



**Statement of the Connecticut Green Bank on House Bill 5427**  
**AN ACT CONCERNING THE SHARED CLEAN ENERGY FACILITY PILOT PROGRAM**  
**Energy & Technology Committee**  
**March 1, 2016**

As the nation's first green bank, the Connecticut Green Bank ("Green Bank") leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Connecticut's residents, businesses and institutions now have easier access to affordable capital to finance clean energy projects. We play an essential role in reducing the costs of clean energy investment, increasing private capital investment, and lowering costs to consumers. The Green Bank looks forward to supporting the legislature's and Governor's vision of cleaner, cheaper and more reliable energy sources for Connecticut – while creating jobs and supporting local economic development.

Throughout last year's deliberations on shared clean energy facility ("SCEF") policy, the Green Bank maintained two key positions with regard to program structure that were communicated to the Department of Energy and Environmental Protection ("DEEP") through its technical proceedings on SCEF policy:

1. **Low-Income** – SCEFs have the ability to broaden access to clean energy to more Connecticut residents, in particular those of limited economic means whose household energy burdens tend to be proportionally higher, a great portion of which are renters. The Green Bank is ramping up clean energy financing that specifically targets customers below their geographic area median income. We are offering a modified version of our traditional Performance-Based Incentive to solar PV installers that serve low-income homeowners, with the goal of developing broader solar penetration across more income classes, particularly those households with 60-80% and 80-100% area median income (see Figure 1). In the process, we are seeing innovative new methods of customer means-testing that work to the benefit of otherwise credit-barred customers. With SCEFs mimicking on paper the transaction of having on-site solar power, these methods (e.g., looking for steady histories of utility payments) might also be used when building an SCEF customer base in this market.

Figure 1. Solar PV deployment under the Connecticut Green Bank and  
the Connecticut Clean Energy Fund

Income Level (AMI)	# of Census Tracts	Tract Households	# of Projects	Projects per Household	Installed Capacity (kW)	Installed Capacity per Capita	% Renter Occupied Units	Avg 2010 Median Tract HH Income
< 60%	167	230,064	708	0.0031	4,250	0.0185	67%	\$32,804
60%-80%	108	198,334	1,395	0.0070	9,246	0.0466	44%	\$52,657
80%-100%	146	262,441	2,778	0.0106	19,501	0.0743	31%	\$66,543
100%-120%	173	290,198	4,491	0.0155	34,060	0.1174	18%	\$78,522
> 120%	230	378,045	5,901	0.0156	47,443	0.1255	11%	\$117,136
<b>Total</b>	<b>824</b>	<b>1,359,192</b>	<b>15,273</b>		<b>114,500</b>			<b>\$74,522</b>

2. **Location** – Pilot SCEFs should confer benefits that go beyond the project developer and the subscriber base, creating spillover benefits on behalf of:

- The Electric Grid** – Shared clean energy systems can serve greater public benefits when they are built in congested areas of the electric grid (e.g., close to demand pockets that are remote from central station generators), helping bypass the need for redundant poles and wires on those circuits. Such projects can help defer capital expenditures in intermittently overloaded substations that may soon come due for replacement, absent any targeted peak shaving solutions. These congested areas may have high locational marginal prices (“LMPs”); if a SCEF were to help address high zonal LMPs, then it could also apply downward pressure to the prices that retail consumers encounter – prices that are averaged across the full service territory of an electric distribution company.
- The Environment** – Connecticut has many brownfields that are essentially unusable until they undergo environmental remediation measures. However far less cleanup is required when a property is repurposed toward energy production, which is essentially an industrial use. Siting SCEFs on brownfields cycles those properties back into purposeful use faster. Such placement may also be less likely to stir up the type of local opposition that pits one environmental concern (conservation) against another (renewable energy) when using undeveloped “green fields” for energy production.

- **Low Income Households** – Certain geographies have higher densities of households below the area median income. Siting clean energy – and not polluting power stations - close to these neighborhoods could be seen positively as a reversal of the environmental equity burden that is endemic to low-income communities. Further, the shared clean energy facilities themselves may act as marketing tools by virtue of their visibility, aimed at the surrounding community that most frequently views them and drawing more local participation.

Overall, DEEP has recognized the importance of both of these policy considerations – their draft SCEF request for proposals has indicated low-income and locational attributes as being considered factors in DEEP’s evaluations of project proposals. Although it is unknown if proposal selection through the final RFP will weight these factors quantitatively or treat them as a set-aside, the Green Bank does commend DEEP’s recognition and inclusion of these factors.

### **Financing**

The Green Bank is supportive of continued efforts to optimize the SCEF pilot program legislatively. However, the length of this power purchase term does represent a concern.

The Green Bank is a key player in assembling financing packages for large and mid-size solar projects whose capital costs are similarly recouped through PPAs. The typical terms we have seen tend to be in the range of 20 to 25 years; in markets outside of Connecticut these PPA terms are sometimes longer. This is to match the financing to the useful life of the equipment, which is a common practice that helps clean energy projects attain positive cash flow early on, ensuring economic viability.

Section 2(d) of the proposed bill suggests projects developed under the SCEF pilot will enter into power purchase agreements (“PPAs”) with electric distribution companies for terms of up to 15 years. The Green Bank respectfully suggests that even though this is a pilot program, allowing for PPA terms of only 15 years or fewer may adversely affect the terms available to offer to SCEF subscribers, and the diversity of the mix of proposed pilot projects.