

YOU'VE GOT THE POWER TO MAKE YOUR HOME WARMER AND HEALTHIER

About a third of your household energy goes on heating your home.

An energy efficient heating system can use less energy, save you money and help our environment by reducing greenhouse gas emissions. This means more than just having a good heater – it's about having a well insulated house and choosing to use your heating efficiently.

The state of your insulation will make a big difference to how effective your heating can be. Perhaps you don't have any or maybe what you do have is no longer as effective as it was. ENERGYWISE™ action sheet 2 gives you information on insulating your home.

THE RIGHT HEATING FOR YOU

There are various heating options available - knowing what you want from heating will help you make better choices about how you can get the best energy efficiency and value for money. Here are some things to consider:

- **How big is the area you want to heat?** It is important to match the size of the heater to the space you want to heat. This will depend on the dimensions of your room, the insulation, how big your windows are and if they are double glazed or covered, and how cold it is where you live. You can calculate what capacity of heater you'll need for your room at www.consumer.org.nz and talk with your supplier.
- **When and how often you want to heat each space?** – e.g. do you want to heat an area for short periods of time only? Do you want instant heat, such as a heat pump will provide, or can you wait for an appliance like a wood burner to heat the room?
- **What you'll pay** – what an appliance will cost to run and install, for example connection fees and on-going line charges, as well as what it costs to buy. Running costs depend on things like the size and efficiency of the heater, fuel prices, potential maintenance and how long you heat each room.

YOUR HEATING OPTIONS

Heat Pumps

Heat pumps are the most efficient way to use electricity to heat your home. Some are more efficient than others and the differences in running costs and performance can be significant. It's important to get a heat pump that is matched to the size of the area in your house that it will heat.

You could save an extra \$150 a year on your power bill by choosing a heat pump with the ENERGY STAR® mark, which shows it is one of the most efficient models on the market.

Wood Burners

It's cheaper to burn firewood in an efficient wood burner than to get the equivalent amount of heat from electric or gas heating. You will get the best efficiency from well seasoned firewood (dried for at least a year) so plan ahead and store your wood under cover. Where possible, use wood from plantation forests rather than native types such as manuka.

Modern wood burners produce very little air pollution and average 75% efficiency. Compare this to the 10% efficiency of open fires and 45% for basic wood burners such as pot-belly stoves – and both of these produce significant air pollution.

Unless your property is larger than two hectares, you need to use an 'authorised' woodburner. You can find a list on the wood burners pages www.energywise.govt.nz Always get a building consent approval from your local council for installation.

Most wood burners generate far too much heat for one room, so it makes sense to use a fan and ducting system to get the heat into other rooms. If the layout of your house and its hot water system are suitable, wood burners can be equipped with a wetback system to heat household hot water.

Wood pellet burners

Wood pellet burners are the most environmentally friendly way of heating your home – the pellets are made from waste products and burn very cleanly.

Wood pellet burners offer you control options over how much heat is produced and when, so they are efficient to use. These use a small amount of electricity so a pellet burner won't work if your electricity isn't working. Always get a building consent approval from your local council for installation.

Electric Heaters

These include radiant, fan, convection and night-store heaters and underfloor heating. Each distributes heat differently. For example, portable electric heaters can be a good option if you want to provide directed warmth for a person or heat a single room for a shorter period.

Gas Heaters

These include flued gas heaters, unflued gas heaters and portable LPG heaters. Gas heaters and other gas appliances should always be installed by a licensed gas fitter. Condensing gas heaters are more efficient than normal gas heaters and will help reduce your energy bills.

Unflued gas heaters, including portable LPG heaters, have no vent or chimney which presents

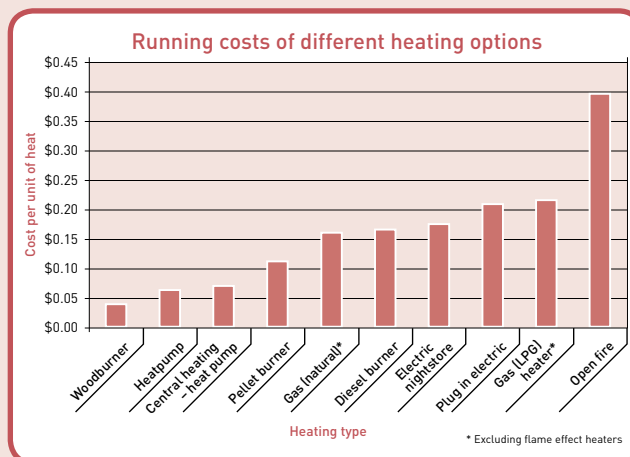
potential serious risks to your health. Your room **must** be well-ventilated if you use one of these. Keep at least one window open to allow fresh air to enter the room.

Central Heating

Central heating heats either water or air which is then used to heat the entire house. For air, the systems use a series of ducts in each room, and for water they can use either radiators in each room or pipes built into the floors. Central heating systems can have the heat supplied by natural gas or wood pellet fuelled boilers, or heat pumps.

Many central heating systems can be zone-controlled, so you can control the temperature of different parts of your house.

You need to install and operate all heating appliances according to the manufacturer's instructions and any legal requirements or guidelines for the area you live in.



How you use heating

A heater or heating system that has thermostats and time switches can help you run your heating more efficiently and save you money.

Set the thermostat. Don't have the temperature higher than you need it – aim for 18-22° Celsius while you are using a space and then 16° Celsius overnight if required.

Use timer features so your heater or heat pump comes on an hour or so before you need it instead of leaving it on all day. A timer will cost you about \$15.

energywise™

YOU'VE GOT THE POWER TO CHOOSE

February 2008