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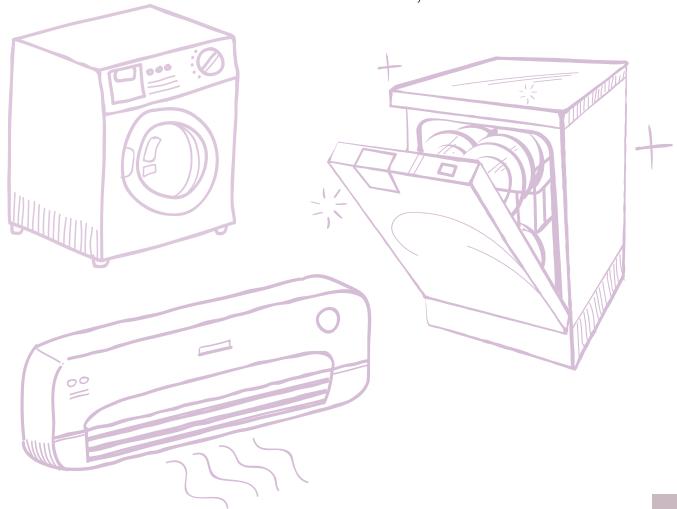
Saving energy around the home



Saving energy in your home and reducing your energy bill is easy when you have the right information. This guide is full of practical tips on how to be energy efficient at home, both indoors and outdoors, and will help you make smart energy choices that suit your family and lifestyle.

To make the biggest energy savings, focus on the appliances that use the most energy (e.g. refrigerator, washing machine, clothes dryer, dishwasher, air conditioner and hot water system).

This guide will run you through how to use these appliances efficiently, saving you both energy and money.



In the kitchen



The refrigerator uses the most energy in the kitchen because it cycles on and off all day, every day. The fridge can consume more electricity than nearly every other appliance in the home.

With some basic maintenance and good habits, you can greatly improve your energy use in the kitchen without sacrificing convenience.

- Place refrigerators and freezers in a cool, wellventilated space out of direct sunlight and not adjacent to a heat source such as an oven.
- Avoid leaving the fridge or freezer door open.
- Defrost frozen food in the fridge ahead of time.
- Keep seals on the oven, fridge and freezer clean, and replace if they are damaged.
- Consider using the dishwasher at night and use the 'economy' setting to wash lightly soiled dishes.
- Think before opening the fridge the more

- times you open the door, the warmer your fridge gets, so more energy is needed to keep the food inside cool.
- Where practical, switch off small appliances at the wall and turn off your second fridge when not in use.
- If you wish to buy a new fridge or dishwasher, look at energy efficient models with a high star rating and buy the right size for your family. This will cost you less to run in the long-term.
- Keep preheating times for electric ovens to a minimum. Gas ovens do not need preheating.
- Where possible, place lids on pots and saucepans to reduce cooking time and match the pot size to the hotplate to reduce heat loss.
- When using a dishwasher, completely fill the racks to optimise water and energy use, but allow proper water circulation for adequate cleaning.

In the living room



Televisions, gaming consoles, cable TV boxes, and stereo systems all consume a lot of power, which is reflected in your electricity bill.

- Where possible, replace energy sapping appliances with high energy star rated products.
- To make turning off electronics easier, plug them into power strips to switch multiple devices off at one time.
- Some electronic devices can't be turned off because that would disrupt recording programs you've set up. With a smart power strip, you can turn off your TV while leaving the recording device plugged in.
- Use power management features to lower the energy use if the device is not completely powered off.
- Change your computer settings to standby / sleep mode. In standby mode, the computer uses 95% less energy than when idle.
- Turn your computer off at the wall if you've finished using it for the day.
- Install energy efficient LED bulbs that will consume 80% less energy than a comparable incandescent bulb and can last 5 to 10 times longer, which will save money over time.

- Install ceiling insulation and seal gaps around doors or windows to prevent draughts. This will make your home warmer in cooler months and prevent heat infiltration during warmer months.
- Close windows, curtains and doors to a room when heating or cooling. It is more energy efficient to heat or cool a small space than a larger living area.
- Consider using ceiling fans for cooling instead of air conditioning as these are significantly cheaper to run.
- Turn off lights, fans, air conditioners and appliances when you leave the room.
- If you have an air conditioner, set it at 25°C for maximum efficiency when cooling, or 18°C in heat mode to warm your home efficiently.
- You can save up to 10% off cooling costs for every one degree that you raise the temperature.



In the bathroom



The best way to improve energy efficiency in the bathroom is to reduce water consumption.

Simple switches to the shower heads and taps can reduce your bathroom water usage by almost half.

Some of these have an upfront cost but like most home energy efficiency measures, they pay for themselves quickly.

- Install energy efficient tapware and shower heads to save water and energy. An efficient showerhead uses no more than nine litres of water per minute.
- Take shorter showers instead of a bath. Limit yourself to a four-minute shower to save water and also help reduce the amount of electricity or gas needed for heating the water.
- A shower timer is a handy device to monitor shower time.
- Renew seals and washers on dripping taps. A hot water tap dripping once a second for a day can waste enough hot water for an extra person.

- Install an energy efficient hot water system.
- Consider installing a solar hot water system that uses up to four times less electricity than a regular electric storage hot water system.
- Switch off exhaust fans, heaters, heated lights and any appliances plugged into the wall when not in use.
- If you have a regular exhaust fan, consider replacing it with a higher energy star rated model.
- Replace the bulbs in your bathroom for LEDs to cut your energy usage.

In the laundry

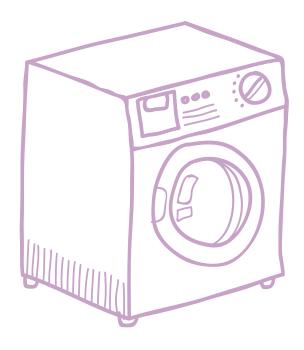


Knowing how to save energy while doing laundry can considerably trim energy costs in your home.

Most laundry expenses come from washing in hot water and using a clothes dryer.

- Wash clothes in cold water with a suitable laundry powder.
- Load your washer fully each wash.
- If you do not have a full load, adjust the water level on the machine to save water and power.
- Use the sun to dry clothes when possible. An outdoor clothesline or an indoor clothes rack near a sunny window, and hanging clothes on coat hangers to dry will do the job, while leaving your clothes smelling fresh.
- If using a clothes dryer, use medium heat and don't overload the machine.
- Only dry full loads in the clothes dryer and try
 not to mix fast and slow-drying clothes this
 wastes energy by continuing to dry clothes that
 are not wet.

- Clean the lint filters in your clothes dryer after every load. Clothes will dry faster, and you will use less energy.
- Iron low temperature fabrics first to reduce the warm-up time and switch the iron off before finishing the last garment.
- Iron batches of clothing at the same time to avoid wasting energy reheating the iron.
- When purchasing a new washing machine or clothes dryer, look at energy efficiency, by comparing the energy star ratings on different models. The more stars, the cheaper to run!



In the bedrooms



Your bedroom might not consume much electricity, but there are some energy wasters that could be contributing to your electricity bill.

While the savings may be less than other areas of your home, many small savings add up over time.

- Check the seals around bedroom doors and windows to identify and remove draughts.
- During colder months, close your curtains well before bedtime, but open them each morning to let in the warming sun during the day.
- Instead of using an air conditioner or heater overnight, use more/less blankets. During winter, use a timer to turn the heating on half an hour before you get up.
- During warmer months, use fans to move air around to reduce humidity and keep the temperature at a comfortable level.
- In colder months, most ceiling fans have a switch to reverse rotation that will pull warm air down from the ceiling, keeping your bedroom comfortable without the need for a heater.

- If your bedroom gets too hot in warmer months you could install reflective blinds or awnings outside the windows to help reduce heat.
- Use a power strip to make it easy to turn off electronics when not in use.
- When using air conditioning, close all doors so you don't waste energy to cool or heat areas that don't need it. The larger your bedroom is, the harder the air conditioner has to work to control the temperature.
- Use bedside lamps so you only light the room where it's needed.
- Use energy efficient bulbs where possible rather than standard incandescent bulbs.
- Switch off all lights as you leave each room and clean lamp shades and bulbs regularly to ensure maximum light output.

In outdoor areas

When most people think of ways to reduce their energy use, they typically focus on things they can do inside their home; but there are plenty of things you can do to reduce energy use outside the home too.

- Install motion and light sensing controls on security lighting to activate lights only between dusk and dawn or use solar garden lights.
- Consider installing a solar PV system. Solar
 has become more efficient and less costly than
 it once was, and for most consumers, going
 solar actually offers substantial overall savings
 especially if you take advantage of rebates and
 incentives.

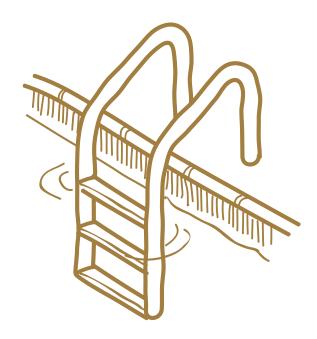
- Planting shade trees can dramatically improve the temperature control in your home.
- By blocking the sunlight entering your windows, shade trees will make your home more energy efficient and reduce the energy needed to cool your home.
- Use compact fluorescent lamp (CFL) spotlights or LED lamps in your outdoor lights.
- Clean light fixtures regularly and keep vegetation away from windows.

Pools and spas

Swimming pools and spas don't just use a lot of water, they also use large amounts of energy and contribute significantly to your electricity bill.

- For greatest efficiency, use an energy efficient pool pump and timer. A 5 star or better rated energy efficient pump could save up to 80% on your pool's running costs.
- Clear leaves and other objects from the pool pump's water inlet, as blocked inlets can make the pump work harder using more energy.
- If you want to heat your pool, install energy efficient heating such as a solar heater or a high efficiency heat pump and maintain the temperature to save on energy costs.

- Connect your pool or spa pump to an economy electricity tariff which could cut your future running costs by around 19%.
- Economy electricity Tariff 33 is available for up to 18 hours a day and rewards customers connected to Ergon or Energex networks for using electricity outside peak demand times (around 4pm-8pm).



Lighting

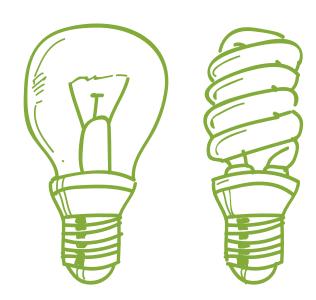


Household lighting accounts for about 8% of electricity costs in Queensland homes.

You could reduce your lighting costs by more than 80% just by replacing incandescent light bulbs with more energy efficient options.

- Use natural lighting during the day.
- Use LED or CFL light bulbs, which use significantly less energy, last 5–10 times longer and can save
 \$71–\$91 each year per household.
- Use dimmers to adjust artificial lighting as natural light levels fluctuate.
- Install lamps near reading chairs and down lights over kitchen benches, dining table and the bathroom vanity to avoid lighting up the whole room.
- Turn off lights in areas of your home when the rooms are not in use.

- Fit timers and motion sensors in areas that are rarely used so your lights are only on when they need to be.
- Consider installing a skylight to allow natural light inside and reduce the need for artificial lighting during the day.
- Download the lightbulb saver App, which provides handy tips about choosing the right lighting for each room in your house (www.energyrating.gov.au/apps).

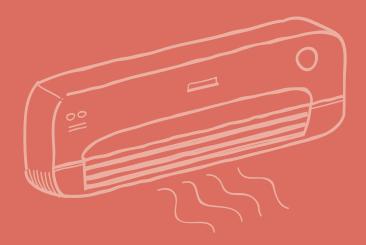


Cooling

Air conditioners use a lot of energy. Every degree of extra cooling may increase your electricity consumption by approximately 5–10%.

- For best efficiency, set your air conditioner to 24°C–26°C to cool your home.
- Open your home to create cross breezes and turn on ceiling fans to circulate air to keep cool.
- Turn off the air conditioner when you leave the room or your house.
- Don't waste electricity on cooling areas not being used.
- Clean air conditioner filters twice a year to ensure it runs as efficiently as possible.

- Close doors and windows in areas you want to air condition, to ensure the cool air stays inside.
- If purchasing a new air conditioner, consider energy efficient models with a high energy star rating as they will save you money over time.
- Install the right sized energy efficient air conditioner for your home. You should consider how big the room is you want to cool, the direction the windows are facing, and if you have insulation in the ceiling.
- Position the outside unit of your new air conditioner on a shady side of the house to increase energy efficiency and keep clear of any buildup of debris and leaves.



Heating

Indoor heating can account for up to 10% of your electricity bill. By making a few small changes you can save on your energy costs.

- When possible, wear warmer clothes to reduce the need to use heaters.
- Choose the right size heater to suit your room and keep it in good operating order.
- Seal gaps around doors and windows to keep draughts out. Unsealed draughts can account for up to 25% of heat loss in your home.
- If you own a heater, use it for short periods and install a timer to turn it on and off automatically.
- Decide which rooms require frequent heating and cooling. Make sure they are well insulated and can be closed off from the rest of the house.

- If you have a reverse-cycle air conditioner, setting the heat mode between 18°C and 20°C is the most efficient way to heat your home.
- Insulation will help keep your house warmer in winter and cooler in summer and will save on heating costs.

Hot water systems

The energy used to heat water can make up a significant portion of your power costs.

Switch to an economy tariff

Check your bill to see if your hot water is charged on an economy electricity tariff. If not, contact your electrician to connect your system to either economy electricity Tariff 31 or Tariff 33, which are both available to customers connected to Energex and Ergon networks.

- Economy Tariff 31: is for electric hot water systems holding 250 litres or more that will reheat at night. Electricity is available for a minimum of 8 hours each day.
- **Economy Tariff 33:** is available for up to 18 hours a day and rewards customers for using electricity outside peak demand times (around 4pm–8pm).

Install an energy efficient hot water system

If you need to upgrade your old hot water system, consider an energy efficient model (such as a heat pump, gas or solar).

Position your new system near to where hot water is used the most, (e.g. the bathroom, kitchen or laundry) to help save water and reduce heat loss.

Ask your plumber for help in understanding what the right sized system for your needs could be.

A wise choice about which hot water system you buy can make a substantial difference to your energy bill.

Government rebates can assist you with the cost of buying a new hot water system.

- If you purchase and install a solar water heater (up to 700 litres) or air-sourced heat pump water heater (up to 425 litres) you may be entitled to the Federal Governments' Small-Scale Technology Certificates (STCs) rebate.
- To be eligible for STCs, systems must be installed by a Clean Energy Council accredited installer.
- Visit www.cleanenergyregulator.gov.au for more information on solar and installers.



Solar PV systems

If you're thinking of making the switch to solar, there has never been a better time to do it. With the reduced cost of installing solar, over 2 million Australian households are now enjoying clean, reliable energy—straight from the sun.

Before making the decision to install solar, it is important to consider whether the investment will be worthwhile for you. A number of different factors affect payback periods, including the amount of the Federal Government's small-scale solar rebate.

The most benefit is gained by 'self-consumption' that is, offsetting the price that you would pay by using power generated by your system instead of drawing power from the electricity grid.

So, you should consider your household electricity consumption when choosing your system size.

When choosing a solar retailer, it's important to do your homework and shop around for the best deal.

The Clean Energy Council recommends you choose an Approved Solar Retailer that has signed the Solar Retailer Code of Conduct.

Approved Solar Retailers provide a five-year, whole-of-system warranty, are committed to providing a quality product and service, and only use Clean Energy Council accredited installers.

Installers and designers need Clean Energy Council grid-connect accreditation with battery back-up endorsement or stand-alone accreditation.

Grid connected PV systems with battery backup are becoming increasingly popular. With solar customers in many states now receiving a low price for electricity sold back to the grid, battery back-up systems can be a viable alternative as they use the electricity stored during the day to run your house at night. They also have the advantage of being able to supply power during electricity outages.

Stand-alone systems are not connected to the electricity grid and typically are installed in remote areas where there is limited connection to the grid, or areas of low electricity demand. Unlike their grid-connected counterparts, these systems must have batteries or backup generation to provide supply at night. In many cases they will also include a diesel or petrol generator to supplement energy supply.

Understanding your energy use at home

Reducing your energy bill can be as quick and easy as replacing products with more energy efficient options.

The average household has around 70 different appliances and some of them can have a significant impact on your electricity bill. Every appliance you have costs money to run—some even continue to use electricity when they're plugged in and turned off at the wall.

By choosing energy efficient appliances and using a few energy saving strategies, you'd be surprised how much control you can have over your home's energy use and costs. Knowing the real cost of running your household appliances can help you manage and reduce your energy use.

13%

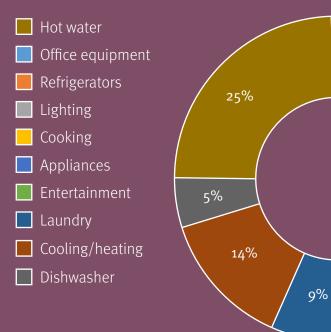
9%

6%

8%

Queensland average home electricity consumption

4,000kWh primary Tariff 11 and 1,357kWh economy Tariff 33



Queensland average household appliances	Input watts	Cost kW	•	Cost per l	ost per hour		Cost per hour		ricity er year	Kilowatts / year	House zone
Dishwasher – 2 Star (268kWh/yr)	1350	\$	0.26	\$	0.19	\$	70.34	270	Dishwasher		
Electric kettle (1 hour /wk)	1400	\$	0.26	\$	0.36	\$	18.95	73	Appliances		
Toaster – 2 slice (1 hour/wk)	982	\$	0.26	\$	0.26	\$	13.29	51	Appliances		
Frypan (2 hours/wk)	900	\$	0.26	\$	0.13	\$	13.40	51	Appliances		
Deep fryer (1 hour /mth)	2000	\$	0.26	\$	0.42	\$	21.65	83	Appliances		
Food blender (o.5 hour /wk)	300	\$	0.26	\$	0.08	\$	2.03	8	Appliances		
Coffee maker (1 hour / wk)	752	\$	0.26	\$	0.15	\$	7.63	29	Appliances		
Food processor (o.5 hr/wk)	600	\$	0.26	\$	0.16	\$	4.06	16	Appliances		
Hair dryer (1 hour / wk)	1200	\$	0.26	\$	0.31	\$	9.74	37	Appliances		
Vacuum cleaner (1 hour wk)	1500	\$	0.26	\$	0.39	\$	20.30	78	Appliances		
Garage roller door (1 hour/wk)	200	\$	0.26	\$	0.05	\$	2.71	10	Appliances		
Electric convection oven (1 hour /wk)	1500	\$	0.26	\$	0.27	\$	14.21	55	Cooking		
Hot plate – small (4 hours/wk)	1200	\$	0.26	\$	0.19	\$	38.98	150	Cooking		
Hot plate – large (4 hours/wk)	1500	\$	0.26	\$	0.21	\$	44.66	172	Cooking		
Microwave oven – 1100W (2 hours/wk)	1100	\$	0.26	\$	0.23	\$	23.82	92	Cooking		
Ceiling fan (4)	240	\$	0.26	\$	0.06	\$	23.39	90	Cooling / Heating		
6100W cooling split system AC inverter type.	1900	\$	0.21	\$	0.49	\$	90.00	346	Cooling / Heating		
6100W split system AC inverter type.	1900	\$	0.21	\$	0.49	\$	90.00	346	Cooling / Heating		
Television – LED (42" x 2) (40 hours / wk)	64	\$	0.26	\$	0.02	\$	69.29	266	Entertainment		
Pay TV/ box (40 hours / wk)	42	\$	0.26	\$	0.01	\$	22.74	87	Entertainment		
PS4 pro (30 Hours / wk)	89	\$	0.26	\$	0.02	\$	32.52	125	Entertainment		
Stereo – Modular Unit (10 hours / wk)	120	\$	0.26	\$	0.03	\$	4.87	19	Entertainment		
DVD player (20 hours / wk)	60	\$	0.26	\$	0.02	\$	4.87	19	Entertainment		
225L single door bar fridge 2 star (371kWh/yr)	80	\$	0.26	\$	0.01	\$	96.41	370	Fridge		
400L fridge freezer – 4 star (313 kWh/yr)	82	\$	0.26	\$	0.01	\$	82.04	315	Fridge		
PC & monitor (4 hours / wk)	240	\$	0.26	\$	0.06	\$	5.20	20	Office Equipment		
Laptop computer (4 hours /wk)	100	\$	0.26	\$	0.03	\$	2.17	8	Office Equipment		
Modem / router (160 hours/wk)	10	\$	0.26	\$	0.00	\$	18.19	70	Office Equipment		
Phone & ipad charger – 10 hours /wk	40	\$	0.26	\$	0.01	\$	4.87	19	Office Equipment		
Front load – 8 kg 4 stars cold wash – 328kWh/yr	900	\$	0.26	\$	0.23	\$ 85.26		328	Laundry		
Clothes dryer – 5kg (ave 1.5 hours /wk)	2400	\$	0.26	\$	0.62	\$	21.93	84	Laundry		
Iron (4 hours / wk)	1100	\$	0.26	\$	0.29	\$	17.87	69	Laundry		
Compact fluorescent light CFL – 18W x 2	36	\$	0.26	\$	0.01	\$	14.62	56	Lighting		
Led light recessed – 9W x 12	108	\$	0.26	\$	0.03	\$	43.85	168	Lighting		
Outdoor spotlights – 150W	450	\$	0.26	\$	0.12	\$	30.45	117	Lighting		
Electric hot water small 110L system – 1000L/wk (T33) economy tariff	1800	\$	0.21	\$	0.47	\$	287.66	1357	Water heating		

Household appliances	Input watts	No per house	Duty Cycle inc Defrosts or other	Avg Weekly Hrs	Annual kWh	Cost per kWh		Cost per hour of use	
Refrigerators									
225L Single door bar fridge 2 star (371kWh/yr)	80	1	53%	168	370	\$	0.26	\$	0.01
225L Single door bar fridge 4 star (220kWh/yr)	60	1	42%	168	220	\$	0.26	\$	0.01
400L Fridge freezer – 2 star energy rating (528 kWh/yr)	110	1	55%	168	529	\$	0.26	\$	0.02
400L Fridge freezer – 3 star energy rating (406 kWh/yr)	93	1	50%	168	406	\$	0.26	\$	0.01
400L Fridge freezer – 4 star energy rating (313 kWh/yr)	82	1	44%	168	315	\$	0.26	\$	0.01
510L Fridge freezer – 2 star energy rating (608 kWh/yr)	127	1	55%	168	610	\$	0.26	\$	0.02
510L Fridge freezer – 3 star energy rating (468 kWh/yr)	107	1	50%	168	467	\$	0.26	\$	0.01
510L Fridge freezer – 4 star energy rating (360 kWh/yr)	94	1	44%	168	361	\$	0.26	\$	0.01
Freezers									
140-220L Chest - 2 star energy rating	75	1	50%	168	328	\$	0.26	\$	0.01
250–340L Chest – 2 star energy rating	122	1	50%	169	536	\$	0.26	\$	0.02
28oL Upright – 3 star energy rating	90	1	54%	170	430	\$	0.26	\$	0.01
425L Upright – 3.5 star energy rating	95	1	54%	171	456	\$	0.26	\$	0.01
Cooking appliances									
Electric convection oven (1 hour /wk)	1500	1	70%	1	55	\$	0.26	\$	0.27
Grilling element (1 hour /wk)	1800	1	85%	1	80	\$	0.26	\$	0.40
Stove hot plate – small (4 hours/wk)	1200	1	60%	4	150	\$	0.26	\$	0.19
Stove hot plate – Large (4 hours/wk)	1500	1	55%	4	172	\$	0.26	\$	0.21
Rangehood/ exhaust fan (4 hours/wk)	60	1	75%	4	9	\$	0.26	\$	0.01
Microwave oven – 1100W (2 hours/wk)	1100	1	80%	2	92	\$	0.26	\$	0.23
Microwave/ convection – 2400W (2 hours/wk)	2400	1	60%	2	150	\$	0.26	\$	0.37
Frypan electric (2 hours/wk)	900	1	55%	2	51	\$	0.26	\$	0.13
Deep fryer (1 hour /mth)	2000	1	80%	1	83	\$	0.26	\$	0.42
Crock pot (8 hours /mth)	300	1	20%	2	6	\$	0.26	\$	0.02
Breadmaker (2 hours wk)	480	1	40%	2	20	\$	0.26	\$	0.05
Toaster – 4 slice (1 hour/wk)	1600	1	100%	1	83	\$	0.26	\$	0.42
Toaster – 2 slice (1 hour/wk)	982	1	100%	1	51	\$	0.26	\$	0.26
Sandwich maker	803	1	90%	0.5	19	\$	0.26	\$	0.19
Electric kettle (1 hour /wk)	1400	1	100%	1	73	\$	0.26	\$	0.36

Household appliances	Input watts	No per house	Duty cycle inc defrosts or other	Avg weekly hrs	Annual kWh	Cost per kWh		Cost per hour of use	
Other kitchen appliances									
Food blender (o.5 hour /wk)	300	1	100%	0.5	8	\$	0.26	\$ 0.08	
Food processor (o.5 hr/wk)	600	1	100%	0.5	16	\$	0.26	\$ 0.16	
Coffee maker (1 hour / wk)	752	1	75%	1	29	\$	0.26	\$ 0.15	
Dishwasher – 2 Star energy rating (268kWh/yr)	1350	1	55%	7	270	\$	0.26	\$ 0.19	
Dishwasher – 4 Star energy rating (199kWh/yr)	1100	1	50%	7	200	\$	0.26	\$ 0.14	
Entertainment									
Television – LED (42" x 2) (40 hours / wk)	32	2	100%	40	266	\$	0.26	\$ 0.02	
Television – LED (55") (40 hours / wk)	58	1	100%	40	121	\$	0.26	\$ 0.02	
Pay TV/ box (40 hours / wk)	42	1	100%	40	87	\$	0.26	\$ 0.01	
DVD player (20 hours / wk)	60	1	30%	20	19	\$	0.26	\$ 0.02	
PS4 pro (30 Hours / wk)	89	1	90%	30	125	\$	0.26	\$ 0.02	
Xbox One (30 hours / wk)	110	1	80%	30	137	\$	0.26	\$ 0.03	
Nintendo Wii U (30 hours / wk)	75	1	50%	30	59	\$	0.26	\$ 0.02	
Stereo – mini system (10 hours / wk)	60	1	35%	10	11	\$	0.26	\$ 0.02	
Stereo – modular unit (10 hours / wk)	120	1	30%	10	19	\$	0.26	\$ 0.03	
Bathroom									
Exhaust fan (2 hours / wk)	55	2	100%	2	23	\$	0.26	\$ 0.03	
Bathroom light/ heater – 4 lamps (4 hour / wk)	640	1	100%	2	67	\$	0.26	\$ 0.17	
Hair dryer (1 hour / wk)	1200	1	60%	1	37	\$	0.26	\$ 0.31	
Hot Water systems - electric									
Electric hot water small 110 L system – 1000L/wk (T11 / Primary Tariff)	1800	1	29%	50	1357	\$	0.26	\$ 0.47	
Electric hot water Std 250 L system – 1000L/wk (T11 / Primary Tariff)	3600	1	14%	84	2201	\$	0.26	\$ 0.94	
Electric hot water small 110 L system – 1000L/wk (T33 / Economy Tariff)	1800	1	29%	50	1357	\$	0.21	\$ 0.38	
Electric hot water Std 250 L system – 1000L/wk (T33 / Economy Tariff)	3600	1	14%	84	2201	\$	0.21	\$ 0.76	
Laundry									
Small 6kg top load automatic 2.5 star warm wash (7 hours /wk, internal heating cold connection)	1250	1	90%	7	410	\$	0.26	\$ 0.33	
Large 10kg Top load automatic 4 star warm wash (7 hours /wk, internal heating cold connection)	1150	1	90%	7	377	\$	0.26	\$ 0.30	

Household appliances	Input watts	No per house	Duty Cycle inc Defrosts or other	Avg Weekly Hrs	Annual kWh	Cost per kWh		Cost per hour of use	
Laundry									
Front load – 8 kg 4 stars cold wash —328kWh/yr	900	1	100%	7	328	\$	0.26	\$	0.23
Front load – 8 kg 4 stars warm wash (7 hours /wk, internal heating cold connection)	1150	1	80%	7	335	\$	0.26	\$	0.30
Clothes dryer – 5kg (avg 1.5 hours /wk)	2400	1	45%	1.5	84	\$	0.26	\$	0.62
Iron (4 hours /wk)	1100	1	30%	4	69	\$	0.26	\$	0.29
Office Equipment									
PC & monitor (4 hours /wk)	240	1	40%	4	20	\$	0.26	\$	0.06
Laptop computer (4 hours /wk)	50	2	40%	4	8	\$	0.26	\$	0.03
Modem / router (160 hours/wk)	10	1	80%	168	70	\$	0.26	\$	0.00
Domestic inkjet printer copier (1 hour month)	50	1	80%	0.25	1	\$	0.26	\$	0.01
Phone & iPad chargers – 10 hours /wk	10	4	90%	10	19	\$	0.26	\$	0.01
Laser printer (1hour /wk)	25	1	80%	1	1	\$	0.26	\$	0.01
Electric blanket (40 hours /wk) winter	60	3	80%	10	75	\$	0.26	\$	0.05
General appliances									
Vacuum cleaner (1 hour wk)	1500	1	100%	1	78	\$	0.26	\$	0.39
Clock radio	5	3	100%	168	131	\$	0.26	\$	0.00
Summer air conditioner 5 hrs/wk 25C									
2700W Window box AC unit – non inverter.	750	1	90%	5	176	\$	0.26	\$	0.20
3500W Split system AC Inverter type	900	1	70%	5	164	\$	0.26	\$	0.23
6100W Cooling split system AC Inverter type	1900	1	70%	5	346	\$	0.26	\$	0.49
10000W Ducted cooling only split ducted AC Inverter	2800	1	75%	5	546	\$	0.26	\$	0.73
Other cooling appliances									
Evaporative cooler – Portable 4 hrs /wk	150	2	80%	4	50	\$	0.26	\$	0.08
Evaporative cooler – Ducted House 4 hrs /wk	1500	1	80%	4	250	\$	0.26	\$	0.39
Ceiling fan (4)	60	4	60%	12	90	\$	0.26	\$	0.06
Pedestal fan	45	2	60%	8	22	\$	0.26	\$	0.02
Reverse cycle heating 5 hrs/wk@18C									
2700W Window box AC unit – non inverter	750	1	90%	5	176	\$	0.26	\$	0.20
3500W Split system AC Inverter type	900	1	70%	5	164	\$	0.26	\$	0.23
6100W Split system AC Inverter type	1900	1	70%	5	346	\$	0.26	\$	0.49
10000W Split ducted AC Inverter type	2800	1	75%	5	546	\$	0.26	\$	0.73

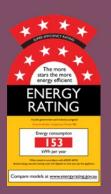
Household appliances	Input watts	No per house	Duty Cycle inc defrosts	Avg Weekly Hrs	Annual kWh	Cost per kWh		Cost per hour of use	
Other heating - average 4 hrs / wk									
Radiator heater – 2000W	2000	2	60%	4	499	\$	0.26	\$	1.04
Radiator heater – 2400W	2400	2	60%	4	599	\$	0.26	\$	1.25
Portable fan heater – 2400W	2400	2	75%	4	749	\$	0.26	\$	1.25
Other equipment									
Avg. residential security system	45	1	100%	168	393	\$	0.26	\$	0.01
Garage roller door (1 hour/wk)	200	1	100%	1	10	\$	0.26	\$	0.05
Electric battery charger (blower and drill)	200	1	110%	0.5	6	\$	0.26	\$	0.05
Domestic water pump	750	1	5%	168	328	\$	0.26	\$	0.20
Lighting - average 30 hours per week									
Motion detector	5	2	5%	168	4	\$	0.26	\$	0.00
Incandescent light – 60W	60	1	100%	30	94	\$	0.26	\$	0.02
Incandescent light – 75W	75	2	100%	30	234	\$	0.26	\$	0.04
Incandescent light – 100W	100	1	100%	30	156	\$	0.26	\$	0.03
Compact fluorescent light CFL – 18W x 2	18	2	100%	30	56	\$	0.26	\$	0.01
Fluorescent light – 36W x 2	80	2	100%	30	250	\$	0.26	\$	0.04
Led light recessed – 9W x 12	9	12	100%	30	168	\$	0.26	\$	0.03
Outdoor spotlights – 150W	150	3	100%	5	117	\$	0.26	\$	0.12
Outdoor sensor light 2 x 100W lamps (less with CFL or LED)	200	2	5%	30	31	\$	0.26	\$	0.10
Pool equipment									
Pool pump std – <i>Tariff 11 / Primary (6 hours /day)</i>	750	1	100%	42	1638	\$	0.26	\$	0.20
Pool pump std – Tariff 33 / Economy (6 hours/day)	750	1	100%	42	1638	\$	0.21	\$	0.16
Salt chlorinator with pool filter (4 hours/day)	300	1	100%	42	655	\$	0.26	\$	0.08
Outdoor spa heating	6000	1	90%	1	281	\$	0.26	\$	1.56
Outdoor spa pump	1860	1	100%	32	3095	\$	0.26	\$	0.48
Sauna	4800	1	30%	5	374	\$	0.26	\$	1.25

Look for the stars

Choosing appliances that provide the best value for money is important—the cheaper option upfront isn't always the cheapest in the long-run. Buying appliances that are energy efficient may cost a little more initially, but they will save you money on running costs in the longer-term.

When shopping for appliances, look for the Energy Rating label. The label provides appliances a star rating depending on how much energy they use—the higher the star rating, the more efficient the appliance is. This makes it easy to see which products are most energy efficient and cheapest to run.

For more information, visit www.energyrating.gov.au.





The next time you're in the market for a new appliance, look for the stars. The examples below show how much money you could save annually by replacing a low star rated appliance with an energy efficient one*.

Appliance	Upgrade	Savings per year
450L fridge freezer	From 2 star to 4 star	\$59
7kg washing machine	From 2.5 star to 4 star	\$53
Dishwasher	From 2 star to 4 star	\$53
7kg clothes dryer	From 1.5 star to 4 star	\$59

*Costs are calculated using 2019-20 residential electricity Tariff 11, and are estimated based on average household appliance use.

Useful links

For more energy efficient information and tips, check out:

- Queensland Government
 www.qld.gov.au (search 'energy efficiency')
- Ergon Energy www.ergon.com.au/retail/residential/home-energy-tips
- Energex www.energex.com.au/home/control-your-energy/save-money-And-electricity
- QCOSS www.qcoss.org.au/energy-factsheets

Rebates/concessions

A range of electricity rebates and concessions are available to further ease the cost of living pressures for Oueensland households:

- Electricity rebate
- Reticulated natural gas rebate
- Home energy emergency assistance scheme
- Electricity life support concession scheme
- Drought relief arrangements

To find out more about eligibility and how to apply, visit **www.qld.gov.au** and search for 'energy concessions'.



