

Your guide to energy smart

gas water heaters

Further information and advice

SEDO's Energy Smart Line (WA only)
Phone 1300 658 158

Australian Gas Association Technical
Office
Phone (03) 9580 4500

National energy rating web site
www.energyrating.gov.au

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Sustainable Energy Development Office
Government of Western Australia

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REACH FOR THE STARS

choosing

an energy smart gas water heater

Most people consider features such as type, capacity, looks and price when buying a gas water heater.

Lifetime running costs can easily exceed the purchase price of a gas water heater. So, it's important to also check the energy efficiency and running costs when shopping around.

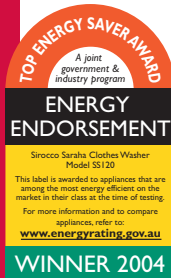
All new gas water heaters are rated for energy efficiency by the Australian Gas Association, and most carry Energy Rating labels to help you compare the energy efficiency of different models in the same situation.

Quite simply, *the more stars you see, the more money you'll save and the better it will be for our environment.* Even a one star improvement can give savings of around 6% on running costs.

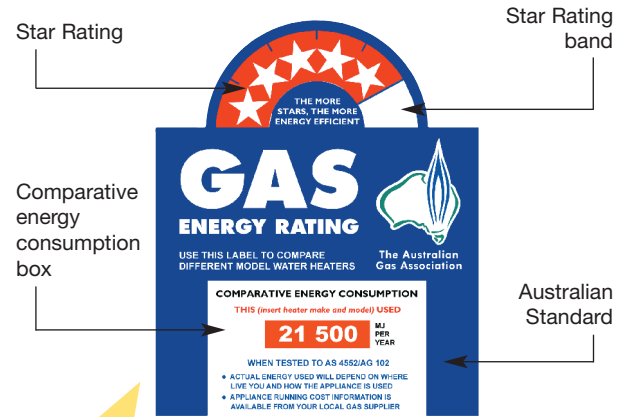
This consumer guide tells you how you can use the gas Energy Rating labels to compare different models of gas water heaters.

If you're about to buy a new gas water heater:

- Compare the *star ratings!*
- Ask for a **Top Energy Saver Award Winner (TESAW)** model—they are the most energy efficient appliances on the market!



Using the Energy Rating label



When comparing models, make sure you:

- **Check the star rating**
The more stars, the more energy efficient the model.
- **Check the red star rating band**
The further this extends across the half circle, the more energy efficient the model.
- **Check the comparative energy consumption box**

The number in the red box is the amount of gas used by the unit over a year (in MJ). It is based on testing to the Australian Standard listed on the label, and a delivery of 200 litres of hot water per day, raised by 45°C above the cold water temperature. The lower the number, the less it will cost to run and the lower the environmental impact.

If you are comparing two models of the same type and capacity which have the same star rating, the model with the lower energy consumption is the more energy efficient one.

The more stars you see, the more you'll save

Estimating

running costs

top star rated gas water heaters

Use the number in the energy consumption box as a guide to the typical running costs of a model. Multiply it by *your* gas tariff to estimate the approximate annual running costs, then multiply this by 12 to estimate the lifetime running costs.

Example:

For an energy consumption of 21,500 MJ per year and a natural gas tariff of 2.1 cents per MJ (\$0.021/MJ), the lifetime running cost is:

$$21,500 \times \$0.021 \times 12 = \$5,418$$

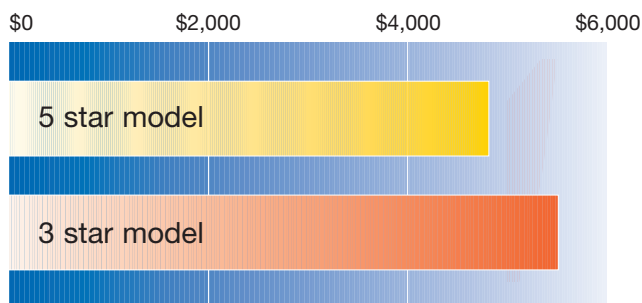
The labels can also be used to estimate the lifetime greenhouse gas emissions. For each MJ of gas consumed, around 0.06 kg of carbon dioxide is emitted, so for the example above the greenhouse gas emissions are:

$$21,500 \times 0.06 \times 12 = 15,480 \text{ kg or } 15.48 \text{ tonnes}$$

The actual running costs and greenhouse gas emissions will depend on where you live, *your gas type and tariff*, cold water temperatures, the amount of hot water used, the quality of installation, the thermostat setting and user behaviour.

Call the Sustainable Energy Development Office Energy Smart Line on 1300 658 158 if you need help estimating running costs.

Typical 12-year running costs for water heaters



Based on a usage of 200 litres of hot water per day, 2.1c/MJ tariff

If you would like details on models on the market, contact the appliance supplier or your local gas appliance retailer.

If you want more information on choosing a gas water heater to suit your needs, contact the Sustainable Energy Development Office Energy Smart Line on 1300 658 158.

If you want more information on gas Energy Rating labels, contact the Australian Gas Association's Technical Office on:

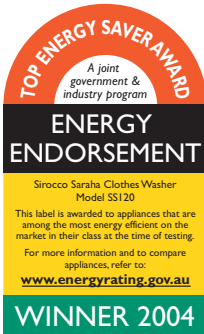
Telephone (03) 9580 4500

For more information on Top Energy Saver Award Winner winning appliances log onto the Top Energy Saver Award Winner web site:

www.energyrating.gov.au/tesaw-main.html

Top Energy Saver Award winners

Energy saving features



An easy way to make sure you choose the most energy efficient gas water heater is to ask for Australia's star energy performers—Top Energy Saver Award Winner (*TESAW*) winners.

Each year, a government authority presents *TESAW* to gas water heaters that have the highest star ratings.

Choosing a *TESAW* of gas water heater could have a big impact on household energy costs.

For a typical four-person household, the savings could be as much as \$984 over a 12-year lifetime. This would also reduce greenhouse gas emissions by some 3.1 tonnes.

Look for the *TESAW* logo on appliances, and in brochures and catalogues.

For more information on Award winning appliances log onto the Top Energy Saver Award Winner web site: www.energyrating.gov.au/tesaw-main.html.

Look for these features before you buy:

- ✓ A size or capacity that matches your hot water needs—this is expressed in litres for storage systems and litres per minute for continuous flow systems
- ✓ Avoid models with a pilot light if considering a continuous flow system
- ✓ Adjustable thermostats for temperature control. These allow you to reduce the temperature of the hot water, saving energy
- ✓ Remote water temperature controls
- ✓ Consider a gas-boosted solar hot water system. These do not carry gas Energy Rating labels. Gas-boosted solar water heating may be an option if you have a suitable area of north facing roof which is unshaded throughout the year. While they cost more to buy, the typical payback period from the energy savings could be as little as 5 years (for new homes). Government rebates are available in Western Australia. The rebate will reduce the overall installation costs and therefore also reduce the payback period.

For further information on rebates, visit the web site at:
www.sedo.energy.wa.gov.au/pages/subsidy.asp