

Standby Electricity : A Hidden Cost In Your Electricity Bill

Do You Really Understand What Standby Electricity Is?

Standby electricity is the power an electrical appliance uses, when it is 'not really' turned off. Turned off meaning, it is not using any power therefore it has a zero cost. Being similar to when the appliance is switched off, at the wall or unplugged.

Standby electricity often occurs in appliances where the mains voltage of 240 volts, is then reduced to a lower voltage. This covers a wide variety of appliances, such as those used for entertainment and communication purposes. These appliances being the primary cause of standby electricity. Appliance such as TVs, stereos, VCRs, set top boxes, DVD players, cordless and mobile phones. Items found in abundance in many Aussie households.

Standby electricity was introduced into our homes, at about the same time as remote controls entered our living rooms. A 'by design' time saving idea, but not cost saving! Where one could walk into a room, press or touch buttons and activate the room's appliances.

Where you have a room where this occurs, you know for sure 'standby electricity' is already in the room with you. Secretly adding dollars to your next electricity bill!

Overnight it seemed like those 'clunk-click' style on/off switches, were removed for the more favourable 'touch-style' switches. This new design meaning more than often, appliances are now on 24/7!

Looking back in time, when you turned off your stereo in the 1980's, one thing you knew for sure was, it was turned off. As the 'clunk-click' style switches, turned off the 240 volts.

Do You Know What Standby Is Costing You?

Standby power can be as much as 10% of the normal operating power of the appliance. For example, a newly purchased 42 inch LCD TV could be using 375 watts, therefore standby electricity could be 37.5 watts.

Some newly designed appliances now include the return of the 'clunk-click' style on/off switches of yesteryear, allowing you to remove all electrical standby, if you so choose.

Another improvement is manufacturers are drastically reducing the total power consumption of devices, with new smaller power saving components. In the future it will not be too long before there is little or no standby, on new appliances.

In the meantime though, our existing appliances still use standby electricity. This being a big part of the bill for many Aussie homes. So we need to make a big effort to reduce

the standby electricity to zero.

So to answer the question: **How much could standby electricity be costing you?**

More than you think, as every 100 watts of electrical power left on 24/7, over a 3 month period, is going to cost you \$47.77!

And part of the next \$47.77 has already been added to your next electricity bill!

This following calculation is based on Country Energy's on-peak rate of 22.12 cents per kWh pre GST, as of July 2010.

$$100 \text{ watts} \times 24 \text{ hours} \times 90 \text{ days} = 216\text{kWhs}$$

$$216 \times 0.2212 = \$47.77$$

That is a lot of power when you consider the average small pool pump, rated at 1032 watts, could be operated for just under a month on an 8 hour/per day cycle. Electricity you simply, are just wasting!

Another common fact is, in a home with two teenage children, the lounge entertainment appliances are often reflected in more than one room of the home. And therefore so is the standby electricity, meaning standby electricity could be 250 - 350 watts in total.

It is not uncommon for our [Home Electricity Audit](#) to discover this fact! Thus if you reduce this amount of standby electricity you are going to save up to \$120+ off your next electricity bill! And that could be:

\$480 Saved Per Year!

So What Can Be Done To Reduce Standby?

Well firstly our rule is any appliance thought to be on standby should be turned off, either at the appliance or at the wall. Where switches are not accessible and power blocks are in use, there are options such as power blocks with remote controls. Or even power blocks with sensors that use your existing TV remote. Thus removing the power from all your entertainment devices when the LCD TV is turned off.

For those of you with hard disk recorders ready to record your favourite program, there is an option to leave that particular power point turned on. Thus you will not have to re-program the device.

As we can see there are easy solutions for removing standby. Solutions that can pay for themselves before the next electricity bill arrives. In fact there is not really any reason for a device being left on standby, except for the lack of awareness or laziness. As most standby electricity can be eliminated by technology and action.

As already mentioned, design is reducing standby electricity by using less power hungry components and with the return of on /off switches to appliances.

Further technology design in the last few months, has meant that future electronic circuits will soon be at 10% of the size of what they are at today. All this means less power will be consumed and appliances will be lighter and smaller in size.

If you buy a DVD player today, compare it to the one you bought a couple of years ago. You will see it uses far less watts, such as 5 watts. When compared to the old DVD player using 50 watts. So the standby of a newer and smaller device, is far less and therefore less costly.

So What Can Common Electrical Appliances Use During Standby?

Here is a list of common appliances found in Aussie homes, stating an average electrical standby rating. Another way to calculate standby electricity ratings is to take it as 10% of the appliances normal operating watt rating.

For example a 32 inch LCD TV rated at 220 watts, may use 22 watts on standby. This LCD TV thus costs you \$10.56 per bill, when you are NOT watching it! In some cases depending on your usage pattern, the appliance could be costing you more for the time you DO NOT watch it, when compared to the time you do watch it! And that is just a plain stupid scenario!

VCR	5 - 19 W
TV	7 - 50 W
Compact Audio	1 - 18 W
Clock Radio	1 - 3 W
Microwave	2 - 6 W
Answering Machine	2 - 4 W
Battery Charger	2 - 4 W
Fax Machine	5 - 30 W
Cordless Phone	2 - 5 W
Stereo System	0 - 8 W

REMEMBER THIS : Every 100 watts costs you \$47.77 per quarterly electricity bill.

And further it is not uncommon for our [Home Electricity Audits](#) to discover homes with 200 - 300 watts of standby electricity!

As a nation Australia's wasted standby electricity greatly adds to the pressure of supply not being able to meet demand and further increases pollution. We can all help.

For further information on home electricity reducing services and products visit [Aussie Home Energy](#)