# Solar hot water systems

Reduce your hot water bills by up to 75% when you use the sun







# Water heating is a major part of your energy bill. Make the switch and save – plan your solar hot water system now.

#### How does it work?

A solar hot water system uses the sun's energy to heat water.

The main parts of a solar hot water system are the water storage tank, a gas or electric booster and the solar collectors that absorb heat from the sun.

The water storage tank can be located on the roof directly above the collectors or on the ground like a conventional hot water system. Solar collectors are positioned on the roof facing as close as possible to north and tilted up. Your installer will be aware of the correct orientation and inclination requirements.

### Plan your replacement

Don't wait for your old system to fail – plan for your solar hot water system now. As this is a significant purchase for your home, you should compare suppliers and tell them your household needs. Solar hot water systems will vary in price depending on the model, tank size and number of panels.

A guide to system requirements:

| Number of people | Capacity (litres) | Collector area (m²) |
|------------------|-------------------|---------------------|
| 1 – 2            | 160 - 200         | 2                   |
| 3 – 4            | 300 - 370         | 4                   |
| 5 – 6            | 440               | 6                   |

#### Solar hot water rebates

The Victorian Government offers rebates of up to \$1600 to people replacing non-electric hot water systems with a gas boosted solar hot water system. Other government incentives are also available. Check with your installer.

# Running costs

Gas and electricity bills are rising, so switching to solar hot water is an investment against these rising costs. Conventional hot water systems are cheaper upfront, but their lifetime running costs will be significantly more.

| Solar hot water system            | Annual cost* |
|-----------------------------------|--------------|
| Electric (off peak)               | \$480        |
| Natural gas – ★★★★                | \$320        |
| LPG - ★★★★                        | \$980        |
| Solar - electric boost (off peak) | \$164        |
| Solar – natural gas boost         | \$108        |
| Solar – LPG boost                 | \$310        |
| Electric heat pump (peak rate)    | \$335        |

<sup>\*</sup> Approx per annum, based on 200 litres of hot water per day, 3 to 5 person household.

# Important considerations

- Read your warranty carefully and see that it includes frost protection.
- The installer must assess the roof's structural strength and compliance with any regulations.
- Make sure all plumbing is carried out by a licensed plumber. The plumber will issue a certificate of compliance.
- Install your system as close as possible to the kitchen, bathroom and the laundry.
- Have the storage tank and solar collectors as close together as possible to reduce the length of the connecting pipes.
- Don't have the solar collectors shaded by trees or nearby buildings.
- · Have all pipes well insulated.
- Fit a low flow showerhead. Showering accounts for over 30% of home hot water use.
- Keep the booster thermostat at its recommended setting of 60°C.

#### Contact details

For more information ask your retailer, phone 1300 363 744 or visit www.sustainability.vic.gov.au







