



## State of New Hampshire Public Utilities Commission

21 S. Fruit Street, Suite 10, Concord, NH 03301-2429

### SOLAR WATER HEATING REBATE PROGRAM

*Thank you for your interest in the Commission's Solar Water Heating Rebate Program.*

Welcome to the Commission's Solar Water Heating Rebate program. We are administering two rebate programs to encourage New Hampshire residents to install solar water heating systems. Both rebates are being handled with a two step process. Step 1 is a pre-approval that is likely to require the assistance of an installer. Once you submit the Step 1 application, staff will review your application and contact you with any questions that may arise regarding your proposed system. When your system is approved you will receive a letter letting you know that you are in the funding queue. After your system is completed, you need to submit a Step 2 application with all stated requirements in order to receive your rebate payment.

The two rebates being offered include:

- **Step 1: Part A.** This rebate is funded through New Hampshire's Renewable Energy Fund, established by the Legislature under [RSA 362-F](#). Up to \$875 is available for this program, depending on the size of your solar heating installation.
- **Step 1: Part B.** This rebate provides an additional **\$750** for consumers replacing existing hot water heaters with qualifying solar water heating systems. The funding available through Part B has been made possible through the American Recovery and Reinvestment Act of 2009 and the Office of Energy & Planning and requires some additional qualifications. Please read both of the following applications to determine what will work best for your project.

#### **Pre-approval is required for both Step 1: Part A and Part B.**

- **Step 2 is the final rebate request form.** The rebate pre-approval expires 12 months from the date this application is approved. The only exception to this is that all **Part B** Step 1 & Step 2 applications must be completed in total and submitted to the Commission by 2-17-2012. Step 2 requires the following:
  - provide 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 electrician;
  - documentation of the installation's rated annual BTU output;
  - building permit or other documentation that the facility meets local zoning regulations; and,
  - (ONLY if the dwelling is over 50 years old and you are requesting Step 1: Part B rebate funding, a copy of State Historic Preservation Act approval).



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



**STEP 1: PART A**  
**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 Part A expires 12 months from the date this application is approved.<sup>1</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. Only systems installed after April 19, 2010 are eligible for this funding.

**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 the form.**

- Any applicant requesting a rebate payment for any renewable energy system is responsible for meeting all terms and conditions of the program.
- The rebate payment schematic follows:

Annual System Output	Estimated Investment	NH Rebate: Part A *	Federal ITC 30%	Final Investment after Rebates	Total % Incentivized
10,000,000 BTU up to 19,999,999 BTU	\$8,000	<b>\$500</b>	\$2,100	\$5,400	32.5%
20,000,000 BTU up to 29,999,999 BTU	\$10,000	<b>\$750</b>	\$2,550	\$6,700	33%
30,000,000 BTU or greater	\$12,000	<b>\$875</b>	\$3,000	\$8,125	32.3%

**\*This does not include the \$750 additional rebate available for those systems that qualify for Part B.**

- Installed system output, using either evacuated tubes or panels, must meet [Solar Rating and Certification Corporation \(SRCC\)](http://www.solar-rating.org/default.htm) standards in order to qualify for the rebate payment. (See <http://www.solar-rating.org/default.htm> for more information.)

<sup>1</sup> Note that all funding allocated through Part B of this application must be dispersed by February 17, 2012.

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. **Only solar water heating systems installed after April 19, 2010 are eligible for to receive either Part A or Part B rebates.**
6. Installations in new construction are not eligible for the rebate.
7. 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.
8. 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.
9. This rebate payment 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.
10. 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. Home owners may self-install, but it is strongly recommended that homeowners work with either a professional or with a group like the Plymouth Area Renewable Energy Initiative.
11. Adding system output to an existing solar water heating system or replacing solar water heating equipment does not constitute an eligible project.
12. The solar water heating system must be located on or at New Hampshire residences with full time occupancy; **second homes do not qualify for this rebate program.**
13. Used parts or self-installer labor cannot be included in the cost of the facility.
14. All solar water heating systems must comply with all 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.
15. 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.
16. All program requirements and documentation must be complete and submitted in order to receive approval for an rebate payment. Payment of the rebate may be subject to inspection of the facility by an agent of the Commission to confirm that the system is operating as described in the application.
17. Certain information, including 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. Specific personal information including Social Security number, name, telephone numbers, and email, street and mailing addresses (but not town or zip code) will remain confidential to the extent permitted under state law.
18. The Commission reserves the right to request system performance data for a period of ten (10) years after issuing the rebate.
19. The rebate recipient may 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 this program 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, see the rebate program FAQ website at [www.puc.state.nh.us/Sustainable%20Energy/RenewableEnergyRebatesQAs-residential.htm](http://www.puc.state.nh.us/Sustainable%20Energy/RenewableEnergyRebatesQAs-residential.htm), \*\*\*or contact Barbara Bernstein at [barbara.bernstein@puc.nh.gov](mailto:barbara.bernstein@puc.nh.gov) or (603)271-6011.

## APPLICANT INFORMATION

Name: \_\_\_\_\_

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

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

Street Address (if different): \_\_\_\_\_

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

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

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

Are you aware that energy conservation improvements are generally the most cost effective means of reducing your energy consumption? **YES** ☐ **NO** ☐

What is your Home Heating Index?	_____	visit <a href="http://www.nhsaves.com/homeheating/">http://www.nhsaves.com/homeheating/</a> to determine this calculation.
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Have you performed an energy audit of your home and undertaken energy efficiency measures? **YES** ☐ **NO** ☐

*If yes, please summarize your activities:*

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).

## SOLAR WATER HEATING SYSTEM INFORMATION

Have you reviewed information about SDHW systems available at [http://www.energysavers.gov/your\\_home/water\\_heating/index.cfm/mytopic=12850](http://www.energysavers.gov/your_home/water_heating/index.cfm/mytopic=12850)? **YES** ☐ **NO** ☐

## 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 below**

Solar Domestic Hot Water ☐ Solar thermal 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, your installation is not eligible for either Part A or Part B rebate.**

### COLLECTOR (either panels or evacuated tubes)

Manufacturer	Model Number	SRCC Certification Number
BTU Rating of Collectors (Btu/day)[or kBtu/day to be consistent with SRCC ratings summary, Clear C conditions]	Number of collectors	Total BTU Rating (# of collectors x BTU Rating)

**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

Please verify that your system includes freeze protection YES ☐ NO ☐

For the **NEW** 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.)

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

electric ☐ natural gas ☐ propane ☐ oil ☐ other ☐ (please describe)

**REPLACED EQUIPMENT INFORMATION**

Product	Manufacturer	Model Number	Storage Capacity (Gallons)
Water Heater/Storage Tank			

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.)

Please check the fuel source of the **REPLACED** hot water heating system:

electric ☐ natural gas ☐ propane ☐ oil ☐ other ☐ (please describe)

**PERCENT OF OPTIMAL BTU PRODUCTION**

Note: The applicant must provide a detailed site map that clearly 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 if the applicant cannot claim 0% shading below.

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

1. Optimal Annual Production (BTU): \_\_\_\_\_

Go to [www.nrel.gov/rredc/pvwatts](http://www.nrel.gov/rredc/pvwatts) or use Concord, NH as a default at:

[http://rredc.nrel.gov/solar/codes\\_algs/PVWATTS/version1/US/New\\_Hampshire/Concord.html](http://rredc.nrel.gov/solar/codes_algs/PVWATTS/version1/US/New_Hampshire/Concord.html). Use total array output, optimal azimuth (180°) and tilt (43.2° for Concord or actual latitude), no shading, and .77 derating factor.

2. Actual Annual Production without Shading (BTU): \_\_\_\_\_

Use total facility output, actual tilt and azimuth, .77 derating factor, and no shading.

3. Percent loss from shading: \_\_\_\_\_ %

Use a Solmetric SunEye, Solar Pathfinder, or other similar device to quantify the percent loss from shading. You may enter 0% loss from shading if no obstruction is closer than 3 times the height that the obstruction extends above the solar collectors.

## REQUIRED ATTACHMENTS

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

Attached

1. Signed contract with qualified installer or evidence of intent (if applicable) ☐
2. Detailed site map and Solmetric SunEye or Solar Pathfinder analysis and photos of the installation site ☐
3. Quantified shading analysis if applicant cannot enter 0% shading  
(See note in Percent Optimal Production.) ☐
4. Results of your Home Heating Index calculation. ☐

Note: In the final rebate request form 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 electrician.

## REBATE CALCULATION

1	Enter number of collectors installed in this installation.	
2	For systems with rated annual output of 10 million BTU up to 19,999,999 BTU enter \$500, systems with rated annual output of 20 million BTU up to 29,999,999 enter \$750, for systems with annual rated BTU output of 30 million or more collectors enter \$875.	
3	<b>Total Requested Rebate Part A ONLY</b>	

**IF YOU ARE APPLYING FOR THE PART B REBATE, THE REBATE CALCULATION IS FOUND ON PAGE 9.**

### SOLAR WATER HEATING REBATE PROGRAM PART A DECLARATION ALL APPLICANTS MUST COMPLETE AND NOTARIZED

**NOTE: APPLICATIONS FOR PART B REQUIRE AN ADDITIONAL DECLARATION  
THAT MUST ALSO BE COMPLETED**

## DECLARATION –

The Undersigned applicant declares under penalty of perjury that:

- 1) the applicant intends to purchase and install the SDHW 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.

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 \_\_\_\_\_



## PART B: STATE ENERGY EFFICIENT APPLIANCE REBATE PROGRAM

ADDITIONAL \$750

For a limited time and on a first come first serve basis, residents who are replacing an existing domestic water heating system with an eligible solar system at their primary residence are eligible for an additional \$750. This funding is offered through the American Recovery and Reinvestment (ARRA) Act and the State Energy Efficient Appliance Rebate Program (SEEARP).

In addition to the information provided in Part A of the **Step I, INCENTIVE PRE-APPROVAL APPLICATION FOR RESIDENTIAL SOLAR WATER HEATING SYSTEMS** the SEEARP Program requires the following additional information. Please note that there is no obligation to apply for this portion of the rebate program if you determine that it is not in your best interest to do so.

Part B rebate funding **may not be used** to finance:

- a solar hot water installation on a new construction project, or
- projects for businesses, non-profits, or second home owners.

*Please check YES or NO to the following. If your installation does not meet these specifications, you do not qualify for the additional \$750 rebate.*

### SYSTEM INFORMATION

1.	Your solar water heating system must meet the following product eligibility requirements. Please check if your system qualifies:	YES	NO
1.a	a <a href="#">Solar Rating and Certification Corporation (SRCC)</a>		
1.b	The solar collector has a solar fraction of greater than or equal to .5		

2.	To be eligible for the Part B rebate, the new solar water heating system must do one of the following. Please check the category that applies to your system:	YES	NO
2.a	Replacement of the existing non-solar water heating system		
2.b	Replacement of a solar water heating system that has been damaged or destroyed. (Part A of the application must be completed.)		

### WARRANTY INFORMATION

3.	Do you have the following warranties for your system:	YES	NO
3.a	A warranty of at least 10 years for your solar collector?		
3.b	A warranty of at least 6 years for your storage tank(s)?		
3.c	A warranty of at least 2 years for your controls?		
3.d	A warranty of at least 1 year for other parts used in the system?		



**DWELLING INFORMATION****4. In what year was your dwelling originally built?**

If the dwelling is over 50 years of age and you are applying for Part B of this application, you may need to meet the specifications of the National Historic Preservation Act. Contact the Commission ([barbara.bernstein@puc.nh.gov](mailto:barbara.bernstein@puc.nh.gov) 603-271-6011) regarding any project that may trigger [State Historic Preservation Office](#) review.

**4.1** Please indicate the type of dwelling being used for the installation:**Single family home** ☐ **Duplex/Townhouse** ☐ **Condo** ☐ **Other** ☐**REPLACED SYSTEM INFORMATION****5.** Please tell us what you have done with the domestic hot water heater being replacedRecycled\*\* ☐ Where was it recycled?Disposed of in Landfill ☐Other ☐ Please describe:

\*\*It is highly encouraged for domestic hot water systems to be recycled. Please request the installer to verify the system has been recycled.

**INVESTMENT CALCULATION**

		Dollars Spent
<b>6.a</b>	<b>Total Installation Cost</b>	
<b>REBATE CALCULATION</b>		
<b>6.b</b>	Rebate from Part A	
<b>6.c</b>	Rebate from Part B	\$750.00
<b>6.d</b>	Total Rebates (Total Rebate Part A + Part B)	
<b>6.e</b>	Subtotal Installation Cost (6.a – 6.d)	
<b>FEDERAL TAX CREDIT</b>		
<b>6.f</b>	Federal Tax Credit (30% of 6.e, Subtotal)	
<b>TOTAL INCENTIVE</b>		
<b>6.g</b>	Total Rebates + Federal Tax Credit (6.d + 6.f)	
<b>YOUR TOTAL INVESTMENT</b>		
<b>6.h</b>	Total Investment (6.a – 6.g)	

**ALL APPLICANTS REQUESTING PART B REBATE FUNDING MUST COMPLETE  
AND NOTARIZE BOTH THE PART A AND THE PART B DECLARATION**

**STATE ENERGY EFFICIENT APPLIANCE REBATE PROGRAM  
PART B**

**DECLARATION –**

The Undersigned applicant declares under penalty of perjury that the applicant:

- 1) Has read and understands the terms and conditions set forth in this application with attachments and has agreed to abide by those requirements.
- 2) Ensures the information provided in this form is true and correct to the best of his or her knowledge; and
- 3) Agrees to retain all paperwork associated with this application for at least 3 years after the completion date.
- 4) Agrees that the system and documents supporting the application may be audited and inspected by the Commission or an agent of the Commission.
- 5) Will provide (Step 2) an original sales receipt showing the date of the purchase and the make/model number of the components of the installation.
- 6) Will provide (Step 2) as proof of payment either a copy of the canceled check or credit card receipt.
- 7) Will provide (Step 2) a copy of the building permit if required by your municipality.
- 8) Certifies that the appliance purchased is replacing an existing hot water heating system. Under no circumstances will the rebate be used to finance a solar hot water heater that is being installed on a new construction project.
- 9) Is a resident of the State of New Hampshire.
- 10) Is installing the solar water heating system at their primary residence. Under no circumstance will the rebate be available to businesses, nonprofits or second home owners.
- 11) Ensures that the water heating system will be placed into service after the commencement of the program.
- 12) Ensures that the solar water heating system being installed is:
  - a. SRCC certified,
  - b. Has a solar fraction rating greater than or equal to .5
  - c. Meets the following warranty requirements:
    - i. Solar Collector  $\geq$  10 years
    - ii. Storage Tank  $\geq$  6 years
    - iii. Controls  $\geq$  2 years
    - iv. Parts  $\geq$  1 year.
- 13) Has never previously received a rebate from the State Energy Efficient Appliance Rebate Program for the aforementioned solar water heating system.

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 \_\_\_\_\_

For questions regarding this rebate program, see the rebate program FAQ website at [www.puc.state.nh.us/Sustainable%20Energy/RenewableEnergyRebatesQAs-residential.htm](http://www.puc.state.nh.us/Sustainable%20Energy/RenewableEnergyRebatesQAs-residential.htm), or contact Barbara Bernstein at [barbara.bernstein@puc.nh.gov](mailto:barbara.bernstein@puc.nh.gov) or (603)271-6011.