

Estimating running costs

Use the comparative energy consumption figure in the red box as a guide to the typical running costs of a model.

Note that the actual running costs will depend on many factors such as *your gas type and tariff*, the local climate, the size of the space being heated, house design, thermostat settings and operating times.

Call the Energy Smart Line (1300 658 158) if you need help estimating running costs.

For a gas space heater, multiply the MJ per year figure by *your* gas tariff to estimate the approximate annual running costs, then multiply this by 12 to estimate the lifetime running costs.

Example:

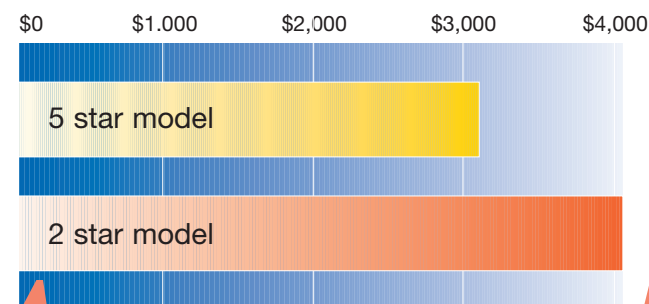
For a comparative energy consumption of 6,500 MJ per year and a natural gas tariff of 2.1 cents per MJ (\$0.021/MJ), the lifetime running cost is:

$$6,500 \times \$0.021 \times 12 = \$1,638$$

The labels can also be used to estimate 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:

$$6,500 \times 0.06 \times 12 = 4,680 \text{ kg or } 4.7 \text{ tonnes}$$

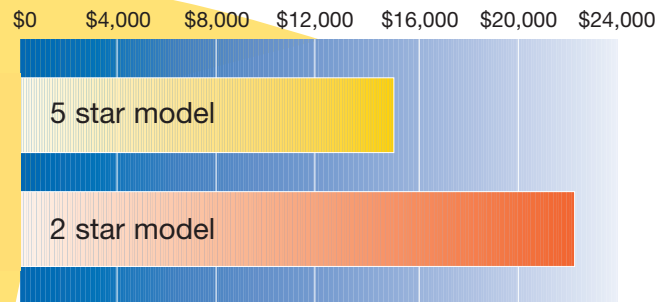
Typical 12-year running costs for space heaters



Based on unit to heat area of 35MJ input, 2.1c/MJ tariff

Running costs of gas ducted heaters

Typical 12-year running costs for ducted heaters

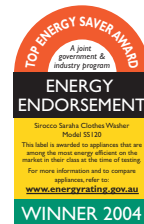


Based on system of 85MJ input to heat an area of 200m², unzoned, 2.1c/MJ tariff

For a gas ducted heater, you will first need to multiply the MJ/m³ per year figure in the red box by the floor area to be heated (in square metres), then by the average ceiling height (in metres) to estimate the annual energy consumption in MJ per year.

The lifetime running costs and greenhouse gas emissions can then be estimated in the same way as for a gas space heater.

Top Energy Saver Award winners



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

Each year, a government authority presents TESAW awards to gas heaters that have the highest star ratings in their class.

Choosing a TESAW ducted heater could have a big impact on household energy costs. For a gas ducted heating system heating a 200 square metre area, the savings could be as much as \$7,500 over a 12-year lifetime. This would also reduce greenhouse gas emissions by some 23 tonnes.

Your guide to energy smart gas 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

The Reach for the Stars program is a national initiative supported by the Department of Environment and Climate Change in New South Wales, Sustainability Victoria, the Energy Division of the Department for Transport, Energy and Infrastructure South Australia, the Sustainable Energy Development Office in Western Australia, and the Australian Greenhouse Office.



The information in this publication was derived from various sources, is provided in good faith and believed to be correct when published. Products listed in this publication are provided for the purposes of information only and reference in this publication should not be construed as an official endorsement by any of the government agencies participating in the Reach for the Stars Program. This document can be made available in alternative formats to meet the needs of people with disabilities.

Published in July 2007 by the Sustainable Energy Development Office

Printed on recycled paper



REACH FOR THE STARS

choosing

an energy smart heater

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

The lifetime running costs of different gas heaters can vary significantly. So, it's important to also check the energy efficiency and running costs when shopping around.

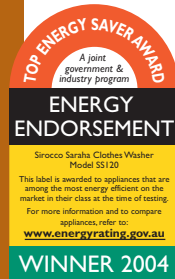
All new gas heaters are rated for energy efficiency by the Australian Gas Association, and most carry Energy Rating labels to help you compare the energy efficiency of similar gas heaters—e.g. same type and similar capacity—in the same situation.

Quite simply, *the more stars you see, the more money you'll save and the better it will be for our environment.*

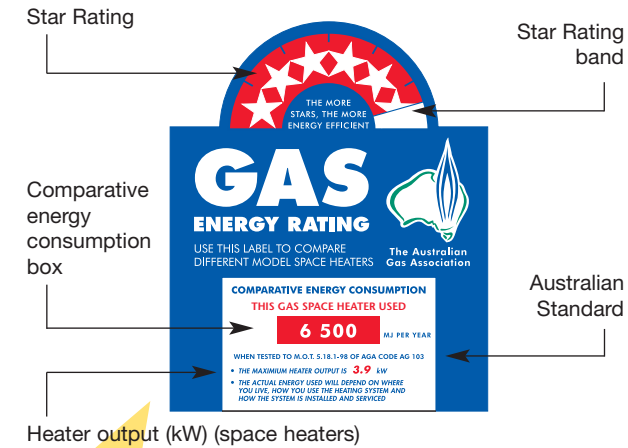
This consumer guide tells you how you can use the gas Energy Rating labels to compare different models of gas ducted heaters and gas space (room) heaters.

If you're about to buy a new gas 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 typical year—in MJ per year for gas space heaters and MJ/m³ per year for gas ducted heaters. It is based on testing to the Australian Standard listed on the label. 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.

gas

space and ducted heaters

Gas space (room) heaters

The comparative energy consumption figure is the amount of gas used by the model over a typical year in MJ per year. In addition to this, the rated heater output in kilowatts (kW) is listed on the label below the test standard.

This is useful when comparing the heating capacity of different models, and for ensuring that the heater will adequately heat the room it is intended for.

You can use the figures below as a rough guide to sizing a gas space heater for the average home, but your heating supplier should undertake a heat load calculation to determine the appropriate heater output.

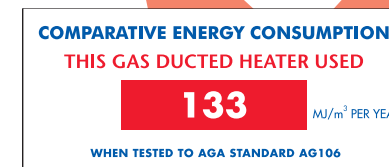
Uninsulated home	- 0.13 kW/m ²
Insulated ceiling only	- 0.10 kW/m ²
Insulated ceiling and walls	- 0.08 kW/m ²

Gas ducted heaters

The energy rating for gas ducted heaters only applies to the *heating furnace* and does not include the duct-work or outlet registers.

For an effective and efficient ducted heating 'system', consideration should also be given to the design of the system, insulation and quality of the duct-work, location of thermostats and controls, quality of outlet registers and zoning opportunities.

For gas ducted heaters the comparative energy consumption figure represents the amount of gas used by the model to heat a cubic metre (m³) of space over a typical year.



top star rated

gas heaters

If you would like more 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 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

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