



www.solarizemass.com/Hopkinton

The logo for Solarize Mass Hopkinton features a large, bright yellow sun with rays on the left. To the right of the sun, the words "SOLARIZE" and "MASS" are written in a large, bold, blue sans-serif font, stacked vertically. Below "MASS", the word "HOPKINTON" is written in a large, bold, black, handwritten-style font.

Hopkinton is one of only 17 towns chosen by the Massachusetts Clean Energy Center to participate in a town wide group purchase plan for Solar Photovoltaic systems.

How does it work?

The more residents install, either through purchase, lease, or Power Purchase Agreement (PPA) ownership structures, the lower the installed costs are for *everyone*. If you own a home or business in Hopkinton with a mostly unobstructed south(ish) facing roof or yard, this is an excellent opportunity to significantly reduce your energy costs. Without having to build in marketing and customer acquisition costs, installers can offer very competitive pricing that only gets better as more people sign on. Because the installer gets to buy in much bigger quantities and rotate crews around a single town, costs go way down.

Hopkinton's evaluation committee and MassCEC have chosen SolarFlair of Framingham for the Solarize program from the ten competitive bids received. Installer bids were based on a 5 tiered pricing structure. Each Solarize home or business installation adds to the total contracted capacity. A typical installation in MA is about 5kW which will make, on average, about 80% of a home's electricity. The tiers are structured like this:

Pricing for Purchased systems:

Tier 1 - 1-25kW contracted = \$3.69 per Watt (current market rate is \$5.20/Watt)
Tier 2 - 25-50kW = \$3.62 per Watt
Tier 3 - 50-150kW = \$3.55 per Watt
Tier 4 - 150-250kW = \$3.47 per Watt
Tier 5 - 250kW+ = \$3.39 per Watt

Solar Flair is responsible for all inspection/application fees and will take care of all Solarize Massachusetts rebate and NSTAR net metering paperwork. The home or business owner is responsible for maintenance of a purchased system. Modern PV systems are essentially maintenance free. Grid tied systems do not need snow removed or batteries replaced.

A Power Purchase Agreement (PPA) is another way to pay for the system with no up-front costs. The system is owned by a 3rd party. A 20 year agreement allows the home/business owner to purchase the electricity generated by the system for much less than what grid electricity costs. The 3rd party owner gets to keep the SREC's, rebates and tax benefits. They maintain, monitor and insure the system and are highly incentivized to do so – they make their money on the output. The PPA pricing tiers are structured like this (contracted capacity from both the purchase and PPA options counts toward each Tier):

Tier 1 - 1-25kW = \$0.065/kWh
Tier 2 - 25-50kW = \$0.063/kWh
Tier 3 - 50-150kW = \$0.059/kWh
Tier 4 - 150-250kW = \$0.055/kWh
Tier 5 - 250kW+ = \$0.050/kWh

Prices above will escalate 2.9% each year for 20 years. NSTAR currently charges residential customers \$0.176/kWh and has historically increased their prices 3-5%/year. Why would you buy grid electricity for 17.6 cents when you can buy clean solar for 6.5?

As each tier of contracted capacity is reached, the price drops for everyone.

Why this makes financial sense:

- PV prices have dropped dramatically in the last few years
- MA currently has some of the best incentives in the country. They will not last forever.
- Federal tax credit of 30% of the installed cost.
- State tax credits of 15% of installed cost up to \$1,000
- Solarize Massachusetts rebates (equivalent to Commonwealth Solar II rebates) = \$0.40 per watt on the first 5kW. \$0.45 if using made in MA inverters or racking. Moderate home value (\$400K or less) or moderate income (\$95K or less) = \$0.40/watt. Max rebate = \$4,250.
- SREC's (Solar Renewable Energy Certificates) – Utilities must provide a certain percentage of the power they deliver from renewable energy sources. SRECs are sellable credits for *all* the solar energy your panels produce. A typical 5kW system will generate 5-6 SREC's/year, and you can sell SRECs for a period of 10 years. SRECs have recently been trading at \$520; however, as more solar is installed in Massachusetts, the value will come down. There are incentives for SRECs to sell for no less than \$285. SRECs represent an important additional revenue stream to PV owners. Not only are you not paying for most of your electricity, you get paid over a 10 year period by selling SREC's

- Solar installations are sales tax free
- 10 year warranty on inverter. 25 years if using micro inverters (\$0.10/Watt additional if purchase)
- 25 year warranty on panels
- 10 year workmanship warranty
- Interest rates are at historic lows
- Keeps your home or business cooler in the summer – panels act as shade and can actually make your roof last longer
- Bill S.2214 is currently pending. If it is passed, it will exempt the added home value from property taxes for 20 years
- Studies in CA show homes with solar sell much faster
- Monitor your PV system in real time right from your PC or smart phone
- These very generous incentives will not last forever

What happens if I add my name to the “interested” list?

There is no commitment by signing the list. The Solar Coach is keeping a spreadsheet of contacts. The Solar Coach will work with Solar Flair to contact people and businesses who sign up. They will do a preliminary site analysis over the phone using satellite imagery to check for obstructions and to see which way the roof/yard faces. If conditions look good, they will come and perform a full no-cost site analysis. They will then be able explain how much it will cost at each tier and offer several installation options including both purchase and PPA (Power Purchase Agreement). If you choose to sign a contract, the system size will count towards the total installed number of watts for the town. As each tier is reached, your contract price is reduced.

A Solar 201 presentation is scheduled at the Senior Center for June 28th at 7PM. Contracts must be signed by September 30th at which time the final pricing is locked for everyone based on the number of watts contracted.

If you are interested in the Solarize program, the Mass CEC has designated the Chairman of the Green Committee, Andy Boyce, as Hopkinton’s “Solar Coach”. If you have questions or would like to be added to the list, you can contact him at:

Solar Coach Email: SolarizeHopkinton@Gmail.com

Solar Coach Phone Number: (508) 293-1837

To learn more about the Solarize Mass program, visit www.SolarizeMass.com, on Twitter at [#SolarizeMass](https://twitter.com/SolarizeMass), or email Solarize@MassCEC.com. Join us on Facebook at SolarizeHopkinton.

Also see solar PV basics at MassCEC.com/AboutSolar

Additional links:

<http://www.dsireusa.org>

www.Hopgreen.com