



People's Action for Clean Energy
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Department of Energy & Environmental Protection
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Re: SCEF Bid Preferences

People's Action for Clean Energy (PACE) would like to thank the Department of Energy & Environmental Protection (DEEP) for the opportunity to comment on the STEPS for Solar Development program and the SCEF bid preferences. We support the work being done to promote shared clean energy facilities and are especially interested in seeing solar power built on "degraded" land or land that has already been developed. We wish to highlight the importance of balancing the creation of renewable energy generation sources with the need to protect existing natural resources. PACE supports the current proposed bid preferences of projects sited on brownfields and landfills, those sited in and/or benefiting environmental justice communities, and other resilient projects. We would like to call specific attention to solar canopies as an additional preferred form of solar power, and wish to advocate for measures that would incentivize them.

PACE has conducted research on the potential of solar canopies in Connecticut and we have found that a significant amount of energy can be generated by this technology in the state. The results of this study demonstrate that there are 8,416 potentially viable sites across Connecticut with a combined capacity of 7,021 MW and a total estimated annual production of 9,226 GWh.¹ These figures represent a substantial amount of the state's potential energy portfolio. The estimated annual production from solar canopies is equivalent to 37.8% of current statewide energy consumption.

Solar canopies provide many advantages that should be taken into account when comparing them to other forms of renewable energy. There are multiple benefits including, preservation of agricultural land and forests, local distributed energy generation, pairing with electric vehicles and battery storage, local resiliency, reducing urban heat island effect, environmental justice implications, reduced energy costs, and protection from the elements. These benefits are described in further detail in our attached [report](#).

¹ We have attached an official [report](#) on the findings of our study, the benefits of solar canopies, and policy recommendations to actualize them. We have also produced an academic journal article that is currently under review, which can be found at this link: <https://bit.ly/pacesolarstudy>

While there are many benefits to solar canopies in comparison to other forms of solar power, there are some barriers to their implementation that must be addressed. Foremost among these challenges is the additional cost arising from building the canopy structure and necessary geotechnical measures. We strongly urge DEEP to address these cost challenges through a SCEF bid preference specifically benefitting solar canopies. Our research indicated that solar canopies cost 25-40% more per installed watt than comparably-sized rooftop or ground-mount arrays.² Addressing this cost differential through a 20-25% bid preference can be a powerful method to foster widespread adoption of solar canopies, leading to multiple societal benefits. Such a bid preference for solar canopies represents compensation for the favorable Environmental Attributes of this technology.

While outside the scope of this hearing on SCEF Bid Preferences, PACE wishes to highlight additional policy mechanisms to address the challenges of solar canopies. These include:

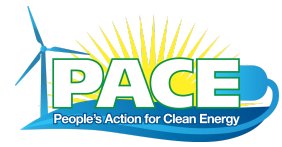
- Creation of “adders” incentives for solar canopies and related infrastructure,
- Creation of specific non-residential tariff allotments for canopies (e.g., 20 megawatts per year),
- Expansion of virtual net metering capacity limits, and site eligibility to enable the creation of canopies where local load is insufficient,
- Support equitable and modern grid and
- Model solar canopy-friendly zoning ordinances for municipalities.

These recommendations are all discussed in further detail in our attached [report](#). Tariff adders for canopies represent another powerful tool to address the cost differential that exists between solar canopies and other forms of solar. Similar incentive programs exist in all of Connecticut’s neighboring states. Both Rhode Island and Massachusetts have an adder incentive of \$0.06 per kWh produced by a solar canopy system.^{3,4} New York has an adder incentive with a different structure that provides \$0.30

² This range is based on our conversations with Connecticut solar installers and is corroborated by industry figures (e.g., <https://www.cesa.org/wp-content/uploads/Vermont-Solar-Cost-Study.pdf>.)

³ An Act Relating to Public Utilities and Carriers – Renewable Energy Programs. H.B. 8354, State of Rhode Island. 2016. <https://openstates.org/ri/bills/2016/HB8354/>

⁴ Solar Massachusetts Renewable Target (SMART) Program, 225 CMR 20.00, Massachusetts Department of Energy Resources, 2020. <https://www.mass.gov/regulations/225-CMR-2000-solar-massachusetts-renewable-target-smart-program>



per watt installed.⁵ These states have recognized the value that solar canopies provide and have dedicated financial resources to support the technology explicitly.

In summary, PACE recommends the following policy changes for the STEPS program and SCEF bid preferences:

- 1. Create a 20-25% Bid Preference directly benefiting solar canopies and related infrastructure.**
- 2. Implement a 6 cent adder per kilowatt of electricity produced by solar canopies.**
- 3. Expand virtual net metering eligibility and total funding.**

We feel that these changes will enable the state of Connecticut to more successfully, efficiently, and equitably transition to a 100% renewable energy sector. Solar canopies are an important resource that is currently being underutilized and therefore must be supported.

Sincerely,

Mark Scully, President

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<https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Contractors/Dashboards-and-incentives/ConEd-Dashboard>