



Commonwealth Solar Hot Water Program Construction Application Instructions

The Commonwealth Solar Hot Water Program provides rebates for the installation of solar hot water projects by professional, licensed installers at residential, commercial, industrial, institutional and public facilities. The following instructions and solar system requirements must be followed in order to apply and qualify for a **construction rebate for a solar hot water system**.

The first year of the Commonwealth Solar Hot Water Program will run from July 2012 through June 2013. The total program budget is \$1.5 million, with approximately \$1.35 million available for construction rebates and commercial feasibility studies. The funding will be expended on a “first-come, first-served” basis. The total funding available for construction rebates is \$1,100,000.

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I. STEPS TO APPLICATION AND PROJECT COMPLETION:

- 1) **Determine eligibility.** Customers may install solar hot water (“SHW”) systems on both new construction projects, or existing heating systems that use any fuel type (electricity, natural gas, oil, propane, etc.). Rebates are only available to Massachusetts customers who pay into MassCEC’s Renewable Energy Trust Fund. This includes all electric customers served by National Grid, NSTAR, Unitil (Fitchburg Gas and Electric), WMECO, or a [participating Municipal Lighting Plant community](#). The host customer will need to provide the installer with a copy of the electric bill so that MassCEC can verify eligibility.

The program allows for third-party owned systems, meaning the system owner may be a different entity than the home or building owner. Solar pool heating is only eligible for commercial-scale systems, not residential systems.

- 2) **Find a qualified installer.** Refer to the Commonwealth Solar Hot Water Program Awarded Projects Database (at www.masscec.com/solarhotwater) for a list of installers that have successfully submitted an application through the program. MassCEC recommends that system owners obtain bids from more than one installer and always check references. Contracts with installers should require that the installer is properly insured with adequate coverage types and limits to meet the project’s needs, and that the installed system meets all of the requirements for this rebate program, including, but not limited to, utilizing a licensed professional when required by state law.
- 3) **Estimate the Construction Rebate.** Rebates for residential projects (single and multi-family up to 4 units) are capped at the lesser of \$3,500 or 25 percent of total installed costs, and rebates for commercial-scale projects (including multi-family, 5 units or greater) are capped at the lesser of \$50,000 or 25 percent of total installed costs.



Public/Non-Profit projects are eligible to receive higher rebate levels because they are ineligible to receive the federal tax credit. Public entities are defined as an instrumentality, authority, agency, department or political subdivision of the Commonwealth of Massachusetts, including municipalities. Non-profits are defined as organizations under Section 501(c) (3) of the Internal Revenue Code and registered with the Massachusetts Attorney General, Non-Profit/Public Charities Division.

The base rebate amount is determined by the number of collectors installed and the SRCC thermal performance rating of the collectors¹. In addition to the base rebate, a system may be eligible to receive additional funding (“adders”) if the system uses Massachusetts manufactured components or if the home or building was damaged by a natural disaster. Residential projects may also be eligible to receive additional funding based on the home value or system owner’s individual or domestic unit income.

Details for the adders listed in the Construction Rebates table below can be found in Section II: Information about Metering and Adders.

Construction Rebates

Project Type	Base rebate calculation	Moderate Income/Home Value Adder	Massachusetts Manufactured Adder	Rebate Cap**	Metering Adder	Natural Disaster Relief Adder
Residential (1-4 Units)	\$45 x (# of collectors) x (SRCC rating ²)	Equal to the Base Rebate	\$200	\$3,500, or 25% project cost	Up to \$1,500	Equal to twice the Base Rebate
Commercial -Scale	\$45 x (# of collectors) x (SRCC rating ²)	n/a	\$200 small proj;* \$500 large proj*	\$50,000, or 25% project cost	Up to \$1,500	Equal to twice the Base Rebate
Public/ Non-Profit	\$55 x (# of collectors) x (SRCC rating ²)	n/a	\$200 small proj;* \$500 large proj*	\$50,000, or 25% project cost	Up to \$1,500	Equal to twice the Base Rebate

*A small project is defined as having a base rebate < \$3,500. A large project has a base rebate > \$3,500.

** The rebate caps listed do not include the Natural Disaster Relief Adder and the Metering Adder, if applicable, in which case rebates are capped at 100 percent of total installed costs.

- 4) The installer and system owner (and host customer, if different) must **sign the Commonwealth Solar Hot Water Program Terms and Conditions**, available at www.masscec.com/solarhotwater.
- 5) **Submit an Application:** The installer must submit an online application through www.PowerClerk.com, including all backup documentation. Please visit www.masscec.com/solarhotwater to access PowerClerk Instructions. Completed applications will be considered in the order they are received online in PowerClerk. The system owner and installer will be notified by email when the application has been approved. **Important**

¹ For purposes of calculating the rebate, MassCEC uses the Solar Rating and Certification Corporation’s (SRCC) thousands of btu/panel/day rating for “Category D, Medium Radiation.” To find the rating of the collector, go to <https://secure.solar-rating.org/Certification/Ratings/RatingsSummaryPage.aspx?type=1> and click on "Certified Collectors and Ratings". Rebates for solar hot water collectors with SRCC certification that do not have a Category D Medium Radiation rating or have a 0.0 rating, may be eligible to receive a construction rebate based on 12 months of performance monitoring data.



Note: Do not order, purchase, or install any equipment until receipt of the award letter. Installation prior to MassCEC approval may render a project ineligible for funding.

Note for Commercial-Scale Projects: A feasibility study must be submitted with a commercial-scale construction application, and must address all aspects of the CSHW Feasibility Study Scope of Work. However, it is not a requirement to have had a MassCEC-funded feasibility study.

- 6) Install the Solar Hot Water System.** Please ensure that the system abides by all of the System Requirements listed below.
- 7) Follow Completion Requirements.** Once the system is installed, the installer will need to submit the Project Completion Form through PowerClerk in order to initiate the rebate payment. Please review the Project Completion Instructions to understand these requirements in advance of installing a system. The rebate payment may be paid directly to the Installer, the system owner or the host customer (in the case of third-party owned systems). The payee must be designated when submitting the project completion form.
- 8) Post-Installation Inspections.** MassCEC is committed to ensuring the quality of SHW installations. MassCEC will conduct an inspection of at least the first two installations completed by any installer participating in the program, and reserves the right to inspect any system.

II. INFORMATION ABOUT METERING AND OTHER ADDERS:

- **Metering Adder:**
 - Metering is not required for residential projects; however system owners may volunteer on the application form to be selected for MassCEC's performance monitoring program. If selected, the system will receive an additional rebate up to \$1,500 to cover the costs of the metering installation. All commercial projects will be required to install monitoring equipment. MassCEC will provide up to an additional \$1,500 toward monitoring installation costs for awarded commercial projects. Data collected through the pilot program will allow MassCEC to assess actual performance of SHW systems.
- **Massachusetts Manufactured Component Adder**
 - To qualify, the system must use eligible Massachusetts manufactured components, posted on the Commonwealth Solar Hot Water Program Website.
- **Natural Disaster Relief Adder**
 - To qualify, the home or building must have been structurally damaged by a natural disaster on or before June 1, 2011, as defined by FEMA as drought, earthquakes, extreme heat, floods, hurricanes, landslides and debris flow, severe weather, space weather, thunderstorms and lightning, tornadoes, tsunamis, volcanoes, wildfires and winter storms and extreme cold. See FEMA's ready.gov website for more information on the definition of a natural disaster. Cosmetic damage does not qualify.
 - The host customer must submit official documentation from FEMA, MEMA\ or an insurance company (or any other backup documentation that MassCEC may reasonably request) documenting that the building was damaged or affected by a natural disaster.



- Third-party owned projects will be eligible to apply for the adder, but MassCEC may request additional information from the third-party owner that demonstrates the lease or PPA savings to the customer specifically as a result of receiving the adder.

- Moderate Home Value Adder

- To qualify, the system owner must be the owner and resident of the home, and the 2012 or later assessed home value (land and building(s)) of the owner’s primary residence, as determined by the municipality, must be less than or equal to the following for the appropriate county of residence:

County	Moderate Home Value
Berkshire, Franklin, Hampden, and Hampshire	≤ \$300,000
Bristol, Suffolk, and Worcester	≤ \$350,000
Barnstable, Duke, Essex, Middlesex, Nantucket, Norfolk, and Plymouth	≤ \$400,000

Note that at the sole discretion of MassCEC, the home value limits are subject to periodic change.

- Moderate Income Adder:

- A system owner can qualify for the Moderate Income Adder based on their individual income (for single-person households) or based on their Domestic Unit income (for households of two or more individuals).
 - **Individual income** (the gross income for single-person households as defined by the IRS) received in 2011, as documented in an individual’s most recent IRS filing must be ≤ \$75,810 (120% of median household income*).
 - **Domestic Unit income** (the gross income for **households** of two or more individuals as defined by the IRS) received in 2011, as documented in the most recent IRS filing(s) by all household members 18 years old and over, including household members not related to the householder and other non-family household members must be ≤ \$95,420 (120 percent of median family income*). The gross income of full-time students aged 18-25 who are members of the household are exempt from this calculation.
- Income levels apply to applications received in 2012 and may be subject to future change. To qualify, the system owner must consent to make household income data available to an independent third-party to verify eligibility. To apply go to: <http://scapartnering.com/masscec.html>.

Note: Both the Moderate Home Value Adder and the Moderate Income Adder require proof of primary residence at the time of application. Eligible forms of documentation include a current copy of the voter registration card, driver’s license (with the driver license number blacked out) or vehicle registration that lists the same address identified as the site address in the application.

As with the base incentive and other associated adders, the Natural Disaster Relief adder will be paid to the designated “Payee” on the application.

III. PROGRAM RULES:

Entity Cap: Entities (installers, building owners and/or system owners/third-party owners) may not receive awards for a total of more than \$550,000 in construction funding, in an effort to prevent one entity from using a disproportionate share of the Commonwealth Solar Hot Water construction funds.



Sector Cap: MassCEC’s goal is to fund a diverse array of projects at different homes, businesses and multi-family facilities. No more than \$800,000 of the total construction funds (\$1.35 million) can go to residential or commercial-scale projects.

MassCEC reserves the right to remove caps at any time, and may do so toward the end of the funding year if the total funding has not been committed. MassCEC will post updates on currently available funding.

MassCEC reserves the right to reject applications that are incomplete or do not meet program requirements, or otherwise, in its sole discretion. The Commonwealth Solar Hot Water Program rebate is available while funding lasts. Do not install the system until the system owner and installer have received the award letter. MassCEC reserves the right to adjust rebate levels and program caps at any time and without prior notice. The rebate levels set during the time of the complete application submittal will determine the rebate amount.

IV. SYSTEM REQUIREMENTS:

- 1) **Installation schedule and requirements:** All systems must be installed within 9 months of the date of the award letter that MassCEC will send once an application is approved. No rebates will be awarded to systems installed before the date on the rebate award letter. Rebates will be paid upon receipt of all project completion documents. Systems and system installation must meet all applicable state and local laws and ordinances.
- 2) **System warranties and certifications:** SHW systems must be whole systems (tanks, collectors, controls, and plumbing), the components must be new, OG-100 or OG-300 certified by the Solar Rating and Certification Corporation (“SRCC”)², and backed by a minimum 10-year manufacturer’s warranty for collectors, 2-year warranty for other system components, and at least a 2-year comprehensive installation warranty.
- 3) **Technical Specifications:**
 - *Collector area and mounting:* A Solar Pathfinder or a comparable device must show that collectors are subject to at least 5 hours per day unobstructed sunlight (75% shade-free). Collector tilt must follow manufacturer specifications, and orientation must be between 90 degrees and 270 degrees true. Collectors must be secured according to manufacturer’s recommendations.
 - *Storage:* All systems must follow manufacturer’s recommendations regarding storage capacity.
 - *Plumbing:* All systems shall include one of the stagnation and freeze protection methods specified in the application form. Installer shall provide assurances for freeze protection to at least -27 degrees Fahrenheit in the case of pressurized systems or 9 degrees Fahrenheit for drainback systems. All systems must have insulation on all exposed and accessible hot water piping.
 - *Load offset:* The percent of load offset by the SHW system must be less than or equal to 80 percent of the total load that the system is serving.
- 4) **Metering:** MassCEC or its representative may contact the installer to verify the metering system layout and details, and arrange for 12 months of remote access to the system’s performance data. Please refer to the Commonwealth Solar Hot Water Performance Monitoring System Requirements for further details.

² Solar collectors are eligible if they have interim SRCC certification. However, the system must be installed and the collectors must have achieved Final SRCC Certification within twelve (12) months of the date on the award letter, otherwise the rebate will be automatically forfeited.



V. REBATE TAXABILITY

Rebates may be considered taxable income to the parties in this agreement by the U.S. Internal Revenue Service and the Massachusetts Department of Revenue. All parties are strongly encouraged to consult with a tax professional to determine the federal and/or state tax implications of receipt of the Rebate. Please note: A rebate tax liability may exist whether the payment is made directly to one of the parties or on its behalf. As a result, MassCEC will need to receive a completed W-9 Form from each awarded System Owner, prior to remittance of the rebate payment. A template W-9 Form and corresponding instructions can be found at www.masscec.com/solarhotwater for the system owner to complete and return to MassCEC's finance department. MassCEC will send out a Form 1099 to each system owner that is awarded funding through the Commonwealth Solar Hot Water program.