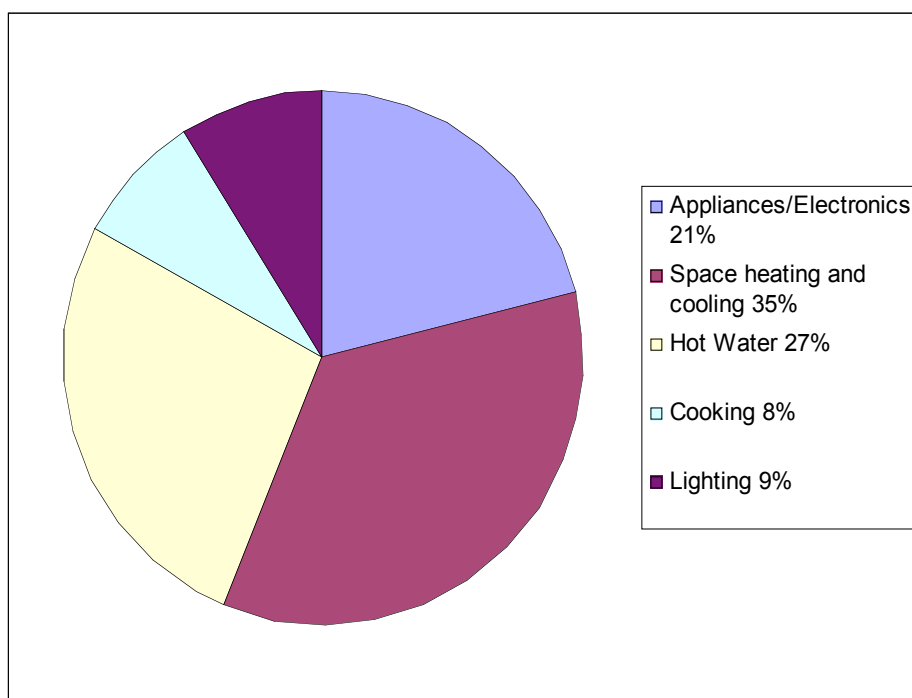

EASY ENERGY SAVING TIPS FROM RIGHT HOUSE

It's easy to save on the energy use in your home!

The average New Zealand household uses approximately 8,500 kwh of energy each year. This costs around \$1,530 per year or \$127 per month. The breakdown of average household energy use is as follows:



HEATING/COOLING

Around 35% of a households energy use is used by space heating and cooling. This equals approximately \$530 per year.

The main areas are:

Insulation

- For heating and cooling to deliver savings installation of the appropriate levels of insulation in the ceilings, floor and walls can reduce your heating or cooling requirements by up to 30%.
- Use the Energy Star rating scheme for energy efficient heating or cooling appliances (refer: www.eeca.org.nz for further information)
- Draught stripping of gaps and drafts can save between 10 and 15% on energy use. A 3mm gap around a door or window is the same as having a brick size hole in the wall.

Heating

- Maximise the benefit of the heat from the sun which can deliver 1,000kw of energy for each m² of window. Cut trees back from windows.
- Close curtains at night and make sure that curtains fit tightly to windows or pelmets are installed. Curtains should extend to the floor.



- Set your thermostat temperature at as low a temperature as comfortable without affecting your health. A temperature of 18°C should be adequate. For each 1°C increase in the thermostat setting may cost an additional 10% of the heating energy.
- Make sure that heating appliances or systems are appropriately sized. If a system is too large or too small it will not be operating efficiently.
- Undertake regular maintenance of your heating system or appliance.
- Reduce moisture build up in your home with appropriate ventilation in the kitchen and bathroom and avoid drying clothes indoors whenever possible and if using a dryer ensure it is vented to the outside of the house.

Cooling

- Close curtains or blinds and rooms where overheating occurs.
- Consider the use of sun shades and louvers – allowing sun entry in the winter while providing shade in the summer.
- Install a ceiling fan. These are relatively inexpensive and have low running costs. Fans do not cool the air.
- Avoid using heat pumps for cooling wherever possible.
- Use natural ventilation such as windows, maximising cross ventilation airflow wherever possible.

Water Heating

Around 27% of a household's energy use is used for water heating. This equates to approximately \$415 per year.

- Make sure the thermostat on your hot water cylinder is set at 55-60°C.
- Take shorter showers and avoid baths. Purchase a shower timer and make it fun to have shorter showers for the kids. One minute less in the shower saves between 10 and 20 litres of water or up to 7,000 litres per year.
- Install low flow showerheads. The new low flow shower models deliver a good water flow and use less than half the amount of water.
- Fix dripping taps, use cold water to fill the jug or kettle and only fill to the level required.
- If you are going away for more than a few days then turn off your electric hot water cylinder.
- Consider installing either a solar hot water system or a hot water heat pump and save up to 50-70% on your water heating costs.
- For hot water cylinders older than 10 years install a hot water cylinder wrap. Installing a hot water cylinder wrap is simple and easy to do and will pay for itself within two years.

Cooking

Cooking uses around 8% of a household's energy.

- Check your oven door seal to ensure it seals correctly.
- Use small appliances for cooking – microwave, electric jug, electric fry pans or grills as these are often more efficient than the oven.
- If using your oven use a fan forced oven as it cooks quicker and uses less energy.
- Only open the oven door when necessary as cooking heat is lost (10-15°C) and energy wasted when you open the door.



Lighting

Lighting uses around 8% of a household's energy use.

- Switch off lights when not in rooms or when you will be out of a room for more than 10 minutes.
- Maximise the use of natural light in rooms
- Use movement sensors on all outside lights
- Consider installing solar power exterior lighting where appropriate
- Replace incandescent light bulbs with compact fluorescent light and fluorescent tubes. Use fluorescent tubes for general lighting in the kitchen, family areas and spaces where lights are on for long periods.
- Use the correct size light bulbs and fittings
- Dimmer switches can save energy but a light dimmed down to one quarter of its input still uses 50% of the energy.

Appliances/Electronics

The appliances and electronics use around 21% of a household's energy use. Some simple tips to save energy in these areas:

Standby Power

Standby power uses up to 10% of a household's energy. Standby power is the energy consumed by an appliance while it is on but not being used. This can easily be reduced by:

- Switching appliances off at the wall instead of leaving them on standby
- Use the Energy Star rating when purchasing appliances

Clothes Washing and Drying

- Front loading washing machines use up to 45% less water and 50% less energy than equivalent top loaders
- Only wash with full loads
- Use the sun to dry clothes outside whenever possible

Refrigerators

Your fridge may account for up to 10% of your household's energy use.

- If your refrigerator is more than 10 years old consider replacing it. The payback may be shorter than 5 years.
- Only purchase a refrigerator that is appropriate to your needs. A larger fridge costs more to run.
- Use the Energy Star rating when purchasing a fridge or freezer.
- Check the door seals are clean and tight fitting.
- Regular defrosting
- Cover food and do not put hot food in the fridge
- Ensure there is good circulation around the fridge in accordance with the manufacturer's recommendations and wherever possible place the fridge in a cool location away from ovens, stoves and direct sunlight.

Heated Towel Rails

If you use heated towel rails either turn them off during summer or install a timer to reduce the time they are used.

