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**Joint Committee of the CT Energy Efficiency Board and the**

**Connecticut Green Bank Board of Directors**

**CT Green Bank**

**845 Brook Street, Rocky Hill, CT**

**Wednesday, January 23, 2019**

**1:30-3:30 p.m.**

**MINUTES1 (Draft)**

**In Attendance**

Voting Members: Eric Brown, Diane Duva, Amanda Fargo-Johnson (by phone), John Harrity

Non-Voting Members: Ron Araujo, Bryan Garcia

Others: Stephen Bruno, Jane Bugbee-Leno (by phone), Anthony Clark, Craig Diamond (by phone), Julia Dumaine, Mackey Dykes, Glen Eigo, George Lawrence (by phone), Madeline Priest, Will Riddle (by phone), Larry Rush, Jeff Schlegel (by phone), Eric Shrago, Kim Stevenson, Nick Zuba (by phone), Kerry O’Neill (by phone)

1. **Call to Order**

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

1. **Public Comments**

None

1. **Review and approval of Meeting Minutes for October 17, 2018 meeting**
* Mr. Garcia pointed out that Jeff Schlegel’s name was inadvertently misspelled by Scribe and other corrections were identified (e.g., DEEP used in notations instead of EEB) but not submitted prior to current meeting
* Ms. Duva brought up some concerns of consolidation of comments and Mr. Brown stated that he would have to review the point he wanted to make in the fourth bullet point in agenda item 4 (RPS issue)
* Ms. Duva asked that edits/changes be forwarded to Craig Diamond and further asked that meeting notes be provided to the team earlier for review
1. **Combined Metrics – Fact Sheet**
* Mr. Garcia thanked all who worked on recommending, compiling and preparing metrics which have been classified in to 7 metric areas; leverage ratio, jobs, Gross State Product, tax revenues, avoided costs, public health, customers.
* Metrics Team is up to the final step of this effort which is to “develop a communication piece that shows the combined impact of CEEF and CGB”; presenting to Joint Cmte.
* Mr. Shrago thanked Steve (Bruno) and Ron (Araujo) as they worked together to determine how the evaluation of these metrics would benefit areas of delivery. Mr. Bruno stated they wanted to determine how customers benefited and included residential in customer metric. Mr. Brown asked to clarify whether customer metric included consumers and Mr. Bruno responded positively.
* Ms. Duva recommended reviewing each metric point on the Fact Sheet:
	+ *Customers* – **608,000 Customers Benefitted** – Mr. Bruno indicated that metric figure may be about 100k without retail sales included. Mr. Garcia suggested a ‘key’ so that any recipient would understand the figures provided. Ms. Duva felt the 608k figure is a bit exaggerated but also wants to show how consumers are affected and benefit from green initiatives. Suggested that this metric should be defined by ‘participants’ instead of by ‘projects’. Ms. Fargo-Johnson asked if the 608k is an annual figure?; advised that each year these values are updated. Mr. Araujo pointed out that the consumer numbers will drop off over time as lighting updates are no longer a factor. Mr. Brown asked if this metric figure can be broken out in to two numbers? Yes. Mr. Brown asked if lower consumer numbers (over time) could be explained by fewer incentives? Mr. Araujo pointed out you would then be trying to explain the metric. Mr. Schlegel recommended keeping the number together but break out figures (in ‘key’) with an explanation.
	+ *Jobs* – **38,000 Jobs** – Mr. Brown asked about how we create link between jobs and purchases made? Ms. Duva pointed out that the bulk of jobs created are due to specific areas of work; HVAC, electricians, plumbers, etc. Mr. Shrago remembered conversations differently regarding job creation. Ms. Duva wants consumers to understand job creations as result of green/clean initiatives. Mr. Brown recommends keeping the 38k figure and include industry jobs but Ms. Duva wants to define individual jobs not just industries. Mr. Garcia also pointed out that the objective is not to create a ‘silo’ affect between renewable energy and energy efficiency. Ms. Duva wants to educate people (consumers and legislators) to recognize the scale of actual job creation numbers in several fields. Mr. Brown asked everyone’s thoughts on this. Mr. Harrity likes it as is and feels things are okay. He is concerned that it may become diluted and feels that legislators need to be educated about the overall services and jobs created (as a result of green initiatives). Ms. Fargo-Johnson, like Ms. Duva, would like more clarification—not so detailed—but some clarification like “maintaining” jobs as opposed to “creating” them. Mr. Schlegel suggests using “supporting” and not splitting the numbers out by Green Bank or other organizations but by CT jobs created in the HVAC, insulation, solar, etc.—grounded in all jobs that are out there. Mr. Garcia read a section of the Green Bank’s website from the FY17 annual report regarding how this is currently described. “Above all in FY17, working in collaboration with Eversource Energy and Avangrid through the Energize CT iniative, we continued to support a growing industry of 38,000 design, installation, and manufacturing green energy jobs in Connecticut.” He noted that a footnote notes that “green energy” means “energy efficiency, solar electric generation, wind electric generation, traditional hydroelectric generation, woody biomass, storage, smart grid, and microgrid.” Mr. Brown asked to keep the 38k number of jobs on the Fact Sheet but qualify it below (in ‘key’). Ms. Duva asked that it be as simple and succinct as possible—concerned that the legislatures may not understand how all jobs/industries (like electricians, plumbers, etc.) are employed by this (green/clean) industry. She further recommended a footnote with a hyperlink to the DOE report. Mr. Brown stated this should note “supporting” jobs rather than creating new jobs and Ms. Duva agreed.
	+ *Avoided Costs* – **Avoided Costs** – Ms. Duva asked Mr. Bruno about megawatts. Mr. Araujo suggested referring to a 100 megawatt plant as it is easier to remember to which Mr. Brown asked; “Is that [100 megawatt plant considered] big or small? Mr. Araujo stated that a 100 megawatt plant would power about 100,000 homes. Ms. Duva mentioned the C&LM Plan and Mr. Garcia the Green Bank Plan and each participant’s megawatt contribution to the grid (including Eversource). Mr. Garcia asked if this megawatt contribution is installed capacity at peak, for example where solar PV is at maximum production. Team needs to work on these figures so legislators can understand the clean energy contributions to avoided costs. Mr. Garcia stated that power plant size and distribution must be defined. Mr. Bruno stated they are working on determining generation information. Mr. Garcia again recommended a ‘key’ with assumptions for a better understanding. Ms. Fargo-Johnson suggested making a change to the notation about homes energized and all agreed.
	+ *Header/Title of Page* – **Customer-Funded Green Energy Delivers Value** – Mr. Schlegel would prefer using “Clean” in title but using “Efficient” in other sections. Mr. Brown voiced concern that we be consistent in language used. Ms. Duva wants to coach legislators about green/clean energy language. Ms. Fargo-Johnson suggested “by implementation of ‘clean & efficient’” to which Mr. Schlegel agreed the use of “clean” rather than “green”. Ms. Duva agrees as long as definitions are clearly defined as ‘clean’ only means ‘renewables’ to legislatures. Mr. Schlegel pointed out that ‘clean’ energy is polling better and more popular that ‘geen’ energy. Mr. Brown summed up discussion and agreed language as using ‘clean’ instead of ‘green’ in header and defining it as ‘efficient and renewable energy’.
	+ *Gross State Product* - **$5.7 Billion Increase to the Gross State Product** – Ms. Duva voiced concern that the $5.7 Billion increase differs from the $4.6 Billion noted on prior documents. Mr. Bruno stated figures were combined (Green Bank and CT Energy Efficiency Fund). Ms. Duva stated there is an Operation Plan as well as a Comprehensive Plan to which Mr. Brown asked; “Do we need to point out plans?” Ms. Duva again wants to define time frames and drive home ‘clean energy’ benefits to legislature. Ms. Stevenson commented that defining the figures and making them part of the State of CT GDP figures may promote a better understanding.
	+ *Leverage Ratio* – **Every $1.00 Collected Results in an Additional $4.10 of Green Energy Spending** –
	+ *Public Health* - **$6.4 Million in Public Health Costs Saved** – Mr. Brown asked about the public health costs. Mr. Shrago stated figures derived from lower cost of figures obtained.
* Ms. Duva commented that plans need to be implemented and wants the legislature to think about the *plan* and not the *money* involved. Mr. Araujo pointed out that it is “about the soup not the ingredients.” Ms. Stevenson also recommended how to explain climate change better so people (legislators, consumers) will understand our goals better. Mr. Garcia and Mr. Brown pointed out that there are a lot of changes to the Fact Sheet but they have now been identified. Mr. Garcia stated the same team will be working on the changes answering Ms. Duva’s question about who is working on updates. Mr. Garcia asked if another draft can be made available by end of week? “Yes”, Mr. Bruno replied. Mr. Harrity recommended future printing on stock paper for sturdiness. All agreed next draft would be issued via email for all to approve. Ms. Duva pointed out that Ellen, Mark, Craig in Marketing should help to ensure Fact Sheet will reflect the appropriate figures utilized to define metrics. There was a further discussion about when to introduce/issue; first week of February when the Regulators and Utility Boards will be meeting. Mr. Brown stated this information will be good and thanked everyone’s work on goals/metrics and the resulting Fact Sheet.
1. **Sector Working Group Reports – Metric Recommendations**

* 1. **Brief Report: –Residential – Single Family Goals/Metrics**
* Mr. Araujo discussed the strategy for expanding Comprehensive Loans for residential, single-family homeowners going forward. He stated 2018 activity was low due to budget deductions and homeowners utilizing the tactics of the energy companies. In addition, marketing budgets were low.
* He further discussed the goal to obtain private sector capital to fund single-family improvements, simplify the financing approval process and reduce barriers for residential improvements in order to move projects forward. The team is working on determining areas where improvements are being implemented and working well so they know where and to whom to market in the future.
* Mr. Brown asked if there is a better fit [funding?] for some projects? Mr. Araujo pointed out that all areas of homes can benefit from these improvements and the CT Energize Heating Loan and Smart-E are utilized for financing.
* Ms. Priest pointed out there is a lot of contractor confusion and team is working to fix that; they have a good plan in the works to correct that. Per Mr. Araujo, they have regular meetings with the contractor base and Ms. Priest added that due to changes in products and turnover within contractors companies, constant communication is important. Mr. Brown asked if the proposed Fact Sheet will help to which Ms. Priest responded that it is not robust enough to assist. Mr. Araujo stated that certain projects need better communication with contractors.
* Ms. Duva stated that the EEB Residential Committee meeting is making some time for discussing further the financing products and what they are funding. Mr. Araujo declared they are working on identifying barriers for energy efficiency improvements and ways to remediate them; primarily to have financing available so projects can move forward. Ms. O’Neill discussed how they are working with other government agencies to determine if Medicare funds can be utilized—especially for projects that would improve health of homeowners/rentors—but this funding will not be determined within the next six months.
* Mr. Araujo stated the proposed metrics are to understand which HES projects are moving forward with additional measures and which of those are being financed by what product, to determine other financing sources to support those projects with health and safety barriers and determine how those can move forward.
* Mr. Garcia feels like a lot of progress has been made and thanks to all. Mr. Brown thanked everyone as well.
	1. **Brief Report: –Residential – Multifamily Goals/Metrics**
* Ms. Stevenson stated one established goal is to evaluate for consideration the development of Green Bank Mulifamily financing products that serve market rate properties, defined as those with residents at 80% of area median income and above which existing financing products are not currently serving. The Green Bank is working to explore and determine what financing can be offered to multifamily property owners in this situation so that clean energy improvements can be introduced and developed. She also reviewed all joint multifamily goals and metrics established for FY’19 by the Companies and Green Bank.
* Ms. Stevenson clarified that the Green Bank serves a limited portion of the multifamily market through its financing programs, primarily serving existing properties that are mid-cycle. (Mid-cycle means that new financing or re-financing is not anticipated in the short term.)
* The ECT multifamily website currently provides a table of available financing for all financing programs offered by the Green Bank and Companies. There have beenchanges in financing program terms and other invormation over the last six months, but the team stays on top of any updates.
* Ms. Steveson presented an analysis of the performance of Green Bank multifamily loans based on the multifamily metrics established by the joint team. This analysis included number of pre-development and term loans, loan amounts, units served and an utility incentive leverage rations.
* The Green Bank primarily funds improvements to existing, master metered properties that involve electric to gas or oil to gas conversions as well as replacement of HVAC systems at the end of their useful life. Efficiency projects often include additional weatherization and other EE upgrades as well as health and safety improvements when they are needed and pencil out. Solar installations represent half of the term loans. Solar is rarely installed at the same time as energy efficiency improvements.
* The Green Bank has received ECT Multifamily Initiative applications from 6 property owners representing 8 properties.  None have advanced beyond application.
* Mr. Brown asked how long the link from CT Energy website to Green Bank has been there and can it be tracked? Link has been there approximately 2+ years and joint applications are issued to both the Green Bank and the Companies if client requests financing.
	1. **Brief Report: C&I – Small and Medium/Large Business – Goals/Metrics**

* Mr. Bruno began with goals to recapitalize small businesses; build on knowledge and analysis to not only educate legislature and consumers but to determine the best available financing and deepest cost savings for business organizations.
* The three year financing program with Amalgamated Bank will help reach these businesses. This is a per project/per account financing as there are concerns about one customer with multiple meters going into default on outstanding loans. Funding is short on capital constraints, made to small businesses and municipalities and making certain loans are paid timely. Per Mr. Dykes, the Amalgamated Bank and Green Bank facility will alow for an increase in the SBEA borrowing cap from $500K to $1 million for public entities (e.g. state facilities and municipalites). Mr. Garcia stated team has worked solidly to help the business and industry sectors grow and that we note a few of these success stories for the benefit of the legislature.
* Per Mr. Bruno, the SBEA recapitalization facility with Amalgamated Bank and Green Bank will devlier $6 million in interest rate savings for the Eversource SBEA program. Ms. Bugbee-Lano stated that there is a good plan with Amalgamated Bank for Eversource and United Illuminating is looking to see if they can achieve similar goals to offer and do more for funding municipality projects.
* The small business goals are met by improving customer experience and engaging in savings and benefits. Mr. Dykes stated they will track and measure how many projects are in process and how they are financed.
	1. **Brief Report: C&I – Government – Goals/Metrics**
* One of the goals for obtaining government projects is to determine how to integrate appropriate Green Bank financing and services and the Green Bank’s capability to finance large-scale projects. Furthermore, develop new, cost-effective vehicles for mid-scale energy-saving projects.
* Mr. Dykes states that we know how our funding is being utilized and how we can expand. Therefore, team will track and measure same items as regards municipalities but it would also be helpful to find out how the Government is financing project(s); figuring out how to ask that question and if they are receiving an incentive. Also try to determine if other financing is needed for project(s). Ms. Duva recommends we review how government projects are being funded (by bonds). The State Bonding Commission meeting was cancelled on Friday but their annual report is on the Eversource website. New Governor’s administration will review this commission’s work when commission meets next.
* Mr. Brown asked if there were any other questions on this Government review. Mr. Harrity stated if we are helping cut energy costs for companies, that means jobs. Ms. Duva agreed the potential for increased jobs in CT—and that clean energy is producing more jobs. Although there are high energy rates in CT they are utilized most efficiently. Mr. Brown asked if we are able to measure the combined amount of the productivity and cost of projects?
1. **C&LM Plan and CGB Comprehensive Plan - Overviews**
* Mr. Brown related that the C&LM Plan has been approved and Mr. Garcia stated the Green Bank Plan (originally a 2-year plan – FY 2017-FY 2018) was extended for another year (i.e., FY 2019. They will discuss off-line how to time the next Green Bank Plan update along with the C&LM Plan.
* Under review of Section 4 (Develop and Maintain a Sustainable Workforce) of the C&LM Plan, Mr. Brown asked if contractors are finding skilled techs? Mr. Araujo answered “No” and then asked how contractors can find skilled and trained people to do these jobs. Ms. Duva responded to convince people that it is a secure job. Mr. Araujo did relate that we do not want customers to wait months to be served and that qualified techs are needed. Ms. Duva spoke about classes being offered at Tunxis Community College to educate people specifically for these services. Mr. Araujo, responding to a question from Mr. Brown, spoke about the requirements for the ‘lead tech’ role and how many hours they must accumulate before being able to supervise projects on their own and also to consider how many projects one person can handle/manage?
* Mr. Bruno, Mr. Garcia, and the appropriate staffs will meet in the coming months to begin to harmonize Green Bank priorities in line with the C&LM Plan
* Mr. Garcia brought up the Governor-elect energy policy transition committee recommendations. Within the recommendations were 10 top priorities (expand energy efficiency was #1), and 3 essential recommendations including support for the Governor’s proposed carbon neutral goal, creation of a green economy and jobs fund, and a council on energy affordability and equity. Asked by Ms. Duva where those funds might come from, Mr. Harrity stated if prior funds are restored to the funds from the new administration, they would consider an amount of those funds for job development within the state. Mr. Brown stated he would like to contribute to the work force development activity if it comes about but, as Mr. Garcia pointed out, we are not certain what the new administration is likely to do. Mr. Harrity pointed out that the way to deal with this is the same way as manufacturing jobs in the state; get or keep jobs/people employed here or companies and workers may relocate.
1. **Other Business**
* Mr. Garcia explained the battery storage slide with attendees; exporting energy generated to the grid on a battery for use later during peak evening or morning hours. Ms. Duva asked if there was funding for this plan? No, per Mr. Garcia but the Green Bank hjas submitted an application into the Electric Efficiency Partner Program for possible funding.
1. **Action Items & Items for Next Meeting**
* Draft of Fact Sheet (flyer) to Matt (Macunas?) at close of business this Friday; The memo of assumptions (key) may take longer but complete Fact Sheet with the current recommended updates and it can be adjusted later if necessary
* Mr. Garcia will connect with Eversource and decide how C&LM and Green Bank plans can come together over time
* Mr. Garcia and Mr. Schlegel asked that groups continue to apply goals, work on metrics and report back on metrics at next meeting
* Mr. Brown asked that we have a legislative update
* The finalized Fact Sheet (flyer) with recommended changes from this meeting
* **Meeting to be held on:**

**Wednesday, April 17, 2019**

**DEEP Headquarters, 79 Elm Street, Hartford, CT 06106**

1. **Adjourn**

**Motion to adjourn meeting made by John Harrity**

2nd by Ms. Duva

Approved Unanimously

Eric Brown adjourned the meeting at 3:36pm

Respectfully Submitted,

Eric Brown, Chairperson