



SIERRA CLUB

Connecticut Chapter
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February 27, 2024 - Energy & Technology Committee Public Hearing

Dear Senator Needleman, Representative Steinberg and members of the Energy Technology Committee,

On behalf of the Sierra Club and our more than 30,000 members and supporters in Connecticut, thank you for the opportunity to testify on HB 5052, HB 5231, and HB 5232. We are very appreciative of the serious consideration that the Committee is giving to accelerating the equitable deployment of solar power generation. We view solar power, particularly distributed solar power, as a critically important strategy to decarbonize our electric grid, gain energy independence, build resiliency, and lower costs for residents, businesses, and communities. Accelerating the deployment of solar now, while the tax credits and rebates from the Inflation Reduction Act are available, will leverage federal funds to meet Connecticut's climate and clean energy goals.

In New England, electricity prices will continue to very closely follow fossil gas prices until we break our dependence on fossil gas.¹ Accelerating the development of solar and other renewables, along with electrification, is the way to do this. Across the region, solar demand is high as consumers seek to lower their energy costs. Residents, businesses, schools, and municipalities all want to save money with solar and get away from rising and volatile electricity prices.

Beyond savings, there are a myriad of benefits that solar will deliver for our state. Solar will reduce pollution and greenhouse gas emissions to help us meet our pollution reduction targets. Lower pollution translates to lower health care costs from many ailments that are associated with air pollution. Instead of sending our hard-earned energy dollars out of state, we keep them here in Connecticut. Additionally, solar is making our grid more reliable. In 2023, ISO-NE commissioned a study that found behind the meter and utility scale solar has improved winter reliability by reducing fossil fuel demand.

Solar has the potential to meet a significant portion of Connecticut's current and future electricity needs. The firm Geostellar Inc. was commissioned by the Green Bank to assess the potential of residential solar in CT. In their December 2023 report, *The Addressable Solar Market in Connecticut*², they estimate the residential solar potential to be at least 659,312 homes, with a total capacity of 3,886 megawatts (MW). In 2021, People's Action for Clean Energy studied the potential for solar canopies on parking lots in Connecticut and found 8,416 potentially viable sites with a combined capacity of 7,021 MW. This is equivalent to 37.8% of current statewide energy consumption.³

Taking action on solar now will help Connecticut leverage federal funding from the Inflation Reduction Act (IRA). The IRA includes tax credits and rebates for all types of solar including residential, commercial, school, government and community solar with added incentives for vulnerable communities.⁴ Tax credits are available now. Rebates for Connecticut are currently being developed by DEEP.

¹ <https://www.sierraclub.org/sites/www.sierraclub.org/files/2023-06/Fossil%20Fueled%20Rates%20White%20Paper.pdf>

² https://www.ctgreenbank.com/wp-content/uploads/2016/03/Total_Addressable_Market_CT_Final.pdf

³ <https://www.pacecleanenergy.org/wp-content/uploads/2021/06/PACE-Solar-Canopies-Executive-Summary-June-2021.pdf>

⁴ <https://home.treasury.gov/news/press-releases/jy1830>

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House Bill 5052 - An Act Supporting Solar Energy in Schools

The Sierra Club strongly supports House Bill 5052, An Act Supporting Solar Energy in Schools. Energy costs are typically the second largest expense for a school, with personnel being the top expense. Schools typically have large flat rooftops that are ideal for solar. They are also often a place for the community to gather, and serve as emergency locations during outages. Solar on schools, paired with battery storage, would provide resilient spaces for the larger community. People's Action for Clean Energy produced a report on school solar in 2023 that quantifies the current solar uptake by schools.⁵ This bill would direct PURA to develop a program for school solar projects, would allow for school solar projects to include excess solar capacity for future EV charging, electrification of heating, and to supply electricity to adjacent town owned buildings, and would require a solar assessment when schools apply for grants.

House Bill 5231 - An Act Concerning Revisions to the State's Nonresidential Renewable Energy Program and Shared Clean Energy Facility Program

The Sierra Club strongly supports House Bill 5231. Connecticut's nonresidential (NRES) program continues to have more demand than the caps, raised in 2022, allow. We expect nonresidential interest in solar will continue to grow especially with the added incentive of the federal IRA dollars. It is in the interest of Connecticut's ratepayers to leverage as much of the federal funds as possible. The Shared Clean Energy Facility Program (SCEF) will sunset in 2025, and a successor program is necessary to ensure that shared clean energy is available for Connecticut residents. The bill will allow for more MW of NRES and SCEF from Jan 2025 until the end of the Inflation Reduction Act, it will allow more load on commercial and industrial projects, and will direct PURA to investigate the SCEF program and make recommendations for a successor program.

House Bill 5232 - An Act Concerning Solar Projects Throughout the State

The Sierra Club strongly supports House Bill 5232, we are particularly interested in sections of this bill (Sections 1, 3, 4, 5, 6, 7 and 9) to create goals for solar deployment and remove barriers.

Section 4: This section of the bill directs DEEP to conduct a study of community solar. Community solar has been successful in neighboring New York and Massachusetts, and we believe Connecticut should have a community solar program that residents who want solar but cannot install it can access. Components of a program that the study should contemplate include how to ensure projects are completed in a timely manner, how to best enable developers to enroll subscribers directly with appropriate consumer protections, and ensuring that renters, condo owners, and anyone who can't put solar on their own rooftop can participate.

Section 5: This section of the bill sets goals for the deployment of solar of at least 500 MW per year across all programs, and 250,000 residential rooftops by 2035. The Sierra Club strongly supports targets so that our state programs know what they are aiming for. In order to achieve a carbon neutral, renewable electric grid by 2050, the state will need roughly 20,000 MW of solar. Today, we have between 1,000 and 1,500 MW, and in recent years, we have been adding between 100 and 200 megawatts per year. At this rate, it would take roughly 100 years to reach what is needed. A target of at least 500 MW per year is both achievable and consistent with the more ambitious targets of our neighbors. Connecticut's previous residential rooftop goal, Sec. 16-245ff of the Connecticut General

⁵ <https://www.pacecleanenergy.org/wp-content/uploads/2023/10/Solar-on-CT-Schools-Report-2023-100523.pdf>

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Statutes, expired in 2022. It charged the Connecticut Green Bank to deploy 350 MW of residential solar. By setting a residential rooftop target, Connecticut ensures that residents continue to be a priority for the benefits of solar and energy independence. Connecticut currently has roughly 64,631 residential solar installations for a total installed capacity of 464 megawatts.⁶ An additional 250,000 residential rooftops would comprise roughly an additional 2,000 megawatts, bringing us to just under 2,500 total megawatts. As noted above, at least 659,312 homes, with a total capacity of 3,886 megawatts is the estimated residential rooftop potential.

Section 7: Sierra Club strongly supports a strategic plan for solar canopy projects that prioritizes Environmental Justice communities.

Interconnections and grid capacity are two barriers to solar deployment that also must be addressed, and the Sierra Club encourages the Committee to incorporate solutions to these issues in this bill, or another appropriate vehicle.

Thank you for considering our comments.

Samantha Dynowski, State Director
Sierra Club Connecticut

⁶ <https://portal.ct.gov/-/media/PURA/2022-Clean--Renewable-Energy-Report.pdf>