

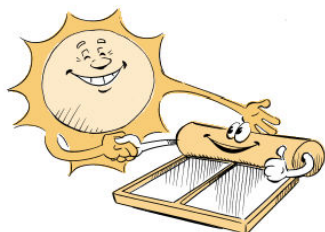
Wash Yourself with Winter Sun

Canberra's Winter Sunshine a gold mine of energy.

Heating water is one of the largest uses of household energy. Water heating in an average house will use between one fifth and one third of all energy consumed, and that costs a lot of money.

Yet most Canberra households are missing out on the substantial financial benefits that could be gained by trapping just some of the free solar energy falling on their roofs. The sunshine falling on the roofs of Canberra's houses is more than adequate to meet nearly all of the annual hot water needs of the average family.

Despite the often chilly winter temperatures Canberra actually enjoys one of the most perfect climates for using solar water heaters because of the high number of clear, sunny days that occur at all times of the year. It is these hours of sunlight far more than the average air temperatures, which determine the output of a good solar water heater.



Average Daily Sunshine

City	12 Mnth Av.	12 Mnth Ranking	4 Mnth Av. (May to Aug)	4 Month Ranking
Darwin	8.4	1	9.9	1
Perth	7.9	2	5.6	5
Canberra	7.6	3	5.8	4
Brisbane	7.5	4	7.1	2
Adelaide	6.9	5	4.6	6
Sydney	6.7	6	6.0	3
Hobart	5.8	7	4.3	7
Melbourne	5.7	8	3.9	8

Source: "Climate of Australia", Bureau of Meteorology, 1989

Those hours of winter sunshine in Canberra are also worth more in energy terms than they are in some of the other cities. Because of the much lower winter temperature of water at the cold tap in Canberra, compared to the other major cities, a lot more energy is

required to heat water up to a useful temperature. The sun can often supply all of this energy. As a result the cash savings generated by solar water heaters are also larger in Canberra than in other major cities.

If the sun cannot deliver enough energy to heat all the water you need, which happens on cloudy winter days, then electricity or gas can be used to boost the supply of hot water from the solar water heater.

Although a solar water heater costs more to buy and install than a conventional gas or electric water heater, in Canberra the savings in ongoing energy consumption can pay back the higher purchase cost in as little as six years. This includes allowance for the cost of boosting energy.

Gas is a cheaper alternative than electricity for boosting, and is also a greener choice (less carbon dioxide emitted per useful energy unit).

Canberra's frosty winters pose no threat to the modern range of commercial solar water heaters. All commercially available models sold in the Canberra area will include frost protection features and manufacturers' warranties on performance.

Two forms of government support.

Federal Government

If you install a solar water heater you may also be eligible for an additional subsidy in the form of Renewable Energy Certificates (RECs). These certificates are issued under 'license' from the Federal Government and are then 'bought' back from you by the retailer providing your system in the form of a price reduction. The number of Certificates that are issued for a solar water heater is based on the estimate of the amount of electricity displaced, so high efficiency systems earn more RECs and systems that replace gas-water heaters earn no RECs at all. Most household systems earn between 20 and 40 RECs. The value of each Certificate depends on the circumstances of exchange, (e.g. the amount a solar water heater retailer is willing to purchase them for), and is currently \$36 per Certificate.