

# Keep electricity costs out of the hot water.



Your geyser is one of the most electricity-hungry appliances in your home. Hot water for laundry, cooking, dishwashing and bathing makes up between 30% and 50% of your household's electricity bill. Using the hot water in your home efficiently makes sense from both a financial and an environmental point of view.

## Conventional electric geysers

### A few easy steps can increase your geyser's energy efficiency.

The average household can save R50 per year by turning the geyser thermostat down to 60°C. Find the optimal thermostat setting according to:

- the number of people in the house.
- how hot you want the water to be at the point of consumption furthest away from the geyser.
- Insulate hot water pipes and use a geyser blanket to limit heat loss and save approximately R280 per year.
- Install an aerated shower head and take showers rather than baths. These two measures alone can save you almost R300 per year.
- A lot of hot water is wasted in the kitchen without us even realising it. Because the geyser starts working every time you use hot water, opening the tap to fill a kettle or rinse vegetables means that you use enough electricity to power 100 portable radios. Only open the hot water tap when you specifically need hot water.

- Rinsing dishes under a running hot water tap is particularly wasteful.
- Boil the kettle for the quantity of hot water you need.
- Boil enough water to fill a thermos flask and store for later use.
- A hot water tap left dripping at a rate of one drop (1 ml) every two seconds, not only wastes water but also costs you around R330 per year in electricity.



## Solar water heating systems

Because water heating accounts for almost half of the electricity consumed by the average household, many people have begun installing solar water heaters. A solar water heating system can reduce the cost by 35%, depending on whether the system selected has an electric back-up or not.

Solar water heaters can be plumbed to add volume to existing geysers or replace them altogether. The complete system can be mounted on the roof, if it can support the mass, or the hot water cylinder can be mounted under the roof or even at ground level in a utility room or cupboard.

### The right solar water heating system

Select a solar water heating unit that will fulfil the hot water needs of your home. Units that are too small will not provide enough hot water; therefore a slightly oversized storage container is usually recommended. The extra volume in an oversized container also makes allowances for cloudy days. But take caution not to oversize too much or the entire unit will become uneconomical and take longer to pay back.

### Keep your solar water heating system effective

- Solar collectors should be placed in areas of uninterrupted sunlight, bearing in mind one's global position and altitude.

- Partial shading from small obstructions such as TV antennae is fine, as long as not more than 10% of the solar collector's surface area is covered.
- Keep your solar collectors clean. The glass panels should be washed clean at least once every three months during the rainy season and once every month over the remainder of the year.
- Aerated shower heads and taps will greatly reduce hot water consumption, while all hot water piping should be insulated to minimise heat loss.

It's a common misconception that solar water heating systems are too expensive to be worthwhile for home use. Given that a good quality system should last approximately 30 years, the system will have paid for itself long before the end of its service life.

For more information please visit [www.eskom.co.za/dsm](http://www.eskom.co.za/dsm)



Issued by: Group Communications Department  
Issue date: March 2008