

Community Energy Network acknowledges the support of the following organisations in the preparation of this information.



The following organisations have a shared interest in addressing the problems associated with un-flued LPG cabinet heaters. For further information and advice contact:

Beacon Pathway Incorporated, www.beaconpathway.co.nz

BRANZ, www.level.org.nz

Community Energy Action, www.cea.co.nz

Consumer New Zealand, www.consumer.org.nz

Eco Design Advisors, www.ecodesignadvisor.org.nz

Energy Options, www.energyoptions.org.nz

Ministry of Health, <http://www.moh.govt.nz/moh.nsf/indexmh/unflued-gas-heaters-may05>

Sustainability Trust, www.sustaintrust.org.nz

Tairāwhiti DHB, www.tdh.org.nz



04 389 3416, info@communityenergy.org.nz
PO Box 7063, Wellington 6242, New Zealand
www.communityenergy.org.nz

Are you using an un-flued LPG cabinet heater?

Keeping warm in Canterbury may be harder than usual this winter because of the earthquake damage to homes and the electricity network.

Important facts to help you **keep safe** while you **keep warm**.



What is an un-flued LPG cabinet heater?

An LPG cabinet heater is a portable heater designed to be used inside.

It burns liquefied petroleum gas (LPG) and doesn't have a 'flue' or chimney to take waste products outside.

How do un-flued LPG cabinet heaters work?

Burning LPG produces heat quickly. It also produces:

- **Harmful gases**
Including nitrogen dioxide, carbon dioxide and carbon monoxide.
- **Excess moisture**
Half a litre (two cups) per hour.

The disadvantages of un-flued LPG cabinet heaters.

Because there is no 'flue' these waste products stay in your home and can seriously affect you.

YOUR HEALTH

- Increased levels of nitrogen dioxide can increase symptoms in asthmatics.
- High levels of carbon monoxide affect people with heart disease. Young children, unborn babies and the elderly may also be affected.
- The increased moisture and mould can also exacerbate respiratory conditions like asthma.

YOUR SAFETY

- High levels of carbon monoxide result in sleepiness and makes it harder for you to think clearly.
- New Zealanders have died from carbon monoxide poisoning from un-flued LPG appliances.
- Un-flued LPG cabinet heaters are a fire risk.

THE COMFORT AND QUALITY OF YOUR HOME

- Dampness can make your home uncomfortable and damage its interior (e.g. mould on curtains, clothes, and window joinery).

Un-flued LPG cabinet heaters increase the cost of staying warm.

Un-flued LPG cabinet heaters seem good for your budget, but are actually an expensive choice for two reasons:

- LPG bottled gas can cost up to 25% more than electricity for the same amount of heat, and
- Damp air costs more to heat. Dehumidifiers help remove moisture but are also expensive to run.

The table below compares running costs of different heaters.

FUEL TYPE	PRICE (cents per kWh)
STAND ALONE HEATERS	
■ Firewood (woodburner)	~5
■ Wood pellets (pellet burner)	~15
■ Electric (panel/column/radiant/convection)	~25
■ Electric (nightstore/underfloor)	~20
■ Electric (heat pump)	~10
■ LPG (unflued heater)	~25
■ LPG (flued heater)	~15
■ Natural Gas (flued heater)	~15
CENTRAL HEATING	
■ Wood Pellets	~15
■ LPG	~15
■ Natural Gas	~15
■ Diesel	~5
0 5 10 15 20 25 30 35 40	
■ RENEWABLE ■ SEMI RENEWABLE ■ NON-RENEWABLE	
<small>GUIDE TO THE FIGURES COSTS are calculated on the basis of providing one kilowatt of heat for one hour. Firewood costs are based on our January 2011 survey of prices for pine. Electricity and natural gas costs are from PowerSwitch. Other costs are from pricing data collected during February 2011. GST is included.</small>	

Table courtesy of Consumer NZ, www.consumer.org.nz

How to use an un-flued LPG cabinet heater safely.

- Always keep a window open. Fresh air dilutes the poisonous gases and moisture.
- Never use un-flued LPG heaters in bedrooms, bathrooms or confined spaces.
- Only use your un-flued gas heater when you are awake. Turn it off even for a nap.
- Use safety guards if you have children.
- Keep flammable items at least 1 metre away. Don't try to dry anything on it.
- Do not use gas-fired patio heaters or gas fired cookers/ bbq's designed for outdoor use inside the house.
- If you smell gas, have trouble with the ignition, or see an unusual pattern of the gas burning turn it off and get it serviced immediately.
- Un-flued LPG cabinet heaters need to be serviced at least every twelve months for safety. Call Community Energy Action for a list of approved service technicians in Christchurch.

Want to stop using your un-flued gas heater, but don't know what to do?

If you want to stop using your un-flued LPG cabinet heater, but you're not sure how to:

1. Choose a replacement that will best suit your needs and budget, or
2. Manage heating costs and high electricity bills.

Call Community Energy Action's Home Energy Advisors for expert, independent advice.

0800 388 588

Community Energy Action is a Charitable Trust that has been helping Cantabrians stay warm and healthy since 1995.