

SAVEenergy



SAVEmoney

the benefits of an energy efficient home



CHANGE YOUR POWER HABITS

The little things can deliver big savings on power bills.



Tasmanian
Government

Making small changes to habits and choices around the home can have a big impact on your energy costs. Choosing to use energy efficiently is one of the easiest ways to reduce energy bills and be environmentally friendly while maintaining or even improving comfort levels.

Energy efficiency is basically using less electricity and gas to produce the same level of performance, comfort and convenience.

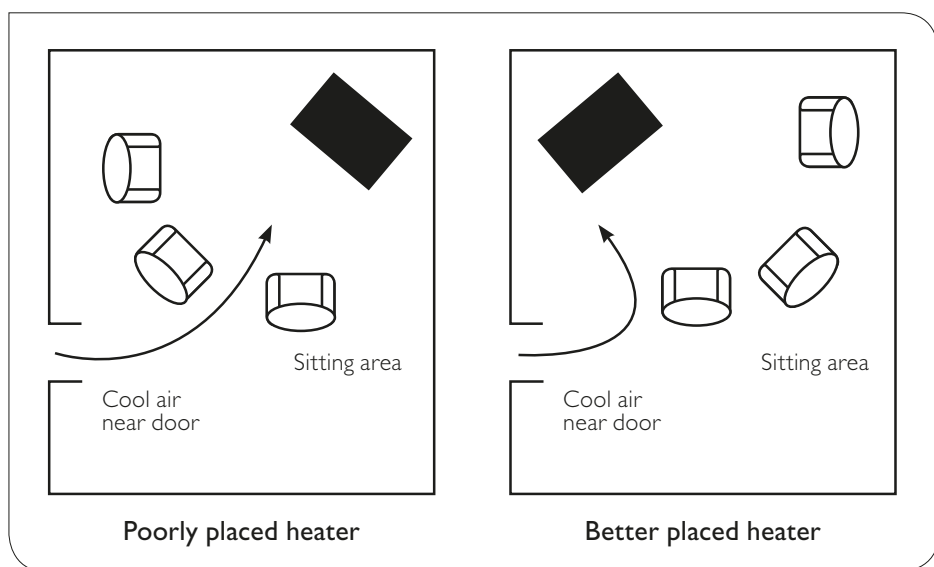
You may be surprised at the range of things you can do, and many changes cost very little. This guide gives you some simple and effective advice, showing you how to easily review your habits in each part of the house.

HEATING AND COOLING YOUR HOME EFFICIENTLY

Heating a house contributes to 50 per cent of the energy bill in a typical Tasmanian family home. Changing habits and making small changes can lower your power bill. You can easily carry out the following suggestions:

- Reduce loss of heat by closing doors to any rooms that are not occupied and pull the curtains or blinds.
- Switch off heaters/air conditioners when you go out or go to bed. If you want the house to be comfortable when you arrive home/get up in the morning, use a timer to turn your system on about 15 minutes beforehand.
- Never set the thermostat at a temperature below or above what you require. Setting it lower or higher does not make the unit cool down or warm up the room faster.
- Make sure your thermostat is set properly. Over the cooler months try setting your thermostat at the lowest possible setting and increase the temperature gradually until it is comfortable.
- Each degree of extra heating in winter or cooling in summer will increase energy use by about 5 to 10 per cent. Try adjusting your room temperature to around 18–21°C in winter.
- If your heater has a timer, make sure it doesn't turn on when you don't need it, like on warmer days or when you're on holiday.
- Dress for the weather, especially if you feel the cold more than others in the house.
- Ensure door seals are installed and there are no air gaps around doors, windows and ceilings (including downlights) or unused open chimneys.

- Ensure all vents (e.g. in the kitchen and bathroom) have louvres that close when the vent is not in use.
- If you have vents in interior walls, e.g. in older houses, fill them with insulation and cover them. Controlling ventilation when you are heating a room will help reduce heat loss.
- Be aware of where your heat goes. Only heat areas where you need it. If you need heat for short periods or in a small space, such as a bathroom, it is more efficient to use a small radiator or fan heater than continuously using a space heater, even when the room is not being used.
- Make good use of window furnishings. Closing curtains or blinds as soon as the sun is off the house will hold in the solar heat from the sun. In hot weather pull curtains, blinds, or external shutters to keep the sun's heat out of the house.
- Heavy curtains with pelmets are better at retaining heat than vertical and venetian blinds. Good window furnishings can make a big difference.
- Avoid sitting in drafts created by air movement. Drafts can make you feel much colder. Move your furniture to deflect or avoid drafts.



- In hot weather you can save significant cooling energy by opening windows and creating air-flow through the house to allow the cooler night air to pre-cool the house.
- In winter use a ceiling fan or a heat transfer unit to send warm air downwards – especially if you have high ceilings or an open staircase.
- If you are trying to cool your house, be aware that lights and all your appliances will cause you to pay twice - once for their own electricity and once again to get rid of the heat they produce.



EFFICIENT HOT WATER USE

Hot water makes up about 25 per cent of household energy use. Taking the following steps to increase hot water energy efficiency will save on energy bills while maintaining similar levels of performance, comfort and convenience:

- Set the hot water thermostat between 60 and 65°C on storage hot water systems and as low as possible on instantaneous systems to avoid scalding. But do not drop the storage hot water system below 60°C, as harmful bacteria can build up.
- Taking a four minute shower generally uses less than half the amount of hot water it takes for a bath.
- Use a shower timer to remind everyone in the household to take shorter showers.
- Cover a continually heated outdoor hot tub when not in use.
- Turn off the hot water system when on holidays.
- Use mixer taps in the cold position unless you really want hot water. Be aware that the entire hot water pipe is used even if you want just a little bit.

If you own your home we also recommend you undertake the following steps. If you are a tenant ask your landlord to:

- Install AAA rated showerheads. Other than baths, showers usually use the most hot water in a home.
- Immediately repair dripping hot water taps and leaking appliances.
- Insulate the tank and all hot water pipes, especially those that are outside, and also insulate the first two metres of the cold water pipe leading into the tank. Care needs to be taken when insulating any other metal fittings attached to the tank, especially pressure and temperature relief valves to ensure that they can continue to work safely. You should seek the advice or assistance from a plumber when insulating these fittings.
- Call a plumber to inspect your hot water cylinder if there are continual signs of water coming from the pressure relief valve – a steady drip soon wastes a lot of energy, water and money.
- Service your hot water system according to the manufacturer's instructions.

LIGHTING YOUR HOME EFFICIENTLY

Lighting makes up about four per cent of Tasmanian household energy use. Here are some tips to reduce its impact on your power bill:

- Make the best use of natural light for a room.
- Turn off lights when not needed.
- Only use the lights in a room that are needed.
- Use LED, fluorescent or compact fluorescent lamps (CFL) instead of incandescent globes (the ordinary older style globes) – they require five times less energy than ordinary bulbs for the same amount of light. Incandescent globes have now been phased out. The table below shows the savings for different lights compared to the older style incandescent globes:

Lamp energy savings compared to an incandescent bulb

Type of lamp	Power usage compared to an incandescent bulb
Halogen	70%
CFL	20 %
LED	10 %

Source: Energy Saving Trust UK

- Avoid using low voltage halogen downlights for general lighting as they are not energy efficient. Low voltage does not mean low energy consumption. Compact fluorescent and LED replacements for downlights are now available.
- Clean lamps and diffusers regularly as dust causes loss of efficiency.
- Use the minimum wattage lamp to provide required light for the area.
- If you own your home, use timers or sensors on outdoor security lights or if you are a tenant ask your landlord to install them.
- If building or renovating a home and installing halogen downlights use as few as possible to achieve your lighting needs.





COOKING EFFICIENTLY

Cooking accounts for about nine per cent of Tasmanian household energy use. Here are some handy hints and tips to make your cooking more energy efficient:

- Use a microwave when convenient rather than an oven, as they use less than half the energy.
- If your oven has a fan forced option, use it. Fan forced ovens are about 30 per cent more efficient than conventional ovens, which can waste up to 90 per cent of the energy used.
- Make sure your oven door seal is clean and in good condition.
- When using a kettle, boil only the amount of water needed. Boiling too much wastes energy.
- Efficient cooking methods include using pots with fitted lids, simmering instead of boiling and using a pressure cooker.

EFFICIENT REFRIGERATION

Refrigeration makes up about seven per cent of energy used in the average Tasmanian home:

- Many Tasmanian households run an additional fridge or freezer even though it is not really required. Only turn it on when it is required and do not position it in a hot garage or veranda.
- Place your fridge or freezer in a cool spot out of direct sunlight and away from cookers, heaters and dishwashers.
- Make sure the door seal is clean and in good condition. It should hold a piece of paper tightly in place when closed.
- Set the fridge thermostat to between 3°C and 5°C. The freezer should be set to between – 15°C and – 18°C. Every degree lower requires five per cent more energy. A fridge thermometer is a good idea.
- Make sure the warm air can escape from the back of the fridge or freezer by leaving a space between the back of the unit and the wall.
- Keeping the metal grill on the back of the fridge clean and free of dust and grime is important to efficient running.
- Avoid overloading the fridge or freezer. Try to leave about 20 per cent free space for good air movement.
- Defrost manual models regularly or when ice is more than five millimetres thick. It will run more efficiently after being defrosted.
- Allow hot things to cool before putting them into the fridge.
- Service your appliances regularly, according to the manufacturer's instructions. An appliance in poor condition usually uses more energy than one in good condition.



EFFICIENCIES FOR OTHER HOUSEHOLD APPLIANCES

Other appliances account for approximately 5 per cent of Tasmanian energy use in the home. Here are some tips to help reduce their impact on your power bill:

- Dry clothes or at least the larger items on a line rather than in the clothes dryer. Save the clothes dryer for a rainy day.
- Use cold-water washing and economy cycles to wash clothes.
- Use appropriate load sizes or cycles for clothes washers and clothes dryers.
- Ensure the dishwasher is full before turning it on and use the economy cycle.
- Select 'energy saving' or 'economy' settings on appliances, if available.
- There are many small items around the house that can use a lot of energy over a year, such as pool filter pumps, electric towel rails, transformers (even when they are not in use) and computer games. Ensure they are not left on unnecessarily.
- Large screen TVs use more energy than those with smaller screens.
- An LCD screen for desktop computers is more efficient than an older style screen, using less energy and taking up less space.
- Switch off computers and printers if you won't be using them for half an hour or more.
- Remember if these devices feel warm they are using electricity.





REDUCING YOUR 'STAND BY' ENERGY USE

In some cases standby energy can use 10 per cent of a household's electricity use. Some appliances can use much more energy over a year in standby than in actual operation.

- Be aware of the standby energy use of electrical equipment such as TVs, videos, clocks, computers, faxes, microwaves, security systems, battery chargers and power packs.
- In standby mode, the appliance is still drawing power even when turned off. Turn off the appliance at its main On switch or power point.
- Often power points are behind desks or entertainment units and can be hard to turn off. Use a power board fitted with On switches placed in an easy-to-reach location. The illuminated switch can remind you to turn the whole board off when not in use.
- The ENERGY STAR® program applies to home entertainment equipment such as computers, monitors, printers, TVs, DVD players, audio equipment and faxes.
- Standby energy consumption can be reduced by using appliances endorsed with the ENERGY STAR® sticker.

Visit www.energystar.gov.au to learn more about the ENERGY STAR® program.





REDUCING PEAK LOAD ELECTRICITY USE CAN LEAD TO PRICE SAVINGS

The growth of total overall electricity demand in Australian households is tending to level out. However, the amount used at peak demand times keeps going up. This means that electricity network providers need to expand the infrastructure just to meet this peak load, leading to higher electricity prices all the time for everyone.

So while saving power is always important, it is especially important at peak times. In Tasmania, these peak times are winter mornings and evenings.

Peak load energy saving tips:

- Use a slow cooker to prepare dinner during the day, instead of switching on the oven in the evening.
- Turn the heater on earlier at a lower temperature, rather than later at a higher temperature.
- Run the dishwasher or washing machine overnight or on weekends, especially in winter.

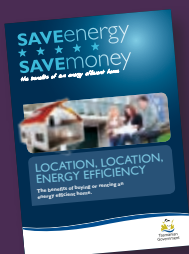
No Interest Loans Scheme

The No Interest Loans Scheme (NILS) of Tasmania provides loans at no interest to eligible people for the purchase of new energy efficient appliances, including refrigerators. For more information call 1300 301 650 for the cost of a local call.

*Making small
adjustments to habits
and choices around
the home can have
a big impact.*

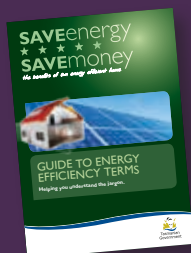


Other information available in the SAVEenergy SAVEmoney series:



LOCATION, LOCATION, ENERGY EFFICIENCY

the benefits of buying or renting an energy efficient home.



GUIDE TO ENERGY EFFICIENCY TERMS

helping you understand the jargon.



STAR RATINGS

your guide to ongoing power savings.

**For more information from the
SAVEenergy SAVEmoney series:**

VISIT: www.climatechange.tas.gov.au/

PHONE: 1300 13 55 13 to request a brochure



**Tasmanian
Government**