Home Energy fact sheet QLD

Winter Energy Consumption

This fact sheet has been developed as a guide to help you understand energy consumption in your home.

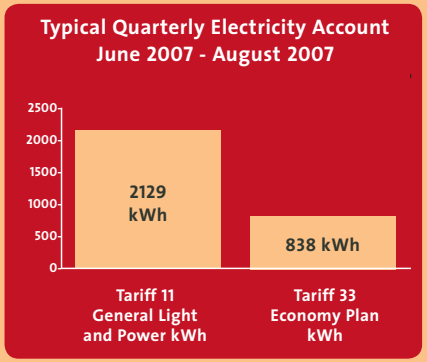
In periods of extreme temperatures or exceptional circumstances you place greater demands on your household appliances and consequently use more energy.

On the reverse of this fact sheet you'll find a table that examines typical household energy consumption and identifies key appliances that may be responsible for higher electricity usage. You'll also find handy hints and tips for cutting back on your energy use to save you money.

By following the steps below we hope that you'll gain a greater understanding of the running costs of the appliances in your home and reduce your household consumption, saving energy and the environment.

1. Compare

Compare your electricity account with the information in the graph below. This will help you evaluate your consumption compared to the average Origin South East Queensland household.



2. Monitor

To understand your daily energy consumption levels you may wish to monitor your electricity meter.

By reviewing the meter over several days, you should be able to establish your daily average consumption.

In recording your daily consumption measurements be aware of any severe temperature fluctuations.

In this instance you may see a spike in your energy usage, particularly if you are running heaters, clothes dryers, extra lighting and air conditioners for extended periods.

3. Test

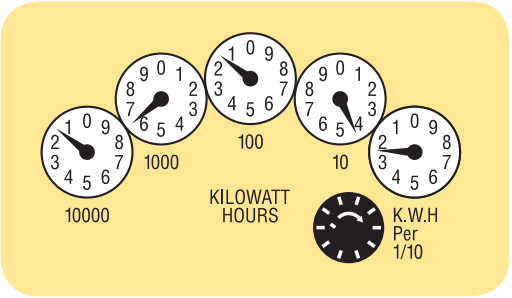
Identifying high electricity consumption appliances:

- Turn off the mains in your meter box.
- Read and make note of your electricity meter reading.
- Turn off all appliances* connected to the tariff in question with the exception of the appliance that you wish to measure. Refer over to see which appliances may be connected to specific tariffs.
- Turn mains on.
- Read meter after one hour – this will give you an indication of how much energy that appliance is using.
- Once these high energy usage appliances have been identified you can refer to the table overleaf to see how you could reduce energy usage. Alternatively you may decide the appliance needs to be repaired or replaced.

How to read a dial type electricity meter

The dial type meter is the most commonly installed meter in South East Queensland. Stand directly in front of the meter so that you can see the exact position of the pointers. Start at the right hand dial and record the number the pointer has just passed on each dial.

To check your average daily consumption, take readings at the same time of the day, several days apart.



The reading from the above dials is 16142

Record your readings in the boxes below.

10000s	1000s	100s	10s	Units

Origin advises that the information set out in this document is indicative only and should not be relied upon as being final and accurate.

*Do not turn off in-use refrigeration for more than one hour

Together we can make a difference.™ origin

Appliance (Estimated use)	Estimated typical Origin household winter use	Approximate running costs			Possible reasons for high energy consumption	Suggested remedy
		Domestic Tariff 11				
		Standard*	Inverter**	Max***		
Air conditioning units 7 hrs/day x approx 63 days minimum temperature no higher than 12°C Estimated compressor use: *Standard type - 50% ** Inverter type - 35% *** Inverter type - 120%	**Bedroom** sized - 2.5kW output / 1 kW input	$38	$27	$91	• Doors and windows left open at night • No curtains or blinds on large glass areas • Long operating times • Too warm thermostat temperatures set • Very cold temperatures (lower than 10°C) • Unit expected to heat too large an area • Lack of ventilation to outdoor unit • Clogged filters on indoor unit	• Allow the sun to come in during daylight hours to warm the home • Cover large glass areas at night (Thermal layer helps stop cold entering via glass). • Set rules (i.e. use ac when temps reach x °C and always dress to suit the weather) • Set temp no higher than 8 °C higher than outside temperatures • Turn ac on before the house gets cold • Close off some areas to contain conditioned air • Remove obstructions • Clean filters regularly
	Lounge/dining room sized - 5 kW output / 2 kW input	$76	$53	$182		
	Typical zoned **ducted** - 14 kW output / 5.5 kW input	$209	$146	$501		
Electric space heaters 7 hrs/day x approx 63 days minimum temperature no higher than 12°C	1 kW (1000 Watt)	$76			• Multiple heaters used simultaneously for long periods in various rooms throughout the home NB: Remember to calculate for each heater used	• Use timers to automatically turn units off after set period of time
	2 kW (2000 Watt)	$152				
	2.4 kW (2400 Watt)	$182				
Lighting 5 hours / day	6 x 100 W incandescent	$47			• Lights left on	• Turn unused lights off / replace with compact fluroescents / install timers and use lamp lights
	6 x 20 W compact fluroescent	$9				
Spa 12 hrs / week (Temp rise - 5°C / hr)	5 kW heater 500 - 1000 Litre	$134			• Spa left on for lengthy periods	• Turn off and unplug when not in use for some time
Water Pumps 3 hrs / day	0.55 kW pump 40 litres / min / 140 kPa	$26			• Pump running continuously	• Turn off and unplug when not in use for some time
Swimming Pool Filter 2 hrs / day	1.1 kW pump	**Domestic Tariff 11**		**$35**	• Pump or chlorinator continuously running • Faulty or no timer setting	• Seek advice from pool experts • Consider viability to connect pool filter to Tariff 33
		Controlled Supply Tariff 33		**$20**		
Hot water systems 9-10 kWh per day	Storage electric system average size 250 litres	**Domestic Tariff 11**		$142 - $158	• Very cold season • More people in the household • More hot water consumed • Faulty thermostat • System leaking	• Using ceiling installation type bathroom heaters to aid short showering time • Install AAA rated shower fittings • Connect appliances to cold water only (dishwasher, washing machine) • Call repairman if required • Research most suitable new unit before purchacing replacement unit
		Controlled Supply Tariff 33		$81 - $90		
		Night Rate Tariff 31		$55 - $61		

Standby power

Estimated use 24hrs /day (92 days)

Various appliances consume power even when you are not using them.

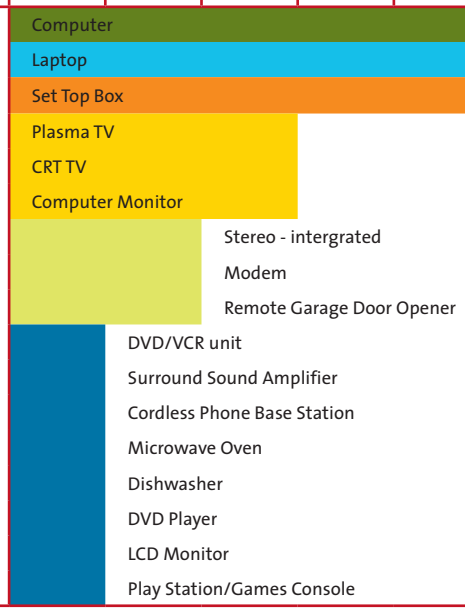
Passive standby mode can be detected as a light, clock or perhaps the unit is simply waiting to be activated by a remote control unit.

Active standby is when the unit is ON but not performing its main function.

Source: Energy Efficient Stratergies 2005

Calculations based on most common mode appliances found using during 2005 intrusive household study

Domestic Tariff 11



Possible reasons for high standby related energy consumption

- Appliances left on at the wall when not in use

NB: Some appliances must be left on 24x7:

- Set Top Box
- Cordless Phone Base Station
- Remote Garage Door Opener

Suggested remedy

- Turn off and unplug when not in use for some time
- When purchasing new appliances consider value of Standby Power component