



Testimony in support of solar legislation

Joint Committee on Telecommunications, Utilities and Energy
Tuesday, December 7, 2021

Thank you to the chairs and members of the committee for the opportunity to offer our testimony today. My name is Hanna Nuttall and I am the campaign associate for Environment Massachusetts, the statewide environmental advocacy organization. Environment Massachusetts works to protect clean air, clean water, and open spaces together with our thousands of citizen members and supporters across the Commonwealth.

I am here today to offer Environment Massachusetts' testimony in support of several of the bills under consideration at today's hearing.

In March, thanks in large part to the work of your committee, the Legislature passed a climate bill that included a number of important steps to reduce Massachusetts' global warming pollution and promote renewable energy. This bill set energy efficiency standards for appliances, increased the renewable portfolio standard (RPS), and expanded our offshore wind procurements. The bill also set statewide emissions goals and required the administration to come up with a plan to meet those goals.

Goals and plans are good, but those goals and plans must lead to action. And action is where the Baker administration is coming up short. After a decade of rapid growth in solar energy, the administration has allowed this critical technology to languish. Flaws in the design of the SMART program, along with repeated delays in the rollout of key parts of the program, have held us back from realizing our solar potential.

That's a shame, because solar is one of our most important resources as we move Massachusetts toward 100 percent clean electricity, heating, and transportation. Our potential to generate energy from the sun is practically limitless. Rooftop solar alone could provide up to 47 percent of Massachusetts' electricity, according to a study from the National Renewable Energy Laboratory.¹ Our potential for ground-mounted solar is even greater.

¹ *Rooftop Solar Photovoltaic Technical Potential in the United States: A Detailed Assessment*, Pieter Gagnon et al., National Renewable Energy Laboratory, January 2016, <<https://www.nrel.gov/docs/fy16osti/65298.pdf>>.

Massachusetts can do better. We should eliminate arbitrary obstacles, expand access to solar energy for all communities, set big goals, and create new opportunities for solar.

Environment Massachusetts is supporting several bills that will help bring more solar energy to the Commonwealth.

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First, the Solar Neighborhoods Act (H.3278, S.2165), filed by Rep. Mike Connolly, Rep. Jack Lewis, and Sen. Jamie Eldridge, will require the installation of rooftop solar panels on new buildings at the time of construction, including single-family homes, apartment buildings, and commercial buildings. For single-family homes, the solar energy system must produce enough electricity on an annual basis to meet 80 percent of the average demand for similar houses. For other buildings, the Department of Energy Resources (DOER) will establish minimum requirements for the size of solar energy systems. Buildings may be exempted from solar roof requirements if the roof is too shaded, if a solar hot water system or other renewable energy technology is installed, or if the building has a green roof. DOER can also grant exemptions to affordable housing developments.

In 2018, California became the first state to require all new homes to be built with solar panels. A similar policy in Massachusetts would have a big impact. A report from Environment Massachusetts Research & Policy Center concluded that requiring rooftop solar panels on all new homes built in Massachusetts between 2020 and 2045 would add more than 2,300 megawatts of solar capacity, equivalent to all of the solar that has been installed in Massachusetts to date. The clean energy generated by these solar panels would reduce our carbon emissions by 1.9 percent relative to 2015 levels.² If commercial buildings and apartment buildings are added to this requirement, the benefits would be even greater.

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Second, *An Act providing solar energy to state agencies* (H.3342, S.2208), filed by Rep. Paul Mark and Sen. Patrick O'Connor, will require solar panels to be installed on the roofs of new or renovated buildings owned or operated by the Commonwealth. If there is insufficient space to install rooftop solar panels, the bill will require a ground-mounted solar installation. The bill allows for exemptions if there is no suitable location for a ground-mounted solar installation, if installing solar panels would cause a negative impact on natural or historic resources, or if another form of renewable energy generation is installed.

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² *Solar Homes: The Next Step for Clean Energy*, Abigail Bradford, Jonathan Sundby, Bret Fanshaw, and Rob Sargent, Frontier Group and Environment America Research & Policy Center, December 2018, <<https://environmentmassachusetts.org/feature/ame/solar-homes>>.

Finally, we support the provisions in S.2169, *An Act supporting solar distribution* (S.2169), filed by Sen. Jamie Eldridge, to expand the availability of net metering for solar. Net metering is Massachusetts' most important solar policy.

Residential solar installations under 10 kilowatts and commercial installations under 25 kilowatts are exempt from the caps on net metering. Under the climate law passed in March, facilities over 60 kilowatts are exempt from the net metering caps if they serve on-site electricity demand. This leaves a gap between either 10 or 25 kilowatts and 60 kilowatts, where systems are still subject to the caps on net metering even if they are producing electricity to serve on-site demand. As a result, the size of solar energy systems that homeowners or small businesses can install is arbitrarily limited, making it more difficult to power a house or small commercial building entirely with solar power, particularly as other energy uses like heating and transportation are converted to electricity.

We hope the committee acts this session to close this gap in net metering eligibility. It's a simple fix and one that could have a significant impact as Massachusetts moves closer to 100 percent renewable energy.

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In conclusion, I encourage you to eliminate obstacles standing in the way of Massachusetts' solar potential, set ambitious goals, and expand access to solar energy. You may contact me with any questions at hnutall@environmentmassachusetts.org or (772) 538-0180.