



How Much Money Can I Save?

The amount of money saved on energy costs depends on the:

- Size of your solar collector and storage tank,
- Average temperature of your incoming cold water,
- Amount of sunlight in your region, and
- Amount of water you use.

On average, the typical family uses about 20 gallons of hot water per person each day. Finding a more cost-effective method to heat your water can accumulate into substantial savings.

According to the U.S. Department of Energy, use of a solar water heater should decrease your water heating bills by 50 to 80 percent. Also, because the sun is readily available to everyone at no cost, you're protected from energy price hikes.

Information is available online to help you estimate your cost and payback period for the installation of a solar water heating system. Visit the Web site www.solar-estimatr.org to calculate the estimated cost and payback period for your home.

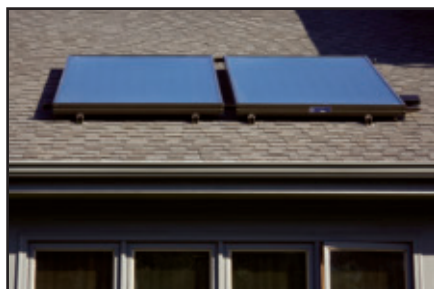
What Equipment Is Necessary?

While there are many possible designs for a solar water heating system, it generally consists of three components:

- Solar Collector – absorbs solar radiation and converts it into useable heat.
- Solar Pump and Controller – transfers heat from the solar collector to the storage tank.
- Storage Tank – stores the heated water.

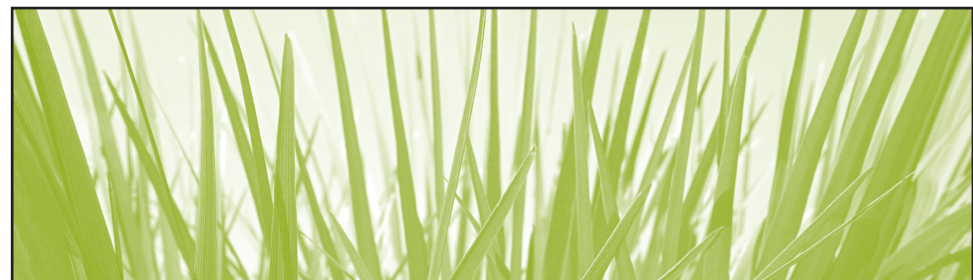
How Visible Are Solar Collectors And Where Should They Be Placed?

Solar collectors are the largest component of a solar water heating system, and most homes require one to three collectors. Modern solar collectors are attractively finished and look similar to low-profile skylights. For optimal performance, collectors should be on an unshaded, south-facing roof or wall that receives sunlight at least 80 percent of the time between 9 a.m. and 3 p.m. during winter and summer.



How Is The Water Temperature Regulated?

Generally, the storage tank stores hotter water than you would use. Mixing valves regulate the amount of solar heated water that's combined with incoming cold water, blending it to the desired temperature.



Do I Need A Backup System?

Yes. Solar water heating systems are combined with a conventional water heating device as a backup source to ensure a steady supply of hot water. During periods of extended cloudiness, the solar water heating system may not be able to provide for all your water needs, but it will preheat water so the conventional water heating device doesn't have to work as hard.

Is A Solar Water Heating System Equally Feasible On Old And New Homes?

Absolutely. It may cost slightly more to retrofit a system to an existing water heater, but the energy savings make both options cost-effective. In addition to providing years of savings to a homeowner, a solar water heating system increases the resale value of a home.



How Much Does It Cost To Install A Solar Water Heating System?

The cost varies depending on a number of factors, including the type and size of equipment chosen. In general, the costs are split evenly between equipment and labor. Tax credits and rebates are often available at the state and federal level for the installation of a solar water heating system. More information about costs and rebates is available at these Web sites:

- www.dsireusa.org
- www.solar-estimate.org (From Energy Matters LLC)
- www1.eere.energy.gov/solar (From the U.S. Department of Energy)
- www.seia.org



Can I Install And Maintain The System Myself?

Tackling the installation yourself requires electrical, plumbing and carpentry expertise. If you aren't licensed in these trades, it's best to have the system installed professionally. Regarding upkeep of the system, minimal regular maintenance, similar to what would be needed with a conventional water heater, will ensure good performance of your solar water heating system and maximize energy savings.

What Standards Regulate Solar Products And Equipment?

Solar water heating products are evaluated and rated by the Solar Rating and Certification Corporation (SRCC). Created in 1980, the SRCC is an independent, nonprofit organization that develops and implements certification programs and national rating standards for solar energy equipment. SRCC certification programs help government agencies, utility companies and consumers by providing a basis for tax credit and rebate regulation, as well as a means for setting codes and standards. Many states and utility companies require SRCC certified products to be used in solar installations.

Save Money And The Environment

Using solar water heating technology can significantly reduce water heating costs for your home. Solar water heaters provide a clean, economical alternative to natural gas, electric, oil and propane water heaters.



Knowing that solar technology works well throughout North America, many consumers find that the choice to use solar energy is more about attitude than latitude. Socially responsible consumers want an energy source that's not only economical but environmentally friendly. Solar energy is an abundant, renewable resource that can fulfill energy needs in a way that saves money and protects the environment.



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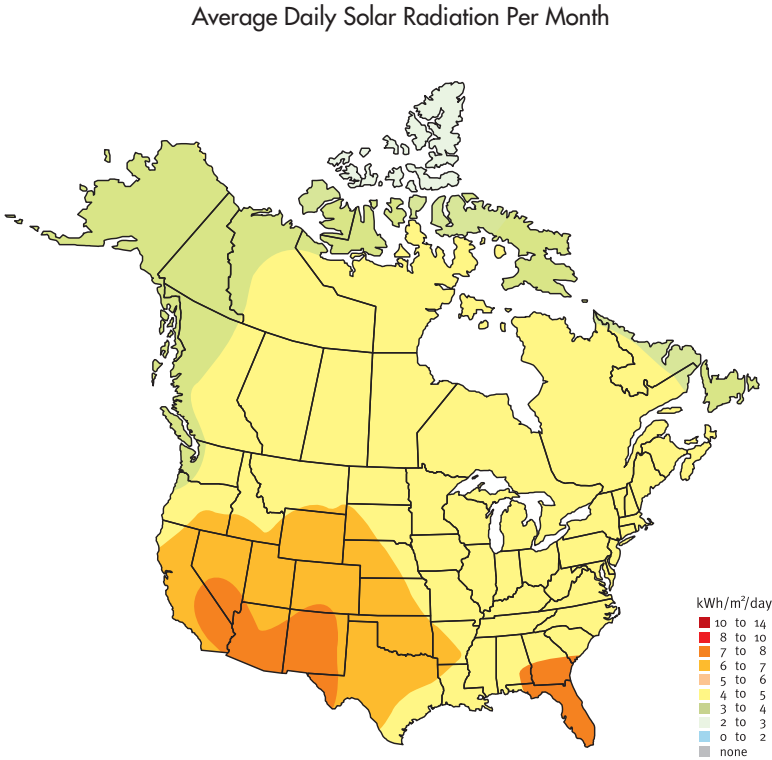
What Is Solar Water Heating And How Does It Work?

Traditionally, conventional water heaters have been used to heat water for the home. Powered by electricity, natural gas, oil or propane, these devices rely on energy that is nonrenewable and can be costly to produce and purchase. Solar water heating, on the other hand, is a simple, clean, economical way to satisfy most of a family’s hot water needs.

A solar water heating system has three main steps. First, sunlight is captured by solar collectors outside, heating liquid inside the collector. Second, heat from the liquid is transferred into hot water. Third, the heated water is stored in an insulated tank until you need it.

Is Solar Water Heating Feasible In My Climate?

Regardless of where you live, the answer is yes. The sun shines everyday, emitting energy even on the cloudiest of winter days. While the percentage of the sun’s rays varies depending on your latitude, solar water heating systems work well throughout North America. Even in latitudes farthest from the equator, solar energy can provide cost-effective heat to satisfy your needs.



Map data from the National Renewable Energy Laboratory Resource Assessment Program (NREL).

A cost-effective, environmentally friendly way to heat water



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Solar Water Heating:
A Brighter Energy Future



A cost-effective, environmentally friendly way to heat water



As attitudes around the world become “greener,” consumers are looking for cleaner, more efficient and cost-effective ways to satisfy their household energy needs.

One ray of hope is solar energy. Available in abundance, more sunlight energy falls on the earth in one hour than is used by the entire global population in one year.

More than ever, products are available to harness that energy and turn it into a viable power source for consumers – particularly to heat the water in their homes. Because solar water heaters deliver the highest number of watts per energy dollar spent compared to other solar options, they’re a wise investment and a natural first step in making your house more energy efficient and environmentally friendly.

As with any new technology, consumers have questions about the application of solar water heating.