

The Solar Neighborhoods Act

Requiring solar roofs on new homes and commercial buildings

An Act establishing solar neighborhoods Rep. Mike Connolly and Rep. Jack Lewis (HD.3098)

> An Act increasing solar rooftop energy Sen. Jamie Eldridge (SD.159)

Today, too much of our energy comes from dirty fossil fuels like oil and gas, polluting our air and warming our climate.

But that's changing. Over the past decade, rooftop solar panels have become an increasingly common sight across Massachusetts. Each solar panel that goes up in our neighborhoods is a step closer to a future powered with clean, renewable energy.

Today, Massachusetts gets more than 70 times as much electricity from the sun as we did 10 years ago.¹ That's amazing progress, but we've only just begun to tap into our potential for solar energy.

Just by putting solar panels on the roofs of our buildings, we could generate up to 47 percent of the electricity used in Massachusetts each year from the sun.²

The best time to put solar panels on a building is when workers are already on the roof. The Solar Neighborhoods Act will ensure that new homes and commercial buildings are built with solar roofs.

¹ *Renewables on the Rise: A decade of progress toward a clean energy future*, Tony Dutzik and Jamie Friedman, Frontier Group, and Emma Searson, Environment America Research & Policy Center, 2020,

<a>https://environmentamerica.org/feature/ame/renewables-rise-2020>.

² 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>.

We should power new buildings with solar energy

When our communities run on solar, our air will be cleaner, our families will be healthier, and we'll have a shot at preventing the worst impacts of global warming. Installing solar panels on the roofs of our homes and commercial buildings can also make our electric grid more resilient, particularly when paired with energy storage.

Many families and businesses find that they can reduce and stabilize their electric bills by going solar. Rooftop solar can also reduce demand on the electric grid and the need for new infrastructure, lowering electric bills for all utility customers.

Requiring solar panels to be installed on the roofs of new homes would double the current amount of installed solar capacity in Massachusetts by 2045.³ We would see even greater benefits by establishing a solar roof requirement for commercial buildings as well.

In 2018, California became the first state to require all new homes to be built with solar panels. In Massachusetts, the town of Watertown has passed a policy requiring new commercial and multi-family residential buildings to include rooftop solar.

What will the Solar Neighborhoods Act do?

(This summary is based on the House version of the bill, HD.3098.)

- All new buildings will be built "solar-ready," able to accommodate rooftop solar panels. The Department of Energy Resources (DOER) will develop amendments to the state building code ensuring that roofs are strong enough to support solar panels, available roof space is maximized, and buildings can accommodate the necessary electrical infrastructure.
- Rooftop solar panels must be installed 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, 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.

³ Solar Homes: The Next Step for Clean Energy, Rob Sargent and Bret Fanshaw, Environment America Research & Policy Center, and Abi Bradford and Jonathan Sundby, Frontier Group, December 2018,

<https://environmentamerica.org/sites/environment/files/reports/Solar_Homes_Report.pdf>.