

CONNECTICUT GREEN BANK

Board of Directors

Draft Minutes

Friday, June 23, 2017

A regular meeting of the Board of Directors of the **Connecticut Green Bank (the “Green Bank”)** was held on June 23, 2017 at the office of the Green Bank, 845 Brook Street, Rocky Hill, CT, in the Colonel Albert Pope board room.

1. Call to Order

Catherine Smith, Chairperson of the Green Bank, called the meeting to order at 9:01 a.m. Board members participating: Rob Klee, John Harrity, Matt Ranelli (by phone), Norma Glover, Reed Hundt (by phone), Gina McCarthy, Betsy Crum, and Bettina Bronisz (by phone).

Members Absent: Tom Flynn and Kevin Walsh

Others Attending: Helle Gronli, Sara Harari, Olivia Headan, Corey Wurster, and Ken Gillingham.

Staff Attending: Bert Hunter, Eric Shrago, Bryan Garcia, Brian Farnen, Kerry O’Neill, Mackey Dykes, Cheryl Samuels, Craig Connolly, Dale Hedman, George Bellas, Jane Murphy, and Kim Stevenson.

2. Public Comments

There were no public comments.

3. Consent Agenda

Upon a motion made by John Harrity, and seconded by Commissioner Klee, the Consent Agenda was unanimously approved.

a. Approval of Meeting Minutes for April 28, 2017 and June 9, 2017*

Resolution #1

Motion to approve the minutes of the Board of Directors Meeting for April 28, 2017 and June 9, 2017.

b. Position Descriptions*

Resolution #2

Motion to approve the position descriptions for Managing Director of Marketing and Director of Residential Programs, Multifamily

c. Financial Statements for April 2017

d. Interest Rate Swap Contract of SL2

e. Acknowledgement and Recognition

Commissioner Smith recognized and thanked Norma Glover for her service. Bryan Garcia also recognized Norma Glover for her service. He also discussed the upcoming event, The Future of Clean Energy in Connecticut. Norma Glover thanked the Board. John Harrity presented Norma Glover with a plaque and also thanked her for her service.

4. Board of Directors Strategic Discussions

Bryan Garcia provided an overview and introduced Ken Gillingham and Helle Gronli to discuss Solarize Your Community and Renewable Thermal Technologies.

a. Solarize Your Community

Ken Gillingham provided an overview of Solarize Your Community. He discussed the partnership that Yale and the Green Bank share with several other partners. He explained the study that they have been doing. He stated that they have determined that it appears to be neighbor affects that is pushing Solarize. He discussed the experiments that they have been doing to test the different hypotheses about what works best.

Ken Gillingham went over a few different hypotheses that they tried. He discussed the options of two or three installers as opposed to one. He also discussed a shorter campaign, along with select towns needing to apply to join and removing group pricing. He stated that in the Solarize towns prices have become lower and adoptions have increased. He stated that prior to the campaign, solar prices were stagnant and during the campaign, there was approximately a 20% price drop.

Ken Gillingham discussed the survey results from those people surveyed, that adopted solar, and those that did not. He stated that group pricing was not essential for the success of the program.

Ken Gillingham stated that they are working on SEEDS II, for additional research on LMI. Gina McCarthy questioned what is considered high value solar. Ken stated that they determine where the grid is most congested or where it is in the most need of an upgrade. Commissioner Klee questioned if it is possible to see if the baseline has been moving relative to the non-Solarize states. He wanted to know if the baseline in CT has moved up because of Solarize. Ken stated that there has been some evidence that yes, it has. He stated that he cannot say for sure, but there is some evidence of spill over to other communities. He stated that the market has grown dramatically, and prices have continued to come down.

Norma Glover questioned how CT compares to other New England states. Ken Gillingham stated that MA has a stronger market than CT with much richer incentives, and he is unsure of RI. He stated that parts of NY are similar to CT. Norma Glover questioned if they are looking at the benefits that the states offer for potential. Ken Gillingham stated that they are referring to potential market.

Bettina Bronisz stated that it appears that radio and television have very low follow through. Ken Gillingham stated that the Solarize is very much community based, and that radio and television might not reach those communities.

Gina McCarthy questioned if they are looking at only homeowner installation or if they are going to look at multifamily, as well. Ken Gillingham stated that that is one of the largest challenges. He stated that they are looking at options to make it easier.

Bryan Garcia questioned the research based strategy in electric vehicles and renewable heating and cooling. Ken Gillingham stated that electric vehicles are visible, and visibility matters. He stated that a key take away, is to leverage pathways in town events and Solar Ambassadors.

John Harrity stated that when it comes to those in apartments, there needs to be clear explanations on how they can do Solar. He stated that they should utilize other community members, such as churches to get the word out.

Commissioner Smith questioned if they are looking at other projects other than Solarize. Ken Gillingham stated that they are looking at other types of messaging that are not Solarize.

Bryan Garcia stated that Solarize has been privatized. He stated that the Green Bank is pulling back. He stated that contractors pay Smart Power for leads and customers.

Matt Ranelli questioned if there is a model to look at people who have social capital in the community. Ken Gillingham stated that social capital is critical in these types of models. Kerry O'Neill stated that they are leveraging the churches that have installed solar, and that they will be laying the groundwork over the next few months.

b. Renewable Thermal Technologies in Connecticut

Helle Gronli provided a high-level overview of the Renewable Thermal Technologies for CT. She stated that heating and cooling of buildings in CT represents 30% of Greenhouse Gases. She stated that they started with how large the market is. She stated that they defined seven different customer categories. She stated that they utilized students to do interviews with consumers, to determine what is driving the market and what the barriers might be. She stated that further studies focused on commercial buildings.

Helle Gronli discussed the economic results. She stated that Solar Water Heating is competitive, but the results are sensitive to fuel costs. Bert Hunter questioned if Propane was considered. Helle stated that yes, you get the same results.

Helle Gronli discussed the Greenhouse Gas emissions from buildings. She discussed the sensitivity of the analysis. She stated that reducing the initial cost by 25% could be done through a Solarize type of campaign. She stated that they also tried combining with Solar PV. She stated that this could represent lower prices than the grid electricity.

Helle Gronli discussed the Cash Flow Analysis. She discussed replacing conventional electricity with GSHP. She explained that they could reduce the initial costs utilizing Solar Thermal, as well as, subsidies and tax credits.

Helle Gronli discussed the barriers, which are, high upfront costs and access to capital financing. Brian Farnen stated that another barrier is the lack of a mature, robust contractor base. Helle stated that the conclusions are to reduce costs, implement market inventions, and improve, operational cash flow, and trust and awareness.

Bryan Garcia stated that the Comprehensive Energy Strategy will come out in July. He stated that renewable heating and cooling will likely be an element of that strategy.

Gina McCarthy stated that this issue must be addressed. John Harrity commented that heating the home is a particular concern in New England.

5. Committee Recommendations and Updates

a. Budget & Operations Committee

Commissioner Klee discussed the Budget and Operations. He stated that they have a similar budget to last year. He stated that they are expecting similar revenues. He stated that they are leveraging their government funds to bring in private capital.

Eric Shrago stated that they are staying pretty much flat in terms of expenses. He stated that they plan to deploy at least 52.5 MW's of clean energy with an investment of \$217 million. He stated that 80% of the investment is in loans.

Eric Shrago stated that Targets and Infrastructure will remain flat. He stated that residential they are looking at about a 15% increase on units, not on dollars. He stated that will be an increase in C-PACE on the CI&I side.

Eric Shrago discussed the investment budget. He stated that they expect over \$56 million in loans, over double of the budget of FY17. He stated that the largest loan is into a third Solar Lease Fund. He stated that they are looking to increase the credit enhancements. He stated that RSIP is flat. Revenues also aiming to be flat year on year. He stated that they are expecting less income from RGGL. He stated that they should be able to start selling SHREC's. He stated that expenses are likely to be flat. He stated that there will be some large percentage shifts, due to reallocating from different expense lines. Commissioner Klee stated that a flat budget makes a whole lot of sense right now.

Eric Shrago stated that there will be no cost of living adjustment. He stated that staff is proposing a merit pool that is capped at 3% for the highest performers for FY18. Bettina Bronisz reminded the Board that State employees are not getting any merit increases nor are they getting any COLAs and they likely will not for several more years. He stated that the resolution seeks Board approval (as opposed to Chairperson approval) for certain strategic partners. He stated that most of them have been through the RFP process and all have gone through an RFP when required by our operating procedures. He discussed research and development expenditures, stating that they are continuing to innovate.

Reed Hundt had questions on the CGB Program Loans citing large increases for some of the loans and the wide range of expected volume. Commissioner Smith requested that they walk through the numbers. On the large range of expected volume, Mackey Dykes said this resulted from the SBEA program which could, in and of itself, result in approximately \$30 million of volume. If this program does not come through – this would result in volume being at the lower end of the expected range. As another example, Bert Hunter stated that in the

FY17 budget for commercial solar transactions, the Green Bank used a financing facility under SL2 to fund a significant portion of these installations. However for FY18, he stated that under SL3 the Green Bank will be providing the leverage instead of going to a 3rd party capital provider – resulting in higher volume on the Green Bank’s balance sheet, which staff expects to refinance after the transactions are built, but not necessarily until after FY18 closes. Mr. Hundt suggested that they’ve chosen a more expensive method. Bryan Garcia referred him to the actual budget breakdown. Commissioner Smith stated that when you look at the Capital Deployed, it’s a short-term use of the capital, and it’s going to be replaced with outside money. Eric Shrago stated that the loans that they’re making they will be keeping a larger portion. Commissioner Klee stated that they’ve looked at different programs and what it means in terms of projects.

i. Approval of FY 2017 Budget and Targets

Upon a motion made by Commissioner Klee, and seconded by Gina McCarthy, the budget passed.

Resolution #3

WHEREAS, on June 9th, 2017 the Connecticut Green Bank Budget and Operations Committee recommended that the Green Bank Board of Directors approve the Fiscal Year 2017 Budget and Targets; and

WHEREAS, on June 9th, 2017 the Connecticut Green Bank Budget and Operations Committee recommended that the Connecticut Green Bank Board of Directors authorize Connecticut Green Bank staff to extend the professional services agreements (PSAs) currently in place or adopt new PSAs with:

- I. Adnet Technologies, LLC
- II. Archaeological & Historical Services, Inc.
- III. Clean Power Research, LLC
- IV. Cortland Capital Market Services LLC
- V. EnergySage Inc.
- VI. Forsyth Street Advisors, LLC
- VII. Locus Energy LLC
- VIII. METIS, Financial Network, Inc.
- IX. New Ecology, Inc.
- X. OpFocus, Inc.
- XI. Opinion Dynamics Corporation
- XII. Paul Horowitz
- XIII. SmartPower Inc.
- XIV. Strategic Environmental Associates, Inc.
- XV. Sustainable Real Estate Solutions, Inc.
- XVI. The Connecticut Housing Coalition, Inc.
- XVII. Wegowise, Inc.

For fiscal year 2018 with the amounts of each PSA not to exceed the applicable approved budget line item.

NOW, therefor be it:

RESOLVED, that the Connecticut Green Bank Board of Directors hereby approves: (1) the FY 2018 Budget and Targets and, (2) the seventeen PSAs listed above, as both items were recommended by the Connecticut Green Bank Budget and Operations Committee.

Commissioner Smith excused herself from the meeting and Norma Glover chaired the balance of the meeting.

6. Staff Transaction Recommendations and Updates

a. Commercial, Industrial, and Institutional Sector Program Updates and Transaction Recommendations*

i. C-PACE Subsidiary

Mackey Dykes provided background on the request for approval to create a C-PACE special purpose entity. He explained that the purpose is to achieve specific goals without exposing the Green Bank's full balance sheet. He explained that it is similar to the others that they have created.

Norma Glover questioned if there was a positive feeling with the direction that the program is heading. Mackey Dykes stated that he feels very good about the fact that other capital providers are coming into CT. He stated that's he's happy that it's growing.

Bettina Bronisz questioned how many special purpose entities that Green Bank currently has. George Bellas stated that they currently have six, and this will make seven. He stated that they will be close to nine when they are finished. He stated that it adds another level of transactions. To a point made that banks should want to provide financing for a pool of loans that the SPE could assemble, Bert Hunter stated that is true, since part of the struggle that commercial banks have is "know your customer" requirements. He stated that since PACE stays on the property no matter who the customer is, this creates a problem for the banks as they are unable to determine with certainty who their borrower will be in the future – as the property could change ownership several times over the life of the financing. He stated that if those customers are pooled into an entity, the bank can then lend to the pool – with the SPE being the borrower, not the underlying property owners.

Reed Hundt questioned if the new SPE would have a different relationship with Hannon Armstrong. Mackey Dykes stated that the creation of the SPE would not alter the relationship or terms with Hannon Armstrong. Brian Farnen clarified that the Green Bank will primarily benefit from the establishment of the SPE. Mr. Hundt noted that staff should express in a hard dollar amount what the benefit of the SPE is expected to be to the Green Bank. Mackey Dykes and Bert Hunter expressed the difficulty of making such an assessment, but would discuss this point further with Mr. Hundt following the meeting.

Upon a motion made by Betsy Crum, and seconded by Gina McCarthy, Resolution #4 passed unanimously.

Resolution #4

WHEREAS, in its various programs and private-public partnerships, Green Bank has successfully utilized special purpose entities (“SPEs”) to facilitate private capital investment in certain program; and

WHEREAS, the Green Bank intends to create a new special purpose entity for use in the Commercial Property Assessed Clean Energy Program (“C-PACE”) to, among other things, originate, aggregate and warehouse transaction before such transactions are sold/assigned into an existing or future C-PACE private capital fund.

NOW, therefore be it:

RESOLVED, that the Green Bank Board of Directors (“Board”) authorizes the President of the Green Bank and any other duly authorized officer of the Green Bank, to create a special purpose entity for the limited purpose outline herein as well as that certain memorandum date June 16, 2017 which has been submitted to the Board; 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.

ii. C-PACE Transaction – Stamford

Mackey Dykes discussed the Stamford C-PACE Transaction. He stated that it is a typical project, eligible for Energy on the Line Program. He stated that it is a 20-year loan at a 6% interest rate.

Upon a motion made by John Harrity, and seconded by, Norma Glover, Resolution #5 passed unanimously.

Resolution #5

WHEREAS, pursuant to Section 16a-40g of the Connecticut General Statutes, as amended, (the “Act”), the Connecticut Green Bank (the “Green Bank”) is directed to, amongst other things, establish a commercial sustainable energy program for Connecticut, known as Commercial Property Assessed Clean Energy (“C-PACE”);

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

WHEREAS, the Green Bank seeks to provide a \$413,981 construction and (potentially) term loan under the C-PACE program to Glenbrook Industrial Park LLC, the building owner of 650 Glenbrook Road, Stamford, Connecticut (the "Loan"), to finance the construction of specified clean energy measures in line with the State's Comprehensive Energy Strategy and the Green Bank's Strategic Plan.

NOW, therefore be it:

RESOLVED, that the President of the Green Bank and any duly authorized officer of the Green Bank is authorized to execute and deliver the Loan in an amount not to be greater than one hundred ten percent of the Loan amount with terms and conditions consistent with the memorandum submitted to the Board of Directors dated June 15, 2017, and as he or she shall deem to be in the interests of the Green Bank and the ratepayers no later than 120 days from the date of this authorization;

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

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

iii. C-PACE Transaction – Farmington

Mackey Dykes discussed the Farmington C-PACE Transaction. He stated that it is a slightly elevated loan to value. He explained that it is typical to not exceed 80% LTV. He stated that the finance team is comfortable with this transaction. He explained that this will remain on their balance sheet for the life of the loan.

Upon a motion made by John Harrity, and seconded by Gina McCarthy, Resolution #6 passed unanimously.

Resolution #6

[Forthcoming on Monday, June 19th]

b. Residential Sector Program Recommendations

i. Health and Safety Partnership with DEEP

Kim Stevenson provided an overview on the Health and Safety Partnership with DEEP. She stated that they established an agreement to receive the loan funds. She stated that they are asking the Board to approved the use of those funds.

Kim Stevenson discussed Multifamily use of funds, stating that they are amending the guidelines of the Catalyst Fund to incorporate dollars. She stated that they are looking to have up to 25% of the funds able to be used for grants. She stated that any projects using the funds are subject to the contracting requirements of the state.

Kerry O'Neill stated that there has been a bit of friction with wanting to move on the use of the funds for Single Family as soon as possible. She stated that they need to work with DEEP on that. She stated that they do not do the direct lending on the Single Family side, that there is only \$1.5 million available, which will quickly be used by multifamily owners, and that the single family market will take extensive study to develop a program for delivering funds through a financing program. Commissioner Klee stated that this is a great opportunity to use the RGGI Funds.

Upon a motion made by Betsy Crum, and seconded by, Gina McCarthy, Resolution #7 passed unanimously.

Resolution #7

WHEREAS, the Connecticut Green Bank (“Green Bank”) actively seeks to deploy private capital investment toward clean energy improvements in the state’s multifamily housing which in some cases have preexisting health and safety issues that are preventing opportunities for clean energy improvements to be made;

WHEREAS, the definition of “clean energy” per the Green Bank’s enabling statute set forth at C.G.S. 16-45n includes renewable energy technologies as well as “financing of energy efficiency projects,” but does not include health and safety;

WHEREAS, the Green Bank’s enabling statute provides that the Green Bank may make “expenditures that promote investment in clean energy in accordance with a comprehensive plan developed by it to foster the growth, development, and commercialization of clean energy sources,” and that “such expenditures may include, but not be limited to...the implementation of the plan developed pursuant to ... this section”;

WHEREAS, the Green Bank Comprehensive Plan approved by the Board of Directors on July 22, 2016 acknowledges the need to mitigate health and safety issues that act as barriers to realizing clean energy investments opportunities; the Comprehensive Plan also notes that the goals of the Green Bank are to support the implementation of Connecticut’s clean energy policies be they statutory (i.e., PA 15-194), planning (i.e., Comprehensive Energy Strategy, Integrated Resources Plan), or regulatory in nature;

WHEREAS, the Connecticut Department of Energy and Environmental Protection (DEEP's) 2013 Comprehensive Energy Strategy and the 2014 report of the Connecticut Department of Public Health highlights a funding gap for health and safety remediation as a significant barrier to energy upgrades in the state.

WHEREAS, Green Bank staff has developed expertise and programmatic capacity in deploying funds to remove health and safety barriers to realize clean energy improvements at multifamily properties consistent with the Green Bank's enabling statute through its current multifamily programs and program partnerships;

WHEREAS, Green Bank Deployment Committee, on May 30, 2017, approved the receipt and administration of \$1.5 million in Regional Greenhouse Gas Initiative funds from DEEP for the purpose of funding remediation of energy related health and safety barriers in residential housing through a program titled EnergizeCT Health and Safety Revolving Loan Fund ("H&S Fund");

WHEREAS, Green Bank staff has developed, submitted to and received approval of Health and Safety Fund guidelines, policies and procedures from DEEP, as required by DEEP prior to distribution of funds, per the executed Agreement dated June 1, 2017 between Green Bank and DEEP;

NOW, therefore be it:

RESOLVED, that the Board authorizes administration of the Catalyst Fund Pilot Program as amended to incorporate Health and Safety Fund conditions consistent with the guidelines and memorandum dated June 23, 2017 and associated exhibits submitted to the Board; and;

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

7. **Other Business**

Bryan Garcia provided an update on the benefits of bringing solar to CT.

8. **Adjourn**

Upon a motion made by John Harrity, and seconded by, Gina McCarthy, the Board of Directors Meeting was adjourned at 11:18 a.m.

Respectfully Submitted,

Catherine Smith, Chairperson