

Solar Photovoltaic System Zoning

PURPOSE

To promote the production of clean, renewable power with solar energy systems while ensuring that they are properly sited, installed and maintained.

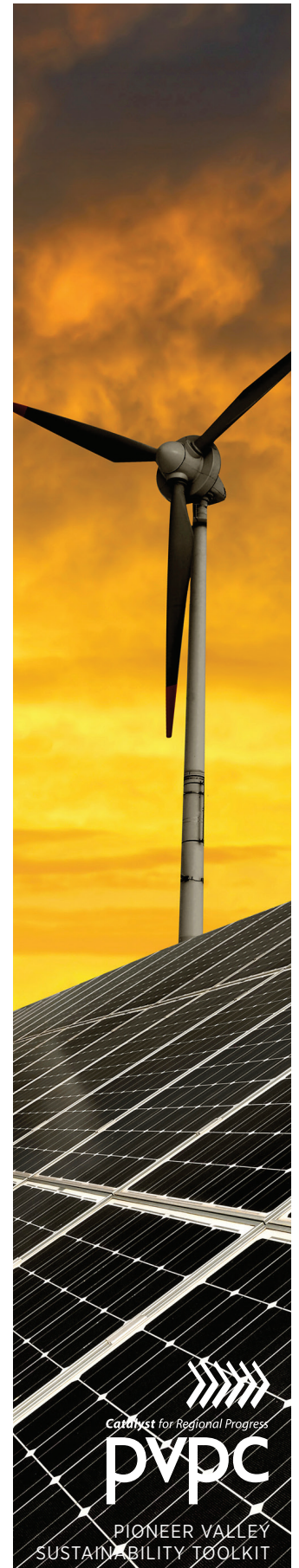
HOW IT WORKS

Photovoltaic (PV) systems use one or more panels to generate renewable energy by converting sunlight into electricity. PV Systems lower fossil fuel use and pollution, and increases energy independence.

These systems can be sized at different scales, from a few panels that aid a home's consumption to a utility-scale solar array meant to sell energy to electric utilities. While Massachusetts General Law Chapter 184, Section 23C states that municipalities cannot "forbid or unreasonably restrict" solar energy systems, cities and towns are free to create bylaws and ordinances that address environmental, design and safety standards to ensure PV systems are properly installed and sighted to avoid potentially negative impacts on neighbors.

In general, these municipal ordinances or bylaws are designed with standards that address different scales of PV installations, placing higher standards on large-scale, ground-mounted photovoltaic systems, since they have the potential to use a significant amount of land and therefore have a broader impact on the public. These bylaws cover issues such as: land clearing, landscaping, setbacks, lighting, signage, utility connections, emergency services, maintenance and decommissioning of the systems once it has reached the end of its useful life. Complying with these standards requires at a minimum Site Plan Approval and in some cases a Special Permit.

On the other hand, small-scale or building-mounted photovoltaic installations are often held to lower standards since their potential for public impacts is so low. These smaller systems, which are usually meant to provide electricity on-site rather than for the wholesale energy markets, are generally permitted as long as they comply with the building code and obtain a municipal building permit.

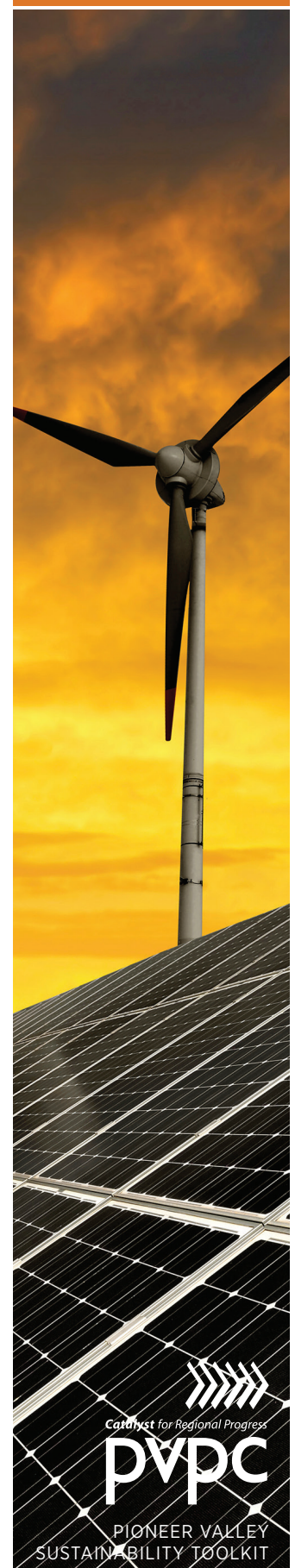


EXAMPLES OF WHERE STRATEGY HAS BEEN ADOPTED

Several Pioneer Valley municipalities, including Chesterfield, Easthampton, Holland, Holyoke, Monson, Middlefield and Palmer, and a handful of others throughout the state, have already adopted zoning ordinances or bylaws that allow photovoltaic systems in their jurisdiction.

The Massachusetts Green Communities Office, under the Department of Energy Resources, has developed a model bylaw for large-scale, ground-mounted solar photovoltaic systems. The bylaw allows these systems to be installed by-right as long as they meet the requirements it outlines and passes site plan review. The Town of Middlefield used this state model to allow large photovoltaic systems in their town, adding height limits, soil permeability and site shading requirements. Other towns, such as Chesterfield, Palmer, Monson and Holland have also used this state model to develop their own bylaws.

The Town of Hadley took a slightly different approach. The town's planning board worked on a bylaw that establishes clear guidelines for solar energy system permitting at all scales. The bylaw allows building integrated systems with only a building permit, allows small ground-mounted systems with planning board review, and requires a special permit for utility-scale installations.



LINKS TO MODEL BYLAWS OR MORE INFORMATION

U.S. DEPARTMENT OF ENERGY, DIVISION OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

http://www.energysavers.gov/your_home/electricity/index.cfm/mytopic=10710

THE MASSACHUSETTS DEPARTMENT OF ENERGY RESOURCES HAS DEVELOPED A MODEL BYLAW FOR ALLOWING AS-OF-RIGHT USE OF LARGE-SCALE GROUND-MOUNTED SOLAR PHOTOVOLTAIC INSTALLATIONS. THIS MODEL CAN BE FOUND AT:

<http://www.mass.gov/eea/docs/doer/green-communities/grant-program/model-solar-bylaw-rev-dec-2010.doc>

PALMER PHOTOVOLTAIC BYLAW:

http://www.townofpalmer.com/Pages/PalmerMA_TCOrdinances/Ordinance%202011-02%20Photovoltaic%20Ordinance?textPage=1

MASSACHUSETTS GREEN COMMUNITIES THAT HAVE ADOPTED BY-RIGHT RENEWABLE ENERGY BYLAWS:

<http://www.mass.gov/eea/docs/doer/green-communities/grant-program/adopted-as-of-right-siting-through-re-generation.pdf>

FOR MORE INFORMATION, PLEASE CONTACT

Pioneer Valley Planning Commission

413-781-6045

60 Congress Street, Floor 1
Springfield, MA 01104-3419

www.pvpc.org

