

More Questions?

Contact the program coordinators at MAEnergyStar@icfi.com or call 1-800-628-8413 prior to submitting an application to confirm incentives are available and maximize your participation in all the programs that offer incentives for energy-efficient residential new construction in Massachusetts.

About the Program

Funding for the Affordable Solar-Powered ENERGY STAR Homes Program is provided by the sponsors of the Massachusetts New Homes with ENERGY STAR Program and the Massachusetts Technology Collaborative as part of their Small Renewables and Green Affordable Housing Initiative .



For answers to more questions about the MTC's Small Renewables Initiative visit the Web site at www.masstech.org/renewableenergy/small_renewables.htm#

For more information on financial support for green affordable housing, visit MTC's website, http://www.masstech.org/renewableenergy/afford_housing.htm

For more information about the Massachusetts New Homes with ENERGY STAR Program visit www.energystarhomes.com



Affordable Solar-Powered ENERGY STAR® Homes Program

Supporting the installation of renewable energy systems in affordable housing

Introduction

Homebuilders participating in the Massachusetts New Homes with ENERGY STAR Program are eligible to receive incentives for the installation of small photovoltaic (PV) systems in affordable housing. Technical assistance on proper PV system selection and installation is also provided to homebuilders participating in the program. Homebuilders interested in adding solar PV to market rate units can apply directly to the Massachusetts Technology Collaborative's (MTC) Small Renewables Initiative for incentives.

Value of Solar PV to Your Project

Adding solar PV to your ENERGY STAR qualified homes make homeownership more affordable to more residents in Massachusetts. ENERGY STAR qualified homes with solar PV provide homeowners with:

- Significantly decreased energy bills; and
- Protection against future electric rate increases.

Increased use of residential solar PV systems also improves the air we breath and helps to reverse the effects of global warming by reducing the air emissions from traditional energy sources.

Project Eligibility Requirements

Following are requirements for a project to receive financial incentives:

- Must meet the ENERGY STAR requirements in order to qualify for the base incentives.
- PV system energy capacity should be between ≤ 3.6 kW for a system serving a single unit and up to 10 kW for a system serving multiple units.
- Must include at least twenty-five percent (25%) of the units affordable to households who earn no more than eighty percent (80%) of the area median income.
- OR, for rental housing, twenty (20%) of the units affordable to households below fifty (50%) of median income.
- Construction on the project must be completed within two (2) years of the date in which the Agreement is entered.
- Monthly production data must be collected from the installed system and automatically reported to MTC's Production Tracking System (PTS) for for the useful life of system, beginning thirty (30) days after the system commences operation.
- Must agree to allow MTC, or its agents, to inspect the installed system as necessary.

Financial Incentives

A limited number of incentives are available to homebuilders on a “first come – first served” basis who construct ENERGY STAR qualified homes in Massachusetts that incorporate renewable energy technologies in affordable housing units. Incentives will be calculated in accordance with the Installation Matrix below.

	Single Unit Tied	Multi-Unit Tied	
	Affordable	20%-49% Affordable	50%-100% Affordable
Base Incentive	\$7.00/watt	\$6.00/watt	\$7.00/watt
Possible Addition to Base			
Green Buildings (e.g., LEED, VBG, ECG)	\$1.00/watt	\$1.00/watt	\$1.00/watt

Federal and state income tax credits up to 15% of the equipment and installation cost may be available towards the purchase price of solar PV systems installed in homes. Consult your tax advisor for more details.

Participation Process

Following are the steps associated with applying for and receiving incentives through the Affordable Solar-Powered ENERGY STAR Homes Program. Technical assistance and guidance is available during all stages of the process.

- Step 1:** Determine if incentives are available for your project and obtain a Application and Agreement form by contacting the program coordinators at 1-800-628-8413 or MAEnergyStar@icfi.com.
- Step 2:** Determine whether solar is compatible with your project by reviewing the guides provided on the MTC Web site at www.masstech.org/RenewableEnergy/sm_renew/all.html or consulting with the program;
- Step 3:** Estimate savings and incentives by using the tools available through MTC at www.masstech.org/RenewableEnergy/sm_renew/all.html;
- Step 4:** Select an installer or vendor (see www.SEBANE.org or www.nesea.org/syp/) that meets the program requirements listed in the Application and Agreement form. (MTC does not allow for third-party ownership.)
- Step 5:** Submit an incentive Application and Agreement form. Your selected vendor or installer will be responsible for preparing the documents; you will need to assist them by providing some supporting materials.
- Step 6:** Receive your incentive award packet, which includes the amount of the incentive, the project completion deadline, and any other requirements, as well as the project completion form and information on the Production Tracking System. Notify your installer or vendor and work with the utility to have the project interconnected to the grid.

Frequently Asked Questions

How much does an installed PV system cost?

Your installer, or the program’s technical specialist, will be able to provide you with a specific cost estimate based on your needs and requirements. Be sure to get estimates from at least three installers. NYSERDA’s Clean Power Estimator, at www.clean-power.com/nyserda/ is also a useful tool in getting more information about typical system costs and benefits.

Is there enough sun for PV to work in Massachusetts?

Not only is there enough direct sunlight received in Massachusetts to generate PV-based electricity, the timing of the intensity of the sunlight is well matched against electricity usage patterns, and offsets expensive electricity costs, as compared to other parts of the United States.

What type of support is available to builders participating in the program?

Technical assistance and guidance is provided to builders participating in the Massachusetts New Homes with ENERGY STAR Program and are interested in installing solar PV systems. Assistance may include evaluating the site’s potential for solar PV, submitting the application for incentives, identifying a qualified installer, selecting the appropriate solar PV equipment, and properly installing the system.

How is solar energy stored and measured?

A PV system is not inherently capable of storing electricity unless it is combined with a battery system to store the energy produced. Although battery storage is available, it adds additional costs to a system. As a result, most PV systems do not include a battery storage system and they are used to supplement the main electrical system. Solar energy output can be measured by a monitor for small systems, and by a more sophisticated data acquisition system (DAS) or larger systems.

What are the maintenance requirements and life span of the PV modules?

Cleaning a PV system is not required since rain is usually sufficient to maintain an array’s performance near its installed power output. In rare situations where there is close proximity to a high pollution source, it may be advisable to conduct periodic cleaning. If the system is performing at or near its rating on sunny days, it is working well. Beyond the system warranty period, examination of the wiring connections by a professional can be done once a year. Photovoltaic systems properly designed and installed are known to last for decades.

What can I do to optimize the performance of the PV system?

The PV system can provide a greater fraction of the homes electricity if the electricity is used more efficiently. Changing the lighting from incandescent to compact fluorescent and installing ENERGY STAR-rated appliances will reduce the electrical consumption without altering the homeowners lifestyle.

Information provided based on Frequently Asked Questions from the MTC Small Renewable Initiative and NYSERDA’s Power Naturally Program.