



State of New Hampshire  
 Public Utilities Commission  
 21 S. Fruit Street, Suite 10, Concord, NH 03301-2429  
 603 271-2431

**RESIDENTIAL SOLAR WATER HEATING REBATE PROGRAM  
 STATE AND FEDERALLY FUNDED REBATES**

*PLEASE CAREFULLY READ THE ENTIRE APPLICATION FORM*

Welcome to the Commission's Solar Water Heating Rebate program. This program offers two distinct rebate opportunities to New Hampshire residents installing solar water heating systems:

- **The Residential Solar Water Heating Rebate – State Rebate** offers a payment of **\$600, \$750 or \$900**, depending on the size of your solar heating installation. This rebate is funded through New Hampshire's Renewable Energy Fund. To apply for this rebate you will need to complete the State Rebate application form.
- **The Residential State Energy Efficient Appliance Rebate Program – Federal Rebate** provides an additional rebate of **\$2000** for consumers replacing<sup>1</sup> existing hot water heaters with solar water heating systems that meet certain efficiency standards. This rebate is funded through the federal American Recovery and Reinvestment Act of 2009 and is made available by the state Office of Energy & Planning. To apply for this rebate you will need to complete the Federal Rebate application form.

**Both rebates require a two step process. First, applicants must complete a Step 1 form to request pre-approval before installing a solar water heating system. This stage of the application will likely require the assistance of a professional installer. If the application is approved, the applicant will receive a letter indicating his/her installation is in the queue for funding. After the system is installed and operational, the applicant must then submit a Step 2 form to receive a rebate payment(s).**

- The **State** rebate pre-approval expires 12 months from the date that the Step 1 application is approved. All **Federal** Step 1 & Step 2 applications must be completed in total and submitted to the Commission by February 17, 2012. Step 2 for both rebates requires the following:
  - paid invoices;
  - documentation that the renewable energy system is SRCC certified;
  - pictures of the installed solar water heating system;
  - documentation of inspection by a local building code official or NH licensed plumber;
  - documentation of the installation's rated annual BTU output;
  - building permit or other documentation that the facility meets local zoning regulations; and,

<sup>1</sup> The replacement of a hot water heating system includes the installation of a solar collector, storage tank, controls and associated parts.



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**STATE REBATE: STEP 1**  
**RESIDENTIAL REBATE PRE-APPROVAL APPLICATION**  
**FOR RESIDENTIAL SOLAR WATER HEATING SYSTEMS**

The Public Utilities Commission (the Commission) requires pre-approval for any New Hampshire homeowner seeking a rebate payment for a residential solar water heating system. Pre-approval will reserve your place in the funding queue. Once the system has been installed at the owner's residence, the homeowner must then complete Step 2 by submitting a **final rebate request form**. The rebate pre-approval for the State Rebate expires 12 months from the date this application is approved.<sup>2</sup> Residents who choose to install systems prior to Commission pre-approval may still apply for this rebate, but the application is subject to Commission approval and availability of funds. Systems installed prior to April 21, 2010 are not eligible for this funding.

**REBATES ARE AVAILABLE ONLY FOR INSTALLATIONS ON PRIMARY RESIDENCES IN NEW HAMPSHIRE**

**Because the application requires an original notarized signature, it will not be accepted if submitted electronically.**

**Please submit application and all associated documents to:**  
Sustainable Energy Division  
New Hampshire Public Utilities Commission  
21 S. Fruit Street, Suite 10  
Concord, NH 03301-2429

**TERMS AND CONDITIONS**  
**Please read the Terms and Conditions carefully prior to completing this form.**

1. Any applicant requesting a rebate payment for any renewable energy system is responsible for meeting all terms and conditions of the program.
2. Rebates and tax incentives are summarized below.<sup>3</sup>

Estimated MMBTU Per Year SRCC Mildly Cloudy C Rating x 365	Estimated Investment	State Rebate	Federal Rebate	Estimated Federal Tax Credit 30% (Investment – Federal Rebate) x .30 <sup>4</sup>
6 MMBTU – 19.9 MMBTU	\$8,000	\$600	\$2,000	\$1,800
20 MMBTU - 29.9 MMBTU	\$10,000	\$750	\$2,000	\$2,400
30 MMBTU or greater	\$12,000	\$900	\$2,000	\$3,000

<sup>2</sup> All Federal Rebate funds must be disbursed by February 17, 2012.

<sup>3</sup> You will receive an IRS Form 1099 for the State Rebate. The rebate may be treated as taxable income. These calculations are not intended as individual tax advice. Please consult your tax advisor for advice on federal tax status.

<sup>4</sup> The estimated tax credit is calculated only on the basis of the federal rebate.

3. Installed system output<sup>5</sup>, using either evacuated tubes or panels, must use the [Solar Rating and Certification Corporation \(SRCC\)](#) collector ratings for Category C, mildly cloudy weather in order to qualify for the rebate payment. (See <http://www.solar-rating.org/default.htm> for more information.)
4. You must complete a **Final Rebate Request Form (Step 2)** to receive your rebate payment. The final rebate request form must be submitted after the installation is complete and within 12 months of the date that this rebate pre-approval form is approved.
5. Residents who choose to install systems, in whole or in part, prior to Step 1 approval by the Commission may still apply for this rebate payment by submitting both the Step 1 and Step 2 forms but the rebate payment is conditioned on meeting the requirements listed herein and available funding.
6. **State and Federal Rebates are available only for solar water heating systems installed on or after April 21, 2010.**
7. **State and Federal Rebates are available only for installations on primary residences in New Hampshire.**
8. The Federal Rebate is not available to installations in new construction.
9. The solar water heating system must be located on or at New Hampshire residences with full time occupancy; seasonal homes, businesses and additions to existing solar systems do not qualify for either rebate program.
10. This rebate is available only for the installation of new commercially available solar water heating systems. This includes collectors, pumps, rack, glycol, permits, wiring, storage tank, plumbing, labor, and associated equipment.
11. Applicants are encouraged to use the services of a qualified installer, whether a sole proprietorship, company, corporation, limited liability company, or other organization authorized to conduct business in the State of New Hampshire, that installs solar water heating systems. Homeowners may self-install, but it is strongly recommended that they work with a professional or a group like the Plymouth Area Renewable Energy Initiative.
12. Used parts or self-installer labor cannot be included in the cost of the facility.
13. All solar water heating systems must comply with manufacturers' requirements and the State Building Code pursuant to RSA 155-A:1, IV including the National Electric Code 2008 and any applicable local codes or ordinances.
14. All solar water heating systems are subject to inspection and monitoring by the Commission, the State Fire Marshal and local code authorities or their agents for safety, performance and compliance.
15. All program requirements and documentation must be complete and submitted in order to receive approval for a rebate. A rebate may be subject to inspection by an agent of the Commission to confirm that the system is operating as described in the application.
16. Certain information, including names and addresses, system details, zip code, and total installed costs of systems installed with program support, may be available to the public and may be publicly posted. Additional information may be released upon official request. Certain personal information including Social Security number, telephone numbers, and email addresses will remain confidential to the extent permitted under state law.
17. State Rebates are subject to the availability of funds received by the Commission under [RSA 362-F](#); complete applications will be processed in the order in which they are received.
18. The Commission reserves the right to inspect system performance data for ten (10) years after issuing the rebate.
19. You will be liable to the State of New Hampshire for the entire amount of the rebate if the rebate is obtained fraudulently.
20. Any rebate received under the State Rebate may be treated as taxable income by the IRS and the applicant will likely receive an IRS Form 1099. It is the responsibility of the recipient of this rebate payment to consult with his or her tax advisor to determine the correct tax treatment of these payments. Applicants who do not provide their social security number on the Step 2: Final Rebate Request Form will not be eligible for reimbursement.

For questions regarding this rebate program, e-mail [rshwrebates@puc.nh.gov](mailto:rshwrebates@puc.nh.gov).

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<sup>5</sup> System output is the estimated average annual shade and/or non-optimal tilt & azimuth de-rated output for the installed system.

**APPLICANT INFORMATION:**

Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code \_\_\_\_\_  
Street Address (if different): \_\_\_\_\_  
Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone: \_\_\_\_\_ Cell: \_\_\_\_\_  
Email Address: \_\_\_\_\_

What is your Home Heating Index? \_\_\_\_\_ visit <http://www.nhsaves.com/homeheating/> to determine this calculation.

Have you performed an energy audit of your home and undertaken energy efficiency measures? **YES**  **NO**

*If yes, please summarize your activities:*

Energy conservation improvements are generally the most cost effective means of reducing your energy consumption. If you would like to learn more about improving energy efficiency, please visit [www.nhsaves.com](http://www.nhsaves.com), <http://necarbonchallenge.org/index.jsp>, [http://extension.unh.edu/news/2009/09/energy\\_answers\\_info\\_line\\_opens.html](http://extension.unh.edu/news/2009/09/energy_answers_info_line_opens.html) and [www.energystar.gov](http://www.energystar.gov).

**DWELLING INFORMATION**

	YES	NO
Is your dwelling located within a locally designated historic district?		
In what year was your dwelling originally built?		
If the dwelling is located in a locally designated historic district you are advised to seek approval from your historic commission.		

Please indicate the type of dwelling being used for the installation:  
**Single family home**       **Duplex/Townhouse**       **Condo**       **Other**

**SOLAR WATER HEATING SYSTEM INFORMATION:**

You are strongly encouraged to review information about [Solar Water Heaters](#) available from the U.S Department of Energy.

**INSTALLATION INFORMATION:**

Anticipated start date: \_\_\_\_\_ Anticipated date of completion: \_\_\_\_\_

Will you install the solar water heating system yourself? **YES**  **NO**

If yes, please initial here indicating that you are requesting a waiver of the requirements that you must provide a signed contract with a primary installer or vendor. **Initials:** \_\_\_\_\_

**System Description (check one or both below):**

Solar Domestic Hot Water       Solar Thermal Space Heating

**INSTALLER:**

Company or Organization Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone: \_\_\_\_\_ Cell \_\_\_\_\_

Email : \_\_\_\_\_

**Years of Experience in Solar Installation:** \_\_\_\_\_**ELECTRICIAN (please provide this information if you plan to use an electrician):**

Name (if different than installer): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone: \_\_\_\_\_ Cell \_\_\_\_\_

NH Electrician license number: \_\_\_\_\_

**Years of Experience in Solar Installation:** \_\_\_\_\_**PLUMBER (please provide this information if you plan to use a plumber):**

Name (if different than installer): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Town/City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code \_\_\_\_\_

Telephone: \_\_\_\_\_ Cell \_\_\_\_\_

NH Plumber license number: \_\_\_\_\_

**Years of Experience in Solar Installation:** \_\_\_\_\_**NEW EQUIPMENT INFORMATION:**Please indicate the SRCC certification for your installation: **OG-100**  **OG-300** **IF YOUR COLLECTOR IS NOT SRCC CERTIFIED, YOU ARE NOT ELIGIBLE FOR THE STATE OR FEDERAL REBATE.****COLLECTOR (either panels or evacuated tubes)**

Manufacturer \_\_\_\_\_ Model Number \_\_\_\_\_

SRCC Certification Number \_\_\_\_\_

Number of collectors \_\_\_\_\_ BTU Rating per collector \_\_\_\_\_

(# of collectors x BTU Rating for mildly cloudy C conditions)

Total BTU rating (# of collectors x BTU rating per collector). \_\_\_\_\_

**OTHER COMPONENTS**

Product	Manufacturer	Model Number	Storage Capacity (Gallons)	Number of Tanks
Storage Tank				
Control Panel			N/A	N/A
Circulation Pump			N/A	N/A

**SYSTEM BEING INSTALLED:**

For the solar water heating system being installed, please indicate the type of back-up heating system:

Direct  Indirect

(A direct system has a heating element installed inside of the hot water storage tank. An indirect system utilizes a boiler to supply back-up heat to the storage tank.)

What is the fuel source for the **NEW** back-up system?

electric  natural gas  propane  oil  other  (please describe)

**REPLACED EQUIPMENT INFORMATION:**

Are you replacing a hot water heater? Yes  No

Please provide the following information on the water heater being replaced.

Manufacturer	Model Number	Storage Capacity (Gallons)	Estimated Installation Date

What was the fuel source for the replaced water heater?

electric  natural gas  propane  oil  other  (please describe)

For the **REPLACED** installation, please indicate the type of back-up heating system:

Direct  Indirect

(A direct system has a heating element installed inside of the hot water storage tank. An indirect system utilizes a boiler to supply back-up heat to the storage tank.)

**ANNUAL BTU PRODUCTION:**

Note: The applicant must provide a detailed site map that illustrates all obstructions and their respective heights and distances from the system as well as panoramic photos of the horizon taken from the installation location from due east through south to due west. A shading analysis must also be provided.

**Azimuth\*** (180°=true south): \_\_\_\_\_ Degrees.      **Tilt\*** (horizontal=0°) = \_\_\_\_\_ Degrees.

1. Optimal Annual Production (BTU): \_\_\_\_\_ (Multiply your total rated daily output x 365)

\* The optimal azimuth is +/- 180° and tilt is +/- 43.2° for Concord, NH, but will vary by latitude.

2. Percent loss from shading \_\_\_\_\_ %

Note: The shading percentage must be supported with documentation from either the Solmetric SunEye or Solar Pathfinder tool, including a snapshot of the tool; a supplemental site analysis report by a professional installer is strongly recommended. You may enter 0% loss if no obstruction is closer than 3 times the height that the obstruction extends above the collectors.

3. Actual Annual Production (MMBTU): \_\_\_\_\_

Optimal annual production x (100 % - % loss from shading) x (100 % - % loss from non-optimal tilt and/or azimuth)\*\*

Note: You must include either a site analysis report, such as the one available through the Solar Pathfinder (or equivalent) assistant software, or show detailed calculations for the actual annual production, derated for non-optimal tilt angle, azimuth and/or shading. Please see the Solar Thermal Q & A section for an example of a Solar Pathfinder site report and a manual calculation.

**\*\*Show Calculation:** \_\_\_\_\_

**REQUIRED ATTACHMENTS:**

These items (copies) **must** be attached to the application

Attached

- 1. Signed contract with qualified installer or evidence of intent
- 2. Detailed site map
- 3. Quantified shading analysis (results from Solar Pathfinder or Solmetric SunEye report)
- 4. Photos of the installation site
- 5. Results of your Home Heating Index calculation.

*Note: In the final rebate request form (Step 2) you will be expected to provide paid invoices, pictures of the installation, a copy of your building permit and documentation that the system has been inspected by a local building code official or NH licensed electrician/plumber, unless the installation team includes a NH licensed plumber.*

**REBATE CALCULATION:**

<b>1</b>	Enter number of collectors installed in this installation.	
<b>2</b>	For systems with annual output of 6 MMBTU up to 19.9 MMBTU enter \$600, systems with annual output of 20 MMBTU up to 29.9 MMBTU enter \$750, for systems with annual BTU output of 30 MMBTU or more enter \$900. <i>Use actual annual production, taking into account azimuth, tilt, and shading, from page 6 number 3</i>	
<b>3</b>	<b>Total Requested State Rebate ONLY</b>	

**SOLAR WATER HEATING REBATE PROGRAM: STATE REBATE DECLARATION  
ALL APPLICATIONS MUST BE COMPLETE AND NOTARIZED.**

**DECLARATION:**

The Undersigned applicant declares under penalty of perjury that:

- 1) the applicant intends to purchase and install the solar water heating system described in this application;
- 2) the applicant has read and understands the terms and conditions set forth in this application with attachments and has agreed to abide by those requirements;
- 3) the information provided in this form is true and correct to the best of his or her knowledge;
- 4) the applicant agrees that the system and documents supporting the application may be audited and inspected by the Commission or an agent of the Commission; and,
- 5) the applicant agrees that in order to receive payment, Step 2 must be completed and submitted according to instructions provided in that application.
- 6) if the dwelling is located in a locally designated historic district it will meet the specifications of the National Historic Preservation Act.

Applicant's Signature \_\_\_\_\_ Date: \_\_\_\_\_

Only one signature needed per household.

Subscribed and sworn before me this \_\_\_\_\_ (day) of \_\_\_\_\_ (month) in the year \_\_\_\_\_  
County of \_\_\_\_\_ State of \_\_\_\_\_

\_\_\_\_\_  
Notary Public/Justice of the Peace  
My Commission expires \_\_\_\_\_

**APPLICATIONS FOR THE FEDERAL REBATE REQUIRE AN ADDITIONAL DECLARATION**