



Local Solar Energy

Solar is incredibly popular in Massachusetts, with more than [84% of people](#) saying that Massachusetts should rely more on solar power. Solar is also a burgeoning [jobs engine](#), employing more than 15,000 people in Massachusetts alone. You can get your energy from the sun AND save money - some towns anticipate savings of almost \$400,000 annually.

What is Local Solar?

Solar produced in your town or city is an important tool for a community to get to 100% renewable energy for all. Getting more of your power from the sun can take many forms: municipal policies that promote solar power in public and private development; “solar-ready” requirements on new construction; renewable energy development on public buildings; and community-wide opportunities such as the Solarize Massachusetts program.

Why is it important?

Local solar is not only clean energy, it also helps people understand that these solutions work in cities and towns across the Commonwealth and across the country. Seeing solar panels every day when picking up kids from school or the drive home from work will continue to remind your friends and neighbors that clean energy works here, and is happening in your backyard.

How can we expand solar power in my community?

We suggest considering three options:

1. Connect residents and businesses with affordable solar options through programs like Solarize Mass or other bulk purchase programs.
2. Install solar panels on municipal buildings and properties, including capped landfills, parking lots, and school buildings.
3. Require new buildings to be built “solar-ready,” so that solar panels can be installed later.

1. Connect residents and businesses with affordable solar options

The Solarize Mass program, a partnership between the Massachusetts Clean Energy Center (MassCEC) and the Green Communities Division of the Massachusetts Department of Energy Resources, aims to increase the adoption of small-scale solar installations through community outreach campaigns.

Since it was launched in 2011, the program has led to nearly 3,000 families and businesses signing contracts for solar installations. Most cities and towns that have participated in Solarize Mass have doubled the amount of solar installed in their community.

Once selected to participate in the program, municipalities select a designated solar installation company, and local volunteers work to spread the word in the community. Typically, residents and businesses that sign up through Solarize Mass are able to install solar at a lower cost than would otherwise be available. Some installers also offer solar installations under a lease or power purchase agreement (PPA), allowing families to switch to solar without any upfront cost.

Some cities and towns have chosen to create their own solar outreach program, rather than participate in Solarize Mass, in order to better meet the needs of their residents.

Resources

- The [Solarize Mass](#) website has instructions for communities applying to participate in the program. Solarize Mass is currently accepting applications on a rolling basis, and hopes to enroll up to 10 communities or groups of communities in 2017.
- [Sunny Cambridge](#) is a good example of an alternative model for solar outreach, with a special emphasis on making it easier for residents of condominiums and other multi-family homes to switch to solar.

2. Install solar on municipal buildings and properties

Many local governments have installed solar panels on municipal properties as a way to save money on their electricity bills while promoting the adoption of renewable energy. Schools, fire and police departments, and municipal office buildings often have large, sunny roofs that are ideal for rooftop solar installations. Solar installations on school buildings can also serve an educational function, integrating into lesson plans around renewable energy, climate change, physics, and chemistry.

Installing solar panels on underutilized land, such as capped landfills, is also a smart way to increase clean energy adoption. Some communities are also looking at solar canopy installations over parking lots, which serve the dual purpose of generating clean energy and providing shade for parked cars.

Resources

- The Massachusetts Department of Environmental Protection (MassDEP) provides resources for communities that are considering installing [clean energy on capped landfills](#).
- The Solar Energy Industries Association (SEIA) has assembled statistics and case studies of [solar installations on school buildings](#) across the country.
- The Green Communities Division of the Massachusetts Department of Energy Resources (DOER) assists communities with energy efficiency and renewable energy projects. [Regional clean energy experts](#) are available to answer questions.

Some regional planning agencies, such as the [Metropolitan Area Planning Council](#), assist cities and towns with planning renewable energy installations on municipal properties.

3. Require solar-ready buildings

Some towns have started requiring that new buildings, or buildings that are having substantial renovations done, have their roofs be “solar ready”. If architects and contractors don’t plan ahead, roofs can end up being unsuitable for solar, with issues like vents in the wrong place or the roof facing the wrong direction.

The goal is that even if the solar system is not installed in the short run, buildings are being built or rebuilt so that eventually most roofs in town will be suitable for solar.

There are two ways a town can do this: by focusing narrowly buildings owned by the town (schools, municipal office buildings, etc) or by going more broadly and changing the town or city code to make sure all buildings in town are solar ready.

Resources

- The National Renewable Energy Lab, or NREL, put out this oldie but goodie in 2009: <http://www.nrel.gov/docs/fy10osti/46078.pdf>
- For in depth discussion and sample language for solar zoning, see this resource: <https://www.planning.org/research/solar/briefingpapers/localdevelopmentregulations.htm>
- We can help you craft locally appropriate language if solar ready is your goal!

Success stories

Solar power from a landfill

The city of Northampton has decided to create a 3.3MW solar array on top of the former Glendale Road Landfill. This solar array will be a great way for the city to further promote their dedication to clean energy and to save the city a great deal in energy savings. When completed, the new solar array is expected to provide nearly 40% of the city’s annual municipal electricity use and save the city nearly \$9 million over the next 20 years in energy savings and income!

Solar and schools

In Braintree, a plan to construct solar panels on two public schools is set to commence to give residents access to clean electricity. Panels on the roofs of Braintree High School and East Middle School will generate 1.3 million MW of electricity. The schools are set to receive \$15,000/year for the space. Additionally, residents are offered solar electricity generated from the schools through a Community Solar Program where participants would be able to lock in a rate of 15cents per KW for 10 years, saving significant money on annual energy costs!

Solarize program

The launch of the new Solarize Somerville project to promote solar energy to clean up the grid in Somerville has been received with great enthusiasm. Today, nearly 70 households have switched to solar energy and numerous other neighbors are taking advantage of the solar energy site assessment. Customers who switch to solar energy enjoy multiple tax-based incentives including a possible \$1000 personal income tax credit!