

**CONNECTICUT GREEN BANK**

Board of Directors

Regular Minutes

Friday, July 21, 2017

**1. Call to Order**

Catherine Smith, Chairperson of the Green Bank, called the meeting to order at 9:02 a.m. Board members participating: Rob Klee, John Harrity, Matt Ranelli (by phone), Reed Hundt (by phone), Betsy Crum, Gina McCarthy (by phone), and Bettina Bronisz

Members Absent: Tom Flynn and Kevin Walsh

Others Attending: Corey Wurster, Olivia Headen, Matt Macunas, Emily Casserino, Sneha Jayaraj, Barbara Waters, Selya Price, Karthik Soora, Shi Yi, Diego Hentschel (by phone), Kris Holz (by phone), and Carla Rodriguez (by phone)

Staff Attending: Brian Farnen, Bryan Garcia, George Bellas, Dale Hedman, Kerry O’Neill, Mackey Dykes, Eric Shrago, Bert Hunter, Ben Healey (by phone), Anthony Clark, Cheryl Samuels, Jane Murphy, and Craig Connolly

**2. Public Comments**

There were no public comments.

**3. Consent Agenda**

**Upon a motion by John Harrity, and seconded by, Commissioner Klee, the Consent Agenda passed unanimously.**

**a. Approval of Meeting Minutes for June 23, 2017**

**Resolution #1**

Motion to approve the minutes of the Board of Directors Meeting for June 23, 2017.

**b. Comprehensive Plan Revisions (FY 2017 and FY 2018)**

**Resolution #2**

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

**WHEREAS**, the Act directs the Green Bank to develop a comprehensive plan to foster the growth, development and commercialization of clean energy sources, related enterprises and

stimulate demand clean energy and deployment of clean energy sources that serve end use customers in this state;

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

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

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

**WHEREAS**, the staff of the Connecticut Green Bank have revised in a redline draft version the Comprehensive Plan for FY 2017 and FY 2018 to include recently approved budget and targets for FY 2018 for the review and approval by the Board of Directors;

**NOW**, therefore be it:

**RESOLVED**, that the Board approves of the revised Comprehensive Plan for FY 2017 and FY 2018 as presented to the Board on July 21, 2017, and subject to nonmaterial modifications made by the officers as described above.

### **c. Board of Directors and Committees Report for FY 2017**

#### **Resolution #3**

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

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

**NOW**, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Overview of Compliance Reporting and the Board of Directors and Committees for FY 2017 memo dated July 21, 2017 prepared by staff, which provides a summary report of the FY 2017 governance of the Board of Directors and its Committees of the Connecticut Green Bank.

#### **d. Bridgeport Microgrid Contract Extension**

##### **Resolution #4**

NOW, therefore be it:

**RESOLVED**, that the Board of Directors authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank to execute and deliver a sub-debt loan in the amount of up to \$502,860, at any time throughout the extended draw period deadline of January 1, 2018, as stated herein, and to be funded from the CHP Pilot program budget, and with terms and conditions consistent with the memorandum and term sheet submitted to the Deployment Committee dated February 23, 2015 and as revised by the memorandum to the Board of Directors dated June 17, 2016; and

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

#### **e. Financial Statements for May 2017**

#### **f. Request for Approvals for PSA's Over \$75,000 in FY 2017**

##### **4. Board of Directors Strategic Discussions – Evaluation Framework and Social Impacts**

Bryan Garcia provided an update on the Evaluation Framework. He stated that they have been spending a lot of time this year determining the societal benefits, including economic development and environmental protection. He stated that they have been working with Commissioner Smith and her team. He stated that they have updated a 2009 report, which compares commercial solar vs residential solar, regarding jobs that are created. He stated that they have created a calculator that plugs into the data collection warehouse.

Bryan Garcia stated that they are working with Commissioner Klee and the Environmental Protection Agency on the clean energy deployed and environmental protection. He stated that they are working with the EPA tool, called Avert to simplify the model. He stated that its outputs serve as inputs into another area, public health, which they are working on with the Connecticut Department of Public Health (DPH) as well. He stated that it will be put into a model for public health in terms of cleaning the air. He stated that they will come back to the Board in October with that methodology. John Harranty questioned if there is a component of the cost. Eric Shrago stated yes, costs associated with health concerns. He stated that they are using EPA identified costs. He stated that they are working with DPH on implementing.

Bryan Garcia stated that they are working to develop a process to understand the consumer experience. He stated that they have real data behind the perceptions of the consumer for the Posigen product. He stated that they are looking to develop similar tools for C-PACE, Smart E, Multi – Family affordable housing. He stated that this will help them to understand how the products are doing and improve on the processes. He stated that they actually collect a lot of data and want to develop a process to use the data and make it available.

Eric Shrago stated that they will finalize the internal data dictionaries and protocols to touch on privacy. He stated that they will bring that to the ACG over the next year. He stated that they are

currently working within the guidelines. He stated that they need to formalize it. Commissioner Klee questioned if customers agree to share some information. Bryan Garcia stated yes, they sign off on the data release form. Commissioner Smith questioned if it is a requirement. Brian Farnen stated it's an attachment to the agreements. He stated that the utilities signed off on it. The agreement is used for all financing products.

Matt Ranelli questioned if they can include a metric of distribution of those benefits to the LMI community. Eric Shrago stated that they can look at projects and census, and begin mapping those specific benefits. He stated that the Cobra model is advanced. He stated that that is tracking where more polluted air is going to blow. He stated that they can model based off of county level at this point. Kerry O'Neill stated that per Green and Healthy Homes, 46% of Asthma spend is concentrated in 5 cities. She stated that they can maybe bridge some of that statewide. Bryan Garcia stated that in the CAFR, they will disclose that the renewable energy credits are helping to create a compliance mechanism for the Class I RPS that is providing environmental benefits.

Bryan Garcia discussed the Comprehensive Plan. He stated that they are in year two of the two-year plan. He stated that they collect a lot of data. If the Board wants independent evaluations of programs, it can be done. He stated that they're making all of the information available on the website. He discussed the website, as well as the Strategy and Impact pages. He stated that there is access on Open CT to historical transactions down to checkbook level detail. He stated that everything that the Green Bank pays out is on Open CT and that this is the greatest form of transparency.

Eric Shrago discussed the Kevala software. He stated that it is a mapping solution on energy and how it is visualized geographically. He stated that they've worked to map all of the projects of the Green Bank. He stated that they've worked with DEEP and the utilities looking at Kevala to map their infrastructure. Commissioner Smith questioned if it is real time data. Eric stated no, it's not. He stated that it is using generation estimates right now, not actuals. Bryan Garcia stated that the goal is to get this onto the webpage. Matt Ranelli questioned if the Green Bank owns the data. Eric stated that they do.

Dale Hedman discussed the Locus software. He explained that it contains energy information on all commercial SL2 and SL3, as well as all other PV systems that are in the RSIP Program. He stated that the data is gathered on a five-minute basis. He stated that it comes from a number of different meters. He stated that they are unique in this space. He stated that they have been able to currently use four or five different meters to provide the information to the platform. He stated that all of the meters are revenue grade. Bryan Garcia stated that they are working on battery installation to store the power and displace it later. Commissioner Klee questioned why they needed both Locus and Kevala. Bryan stated that Locus is real time data. He stated that Kevala stores the data. Bettina questioned what the cost was. Dale stated that Locus was just under \$500,000. Commissioner Smith stated that this is powerful and will help. Bert Hunter stated that if systems are not producing to their potential this can be a proactive response. Dale stated that they would be able to see that trend and suggest correction action. Dale stated that they've been working with the utilities with what they have now. Locus is coming up with an improved notion of this. He stated that they can go in and pick out by zip code, done by installer, done by third party provider. Bettina Bronisz questioned if it can be done by Legislative District. Dale stated not as of yet, but with the correct information, it can be done.

## **5. Committee Updates and Recommendations**

**a. Audit, Compliance, and Governance Committee**

**i. Review and consider Revisions to Internal Control Procedures**

George Bellas provided an overview of the Accounting Internal Control Policies. He stated that Accounting uses these procedures to safeguard the liquid assets of the company. He stated that they review the set of policies with the Audit Committee annually. He discussed the three revisions they are proposing. They would like to substitute Brian Farnen as a second approver instead of Bryan Garcia. Mobile device reimbursement will be for only the monthly service charges, and not for the device itself. Lastly, Fixed Assets and Depreciation, they would like to reflect an increase in the threshold requiring capitalization of equipment from \$500 to \$1000. He advised that the Audit Committee recommended these to the Board for approval.

**Upon a motion by Bettina Bronisz, and seconded by Commissioner Klee, the approval was unanimous.**

**Resolution #5**

**WHEREAS**, on July 11, 2017, the Audit, Compliance and Governance Committee recommended that the Board of Directors (the “Board”) approve the proposed revisions to Internal Accounting Control Procedures as presented.

**NOW**, therefore be it:

**RESOLVED**, that the Board hereby approves the proposed revisions to Internal Control Procedures outlined in the Memo dated July 21, 2017 (along with attachments) which was submitted to the Board.

**6. Sector Updates and Progress to Targets for FY 2017**

Bryan Garcia provided an overview on the Sectors and the progress to targets for FY 2017. He stated that there are a lot of dynamic things happening this year in clean energy. He stated that a lot of third party models are being very challenged. He stated that recently Direct Energy Solar announced that they were pulling out of the residential space. He stated that the local installers are seeing steady growth.

**Resolution #6**

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

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

**WHEREAS**, on July 22, 2016, the Board of Directors of the Connecticut Green Bank approved a Comprehensive Plan for FY 2017 and FY 2018, including an annual budget and targets for FY 2017.

**NOW**, therefore be it:

**RESOLVED**, that Board has reviewed and approved the Program Performance towards Targets for FY 2017 memos dated July 21, 2017, which provide an overview of the performance of the Infrastructure, Residential, Commercial, Industrial, and Institutional sectors with respect to their FY 2017 targets.

**a. Infrastructure Program Sector**

Selya Price discussed the Infrastructure Program Sector. She stated that in the RSIP they have 170 Megawatts approved, with 145 Megawatts completed. The Target is 300 Megawatts.

Selya Price discussed the SHREC. She stated that the MPA had been approved and executed. She stated that they are able to sell SHRECs to utility companies. She stated that the SHREC aggregation process has been approved and they are implementing it. Dale Hedman stated that they have over 8,000 Megawatt hours in REC's that will be SHREC. He stated that the first invoice for the first quarter will be the in neighborhood of \$400,000. He stated that 40,000 of non SHREC Recs includes C&I.

Selya Price discussed the AD Project. She stated that they achieved commercial operation. She stated that they are producing clean energy and recycling food waste.

Selya Price provided an overview on Sunshot Projects. She stated that they finished two rooftop solar challenges and the Sunshot Prize Competition.

Selya price went on to discuss the soft costs. She stated that the soft cost percentage was increasing. She stated that they are stabilizing soft costs at about 50%. She stated that they are continuing that work through a smaller SolSmart project. Reed Hundt questioned if the 50% was installers costs. Selya stated that it is installed costs and that it can impact what the customer is paying, which can impact the installer. She stated that they are not clear on how the soft costs are actually divvied up. Commissioner Smith stated that that is a big number. She stated that they need to determine what the right level should be over time. Selya discussed a grant through the DOE to help continue LMI research and strategy. She stated that the goal is to reduce soft costs significantly. Reed stated that they should look to find a quantitative number and how the 50% can continue to go down. Selya stated that installed costs have been stable around \$3.5 per watt, and they continue to work on that. She stated that there are a lot of different solutions to reach that. Matt Ranelli questioned if they have a finer breakdown of the of the soft costs. Selya stated that they have more fine grain data. She stated that the permitting process is a major cost, as well as, customer

acquisition. She stated that those costs vary widely. She stated that this has been an increasing trend on a national basis. Commissioner Smith suggested educating the installers on different ways to get customers.

Selya Price discussed the targets and the progress. She stated that most of this has been RSIP capacity and targets. She stated that the revised target was 49 Megawatts, 47.4% of that was RSIP. She stated that the biggest factor was Solar City. She stated that in Fiscal 2015 and Fiscal 2016 they represented 39% of the market captured by the RSIP. She stated that in Fiscal 2017 Solar City dropped to 2% of RSIP. She stated that that was the biggest factor in the decline. Commissioner Klee questioned if the local installers had a better year than previously. Selya stated yes, they did. Bryan Garcia stated that they are seeing a shift in third party ownership to loans. He stated that they will provide that data. Dale Hedman stated that as a result of companies leaving the market or revising their business plans, they are seeing an uptick in local installers establishing their own companies.

John Harranty stated that the Green Bank is built around the idea of creative financing. He stated that they need to have a handle on what is happening. Bert Hunter stated that they need to step back and reassess the market from a financial products point of view. He also suggested that the Green Bank study the impact of Solar City selling RECs into other markets which might result in CT rooftops supporting the RPS goals of other states.

#### **b. Residential Program Sector**

Kerry O'Neill discussed the Residential Sector. She stated that they exceeded their targets for the first time ever. She stated that cumulatively, for all programs they broke \$100 million. She stated that for Smart-E Loan Program they have been able to get six of the eleven lenders to come on to the credit-challenged term sheet. She stated that they now have all of the Credit Unions on it. She stated that they also got those same six lenders to agree to unsecured loans for 15 to 20 year terms, for qualified borrowers. She stated that investments and expansion has been focused in the LMI markets. She stated they will help their contractors to reach those segments with the research they've done.

Kerry O'Neill stated that they launched a partnership with Department of Public Health and Green and Healthy Home Initiative to research sustainable funding streams for the CT health sector, to support health and safety. She stated that this is just the beginning of a multiyear effort. Betsey Crum stated that it is difficult, but very important work.

Kerry O'Neill stated that Smart-E blew away the targets in the fourth quarter. She stated that PosiGen has ramped up. She stated that they are delivering on their LMI mandate. In the single-family area, they are engaging contractors and doing community outreach. She stated that in the multifamily area they need to continue to work through strategic partnerships and continue to align programs with the utilities. She stated that distressed properties are coming the Green Bank as a lender of last resort. Matt Ranelli stated that they should take advantage of the competitiveness. Commissioner Smith agreed, and stated that this should be a discussion for another meeting.

#### **c. Commercial, Industrial, and Institutional Program Sector**

Mackey Dykes discussed the Commercial, Industrial, and Institutional Sector. He stated that C-PACE has now supplied more than \$100m in financing for project in Connecticut.

He stated that they are the biggest C-PACE Program in the country, outside of California. He stated that they are attracting more lenders in CT.

Mackey Dykes stated that the Commercial and Institutional Solar PPA performance has exceeded the goal for the fiscal year. For C-PACE, they are short of the targets, but they are the closest that they've ever come before. He stated that they had a strong year, in which to build FY 18.

He stated that they are working with DEEP and the Attorney General's Office to unlock the state college and university network as well as state facilities for solar with the use of a template PPA that can be utilized across all facilities.

Mackey Dykes stated that C-PACE was a bit short of it's targets. He stated that they need to focus on increasing the repeat contractors. He stated that 29% of them are repeat performers. He stated that 71% are what they call one and done. He stated that they need to figure out what the hurdles are to get them to come back. He stated that they did learn that they can't rely solely on the contractor base. He stated that they need to come up with better ways to engage directly with building owners.

Commissioner Smith mentioned the July 27<sup>th</sup> announcement of Pratt and Whitney and working with their supply line.

**Upon a motion by, Bettina Bronisz, and seconded by Commissioner Klee, the Board voted unanimously to approve Resolution #6.**

## **7. Staff Transaction Recommendations and Updates**

### **a. Commercial, Industrial, and Institutional Sector Program Recommendations**

#### **i. C-PACE Transaction (Putnam) – Cargill Falls**

Ben Healey provided an update on the Cargill Falls C-PACE project. He explained that this is a partnership with DOH. He stated that they are doing the hydro portion of the project. He stated that they are close to closing on the CHAMP money. He stated that the hydro portion is near completion, with the larger turbine already online. He stated that the smaller turbine unit will be coming online later in the Fall. He stated that they are requesting to use some of the Bank of America money to replenish a Green Bank bridge loan. Bettina Bronisz questioned if there was a penalty. Ben Healey stated that there was no penalty, but they will be responsible for the accrued interest.

**Upon a motion by Betsey Crum, and seconded by Bettina Bronisz the Board voted unanimously to approve.**

### **Resolution #7**

**WHEREAS**, the Board previously approved a C-PACE benefit assessment with a not-to-exceed amount of \$4,700,000 to Historic Cargill Falls Mill, LLC ("HCFM"), the property owner of 58 Pomfret Street, Putnam, CT to finance the construction of specified



clean energy measures (the “Project”) in line with the State’s Comprehensive Energy Strategy and the Green Bank’s Strategic Plan; and

**WHEREAS**, Enhanced Capital Connecticut Fund V (“Enhanced Capital”) acquired \$1,200,000 of the original Green Bank’s investment (the “Senior Benefit Assessment”), leaving the Green Bank with a total \$3,500,000 exposure at the time (the “Subordinated Benefit Assessment”); and

**WHEREAS**, both the Senior Benefit Assessment and the Subordinated Benefit Assessment have accrued interest to date under the terms of the existing financing agreement with HCFM (the “Financing Agreement”), for a total combined balance of approximately \$5,000,000;

**WHEREAS**, the Green Bank is currently negotiating a loan facility with Bank of America (“BofA”) that is expected to close in 2017 and for which C-PACE projects will be an eligible use of funds; and

**WHEREAS**, the Green Bank now seeks to refinance the Financing Agreement.

**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 an amended Financing Agreement in a total amount not to exceed the sum total of the Senior Benefit Assessment and the Subordinated Benefit Assessment plus any and all interest accrued, with terms and conditions consistent with the memorandum submitted to the Board dated July 14, 2017, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from July 21, 2017;

**RESOLVED**, that the President of the Green Bank and any other duly authorized officer of the Green Bank, is authorized to apply BofA funds to the Project so as to fully replace Enhanced Capital’s position in the existing capital stack;

**RESOLVED**, that before executing an amended Financing Agreement, the President of the Green Bank and any other duly authorized officer of the Green Bank shall receive confirmation that the C-PACE transaction continues to meet 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 effect the above-mentioned legal instrument.

## **8. Other Business**

### **a. Nissan Leaf Promotion (Update)**

Matt Macunas provided an overview of the Nissan Leaf promotion. He stated that they have 102 unique registrations for the Nissan Leaf offer. He stated that they do not have final sales numbers as of yet.

**b. Other Business**

Brian Farnen provided an overview on new legislation for 2017 as well as bills that did not pass. He stated that they feel that the Green Bank is in a good spot regarding the state budget. He stated that they do expect some impact.

Bryan Garcia discussed the retirement of Norma Glover and the article in the Hartford Courant.

**9. Adjourn**

**Upon a motion by Bettina Bronisz, and seconded by, John Harrity, the meeting was adjourned at 11:03 a.m.**

Respectfully Submitted,

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Catherine Smith, Chairperson