to include all methods being utilized to finance energy improvements to multifamily housing. This includes HES and HES-IE incentives for multi-family and CGB, CHFA, DOH financing, etc.	Develop a matrix depicting multi- family financing from CEEF, CGB sources, others as available (i.e., LIME, C-PACE, CHFA, DOH, HUD, others). Track activity ongoing once developed.		Q1-2016 for development , ongoing for tracking and reporting	Revised Template was created and circulated for review	1
Track savings per property financed on a monthly basis (energy savings per unit)	Utilizing company tracking system data – graphically show an increase in the savings per unit (ie., MMBTU/unit, MMBTU/Square Foot-where possible) for financed multi- family projects.		Ongoing, beginning Q2-2016	Companies and CGB met and are working to establish a joint tracking matrix	1
Create a matrix that aligns funding programs and gaps and develop solutions to fill in the gaps (for example; earlier involvement in CHFA projects, SBEA vendors perform some multi-family services, financing alternatives to CPACE, which	Completed matrix of gaps and solutions, and action plan to close the gaps.		End of Q1, 2016 for the Matrix of gaps End of Q2, 2016 for the	Ongoing and complete	2

Residential Metrics for Single Family and Multi-Family

doesn't work well below \$100K or for FHA financed or HUD		action plan to close the	
insured properties, a large portion of the MFH market)		gaps	
Fund and complete a market analysis of certain sectors to quantify and qualify the multifamily segment in a meaningful way. For example (small multi-family, condo's, other building structures and property types, etc., tenant paid vs. owner paid, affordable vs. market rate.	RFP is issued by Q1, 2016; vendor selected Q2, 2016 and study completed Q3, 2016. Use the analysis to update the solutions to the gaps identified above.	Develop and issue an RFP by the end of Q4, 2016 Complete study by the Q1, 2017	2,3

Commercial & Industrial Metrics for Government, Small Business, and Medium/Large Business

July 20, 2016

Commercial Sector

C&I Sector: Government

- 1. Improve the Customer Experience. Ensure seamless service delivery that is responsive to State and local governmental and institutional needs, including
 - a. Integration of appropriate Connecticut Green Bank and other related services, especially for those that aren't currently served by Lead By Example (LBE)-Energy Savings Performance Contracts (ESPC); and
 - b. Providing technical support and incentives from the Connecticut Energy Efficiency Fund and the Connecticut Green Bank's capability to finance ESPC projects at scale. Establish and communicate a process for customers undertaking ESPCs to receive technical support through internal utility resources and contracted "owner's representative" services.
- 2. Establish sustainable and cost-effective financing mechanisms Develop sustainable and cost-effective funding mechanisms for both the preparatory and permanent project financing needs of government sector energy savings projects.
- 3. Develop new products to fill market gaps For example, develop a financing vehicle for aggregation of small-scale comprehensive energy saving projects at municipal or other institutional facilities that are, individually, too big for the Small Business Energy Advantage (SBEA) financing program but too small to be standalone ESPC projects.

C&I Sector: Small Business

1. Improve the Customer Experience – Ensure seamless service delivery between services of the Connecticut Energy Efficiency Fund and the Connecticut Green Bank that is responsive to customers' needs, including integration of appropriate Connecticut Green Bank and other allied small business services, especially for those that aren't currently served by Small Business Energy Advantage (SBEA) financing program.

2. Identify and engage alternative capital sources to lower the cost of and increase opportunities for project financing.

3. Examine ways to couple SBEA and C-PACE (or other financing offerings) - Promote more comprehensive projects (especially among higher energy usage customers) and longer-term payback measures.

Commercial & Industrial Metrics for Government, Small Business, and Medium/Large Business

July 20, 2016

C&I Sector: Medium/Large Business

- 1. Improve understanding of opportunities within this market for deep energy efficiency improvements Build on available knowledge and analysis to develop effective and sustainable incentive and financing strategies for stimulating deeper energy investments and that meet all cost-effective energy efficiency goals.
- 2. Increase customer savings and benefits from the C&I Programs Drive more projects with deeper energy savings, supported with increased financing options (including C-PACE) to help ensure comprehensive investment and closure of financing gaps
- 3. Cross-leverage Connecticut Energy Efficiency Fund and Connecticut Green Bank programs Develop and implement communication and marketing strategies to insure maximum cross-leveraging of these opportunities to help achieve the state goals of acquiring all cost-effective energy efficiency and expanded renewable deployment through highly effective leveraging of ratepayer funds.
| Action Item | Measurement
of Success | Challenges | Target
Completion
Date | Status | Satisfies
Items |
|---|---|--|------------------------------|--|--------------------|
| C&I Government | | | | | |
| Companies allocate spending for
technical support and incentives to
develop ESPC projects. Ensure CEEF
support for ESPC owner's
representative via internal or
contracted support. | Sufficient
Funding
available | | Q3 | Ongoing - Companies refiled budget 3/1/16 | 1, 2 |
| Identify low cost capital sources
(non-utility capital) for municipal
loans. Similar Goal for SBEA.
Any other products contemplating
for future for this sector? Example:
pre-development loans. | Pool of low
cost capital
available for
Municipal and
State projects.
The cost of CT
Green Bank
sourced capital
is lower than
the utility cost
of capital. | Unsecured Loans
based on utility bill
credit history; Process
is consistent with
SBEA Loan
Process/Payment
Plan. | Q3 | Both Companies have faced capital
constraints and have adopted interim
solutions.
Eversource is piloting use of third party
capital (M-CORE) to finance Municipal and
State Loans. Third party Muni Market rate
capital at 5-6% (or lower) is being bought
down to 0% which costs less than buying
down utility cost of capital. 1 completed
project (New Fairfield) and 3 in the works
(Weston, Vernon, Region 10 School District).
Eversource has also increased self-funding
for financing SBEA and Municipal loans
United Illuminating is currently rationing the
capital for municipal and state customers.
The Companies have also utilized a PURA
distributed generation/EE loan product with | 2,3 |

				and reduce kW demand. The subsidized rate is 1% below prime or customers lowest interest rate and subsidized through Federally Mandated Congestion Charges. Both companies, UI and Eversource, have jointly met with CT Green Bank to pursue a longer term, sustainable, and cost-effective option for the Green Bank to source more and lower cost capital. The companies and Green Bank together have reviewed the existing SBEA/Muni loan process. They are developing a proposal in which the Green Bank would source and manage capital for small business, muni, and state customers, including the on-bill repayment option.	
Update the Master Agreement between CEEF and state for state agencies to provide improved flexibility.	Master Agreement in place for both Eversource and UI	Financing cap imposed; resolution tied to item above	Q1	Complete; though cap imposed, highlighting need for items above and below.	2,3

Develop new products to fill market	Products in	CT Green Bank	Q4	CT Green Bank's role is to close financing	2,3
Develop new products to fill market gaps: Example 1: develop financing for projects too large for SBEA and too small for ESPC Example 2: Develop a financing vehicle for aggregating smaller, long-term, comprehensive energy saving projects for multiple municipalities that don't fit the Small Business Energy Advantage (SBEA) financing mechanism that ensures that energy savings from one town do not offset financing measures for another town.	Products in place for pre- development financing, for mid-sized projects, and for aggregated projects.	CT Green Bank researching potential solutions.	Q4	 gaps that private investors and banks will not address. Next steps are to have CT Green Bank take on the role of financing a mid-sized program for small business customers and municipal and state customers. Additionally, develop a timeline. For municipalities and state facilities – current Green Bank strategy is to use the modified SBEA program (under development per the above) to act as an aggregation facility for smaller long term 	2,3
				 comprehensive energy savings projects and roll these into a term facility for the relevant municipalities. For regular C&I/non-municipalities – current Green Bank strategy is to develop a "product extension" of the modified SBEA program (under development per the above) – this will follow by some period of time after the modified program is launched (might not complete by 6/30/17). 	
Issue Green Bond [revenue bonds] for LBE ESPC project for Department of Correction District 1;	Indenture document drafted; Green Bond issued	Financing constraint	Q4	Department of Correction ESPC project waiting for financing (\$40-\$50M). CT Green Bank is awaiting further direction from Office of the Treasurer (OTT) regarding bonding capacity for State.	2

CT Green Bank will continue to identify other financing vehicles for large projects [including ESPC] that do not involve bonding, both for municipal projects and state projects [might be different vehicles].	Development of financing tools/products	A question from the Attorney General's office is whether a security interest in state projects' equipment is permissible. The CT Green Bank does not see an issue (barrier) for municipal projects.	Q4	CT Green Bank is having preliminary discussions with DEEP on this issue (in July).	2
Execute on the PURA Distributed Generation/EE Loan with the Bank of America that provides an interest rate buy-down for this sector [usually for municipal performance contracts]	Execution	Execution dependent on projects completing technical studies/scope	Q3 ongoing	CT Green Bank assessing viability for using for other performance contracts by using with Clean Renewable Energy Bonds for a project that will benefit the City of Meriden. [currently electric only projects with demand savings qualify for the interest rate buy down portion]	2

Action Item	Measurement of Success	Challenges	Target Completion Date	Status	Satisfies Items
Small Business					
Joint Projects with C-PACE to finance projects with longer term (i.e., greater than 4 year paybacks). CEEF funds would be provided for EE rebates on qualifying measures plus interest rate buy-downs on the EE customer portion of projects up to 4 years and less than \$100K.	Joint C-Pace Projects with CT Green Bank and the Utilities that include measures that have greater than 4 year paybacks.	Identification of Projects	Q2	Continued communication and dialogue on the process.	1, 2
Identify low cost capital sources (non-utility capital) for SBEA loans. Similar Goal for Muni.	Pool of low cost funds available for SBEA Loans. The cost of funds is lower than the utility cost of capital.	Unsecured Loans based on utility bill credit history; Process is simple and sold by contractors	Q3	Companies and Green Bank are pursuing solution that applies to muni, state, and small business customers. See update in government sector section.	2,3

Action Item	Measurement of Success	Challenges	Target Completion Date	Status	Satisfies Items
Medium / Large Business					
Target Segments (i.e., Nursing Homes) to identify and develop a comprehensive project with financing options.	Completion of a joint Nursing Home Project which combines utility incentives plus C- PACE project financing.		Q3	Joint collaborative projects are being evaluated to maximize the potential for deep energy retrofits (i.e., Stamford Town Center, Bridgeport Diocese, etc.). Had a successful workshop with CT Green Bank, Utilities, CT DEEP, and Nursing Homes and association.	1, 2
Develop a tool / cut-sheet for a comprehensive project offering with financing options.	Simple and unified comprehensive / financing offer		Q3	Utilities have begun pulling together existing tools / cut-sheets to share to develop a comprehensive project offering that includes financing options.	2,3
Develop an enhanced process flow model	Simple and unified process flow model		Q2-Q3	CT Green Bank has developed a model which will be shared with the Utilities. Utilities will share their current process models also.	1,2,3
Identify other cost effective segment and other project opportunities.	Identify segment, projects and complete a joint project in alignment with the findings from above. Create a summary report on Joint Projects.		Q3	Utilities and CT Green Bank are pulling together their studies, segment efforts and will share with the intent of identifying other cost effective segment and project opportunities.	2,3

July 20, 2016

Commercial Sector

C&I Sector: Government

- 1. Improve the Customer Experience. Ensure seamless service delivery that is responsive to State and local governmental and institutional needs, including
 - a. Integration of appropriate Connecticut Green Bank and other related services, especially for those that aren't currently served by Lead By Example (LBE)-Energy Savings Performance Contracts (ESPC); and
 - b. Providing technical support and incentives from the Connecticut Energy Efficiency Fund and the Connecticut Green Bank's capability to finance ESPC projects at scale. Establish and communicate a process for customers undertaking ESPCs to receive technical support through internal utility resources and contracted "owner's representative" services.
- 2. Establish sustainable and cost-effective financing mechanisms Develop sustainable and cost-effective funding mechanisms for both the preparatory and permanent project financing needs of government sector energy savings projects.
- 3. Develop new products to fill market gaps For example, develop a financing vehicle for aggregation of small-scale comprehensive energy saving projects at municipal or other institutional facilities that are, individually, too big for the Small Business Energy Advantage (SBEA) financing program but too small to be standalone ESPC projects.

C&I Sector: Small Business

1. Improve the Customer Experience – Ensure seamless service delivery between services of the Connecticut Energy Efficiency Fund and the Connecticut Green Bank that is responsive to customers' needs, including integration of appropriate Connecticut Green Bank and other allied small business services, especially for those that aren't currently served by Small Business Energy Advantage (SBEA) financing program.

2. Identify and engage alternative capital sources to lower the cost of and increase opportunities for project financing.

3. Examine ways to couple SBEA and C-PACE (or other financing offerings) - Promote more comprehensive projects (especially among higher energy usage customers) and longer-term payback measures.

July 20, 2016

C&I Sector: Medium/Large Business

- 1. Improve understanding of opportunities within this market for deep energy efficiency improvements Build on available knowledge and analysis to develop effective and sustainable incentive and financing strategies for stimulating deeper energy investments and that meet all cost-effective energy efficiency goals.
- 2. Increase customer savings and benefits from the C&I Programs Drive more projects with deeper energy savings, supported with increased financing options (including C-PACE) to help ensure comprehensive investment and closure of financing gaps
- 3. Cross-leverage Connecticut Energy Efficiency Fund and Connecticut Green Bank programs Develop and implement communication and marketing strategies to insure maximum cross-leveraging of these opportunities to help achieve the state goals of acquiring all cost-effective energy efficiency and expanded renewable deployment through highly effective leveraging of ratepayer funds.

Action Item	Measurement of Success	Challenges	Target Completion Date	Status	Satisfies Items
C&I Government					
Companies allocate spending for technical support and incentives to develop ESPC projects. Ensure CEEF support for ESPC owner's representative via internal or contracted support.	Sufficient Funding available		Q3	Ongoing - Companies refiled budget 3/1/16	1, 2
Identify low cost capital sources (non-utility capital) for municipal loans. Similar Goal for SBEA. Any other products contemplating for future for this sector? Example: pre-development loans.	Pool of low cost capital available for Municipal and State projects. The cost of CT Green Bank sourced capital is lower than the utility cost of capital.	Unsecured Loans based on utility bill credit history; Process is consistent with SBEA Loan Process/Payment Plan.	Q3	Both Companies have faced capital constraints and have adopted interim solutions. Eversource is piloting use of third party capital (M-CORE) to finance Municipal and State Loans. Third party Muni Market rate capital at 5-6% (or lower) is being bought down to 0% which costs less than buying down utility cost of capital. 1 completed project (New Fairfield) and 3 in the works (Weston, Vernon, Region 10 School District). Eversource has also increased self-funding for financing SBEA and Municipal loans United Illuminating is currently rationing the capital for municipal and state customers. The Companies have also utilized a PURA distributed generation/EE loan product with	2,3

				and reduce kW demand. The subsidized rate is 1% below prime or customers lowest interest rate and subsidized through Federally Mandated Congestion Charges. Both companies, UI and Eversource, have jointly met with CT Green Bank to pursue a longer term, sustainable, and cost-effective option for the Green Bank to source more and lower cost capital. The companies and Green Bank together have reviewed the existing SBEA/Muni loan process. They are developing a proposal in which the Green Bank would source and manage capital for small business, muni, and state customers, including the on-bill repayment option.	
Update the Master Agreement between CEEF and state for state agencies to provide improved flexibility.	Master Agreement in place for both Eversource and UI	Financing cap imposed; resolution tied to item above	Q1	Complete; though cap imposed, highlighting need for items above and below.	2,3

Develop new products to fill market	Products in	CT Green Bank	Q4	CT Green Bank's role is to close financing	2,3
Develop new products to fill market gaps: Example 1: develop financing for projects too large for SBEA and too small for ESPC Example 2: Develop a financing vehicle for aggregating smaller, long-term, comprehensive energy saving projects for multiple municipalities that don't fit the Small Business Energy Advantage (SBEA) financing mechanism that ensures that energy savings from one town do not offset financing measures for another town.	Products in place for pre- development financing, for mid-sized projects, and for aggregated projects.	CT Green Bank researching potential solutions.	Q4	 gaps that private investors and banks will not address. Next steps are to have CT Green Bank take on the role of financing a mid-sized program for small business customers and municipal and state customers. Additionally, develop a timeline. For municipalities and state facilities – current Green Bank strategy is to use the modified SBEA program (under development per the above) to act as an aggregation facility for smaller long term 	2,3
				 comprehensive energy savings projects and roll these into a term facility for the relevant municipalities. For regular C&I/non-municipalities – current Green Bank strategy is to develop a "product extension" of the modified SBEA program (under development per the above) – this will follow by some period of time after the modified program is launched (might not complete by 6/30/17). 	
Issue Green Bond [revenue bonds] for LBE ESPC project for Department of Correction District 1;	Indenture document drafted; Green Bond issued	Financing constraint	Q4	Department of Correction ESPC project waiting for financing (\$40-\$50M). CT Green Bank is awaiting further direction from Office of the Treasurer (OTT) regarding bonding capacity for State.	2

CT Green Bank will continue to identify other financing vehicles for large projects [including ESPC] that do not involve bonding, both for municipal projects and state projects [might be different vehicles].	Development of financing tools/products	A question from the Attorney General's office is whether a security interest in state projects' equipment is permissible. The CT Green Bank does not see an issue (barrier) for municipal projects.	Q4	CT Green Bank is having preliminary discussions with DEEP on this issue (in July).	2
Execute on the PURA Distributed Generation/EE Loan with the Bank of America that provides an interest rate buy-down for this sector [usually for municipal performance contracts]	Execution	Execution dependent on projects completing technical studies/scope	Q3 ongoing	CT Green Bank assessing viability for using for other performance contracts by using with Clean Renewable Energy Bonds for a project that will benefit the City of Meriden. [currently electric only projects with demand savings qualify for the interest rate buy down portion]	2

Action Item	Measurement of Success	Challenges	Target Completion Date	Status	Satisfies Items
Small Business					
Joint Projects with C-PACE to finance projects with longer term (i.e., greater than 4 year paybacks). CEEF funds would be provided for EE rebates on qualifying measures plus interest rate buy-downs on the EE customer portion of projects up to 4 years and less than \$100K.	Joint C-Pace Projects with CT Green Bank and the Utilities that include measures that have greater than 4 year paybacks.	Identification of Projects	Q2	Continued communication and dialogue on the process.	1, 2
Identify low cost capital sources (non-utility capital) for SBEA loans. Similar Goal for Muni.	Pool of low cost funds available for SBEA Loans. The cost of funds is lower than the utility cost of capital.	Unsecured Loans based on utility bill credit history; Process is simple and sold by contractors	Q3	Companies and Green Bank are pursuing solution that applies to muni, state, and small business customers. See update in government sector section.	2,3

Action Item	Measurement of Success	Challenges	Target Completion Date	Status	Satisfies Items
Medium / Large Business					
Target Segments (i.e., Nursing Homes) to identify and develop a comprehensive project with financing options.	Completion of a joint Nursing Home Project which combines utility incentives plus C- PACE project financing.		Q3	Joint collaborative projects are being evaluated to maximize the potential for deep energy retrofits (i.e., Stamford Town Center, Bridgeport Diocese, etc.). Had a successful workshop with CT Green Bank, Utilities, CT DEEP, and Nursing Homes and association.	1, 2
Develop a tool / cut-sheet for a comprehensive project offering with financing options.	Simple and unified comprehensive / financing offer		Q3	Utilities have begun pulling together existing tools / cut-sheets to share to develop a comprehensive project offering that includes financing options.	2,3
Develop an enhanced process flow model	Simple and unified process flow model		Q2-Q3	CT Green Bank has developed a model which will be shared with the Utilities. Utilities will share their current process models also.	1,2,3
Identify other cost effective segment and other project opportunities.	Identify segment, projects and complete a joint project in alignment with the findings from above. Create a summary report on Joint Projects.		Q3	Utilities and CT Green Bank are pulling together their studies, segment efforts and will share with the intent of identifying other cost effective segment and project opportunities.	2,3