

Get a discount with Eskom's solar water heating programme

- Eskom, government and the National Energy Regulator are committed to helping South Africans enjoy energy efficient lifestyles.
- As part of a programme to promote solar water heating in South Africa, Eskom is offering a discount to all customers who install solar water heating through an Eskom accredited and SABS approved supplier.

Think green. Save electricity and save our planet with solar water heating.

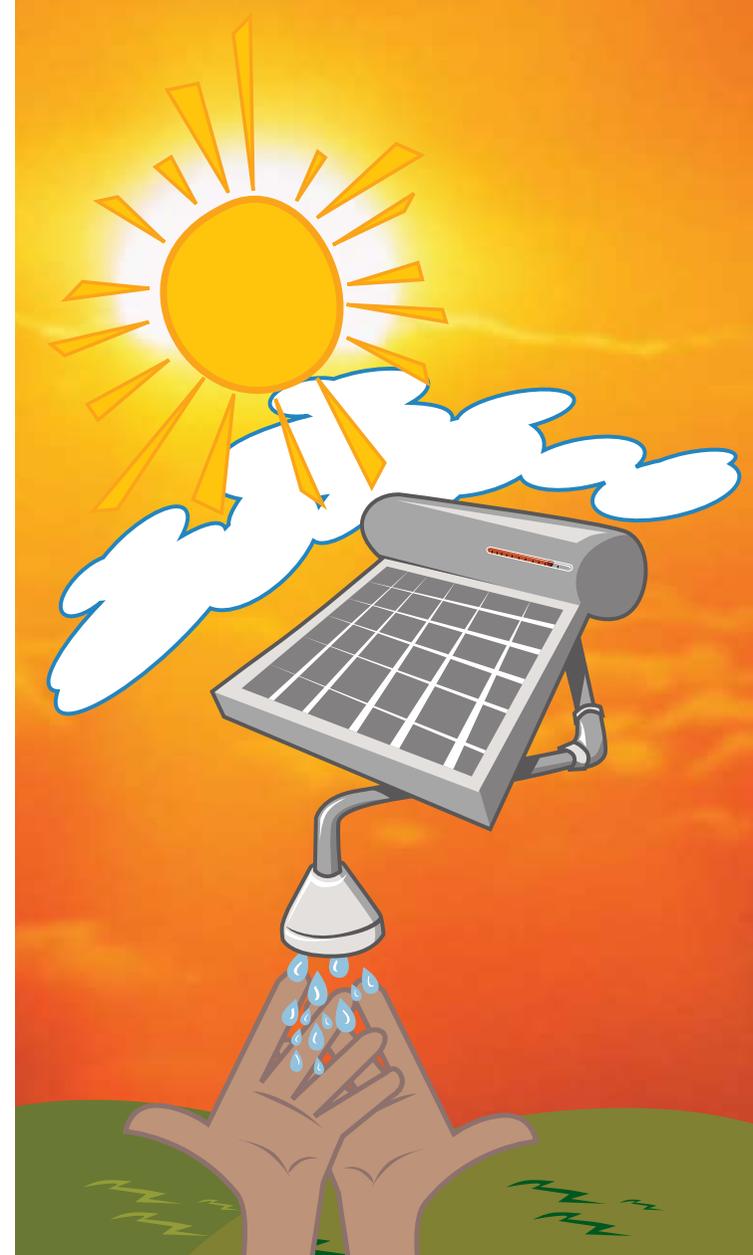
Reduce the amount of electricity you use and help prevent power shortages. It cuts down on the amount of natural resources (such as coal) we need to generate electricity. What's more, with solar energy, there's no pollution and no harm to the environment. Reduce your carbon footprint, and enjoy unlimited energy with solar water heating.

For more information and a full list of accredited and SABS approved suppliers, visit www.eskom.co.za/dsm (click on solar water heating link)

For more information about Eskom's discounted solar heating programme and a list of accredited suppliers, visit www.eskom.co.za/dsm (click on the solar water heating link) or call the EEDSM Help Desk at 011 800 4744.

Solar water heating

Look to the sun for free energy

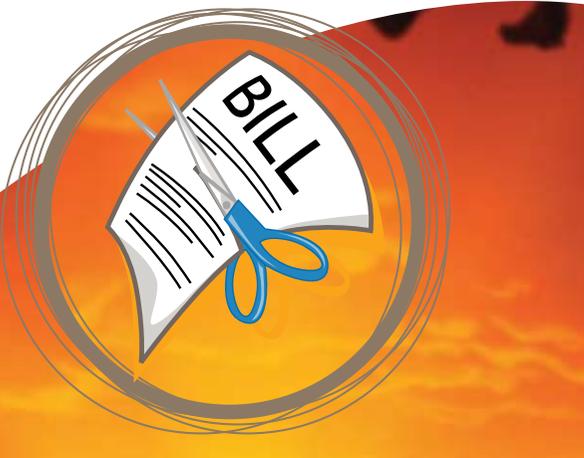


Endless energy – absolutely free

- The sun is a source of unlimited, renewable energy just waiting to be tapped – and it's totally free.
- Sunny South Africa enjoys one of the highest levels of solar energy in the world.
- It is believed that each hour the earth receives more energy than the world can use in a full year.

A bright way to save money

- Water heating accounts for 30% - 50% of the electricity your household uses.
- Installing solar water heaters to supplement, or replace existing geysers can reduce your water heating bill, by as much as 70%.
- With electricity rationing, the sun allows you to make the most of your ration.



Choosing the best solar water heating system for your household

First, you need to work out your household's hot water needs. A unit that is too small will not provide enough hot water, so slightly oversizing your container is recommended. However, if it is too big it will be uneconomical.

A good way to size a system is to allocate 50 litres of water per person in your household and then to add on an extra 50 litres for appliances that draw a large amount of water from the geyser. By oversizing a system slightly you can maximise the hot water achieved through solar gains and not heated later by electricity.

Household size	Solar water heating system size	Estimated payback period
1 person no household appliances	100 litre	12 – 15 years
2 persons household appliances	200 litre	9 – 11 years
3 persons household appliances	200 litre	6 – 9 years
4 to 5 persons household appliances	200 litre	5 – 8 years
5 or more persons household appliances	300 litre	5 – 8 years

How does solar heating work?

There are various types of solar water heating systems, but they all work on similar principles.

Panels called solar collectors, are mounted on your roof where they will receive maximum direct sunlight.

The solar collectors are designed to heat up quickly and they in turn heat up your water, either via a **direct system** (the water is heated up by passing through the collector) or via an **indirect system** (the heat is transferred to a separate container where the water is heated).

NB: Because water expands when it freezes, indirect systems must be used in places where the temperature may drop to below freezing (4°C). This prevents damage to the system.

The hot water is stored in a geyser. Solar water heating geysers are usually bigger and better insulated than electrical geysers, so more water stays hot for longer.

