



Understanding Rebates for SOLAR WATER HEATING SYSTEMS

California Solar Initiative (CSI)-Thermal Program

What is

SOLAR WATER HEATING?

A solar water heating system (SWH) captures the warmth of the sun, transfers that heat to water, and works with your conventional water heater or boiler to help it use less energy.

Unlike solar power systems (photovoltaics or "PV") that collect light energy (photons) from the sun and convert it into electricity, solar water heating systems absorb the heat energy of the sun and use it to heat water. Since it involves heat energy, the technology is referred to as solar thermal.

What are its **BENEFITS**?

Solar water heating can have a number of benefits for single-family residences, multi-family dwellings and commercial enterprises. They include:

- Reducing the amount of energy used to heat your water;
- · Lowering the cost of heating your water;
- · Reducing harmful greenhouse gas emissions; and,
- Helping your home or business become more sustainable.

The more hot water you use in your home or business, the more energy savings you can achieve. Your solar water heating system can be scaled to meet your needs by installing a tank with sufficient hot water storage capacity and adjusting the number of solar collectors installed.

California Solar Initiative (CSI)-THERMAL PROGRAM

The CSI-Thermal Program offers cash rebates to single-family residential, multi-family dwelling owners and business customers who: 1) heat their water with electricity, natural gas or propane; 2) install a qualifying solar water heating system; and, 3) are customers of one of the four investor-owned utilities in the state*:

- Southern California Gas Company (SoCalGas®)
- Pacific Gas and Electric Company® (PG&E)
- Southern California Edison® (SCE)
- San Diego Gas & Electric Company® (SDG&E®)-California Center for Sustainable Energy® (CCSE) is the Program Administrator in the SDG&E® service territory

^{*}Restrictions, requirements and qualifications apply.

How much are the **REBATES**?

The CSI-Thermal Program will run until December 31, 2017, or until the rebate money runs out. Rebates will decrease in a four-tiered declining incentive structure over the life of the program, which means the rebate amounts will be reduced over time independently in each service territory as more systems are installed for each service class. The earlier you apply, the more you may be eligible to receive. Rebates are based on how much energy the solar water heating system is expected to displace annually.

For Single-family Residential Properties:

The maximum rebate that can be awarded to single-family residential customers is \$2,719 for natural gas-displacing systems and \$1,834 for

electric- or propane-displacing systems.

- Income-eligible natural gas customers who are participating in a California Public Utilities Commission-approved gas corporation Energy Savings Assistance Program, or a residence occupied by renters that meets the requirements in Public Utilities Code (PUC) Section 2861(e), can receive rebates up to \$3,750.
- For Commercial/Multi-family Properties:

 The maximum rebate that can be awarded to commercial and multi-family customers is \$500,000 for natural-gas displacing systems and up to \$250,000 for electric- or propane-displacing systems.
 - Multi-family dwellings that qualify for the incomeeligible program receive a higher rebate level up to a maximum of \$500,000 through the end of the program.



Who is eligible for a **REBATE**?

Customers of the four investor-owned utilities who heat their water with electricity, natural gas or propane are eligible in the following categories:

- Single-family Residential Homeowners:
 - Examples of rebate-eligible domestic hot water (DHW) uses include drinking, food preparation, sanitation and personal hygiene, but do not include space heating, space cooling, swimming pool heating or spas.
 - Rebates for single-family electric customers are available for retrofits only, not new construction.
- Multi-family Dwellings: Owners of multi-family dwellings of five or more units that deliver hot water to their tenants
 - Examples of rebate-eligible properties include apartment buildings and senior communities that use domestic hot water for the same purposes as residential homeowners to qualify for the rebates.
- Commercial and other Non-Residential Customers: Eligible commercial hot water end uses include drinking, laundry, dishwashing, cleaning and sanitation, rather than water heating for some other end uses.
 - Examples of rebate-eligible businesses include commercial laundries, gyms, laundromats, restaurants, convalescent homes, hotels/motels, school dormitories, prisons, agricultural processes, hospitals, food processors and car washes.

Who can install a

REBATE-ELIGIBLE SYSTEM?

To be eligible for a CSI-Thermal Program rebate, a qualifying SWH system must be installed in one of the two following ways:

- By an eligible contractor
 - To be eligible, a contractor must be licensed by the State of California Contractors State License Board (CSLB); have an active A (Engineer), B (General), C-4 (Boiler, Hot Water Heating and Steam Fitting), C-36 (Plumbing) or C-46 (Solar) contractors' license; and be in accordance with rules and regulations adopted by the CSLB.
 - Contractors must also attend a CSI-Thermal contractor/installer training workshop presented by one of the Program Administrators to be certified in the program.
 - Each contractor who meets these requirements is included in the CSI-Thermal Program's list of eligible contractors that is publicly available.
- By a self-installer

Self-installations are permitted in the CSI-Thermal Program. Homeowners or building owners who choose to install a SWH system on their property must attend a CSI-Thermal Program contractor/installer training workshop for their SWH system to be eligible for a rebate.

 Self-Installers are also required to comply with all applicable laws, codes, regulations, permits and installation requirements.

Tips for choosing a **CONTRACTOR**

Selecting the right contractor is one of the most important decisions you can make when installing a solar water heating system. Following these tips will help you make an informed decision:

- Interview a minimum of three eligible contractors and obtain written bids from each for comparison.
 A link to a list of eligible contractors can be found at the CSI-Thermal section of each Program
 Administrator's website.
- Request references from previous customers and review past installations to ensure the costs were reasonable, the customers were satisfied and the systems are performing properly.

- Verify that the contractor's license is current and active at www.cslb.ca.gov. The contractor must hold an A. B. C-4. C-36 or C-46 license.
- Make sure all quotes for the project are in writing.
 Only sign a contract if you fully understand the terms and have determined that the costs are within reason.
- Never provide more than 10 percent of the system's cost for an up-front deposit and do not make final payment until the system is installed and operating properly.
- Do not hesitate to ask the contractors questions about their businesses, system recommendations or anything you may not understand.

What are the **SWH SYSTEM REQUIREMENTS**?

Solar water heating systems must be rated by the Solar Rating and Certification Corporation (SRCC) or the International Association of Plumbing and Mechanical Officials (IAPMO):

- Single-family Residential systems must have OG-300 certification
- Commercial/Multi-family collectors must have OG-100 certification

System installations must conform to manufacturers' specifications and all applicable codes and standards. All systems must have freeze and overheat protection.

To learn more about solar water heating and the CSI-Thermal Program, visit:

water heated by the sun.com









This brochure is intended to be an overview and introduction to the CSI-Thermal Program. The California investor-owned utilities and Program Administrators do not guarantee the quality or performance of any contractor and are not responsible for any goods or services selected.

The CSI-Thermal Program is funded by California investor-owned utility customers and is administered by regional Program Administrators under the auspices of the California Public Utilities Commission.

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