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CONNECTICUT
GREEN BANK

Statement of the Connecticut Green Bank
Concerning Senate Bill 366

AN ACT CONCERNING ADMINISTRATION OF THE CONNECTICUT GREEN BANK, THE PRIORITY OF THE BENEFIT ASSESSMENTS LIEN UNDER THE GREEN BANK'S COMMERCIAL SUSTAINABLE ENERGY PROGRAM AND THE GREEN BANK'S SOLAR HOME RENEWABLE ENERGY CREDIT PROGRAM.

March 10, 2016

The Connecticut Green Bank (Green Bank) is the nation's first green bank. We're creating a thriving marketplace to accelerate green energy adoption in Connecticut by making green energy financing accessible and affordable for homeowners, businesses and institutions. Our mission is to lead the green bank movement by accelerating private investment in clean energy deployment within Connecticut, and to achieve economic prosperity, job creation and energy security throughout the state.

Since the Green Bank's creation in July of 2011, we have supported 17,179 clean energy[1] projects by financing $156 million and offering $86 million in incentives; we have made customers far less reliant on these incentives, as they are now 80% lower than they were in 2011. As a result, we have created $750 million in project development, generating 172 megawatts of clean energy and creating 10,102 of direct, indirect and induced job-years of economic activity. We look forward to continuing to scale the private lending market for clean energy, leveraging limited public dollars as credit enhancements to create many multiples of private capital investment. We have attached our FY 2015 Comprehensive Annual Financial Report to this testimony.[2]

[1] "Clean energy" as defined in the Green Bank's FY 2015-2016 Comprehensive Plan means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in greenhouse gas emissions and fossil fuel consumption, usable electricity from combined heat and power systems with waste heat recovery systems, thermal storage systems, other energy resources and emerging technologies which have significant potential for commercialization and which do not involve the combustion of coal, petroleum or petroleum products, municipal solid waste or nuclear fission, financing of energy efficiency projects, projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and associated infrastructure, any related storage, distribution, manufacturing technologies or facilities and any Class I renewable energy source, as defined in section 16-1. Additional definitions are available on page 69 of the Comprehensive Plan: http://www.ctgreenbank.com/wp-content/uploads/2015/11/CGB_FY15_and_FY16_Comprehensive_Plan.pdf

[2] http://www.ctgreenbank.com/wp-content/uploads/2015/12/CGB-finalized-financials.pdf

The Green Bank strongly supports SB 366 as a package of fixes – technical in nature – that allow the Green Bank to optimize existing programs on behalf of Connecticut residents, businesses and institutions.

This bill is composed of three elements:

1. Removing the Green Bank from the statutory authority of Connecticut Innovations;
2. A minor clarification to the Commercial Property Assessed Clean Energy ("C-PACE") program; and
3. Enablement of the Solar Home Renewable Energy Credit ("SHREC") policy to move forward.

1. Removing the Green Bank from the statutory authority of Connecticut Innovations

Despite having its own enabling statute[3], the Green Bank has derived certain administrative powers from Connecticut Innovations' statute section. This extends back from when the Green Bank was the Connecticut Clean Energy Fund. Historically this hasn't been problematic, but with markets wanting to invest with the Green Bank, we anticipate seeing more of the following described problem.

In 2015 we were engaged in discussions with the MacArthur Foundation on the terms of a program-related investment to the Green Bank. This would be a first-in-the-nation arrangement whereby a foundation invests into a program of a (quasi-)state agency. With the Green Bank's ability to leverage public dollars into credit enhancement tools, rather than spend the dollars outright we use them to attract multiples in private investments that go toward public purposes – thus further extending the usefulness of a program-related investment like this.

The MacArthur Foundation proposal was for a $5 million low-interest and long-term loan toward the Green Bank's initiatives to get more clean energy to low-to-moderate income and multifamily households. Under the proposed arrangement, the Green Bank would create a special purpose entity ("SPE") to receive and hold the funds, thereby shielding the state from liability beyond this transaction. In the MacArthur Foundation's due diligence it noticed that our authority to create SPEs was actually derived from Connecticut Innovations and was thus indirect. This contingency raised enough concern that it was a factor in restructuring the deal.[4]

The purpose of this proposal is to make perfectly clear to the capital and institutional markets that the Green Bank has straight-line statutory authority to create SPEs. It confers no powers upon the Green Bank beyond those of other comparable quasi-public authorities that were created to engage markets:

1. Connecticut Innovations, Incorporated ("CI") - established under Connecticut General Statutes ("CGS") § 32-35 with the powers set forth in CGS § 32-39. The Green Bank's

[3] C.G.S. Sec. 16-245n

[4] Since then the Green Bank has engaged in differently-structured deals to address low-to-moderate income and multifamily markets.

proposed powers were largely derived from these CI powers. The expanded powers proposed mirror the powers granted to CI in CGS § 32-11e and to CHFA in CGS § 8-244.

2. Connecticut Health and Educational Facilities Authority ("CHEFA") - established pursuant to CGS § 10a-179 with powers set forth in CGS § 10a-180. Note that an important function of CHEFA is to make loans to nonprofit health and educational organizations and, therefore its powers are tailored to satisfy that legislative purpose.

3. Connecticut Housing Finance Authority ("CHFA") - established pursuant to CGS § 8-244 with powers set forth in CGS § 8-250. Note that an important function of CHFA is to make loans for housing purposes, so its powers reflect that legislative purpose.

4. Connecticut Airport Authority ("CAA") - established pursuant to CGS § 15-120bb with the powers set forth in § 15-120cc. Note that an important function of CAA is to manage and develop airports in the State, so its powers reflect that legislative purpose.

For clarity, the Green Bank will also submit to committee leaders language indicating that (1) governance members of special purpose entities would not be eligible to receive any outside compensation or financial benefit from such a role and (2) that subsidiaries must be directly related to our statutorily mandated Purpose and Comprehensive Plan.

2. Clarifying the Commercial Property Assessed Clean Energy ("C-PACE") program

The Commercial Property Assessed Clean Energy ("C-PACE") program is the Connecticut Green Bank's ("Green Bank's") flagship financing product for the commercial and industrial market. C-PACE allows building owners to finance up to 100% qualifying energy efficiency and clean energy improvements through a voluntary assessment on their property tax bill. Property owners pay for the improvements over time (potentially up to 25 years such as for solar PV) through this additional charge on their property tax bill, and the repayment obligation transfers automatically to the next owner if the property is sold. Capital provided under the C-PACE program is secured by a lien on the property, so capital can be raised from the private sector at lower rates of interest and for longer terms than would be available without the security of the PACE assessment. The Green Bank's program is regarded as one of the leading – if not the best – C-PACE program in the nation and is often consulted by other states seeking to launch their own programs.

The technical fix in SB 366 clarifies the lender consent process for parties to C-PACE transactions. The lien priority of C-PACE remains the same – with the exception of taxes on real property owed to the municipality, all lienholders (including mortgage holders) are subordinated by statute to a C-PACE lien. However, since a C-PACE lien becomes senior to mortgage indebtedness, C-PACE transactions, by statute, require the consent of the commercial property's underlying mortgage holder to subordinate to a C-PACE lien placement. Lender consent is typically granted because businesses seeking C-PACE financing make the case that their cash flow improves as a result of the deal, which bolsters their ability to make ongoing mortgage or lease payments. In fact, it is a statutory requirement that the energy

savings at least match the benefit assessment payments, and to date average savings have exceeded assessment payments by 30% - demonstrating that these investments are designed not only to save businesses energy expenses – but result in cash flow savings as well. This proposal clarifies that an existing mortgage holder in such a transaction is signing consent only for their own lien, and not on the behalf of any other parties to the lien placement or mortgage.

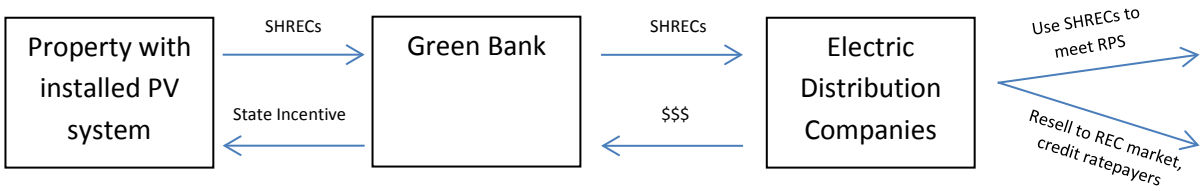
In three years of successful operation – and while leading the nation in commercial PACE transaction volume – this has to date not yet surfaced as a problem. With this change we will ensure that continues to be the case. Note, to expand this offer to residential customers, the Connecticut Green Bank is supporting Raised Bill Number 5563 "An Act Concerning Residential Property Assessed Clean Energy," which was released in the Banking Committee.

3. Enabling the Solar Home Renewable Energy Credit ("SHREC") policy to move forward

With the passage of Public Act 15-194, Connecticut's residential solar deployment target expanded by an order of magnitude. The Green Bank was successful in meeting its previous goal[5] of 30 MW by 2022 eight years early and under budget, so this goal was expanded by the Governor and the legislature to 300 MW. In policy roundups following the 2015 Regular Legislative Session this policy was hailed as a key achievement for the development of local renewable energy, leveraging existing policies around the Renewable Portfolio Standard to create more economic activity within Connecticut's borders.

A core feature of PA 15-194 was the directive that the Green Bank and the non-municipal electric distribution companies ("EDCs")[6] enter into negotiations for a Master Purchase Agreement for the sale of newly-designated SHRECs (see Figure 1).

Figure 1. Custody Flow for Solar Home Renewable Energy Credits (SHRECs)



However, the final language of PA 15-194 was imprecise in that it created two different interpretations of key provisions for the EDCs' purchase of SHRECs from the Green Bank. In the Green Bank's communications on SHREC policy to the General Assembly and other stakeholders, the SHREC was described as being set up similar to ZREC/LREC policy in that it creates multiple 15-year purchase terms.[7] All of the Green Bank's financial modeling was contingent on this as well. These purchase obligations

[5] Established through Public Act 11-80, Section 106
[6] i.e., Eversource and United Illuminating/Avangrid
[7] Nationwide, long-term contracting has to date been a foundational element of renewable energy deployment.

were statutorily set to expire after December 31, 2022, meaning that by 2023 no new 15-year purchase obligations could be created.

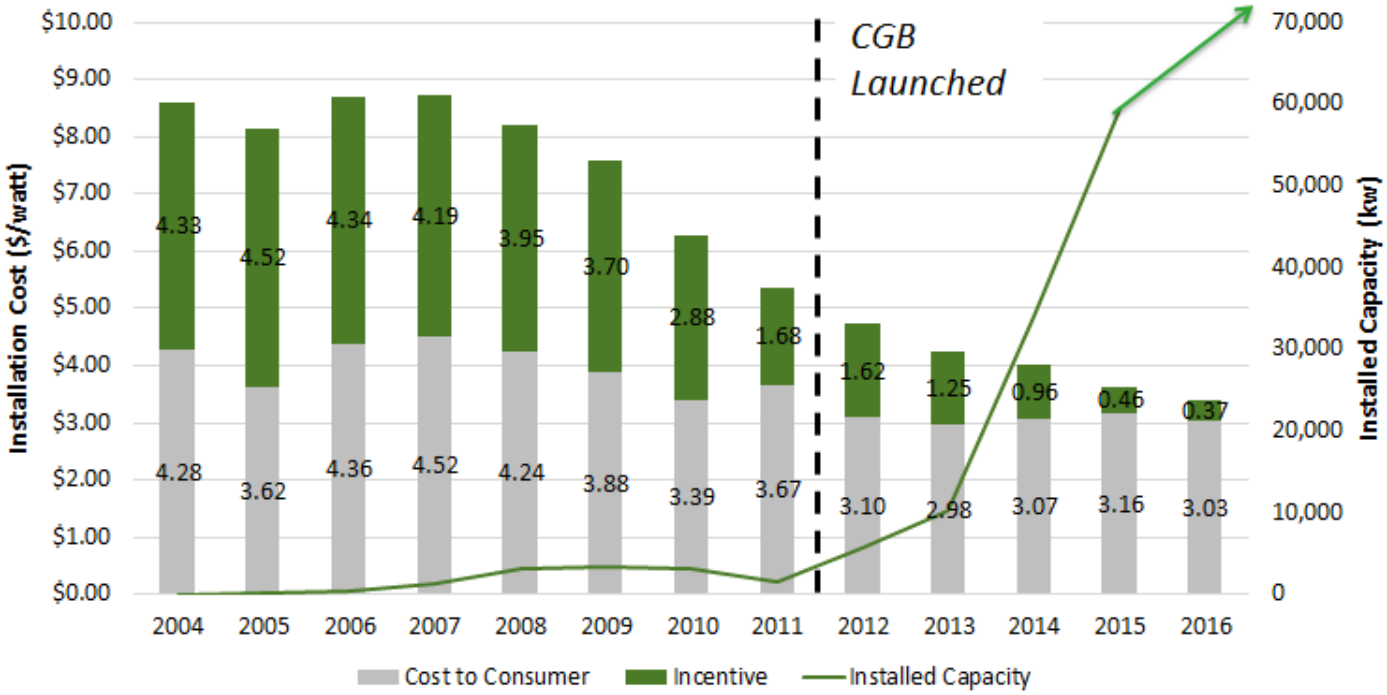
During negotiations on the Master Purchase Agreement, the EDCs had concerns with entering into this contract due to the potential for an alternate interpretation of legislative language. There was the possibility that the language simply directed EDCs to purchase SHRECs until December 31, 2022 rather than use the 2022 cutoff as the last instance EDCs might be required to enter into 15-year contracts. This, despite the clear language indicating contract terms were for 15 years. The earliest year a purchase obligation could have begun was 2015, which leaves 7-8 years until the 2022 cutoff. Thus the interpretation that December 31, 2022 represents the final date EDCs would be required to purchase SHRECs is in direct conflict with the concept of a 15-year term. The Green Bank and the EDCs worked together collaboratively to propose the amended language that simply clarifies and removes any ambiguity on the original intent of the SHREC statute.

With negotiations closed on the Master Purchase Agreement, the sole unresolved issue between the Green Bank and the EDCs is the ambiguity around the purchase obligation. With passage of this legislation that has been agreed upon by both the Green Bank and the EDCs, the parties can together submit the Master Purchase Agreement to PURA for approval. After approval, the parties would be able to initiate SHREC policy as a financing mechanism to fund the Green Bank's declining solar incentives under its Residential Solar Investment Program[8]. Upon reaching 300 MW of deployment – which may happen well sooner than December 31, 2022 – the State of Connecticut will no longer incent residential solar deployment.[9]

[8] Incentives under the Residential Solar Investment Program have declined 80% since FY 2012.
[9] Solar PV deployment and the public versus private portion of costs can be found in Attachment A.
Current and historical state incentive rates can be found at http://www.energizect.com/residential-pv-calculations

Attachment A

Solar PV Market Overview: Installed Costs, Installed Capacity; and Green Bank Incentive (green) vs. Customer Contribution (grey)



Total System Cost per Watt includes all reported installed costs without including those projects where financing costs for some third party ownership installers are included as part of the total system cost.