HOT WATER

Hot water is a major contributor to guest comfort and can influence the impression guest's form of their stay, for example, the quality of their shower.

Heating water is also a major energy cost with the potential for significant savings. The cost of energy for heating water can be cut by:

- No cost and low cost actions involving the existing hot water system,
- Selecting the most appropriate hot water system when a new or replacement heater is needed.

Existing Hot Water Systems

No Cost Actions

- *Adjust the thermostat on your hot water system.*

The thermostat on your hot water system needs to be set high enough to deliver water at the required temperature. This temperature will depend on what the hot water is used for as well as the heat lost between the heater and the point of use. Setting the thermostat higher than required will increase heat losses. For each 10°C increase in the setting, heat losses and energy costs rise by about 25%.

For showering, water is required at 40°C to 45°C, and for kitchens, up to 55°C. An unnecessarily high water temperature can compromise guest safety (for example, 60°C water can produce a third degree burn in under one second). Too high a hot water temperature also makes a shower harder to control. Some trial and error may be required to achieve the best thermostat setting, and fine-tuning at the start of summer and winter is often beneficial.

- *Encourage guests to have shorter showers*

Reducing shower times can lead to significant savings in energy required to heat hot water. By installing signage in bathrooms to encourage water-saving, you will also save water while saving energy. Tourism Victoria can supply FREE 'bathroom cards' for accommodation operators – simply contact Tourism Victoria or call (03) 9653 9838 to place an order.

Low Cost Actions

Reduce the consumption of hot water

- Control water flows to shower and taps by installing water efficient devices such as flow regulators, tap aerators and 3 star water efficient showerheads (refer to Bathrooms section).
- Install a simple plug-in timer onto the boiling water urn in your kitchen. This automatically turns the system off at night and on weekends, so you're not boiling water for no point.
- Use water efficient appliances (see box below) such as clothes washing machines and dishwashers and wash with cold water.

Water Efficiency Labelling Scheme (WELS)

Common water-using appliances are registered and labelled under the WELS Scheme, which awards stars for water efficiency – the more stars, the more water-efficient the appliance. The following products are rated under this scheme:

- clothes washing machines
- dishwashers
- toilets & urinals
- showers
- indoor taps & flow controllers

A searchable database of all products can be found at www.waterrating.gov.au

Maintain your hot water system

- Fix dripping taps.
- Insulate your hot water pipes to prevent heat loss.
- Ensure that the water heater pressure relief valve is not leaking.
- Drain the sediment from the bottom of gas hot water system storage heater tanks regularly.

Selecting a New Hot Water System

Selecting the most appropriate hot water system can assist in reducing costs, improving customer satisfaction and reducing environmental impacts.

There are a range of hot water systems available, and the more efficient systems include:

- Instantaneous gas water heaters with electronic ignition systems, which heat water on demand. These have a modest capital cost of $800 - $1500, use no energy when not in use, and never run out. They also heat water on demand so there is minimal loss of heat from storing hot water.
- Standard electric or gas systems with a high energy efficiency rating.
- Solar hot water systems. These cost from $2,500 plus installation, with gas or LPG boosting, but can reduce energy consumption by about 75% (and the ongoing solar energy is free). They are suitable for **all** areas of Victoria and government rebates are available.

Another significant source of heat loss is through storage tanks and piping. This loss can be minimised by:

- locating any new hot water system close to the point of use so that the distance the hot water travels is much less.
- insulating pipes and storage tanks – this can be completed by your plumber when the system is installed, and will pay for itself through reduced heating costs.

Insulating hot water pipes with foam