

Choosing and using your appliances



Appliance running costs are not just about what product you buy – how you use them every day also makes a big difference.

Because we use them daily and often keep them for a long time, it really makes sense to choose and use your appliances wisely. You'll reduce your energy use without compromising your lifestyle.

Appliances make up about 40% of the average household's electricity bill, but you can make real savings by powering your appliances more efficiently. It all adds up, which is great for your pocket and the environment.

Simple energy-saving actions

You can use your appliances more efficiently with some easy, everyday habits.

- Switch appliances off at the wall when you are not using them. Household stand-by energy costs the country over \$100 million a year – which is enough to power over 55,000 homes.
- Use the sun to dry your clothes rather than a dryer. It could save you around \$200 each year.
- Use cold water for washing your clothes. This uses 75% less electricity than hot water washes and, at four loads a week, could save you around \$50 to \$75 each year.

Look out for more simple energy-saving tips throughout this action sheet.

Choosing energy efficient appliances

We hold on to many of our appliances for a long time, so it really makes sense to choose products that meet your needs properly, last well, and use less energy to run over a lifetime – particularly when it comes to bigger things like whiteware.



Look for the energy rating label to help you compare energy use between similar models, or look for the blue ENERGY STAR® mark to tell you which models are the most energy efficient.

All whiteware appliances carry energy rating labels which show an annual energy consumption figure and a star rating. The more stars, the more energy efficient the appliance is in comparison with similar models.



The ENERGY STAR mark tells you at a glance which models are the most efficient. It is the independent, international benchmark for energy efficiency and is typically awarded to the top 25% most energy efficient appliances in each category. You'll find it on a range of products including whiteware, home entertainment and home office equipment.



Fridges and freezers

After water heating, the fridge is the biggest household electricity user and the most expensive appliance in your home to run. A typical new fridge-freezer uses around 400 to 500 kWh a year.

Modern fridges and freezers are more energy efficient than older models. A modern family fridge/freezer with a 3½ star energy rating label costs around \$100 per year to run. A 10-year-old fridge of the same size could cost twice as much to run.

We also tend to hold on to our fridges and freezers for a long time – around 15 years.

So when it's time for a new fridge, it's worth choosing an energy efficient one.

Choosing a fridge and freezer

- Size impacts on energy use, so choose one that's not too big or small for your needs.
- Fridge-freezers with a top-and-bottom configuration are often more energy efficient than a side-by-side arrangement.
- Through-the-door features such as cold water, drinks dispensers and ice-makers use more electricity, so cost more to run.
- Use the energy rating label and the ENERGY STAR mark to compare similar models.

Using your fridge and freezer

- Regularly clean and check door seals – turn a torch on, put it inside your fridge and close the door. If you can see the torchlight, your seals need replacing.
- Check the temperatures with a fridge thermometer. Freezers should be between – 15 °C and – 18 °C, while fridge compartments should be around 2 °C to 4 °C.
- Don't let ice build up in your fridge or freezer as this will make it very inefficient to run and may prevent it from maintaining safe temperatures for food storage.
- If your fridge or freezer is running continuously or nearly all the time, it may be faulty. A faulty fridge or freezer can pose a health risk by not keeping food cool enough – and can cost you a lot of money in wasted energy and having to replace food that has gone off prematurely.



Laundry

Using your washing machine efficiently and your dryer less often can cut your laundry energy use – and if they're energy efficient models, you can save even more.

Choosing a washing machine

- Select the right size for your needs – the most common sizes are 5.5 to 6.5 kg.
- Check its water usage and energy rating. Both figures are on the label. ENERGY STAR-qualified washing machines can be about 50% more efficient than non-qualified models. They also use less energy and water.
- Choose a model with economy and cold wash cycles.
- When buying a large washing machine, choose a model which adjusts the wash to match the load size.
- High spin speeds (1000rpm or higher) will remove more water, reducing drying time and energy use when using a dryer.

Using your washing machine

- Save energy by using cold water to wash your clothes and other lightly soiled loads, and just use warm washes for really dirty loads. At four loads a week this could save you around \$50 to \$75 each year.
- Wash a full load rather than several smaller loads where possible.

Choosing a dryer

- The best way to reduce running costs and get the best results for your clothes is to choose the right sized dryer for your needs.
- If you use your dryer regularly, look for a model with an auto-sensing feature which prevents over-drying. This saves electricity and is also better for your clothes. If you only use your dryer occasionally, simple timer models tend to be cheaper.
- Choose a dryer with an easily accessible lint filter for cleaning. A clogged filter consumes more energy and may become a fire hazard if unattended.



Using your dryer

- Vent your dryer to the outside so the moisture doesn't make the house damp.
- Avoid overloading and over-drying.
- Clean the lint filter on your dryer after each load.
- Ideally, the best place to dry clothes is outside in the fresh air and sunshine. You could save around \$200 a year by not using your dryer.



Dishwashers

There are around 800,000 dishwashers in use in New Zealand. If each of these were ENERGY STAR-qualified, we could save over \$16 million a year across the country.

Choosing a dishwasher

- Choose the right-sized dishwasher to suit your household.
- Models with an 'eco', 'half load' or 'fast' wash setting can help save water and energy.
- Choose an energy efficient dishwasher – look for the energy rating label and the ENERGY STAR mark when comparing similar models.

Using your dishwasher

- Use the machine's eco-cycle or select the cycle with the lowest temperature and minimum time to get the job done.
- Rinse dishes under the cold tap – or scrape plates before loading.
- Regularly clean your dishwasher's filter.
- Only run the dishwasher when it is fully loaded.

Household stand-by energy adds up to over \$100 million a year, and home entertainment products account for around two-thirds of this.



Home entertainment

Around 10 to 15% of household electricity is used on home entertainment products such as televisions, audio equipment, DVD players, home theatre systems, game consoles and set top boxes (digital receivers). This figure is increasing as home entertainment products get bigger and we use them for longer.

Household stand-by energy adds up to over \$100 million a year, and home entertainment products account for around two-thirds of this – so if you're not using it, switch it off at the wall.

Choosing a television

Televisions (TVs) are using an increasing proportion of our household electricity bills – it's currently around 7%. The average home has two televisions, screens are getting bigger and viewing hours are increasing – so it makes sense to choose one that uses energy efficiently.

- Look at the ratings – an ENERGY STAR-qualified TV could use up to 30% less electricity than a non-ENERGY STAR-qualified model.
- The larger the screen, the more electricity it uses. Check the manuals before you buy so you can compare the electricity use of models in operation.
- Plasma and LCD screens have good, high-resolution picture quality but many of them can use large amounts of electricity.
- Cathode ray tube TVs are becoming less popular but are still sold. They can produce as good a picture as some LCD or plasma televisions, but may be cheaper to buy and run.

Choosing other home entertainment appliances

Set top boxes (digital receivers), games consoles, DVD players, home theatre systems and audio equipment all use stand-by energy – so switch them off at the wall when you're not using them.

- Buy products which have low stand-by electricity consumption.
- Choose by the labels – ENERGY STAR-qualified home entertainment products use 1 W or less of electricity in stand-by mode – that's up to 90% less than some equivalent non-ENERGY STAR products.

Home office equipment

Computers, laptops and imaging equipment, including printers and faxes, are increasingly a part of our everyday life at home.

An average computer system (desktop box and monitor) costs between \$50 and \$80 a year in electricity to run so choosing the most efficient office equipment can save you money – and deliver other benefits such as equipment running cooler and lasting longer.

Choosing and using home office equipment

- Choose by labels – ENERGY STAR-qualified office equipment and imaging products all use the latest energy efficient technology – which means lower energy use than standard equipment.
- Turn off your equipment at the wall at night, or when not in use.
- Use the power options on your computer to save electricity when you're not using it. You can choose the amount of time after which your computer does simple tasks like turning off the monitor and hard disks.



Cooking equipment

Cooking equipment, like microwaves and ovens, use about 10% of total household electricity use.

Choosing and using cooking equipment

- Fan forced ovens are about 30% more efficient than conventional units¹.
- Look for ovens with high levels of insulation and triple glazed, low-e coated windows.
- Microwaves use around half as much electricity as ovens².
- Vent the kitchen when cooking and keep lids on pots to prevent moisture build-up in your home.
- Turn appliances off at the wall when you are not using them, particularly the microwave.

Choosing the most efficient appliances and using them wisely will use a lot less energy over time. You'll spend less on power bills to get the same level of convenience in your home, and reduce your impact on the environment.

1. Your Home technical manual. <http://www.yourhome.gov.au/technical/fs61.html>

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