

Solarzone's focus is on the supply and design solar systems for hot water and power generation. The company has extensive knowledge and experience in domestic and industrial application of harnessing the sun's energy to save money. We have installers covering most of the country.

What is the most cost effective way to use solar power?

Solar water heating is the most effective way of using solar energy to work for you. It can help you to drastically reduce your monthly energy bill.



How much money can I save?

About 30-60% of a normal household electricity bill can be allocated for water heating, depending on electrical usage.

The average house hold spends about 14kWh of power per day on heating a 200 liter geyser and keeping it warm. The cost of 1 kWh is about R0.60 and this means that the average house hold spends at least R252.00 currently per month on water heating.

With the coming 3 x 25% price increase on electricity, that same house hold will spend R492.19/month on heating water!!! A solar water heater can reduce your annual water heating bill by 70%.



How does a solar water heater work?

There are 2 main components in a solar water heating system.

1. Solar hot water storage vessel or solar geyser
2. Thermal collector or solar panel

The solar panel is installed outside on an inclined roof in a north facing direction, and is connected to the solar geyser with pipes. When the sun shines on the solar panel it is heated. The water inside the geyser is circulated through the solar panel and draws the energy away from the solar panel and the water gets heated in the process. This process happens consistently throughout the day while the sun shines and the whole geyser volume gets heated.

There are two ways to circulate the water

1. Pumped system (most common)
A small pump in combination with a thermal controller is used to regulate the flow between the geyser and solar panel. Most of these thermal controllers can be used to regulate the element temperatures in set time windows.
2. Thermo siphon system
The solar geyser must be installed in such a way that it is mounted higher than the solar panel. The geyser needs to be outside on the roof with the collector at an inclination between 20°- 40°. This arrangement allows the heated "lighter" water inside the solar panel to rise into the geyser and the colder "heavier" water from the geyser to go down into the solar panel. This process happens without electrical supply.

How does the Eskom Rebate Program works?

A solar water heating system is submitted to the SABS test facility for testing. Thermal performance, durability and safety tests are carried out and the system is awarded a Q-factor. The Q-factor and system capacity is used to calculate the Eskom rebate.

We have several different types of systems and configurations, most of them registered on the Eskom Rebate Program. Rebate values differ from system to system but start at R4000 and up.

Frequently Asked Questions

- **Q Can I use my existing geyser in combination with a solar panel?**
A Yes, a normal domestic geyser can be converted to work with a solar panel.

- **Q Will I still get an Eskom rebate if I use my own geyser?**
A If your geyser is the same as the geyser used for the SABS test, you will receive your rebate, but there are certain term and conditions that needs to be adhered to. Best would be to enquire about your specific case.

- **Q Can I install my own system?**
A Yes you can, but in order to receive the Eskom rebate, an Eskom registered installer must install your solar water heating system.

- **Q How long does it take to get my rebate and how to I go about?**
A Deloitte & Touche handles the claim between Eskom and the client. The whole process takes about 6-8 weeks. The supplier of the solar water heating system must supply the client with the rebate forms and necessary information, but is not allowed to do the application for the client.