

# OPERATING COSTS OF GAS APPLIANCES

This brochure provides typical running costs for common domestic gas appliances. They are based on what a typical four person family in Victoria would pay. Of course, your own running costs may vary somewhat from these, depending on factors such as climate conditions, the energy efficiency of your home, thermostat settings, family size and the age and efficiency of appliances.

Wherever possible, hourly running costs have been provided so you can easily estimate your own monthly or annual costs. Monthly running costs have been given for hot water systems which are run permanently. Costs are provided for both natural gas and LPG (bottled gas).

## Gas tariff prices

Natural gas is measured in units known as 'megajoules' (MJ), and the gas tariff is the cost per MJ. Bills are usually issued every two months.

The Domestic General Tariff is the most common tariff used by households. Currently, natural gas is charged at the following prices (GST inclusive):

	Peak*	Off-peak**
First 4000 MJ	0.75c/MJ	0.75c/MJ
Consumption after 4000 MJ	0.96c/MJ	0.81c/MJ

\*price for the period between 1 June and 30 September each year

\*\*price for the period between 1 October and 31 May each year

Most households with gas heating would use much more than 4000 MJ per billing period. Apart from hot water systems, which are used year round, appliance running costs listed are based on peak rates for consumption over 4000 MJ (i.e. 0.96c/MJ).

These costs do not include supply charges, which add approximately \$15.00 to each bill.

## LPG (Liquified Petroleum Gas)

LPG is generally used in areas where natural gas supply is not available. It is sold by the litre or kilogram (bottle size). One litre of LPG provides approximately 26 MJ of energy, and one kilogram contains approximately 2 litres.

LPG prices are highly variable depending on factors such as geographical location and world prices. Currently the price of LPG is more than two and a half times that of natural gas (i.e. approximately 70c per litre). LPG costs listed in this brochure are based on this price. *They do not include bottle rental or delivery charges.*



## Heating

Annual heating costs assume heating is used for 8 hours per day in Melbourne during the heating season (May–October), unless otherwise specified. For each degree the thermostat is increased, costs will increase by up to 15%. Running heating 24 hours a day will double costs. Energy smart homes can reduce heating costs by up to 30%.

### Central heating

All costs are given for homes of 150 m<sup>2</sup> with 2.4 m ceilings, heated to 21°C. Calculations for larger or smaller homes can be estimated proportionately from these. Add \$65 per year if your heater has a fan (all gas ducted heaters have one), \$25 per year for natural gas heaters with pilot lights and \$70 per year for LPG heaters with pilot lights.

Heating system	Natural gas			LPG		
	Approx. hourly cost	Annual cost (fully insulated home)	Annual cost (poorly insulated home)	Approx. hourly cost	Annual cost (fully insulated home)	Annual cost (poorly insulated home)
Gas ducted heating (1–2 star rating furnace)	28c–44c	\$480–\$530	\$660–\$740	78c–\$1.23	\$1340–\$1490	\$1850–\$2070
Gas ducted heating (1–2 star rating furnace—zoned*)	15c–22c	\$240–\$270	\$330–\$370	42c–62c	\$670–\$760	\$920–\$1040
Gas ducted heating (4–5 star rating furnace)	21c–34c	\$360–\$400	\$500–\$560	58c–95c	\$1000–\$1120	\$1400–\$1570
Gas ducted heating (4–5 star rating furnace—zoned*)	11c–17c	\$180–\$200	\$240–\$280	31c–48c	\$500–\$560	\$670–\$790
Hydronic heating (panel radiators)	26c–41c	\$440–\$500	\$610–\$680	72c–\$1.15c	\$1230–\$1400	\$1700–\$1910
Hydronic heating (in-slab**)	n/a	\$430–\$490	\$710–\$790	n/a	\$1200–\$1380	\$1980–\$2210

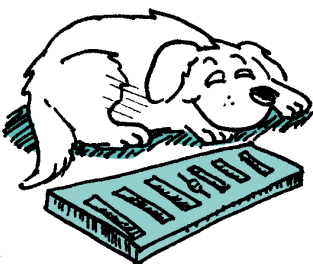
\*assumes 50% of the home is not heated

\*\*assumes heating a home to 18°C for 24 hours a day

### Gas space heating

The following costs are based on heating an area of 60 m<sup>2</sup> with 2.4 m ceilings to 21°C. Calculations for the size of your rooms can be estimated proportionately from these. Add \$20 per year if your heater has a fan, \$20 per year for natural gas heaters with pilot lights and \$55 per year for LPG heaters with pilot lights.

Heating system	Natural gas			LPG		
	Approx. hourly cost	Annual cost (fully insulated home)	Annual cost (poorly insulated home)	Approx. hourly cost	Annual cost (fully insulated home)	Annual cost (poorly insulated home)
Low (1–2 star rating)	12c–19c	\$190–\$235	\$270–\$305	33c–54c	\$530–\$660	\$750–\$860
Medium (3–4 star rating)	10c–16c	\$165–\$210	\$235–\$270	28c–45c	\$460–\$590	\$655–\$760
High (5–6 star rating)	9c–14c	\$145–\$180	\$205–\$235	25c–40c	\$405–\$500	\$570–\$660



## Hot water systems

Costs are based on hot water usage for a typical four person household. Lower figures apply to energy-conscious users, and higher figures for high volume water users.

System	Natural gas monthly cost	LPG monthly cost
Storage (5 star efficiency)	\$15–\$21	\$42–\$59
Storage (2 star efficiency)	\$19–\$26	\$53–\$73
Continuous flow (5 star efficiency)	\$15–\$21	\$42–\$59
Solar* (gas boosted)	\$6–\$7	\$16–\$20

\*costs are based on 65% solar contribution (typical for Victorian locations south of the divide). Lower costs by \$1 (natural gas) and \$3 (LPG) if you live north of the divide.

## Cooking

Appliance	Natural gas (hourly running cost when on full)	LPG (hourly running cost when on full)
Burner	10c	27c
Griller (horizontal)	Up to 13c	Up to 36c
Oven	Up to 13c	Up to 36c

## Other appliances

Appliance	Natural gas (hourly running cost when on full)	LPG (hourly running cost when on full)
Barbecue	46c	\$1.30
Gas dryer*	24c	61c
Gas light (internal)	2c	4c
Gas light (external)	3c	8c
Gas fridge (220 litres)	n/a	5c

\*running costs include price of electricity

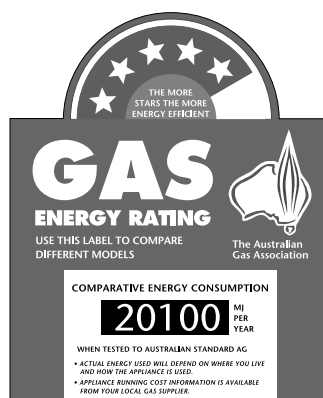




## Energy Rating labels

When buying a new appliance, look for the Energy Rating label. Energy Rating labels will help you buy an energy smart model which could save you hundreds of dollars over the lifetime of the appliance.

Every Energy Rating label has from 1–6 stars marked on it—the more stars, the less energy you use, and the more money you will save. They can be found on all gas space heaters, gas ducted heating furnaces and gas hot water systems, as well as on electrical appliances including refrigerators, freezers, dishwashers, air conditioners, clothes washers and dryers.



## Please note

The running costs in this brochure are based on tariffs correct at time of print. As tariffs will vary, check with your supplier for the tariff applicable to your home, and adjust running costs accordingly.

Sustainable Energy Authority  
Ground floor, 215 Spring Street  
Melbourne Victoria 3000  
F (03) 9655 3255  
[www.seav.vic.gov.au](http://www.seav.vic.gov.au)

The information in this document is derived from various sources and is understood to be correct at the time of publication. However, the information may not be error free and may not be appropriate for a particular purpose. The Sustainable Energy Authority accepts no liability whatsoever to any person for any injury, loss or damage that may arise in connection with any use or reliance on the information.

Printed on recycled paper  
June 2002

[www.seav.vic.gov.au](http://www.seav.vic.gov.au)