



VOTE SOLAR

Connecticut General Assembly

Before the Joint Committee on Energy and Technology

Written Testimony of Vote Solar

Regarding SB 9 – AN ACT CONCERNING CONNECTICUT'S ENERGY FUTURE

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March 1, 2018

Thank you Senator Winfield, Senator Formica, Representative Reed and Representative Ackert, Members of the Committee:

I offer this testimony in opposition to Raised Bill SB 9. I am sorry I am unable to attend the hearing in-person, as I am attending to a family emergency out of state.

Quick background on Vote Solar - we are a non-profit, non-partisan grassroots organization with members throughout the U.S. including many in Connecticut. Since 2002, we've worked in New England and across the country to remove market barriers and implement policies needed to bring solar into the mainstream.

We oppose SB 9, because it takes away the ability of Connecticut citizens to directly invest in solar and reap the benefits of many distributed energy resources. Vote Solar has worked to guide policy development in states leading the clean energy revolution in our country – including Connecticut as well as neighboring Massachusetts and New York and more distant California and Nevada. All of these states have benefitted from not only bold commitments to clean energy, but also from allowing their own citizens to participate in the clean energy economy through solar. SB 9 increases the renewable portfolio standard to 40 percent by 2030, but would close the door on citizens helping reach that standard by installing solar on their home or business.

Our testimony will cover three portions of SB 9 and one addition we wish to see included: the end of net metering and capping of distributed energy resources, the renewable portfolio standard increase, the shared clean energy facilities policy and a new target for energy storage.

We oppose the end of net metering and capping of distributed energy resources. Net metering, which fairly compensates customers for investing in clean energy like solar, has been a very successful policy for Connecticut. In 2017 there were more than 22,000 homes with solar panels in Connecticut.¹ That means 22,000 families or individuals investing their money and space to contribute to the state's climate and clean energy goals and our communities' public health. It also means that many families and individuals taking control of their electric use and reducing their bills. By drastically lowering the compensation for solar customers – well below our neighboring states and well below the vast majority

¹ <http://www.courant.com/hartford-magazine/home-living/hc-hm-home-solar-power-20170325-story.html>

of estimates of the value of solar² – Connecticut will make it financially unfeasible for most customers to make this choice. At the same time, SB 9 takes away the ability for customers to use their own solar energy in their own home by forcing them to install two electric meters and sell all of their power to the monopoly electric utilities. This violates customers’ right to make their own safe electricity choices behind their meter.

Many of the state’s 2,168 solar jobs³ are in the business of developing and installing distributed solar energy, such as on a customer’s home or business. Making solar financially unviable and putting a new cap on customers going solar, as SB 9 proposes, will slow and eventually all but eliminate solar growth, costing many of those good solar jobs. Further, capping a compensation mechanism based solely on the cost and with no consideration of the offsetting benefits is a poor form of policy.

The cost analysis of behind-the-meter clean energy systems in the Comprehensive Energy Strategy used to justify these drastic policy changes is deeply flawed. Specifically, the analysis:

1. Fails to fully account for the benefits of distributed generation to our electric grid and society as a whole. The rudimentary ‘net cost’ analysis only credits distributed generation for basic wholesale energy service and a poorly justified portion of the transmission and delivery rates. This misses significant value these systems provide to the distribution system as well as societal value they bring to the state. If Connecticut wishes to understand the net value of distributed energy resources, like solar, a full Benefit-Cost Analysis analysis should be pursued through an open process with stakeholder input, an evidentiary record and thorough data collection and calculations. However, a full Benefit-Cost Analysis may not be necessary at this time, since recent studies have shown little or no cost from net metering⁴ and value close to or above the retail rate compensation from net metering.⁵
2. Unnecessarily and unfairly compares utility scale renewable energy to distributed renewable energy. This comparison is unnecessary, because our climate change commitments demand that we pursue both of these markets ambitiously. In addition, these systems provide different values to our electric system and work best when integrated together to provide reliable and resilient power. The specific comparison is also unfair, because it utilizes the bottom 50 percent of utility scale bids, which represent much of the low-hanging fruit available in a region where significant tracts of land and transmission capacity are now constrained. It is also an unfair comparison, because much of the cheaper utility scale renewable energy is located out of state and provides much less value to Connecticut’s economy.

Instead of restricting and deterring private citizens and small businesses from investing in clean, renewable energy, Connecticut should be doubling down on this new, distributed energy economy. Leveraging private investment, democratizing control of our electric system and distributing energy generation will in the long term make our electric grid cleaner, more efficient, more reliable and more equitable. We urge the Committee to oppose ending net metering without a more rigorous study of the

2 *Rooftop solar: Net metering is a net benefit*. Brookings Institute, 2016. Available online at <https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/>

3 *National Solar Jobs Census*. The Solar Foundation, 2018. Available online at <https://www.thesolarfoundation.org/national/>

4 *Putting the Potential Rate Impacts of Distributed Solar into Context*. Lawrence Berkeley National Laboratory (LBNL), 2017. Available online at <https://emp.lbl.gov/publications/putting-potential-rate-impacts>

5 *Rooftop solar: Net metering is a net benefit*. Brookings Institute, 2016. Available online at <https://www.brookings.edu/research/rooftop-solar-net-metering-is-a-net-benefit/>

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costs *and* benefits of distributed solar and a replacement that will fully and fairly compensate customers for their valuable solar energy.

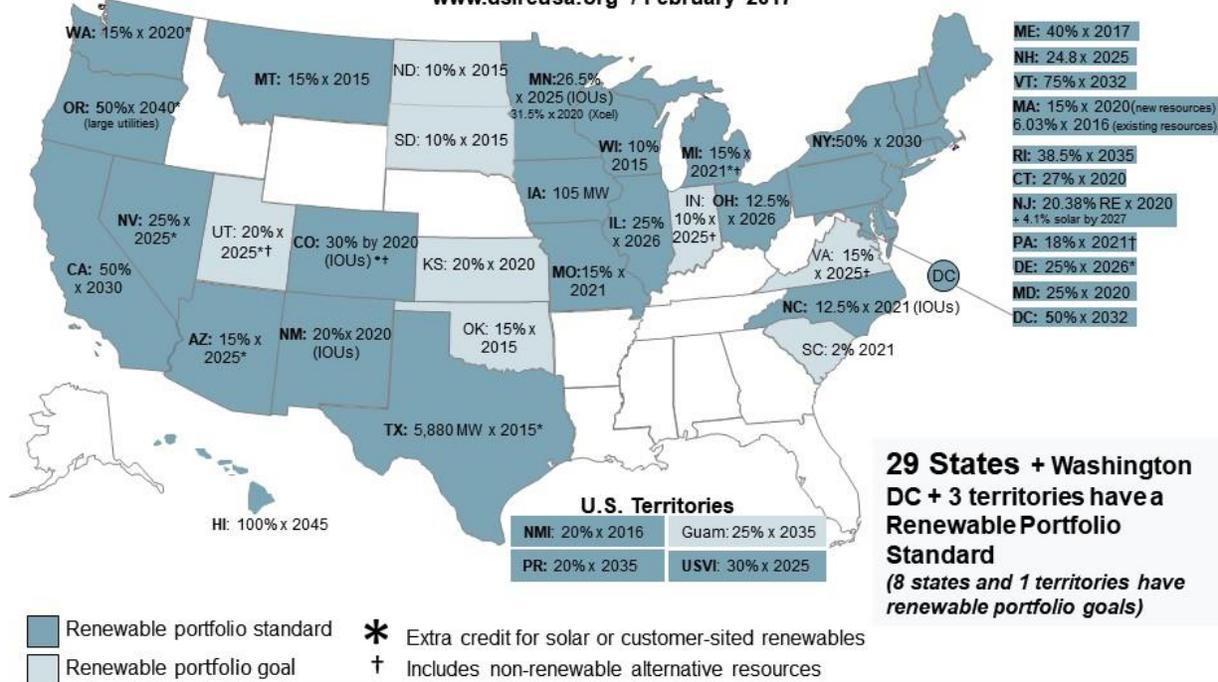
We support increasing the renewable portfolio standard and call for further ambition to reach at least 50 percent renewable energy by 2030. Connecticut has committed to bold climate pollution reduction goals and it will take ambitious clean energy development to hit those goals. This is critical to avoiding the worst impacts of climate change, maintaining our national leadership on climate and the environment, and harnessing the power of this clean energy transition to boost our local economy.



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SB 9 would raise the state’s renewable portfolio standard and we support the direction of that section of the legislation. However, getting to 40 per cent renewable energy by 2030 is not enough to meet our climate pollution reduction goals or to cement our leadership on clean energy. This is especially true in combination with measures to take away citizens’ ability to go solar. Leading states, such as New York, Vermont and California have standards of at least 50 percent renewable energy by 2030 and continue to allow customers to invest in solar while working to expand access for new customers.

A recent study from the Northeast Clean Energy Council (NECEC) demonstrated the incredible benefits of a strong renewable portfolio standard for Connecticut. Raising the standard to get 50 percent renewable energy by 2030 along with Massachusetts doing the same would create as much as 43,000

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new jobs across the region, decrease electric sector emissions by as much as 71 per cent and reduce electricity prices by up to 8.1 per cent.⁶

We urge the Committee to increase the renewable portfolio standard to achieve at least 50 percent renewable energy by 2030 and to do it without restricting customer choice.

We support opening access to clean energy, like solar, through shared clean energy facilities, but not as done in SB 9. Connecticut should be following the lead of all of its neighbor states – New York, Massachusetts and Rhode Island – and work to continue the success of on-site solar while expanding access to solar further through shared clean energy facilities. Connecticut could be combining the nation-leading work of the Connecticut Green Bank with a strong, statewide shared clean energy facilities program to engage more ratepayers in the energy system and boost local economies.

Currently, most Connecticut energy customers can't put solar on their property, either because they rent their home or business, or because their property isn't suitable. Under current law, these people and businesses, making up around three quarters of the population, cannot choose solar or another renewable energy source for themselves and access the many great state programs for renewable energy.

Shared clean energy can solve that problem. Here's how it works – customers sign up to participate in a local shared clean energy facility. The customer continues to receive their standard utility bill for the electricity they consume, but that bill will now show a credit for that customer's portion of the output from the shared facility. So customers can save money on their utility bills, hedge against rising electricity rates, and know that they're directly supporting local clean energy development.

Shared clean energy facilities are already operating in Massachusetts and New York and delivering concrete benefits to thousands of families and small businesses. Connecticut has approved three new projects through a shared clean energy facilities pilot, but is far behind neighboring states.

However, in order for shared clean energy facilities to open up access to clean energy and deliver benefits to the state a well-designed statewide program must be established. Such a program will:

1. Allow for sufficient scale to attract major private investment to the state. Such a program would create 2,580 full-time jobs in Connecticut through the development and installation of 200 megawatts of shared clean energy facilities.⁷
2. Fairly compensate customers for their valuable solar power through credits on their electric bills. This means using credits at the retail rate of electricity as an approximation of this fair value or a credits of a value set through a thorough and transparent study of the value of solar and other distributed energy resources. It is important that this value be set upfront for all customers of a given class and in a given area, so that developers and customers can predict and understand their projects' economics.

⁶ *An Analysis of the Massachusetts Renewable Portfolio Standard*. Northeast Clean Energy Council (NECEC), 2017. Available online at <http://www.necec.org/files/necec/PDFS/An%20Analysis%20of%20the%20Massachusetts%20Renewable%20Portfolio%20Standard.pdf>

⁷ *Community Solar: Ready to Work for Connecticut*. Vote Solar, 2017. Available online at <https://votesolar.org/usa/connecticut/updates/jobs/>

3. Expand access to solar in low-income and other underserved communities through a carve-out of at least 15 percent of program capacity serving low- and moderate-income customers and explicit direction to relevant agencies to support adoption in these communities.
4. Allow for flexibility of business and customer model to allow the market to innovate and meet the needs of all customers.

Shared clean energy facilities policy, as envisioned by the Department of Energy and Environmental Protection (DEEP) and established under SB 9, does not sufficiently meet any of these core principles.

In addition, shared clean energy facilities should expand access to solar to new customers and expand the market for clean, renewable energy, not open the door for some distributed projects while closing the door on others. A new shared clean energy facilities program should be in addition to the existing net metering program and not in competition with or replacement of that program. Customers that want to install solar on their roof should be allowed to do so even as customers who cannot or do not want to should be allowed to subscribe or purchase a share of a shared clean energy facility.

Finally, we support the establishment of a firm commitment to energy storage as laid out in the testimony of the Northeast Clean Energy Council (NECEC). Energy storage is imperative to creating an energy future that allows for more customer choice, is powered by clean, renewable energy, and is as efficient and reliable as possible.

I thank the Committee for their consideration of these important issues and look forward to working with you to build a competitive and thriving solar market in Connecticut.



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