



Turn appliances off at the wall where practical.

Turn off your heated towel rail overnight.

Switch to the new generation energyefficient light bulbs.

Consider a low-flow showerhead.

Make sure your hot water cylinder is set at 55°C.

Switch to coldwash cycles for your clotheswashing.

## power to the people

As winter approaches, we're faced with that seasonal dilemma: how to effectively save power, and therefore money.

You've just enjoyed another warm and lovely summer, so the arrival of your power bill is hardly going to make you bat an eyelid. Even without opening it you know that with no heating used, lights hardly switched on, washing hung out to dry on the line and the barbecue frequently used for cooking, the bill will be satisfyingly low.

However, in two months time it can be quite a different story. The weather only has to turn a bit wet, then the clocks go back and, hey, it's on with the lights, chuck the clothes in the dryer, switch on the dehumidifier, plug in your heater and that bill has doubled in size, or even trebled by mid-winter. While most of this energy usage is necessary, it is possible to trim your winter energy bill without compromising on warmth and comfort.

So where to start? Well before you rush to turn off the heater, it can be worthwhile taking time to assess exactly how much each appliance in your house is currently costing you to run. Happily this is very easy to do and, dare it be said, even fun. Just log on to the Government's website www.energywise. org.nz and take a home energy audit. You will be taken on a tour of an average house, room by room, with all the appliances likely to be found in each room, letting you indicate how frequent your usage is. From there, the running cost of each item is calculated and advice given on how to make savings.

Compare, for instance, the difference in price if everybody in your house has a fiveminute shower a day as opposed to a couple of longer ones, or a bath. Is your washing machine always stuck on the 40°C wash cycle? See the money you can save just by changing to a 30°C wash - it's a surprising 20 cents each wash.

The typical household apparently spends around 29% of its energy costs on heating water, so you can see why they ask if your water is at the recommended temperature of 55°C. Even 5°C over that will cost you an extra 5-10% more on your energy bill a year. Some of the saving tips recommended will cost you money to apply, like insulating your hot-water tank and pipes or changing your showerhead to a low-flow model, but will also gain you the biggest savings. It's estimated that a low-flow showerhead, which gives the same water pressure as traditional models but uses substantially less water can save up to \$500 a year.

Skylights can play a role in energy saving – for passive solar gain, for light (skylights allow in twice as much light as vertical windows of the same size), for reducing the needs for mechanical cooling and ventilation, and for heat loss (Velux skylights, for example, have a higher insulation rating than double glazed vertical windows).

Another eye-opener is fridges – or to be precise the cost of running old fridges. Many people upgrade their fridge and then put the old one in the garage to use as a beer fridge and to store frozen meat. On one hand this can seem to be making good use of old equipment, however the cost of running an old fridge (especially one more than 10 years old) which is unlikely to be very energy efficient, can be around \$300 more a year than a modern model.

If you're about to purchase a new fridge look for the most energyefficient models and take advantage of the Government's pilot project, where old fridges are taken away for free (they have to be in working order and at least five years old) and you get \$25 towards vour new one.

Then there's the interesting question of whether turning off appliances at the wall, as opposed to leaving on standby, genuinely makes a real saving. The answer is definitely yes, though the amount really depends on just how many appliances your household use on standby.

Take into consideration which ones are practical to turn off at the wall, you obviously don't want the hassle of switching off a radio alarm and having to reset it each time, though be aware that it takes more electricity to keep your DVD player on standby for a year than it actually uses playing DVDs.

So if you're a typical household with several appliances on standby (televisions, gaming consoles, phone chargers, power tool chargers, stereos, microwaves, washing machines, dishwashers) you could save around \$75 a year just by getting into the habit of switching them off at the socket.

And while you're in the mood for changing habits another good one to adopt is switching off heated towel rails for part of each day; there's another nifty saving of \$100 to be made this way. H

## Seeing the light

While the National Government has overturned Labour legislation to phase out old incandescent bulbs and replace them with energy-saving models, reviewing your light bulb usage is always a good idea.

You may remember the early energy saving models, typically of curly design, which were slow to warm up and then didn't always give bright enough light. Never fear, the current models have been hugely improved upon and can be found in a wide range of sizes and shapes to suit almost all light fittings.

The most common energy efficient light bulb is the compact fluorescent lamp (CFL). This is great to use for general household lighting and can be bought in two different tones, 'warm white' for creating mood lighting or 'cool white' for brightness. CFLs use 80% less energy than traditional bulbs and last many, many times longer - a good quality CFL should give you 10,000 hours of lighting, compared to only 1000 for old style bulbs.

Unlike traditional light bulbs that waste energy by getting hot, CFLs run much cooler, which is why they save you so much energy. Until recently you couldn't use them with dimmer switches, but this is now possible with the addition of a range known as 'new generation halogen incandescent light bulbs'. While not as energy efficient as CFLs, they will still save you 30% less energy than old bulbs and last twice as long.

Light emitting diodes, better known as LED lights, are most commonly associated with bicycle lamps and torches, but this technology is making its way into the home, currently in the form of spotlights and downlights. At present LED lighting can be fairly expensive to install but has the potential to revolutionise home lighting. With the ability to last between 50,000 and 100,000 hours, it may mean the chore of changing light bulbs will be a thing of the past.



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