



No Cost & Low Cost Energy Saving Tips



For Your Home...

Save Hundreds on your Energy Bill

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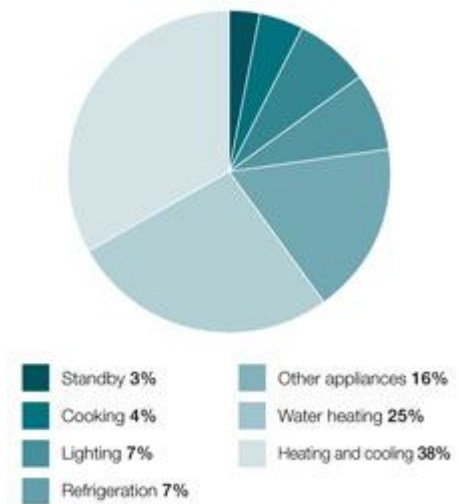
HOME ENERGY USE

This diagram shows us the energy use for different applications in the average Australian home.

Heating, cooling, and hot water make up a large part of it, so improving the efficiency of these can make significant savings in your pocket.

Standby power (i.e. leaving the red light on appliances) in recent studies has been found to more around 10% of an average home's energy consumption, as appliances like Plasma TV's guzzle electricity – this is just pure wastefulness, & can be eliminated easily by turning things off at the plug.

Home energy use
(Baseline Energy Estimates, 2008)



Water Heating

25 per cent of energy used in the home is to heat water, so it is a great opportunity to reduce your impact on the environment, as well as save on you bills.

Our top **Water Heating NO COST & LOW COST tips** are:

- ❖ Insulate hot water pipes, particularly externally exposed pipe leading from the water heater to the house and the pipe leading to the relief valve (on storage systems). Note: Standard lagged hot water pipes are inadequate external protection in cold and cool temperate climates. Apply additional insulation or 'lagging'. About 30 per cent of the energy used to heat water in a storage system is wasted due to heat loss from the tank and associated pipework.
- ❖ For storage systems consider installing a timer to ensure water is not heated when it's not needed and a switch so the system can be turned off when you go on holiday.
- ❖ Install water-heater wrap as per manufacturer's instructions.
- ❖ Install heat traps on hot and cold water lines when it's time to replace your water heater.
- ❖ Ask the installer/plumber to set the system's booster thermostat at 60 degrees Celsius to inhibit the growth of legionella bacteria. This lower temperature setting will save you money and energy as you don't have to heat the water as much.
- ❖ Instantaneous hot water systems should be set to no more than 50°C.

- ❖ Install low-flow shower heads – this not only conserves water, but also reduces your energy bill!
- ❖ Limit shower length to 3-5 minutes – this conserves energy as well as water.
- ❖ Take more showers than baths. Bathing uses the most hot water in the average household. You use 15–25 gallons of hot water for a bath, but less than 10 gallons during a 5-minute shower.
- ❖ Wash clothes in cold water. Use hot water only for very dirty loads.
- ❖ Do only full laundry loads.
- ❖ If you must do smaller loads, adjust the water level in the washing machine to match the load size, especially when using hot water.
- ❖ Fix dripping faucets promptly; a leaky faucet wastes gallons of water in a short period of time.
- ❖ Install aerators.
- ❖ If you have solar hot water, whenever possible, use hot water early in the day so that the sun, not the booster, will reheat water left in the tank.
- ❖ Turn the booster off when you go away on holidays.
- ❖ Maintain your system and have it serviced according to manufacturer’s instructions.
- ❖ A solar water heater can provide between 50 per cent and 90 per cent of your total hot water requirements, depending on the climate and the model of heater. There are rebates available that make it affordable! The time required to break even (the payback period) depends on the climate and the type of system installed, but is typically five to 10 years. Solar water heaters have additional benefits, as they last longer than conventional water heaters and add to the value of your home.
- ❖ If you are in the market for a new dishwasher or clothes washer, consider buying an efficient, water-saving model to reduce hot water use.
- ❖ Although most water heaters last 10– 15 years, it’s best to start shopping for a new one if yours is more than 7 years old. Doing some research before your heater fails will enable you to select one that most appropriately meets your needs.

See here for more details on Hot Water - <http://www.yourhome.gov.au/technical/fs65.html>

Heating & Cooling

38 per cent of energy used in the average home is used for heating and/or cooling, so this is also a great opportunity to reduce your impact on the environment, as well as save on you bills.

Our top **Heating & Cooling NO COST & LOW COST tips** are:

- ❖ Set your thermostat as low as is comfortable in the winter and as high as is comfortable in the summer.
- ❖ Turn off kitchen, bath, and other exhaust fans within 20 minutes after you are done cooking or bathing; when replacing exhaust fans, consider installing high-efficiency, low-noise models.
- ❖ During the heating season, keep the draperies and shades on your North facing windows open during the day to allow the sunlight to enter your home.
- ❖ Closed curtains at night to prevent warm air in the home escaping & reduce the chill you may feel from cold windows. Thick lined curtains with pelmets are the most insulating.
- ❖ During the cooling season, keep the window coverings closed during the day to prevent solar gain.
- ❖ Install a curtain or door in between rooms & the hallway. It's far more efficient to heat a smaller room in which you spend the most time, rather than letting the heat escape into the rest of the house.
- ❖ Put a timer on your electric heater. Rather than letting it run all night, set it to turn off an hour after you asleep and an hour before you wake.
- ❖ Run ceiling paddle fans on medium, blowing down, in summer.
- ❖ Run ceiling paddles fans on low, blowing up, in winter.
- ❖ When heating or cooling, keep windows locked; they seal better.
- ❖ Insulate electric wall plugs and wall switches with foam pads.
- ❖ Ensure attic access door closes tightly.
- ❖ Insulate attic access door.
- ❖ The most efficient option is to put on more wooly clothes in winter! ☺

- ❖ If you have a **ducted system** make sure it's well insulated, sealed from leaks, and the filter is cleaned every 6mths, all of which will significantly improve its efficiency.
- ❖ A ducted system should be zoned so that it does not heat areas that are not being used - doing this could save you hundreds of dollars!
- ❖ If you have a **fireplace** you never use, plug and seal the chimney flue.
- ❖ Keep your fireplace damper closed unless a fire is going. Keeping the damper open is like keeping a window wide open during the winter; it allows warm air to go right up the chimney.
- ❖ Check the seal on the flue damper and make it as snug as possible.
- ❖ Use grates made of C-shaped metal tubes to draw cool room air into the fireplace and circulate warm air back into the room.

For a more detailed guide on **"What Heater Should I Use..?"** see this article...

<http://www.ecovise.com.au/2010/05/26/what-heater-should-i-use/>

Draught Proofing & Insulating

Air infiltrates into and out of your home through every hole, nook, and cranny. About one-third of this air infiltrates through openings in your ceilings, walls, and floors – and it's all contributing to your heating & cooling bill!

How and Where Does the Air Escape?

Plumbing penetrations - 13%	Windows - 10%
Floors, walls, and ceiling - 31%	Fireplace - 14%
Fans and vents - 4%	Doors - 11%
Ducts - 15%	Electric outlets - 2%

Our top **Draught Proofing & Insulating NO COST & LOW COST tips** are:

- ❖ Firstly, test your home for draughts. On a breezy day, hold a lit incense stick next to your windows, doors, electrical boxes, plumbing fixtures, electrical outlets, ceiling fixtures, attic hatches, and other locations where there is a possible air path to the outside. If the smoke stream travels horizontally, you have located an air leak that may need sealing.

- ❖ Weather-strip doors and windows that leak air.
- ❖ Seal air leaks where plumbing, ducting, or electrical wiring penetrates through exterior walls, floors, ceilings, and soffits over cabinets.
- ❖ Install rubber gaskets behind outlet and switch plates on exterior walls.
- ❖ Look for dirty spots in your insulation, which often indicate holes where air leaks into and out of your house. You can seal the holes by stapling sheets of plastic over the holes and sealing the edges of the plastic.
- ❖ When the fireplace is not in use, keep the flue damper tightly closed. A chimney is designed specifically for smoke to escape, so until you close it, warm air escapes—24 hours a day!
- ❖ Insulation helps to:
 - reduce the need to use your mechanical heating and cooling systems, saving money on your energy bills
 - improve weatherproofing of your home
 - reduce moisture problems like condensation

Some types of insulation can also make your home more soundproof.

Read more on Insulation - <http://www.yourhome.gov.au/technical/fs47.html>

Kitchen

Our top **Kitchen NO COST & LOW COST tips** are:

- ❖ Switch your refrigerator's powersaver to "ON," if available.
- ❖ Clean refrigerator coils annually.
- ❖ Set the refrigerator temperature to 5 degrees Celsius – every degree lower requires 5% more energy. Use a special thermometer to check that the internal temperature is set correctly.
- ❖ Set the freezer temperature to -15 degrees.
- ❖ Ensure door seals are airtight. To test them, close the door on a bit of paper and try to pull it out. If the paper slides out easily reseal the fridge or upgrade if the fridge is old. New door seals can increase efficiency by 10 per cent.

- ❖ Unplug your second refrigerator or freezer (& save on average \$210/year!).
- ❖ A near empty fridge does not operate very efficiently – best to fill it up with bottles of water so that it can run more efficiently.
- ❖ Keep fridges away from walls and heat sources, such as ovens. Fridges should always be well ventilated at the rear.
- ❖ Use microwave for cooking when possible
- ❖ When cooking on the range, use pot lids; food will cook quicker.
- ❖ If you are heating water, don't start with hot water from tap; start with cold water from tap.
- ❖ Remember to use the kitchen exhaust fan when cooking and turn it off after cooking.
- ❖ Let hot food cool before storing it in the refrigerator.
- ❖ Scrape dirty dishes with cold water before putting them into the dishwasher.
- ❖ Only run the dishwasher when fully loaded.
- ❖ Use air-dry cycle instead of heat-dry cycle to dry dishes.

Laundry

Our top **Laundry NO COST & LOW COST tips** are:

- ❖ Consider using a “solar-powered” clothes dryer...an old-fashioned clothes line.
- ❖ If using a dryer, use one with a moisture sensor if available & clean the dryer lint trap before each load.
- ❖ Verify the outdoor dryer exhaust door closes when dryer is off.
- ❖ Verify dryer vent hose is tightly connected to inside wall fitting, & the dryer itself. Check the hose is not kinked or clogged.
- ❖ Dry consecutive loads to harvest heat remaining in dryer from last load.

Every household in Australia is entitled to have a FREE Home Energy Assessment, provided by the Federal Government – valid until Dec'10.

If you would like to have a qualified assessor, visit your home and carry out a Free Home Energy Assessment + Report with Recommendations... please book via our [Online Booking](#) tool.

Or call (02) 8090 5411 for more information.

<http://www.ecovise.com.au/>