



Town of Lexington

Land Use and Development

Solar PV Energy Systems FAQ for Roof Mounted:

Things to Consider Before Investing

I'm considering installing a solar PV system. What should I Know?

- *Do your homework*, and get balanced information from several sources. Talk to others who have PV systems. Additional resources we recommend are listed at the end of the FAQs.
- Research and investigate the contractor. Get estimates and quotes from more than one reputable, licensed and insured solar installation contractor.
- Read and understand the fine print before you sign any contract. Verify if there are performance guarantees.
- Look at the production and savings estimates over the life of the system or contract term, not just the first year payments. Verify the incentives and tax credits presented are actually offered by the State and the IRS if applicable.

Definitions

Solar Energy – Radiant energy emitted by the sun. Sometimes people use the term solar energy when they really mean solar power.

Solar Power – Power obtained by harnessing the energy of the sun.

Photovoltaic – Refers to the process of converting sunlight to electricity. PV cells, or solar cells, are components that do the conversion.

Net Metering – Refers to the metering capability of a generation resource that accounts for the net difference between electricity being used (delivered to the customer) and generated (received from the customer). RES provides billing credits for excess, or net, production during a billing period.

How much electricity will my system generate?

The amount of electricity a site will produce is a product of the site-specific characteristics, such as system size, amount of shading, angle of the panels and orientation of the roof, as well as the annual weather patterns. With this in mind, a conservative rule of thumb is to assume that a residential solar electric system will generate around 1,100 kilowatt hours of electricity annually for every one kilowatt of system size. The average residential system in Massachusetts is about 8 kilowatts, which would produce around 8,800 kilowatt hours of electricity each year. See the [SREC Capacity Factor Report](#) for more information.





Town of Lexington

Land Use and Development

Is my solar PV project exempt from municipal property tax

Homeowners with a solar electric system may be eligible for a property tax exemption on the value added by the system. Homeowners are encouraged to discuss this with their installer and the local tax assessor's office.

What federal incentives are there for solar PV energy systems?

A solar PV system installed in 2020 will receive 26% credit and decrease to 22% for systems installed in 2021. And the tax credit expires starting in 2022 unless Congress renews it

<https://www.energy.gov/sites/prod/files/2020/01/f70/Guide%20to%20Federal%20Tax%20Credit%20for%20Residential%20Solar%20PV.pdf>

How many solar PV systems have been installed in Lexington?

In Fiscal Year 20, there were 127 permits processed for roof mounted solar in Lexington.

From 2015 onward-

What permits are required to install a PV system?

- Building Permit
- Electrical Permit

What are the best resources for additional information on Solar Energy Systems?

Thanks for asking such great questions. Check out the resources below to learn more.

- Mass CEC Solar Guide for Residential
- <https://files.masscec.com/solar-loan/SolarElectricityResidentialGuide.pdf>
- Mass CEC Solar Resources for Commercial
- <https://www.masscec.com/commercial-solar-resources-library>





Town of Lexington

Land Use and Development

Resources

<https://www.mass.gov/solar-information-programs>

[National Renewable Energy Laboratory \(NREL\) – www.nrel.gov](http://www.nrel.gov) – [PVWatts®](#) PV production calculator

[U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy – Homeowner’s Guide to Going Solar](#)

[Federal Trade Commission – www.consumer.ftc.gov](http://www.consumer.ftc.gov) – [Solar power for your home](#)

[Interstate Renewable Energy Council \(IREC\) – www.irecusa.org](http://www.irecusa.org) – [Consumer Protection Checklist](#)

