

The Solar Neighborhoods Act

Requiring rooftop solar panels on new homes and commercial buildings

An Act establishing solar neighborhoods Rep. Mike Connolly and Rep. Jack Lewis (H.3677)

> An Act increasing solar rooftop energy Sen. Jamie Eldridge (S.2120)

Every day, there's a practically limitless source of pollution-free energy shining down on the roofs of our homes and businesses.

Over the past decade, solar panels have become an increasingly common sight across the Commonwealth. Today, Massachusetts gets more than 17 times as much energy from the sun as we did in 2012.¹

That's amazing progress, but we've only just begun to tap into our potential for solar energy. Rooftop solar could generate up to 47% of the electricity used in Massachusetts each year.² Just installing solar panels on the roofs of Massachusetts' big-box retail stores, grocery stores, and shopping malls could generate enough electricity to power 134,000 homes.³

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 Dashboard, Environment America Research & Policy Center and Frontier Group,

<https://environmentamerica.org/center/resources/renewables-on-the-rise-dashboard/>.

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>.

³ Solar on Superstores: Big roofs, big potential for renewable energy, Environment America Research & Policy Center and Frontier Group, https://environmentamerica.org/center/resources/solar-on-superstores-2/.

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.

In 2018, California became the first state to require new homes to be built with solar panels. **Requiring solar panels to be installed on the roofs of new homes would double the amount of installed solar capacity in Massachusetts by 2045.**⁴ We would see even greater benefits by establishing a solar roof requirement for commercial buildings as well.

What will the Solar Neighborhoods Act do?

- 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% of the average demand for similar houses. For other buildings, DOER will establish minimum requirements for the size of solar energy systems. These requirements may be adjusted if battery storage devices are installed at the same time as solar panels.
- DOER will propose any necessary changes to the building code to ensure that new buildings can accommodate rooftop solar panels.
- 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.

⁴ *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>.