

Make the switch to
energy efficient lighting

Consumer
Frequently Asked Questions



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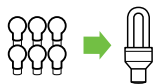
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Philips, the global leader in advanced and energy efficient lighting solutions, is proud to see the Australian Government take a leadership position on energy efficiency on June 5th 2008, the 12-month acceleration of the four-year phase out of energy inefficient incandescent light globes, beginning with the introduction of a ban on imported incandescent globes from November 2008. This initiative will result in earlier cuts to greenhouse emissions of more than four million tonnes per year.*

At Philips, our position on this policy is clear. As you'd expect from one of the **Global 100 Most Sustainable Corporations** in the World, we are 100% behind it. With Philips new energy saver technology, consumers, business and the environment all benefit.

* Media Release, The Hon Peter Garrett MP, Minister for the Environment, Heritage and the Arts - New Measures Tackle Spiralling Energy Consumption In Homes, 05/6/08.

Make the switch to Philips Energy Saver globes



	60W Incandescent Globe	11W Philips Energy Saver Globe	SAVING
Running costs over 3 years*	\$36.00	\$6.60	\$29.40
Average Life in hours	1000hrs	6000hrs	
Average purchase cost per unit**	\$0.98** (6 globes = \$5.88)	\$5.98**	
Number needed over 3 years	6	1	
TOTAL COST	\$41.88	\$12.58	\$29.30
GREENHOUSE GAS EMISSIONS***	342kg	63kg	279kg

* 3 years calculated: 5.5hrs per day at \$0.10/kWh

** Prices are indicative only, and may not reflect actual cost in this outlet

*** Calculations based on an average of 0.95 Kg CO₂ p/kWh, source Australian Greenhouse Office

Note: 11W Philips Energy Saver globe has a similar light output to a 60W incandescent bulb

Energy Savers – FAQ's

What does the term CFL-i stand for?

The term CFL-i refers to Compact Fluorescent Lamp Integrated and is our new energy saver technology. Throughout this guide we will refer to CFL-is as 'energy savers'.

Why do energy saver globes cost so much?

Energy saver globes have traditionally had a higher upfront cost than 'traditional' incandescent globes because they are more expensive to make (these globes have integrated ballasts). However, the price of an energy saver globe has decreased over the last several years and as energy saver globes save you money on your energy bill the initial cost is recovered very quickly.

Can I replace all of my incandescent globes with energy saver globes?

There are different types of energy saver globes available to suit most applications throughout your home. There is no need to change the wiring in your home to suit these light globes. Philips energy saver globes come in the traditional covered form as well as spiral and stick shape. In addition, energy saving globes are now available in the popular candle shaped product. In special situations such as oven lights, bathroom heat lamps and healthcare solutions consumers will still be able to purchase incandescent globes.

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Energy Savers – FAQ's

I don't like the colour produced by energy saver globes. Is that being improved to be more like incandescent lamps?

Energy saver globes have evolved to the point where good quality globes now are usually very similar in functionality to incandescent. They last longer and they will continue to get smaller, better, more efficient, and less expensive. Energy saving globes from reputable manufacturers render a light quality which approaches very closely that of incandescent globes.

Energy saver globes can also be purchased in either a 'cool white' or a 'warm white' colour. Warm white would be more suitable for general use around the home including reading, while cool white would be better suited to task work such as cooking.

Energy Savers – FAQ's

Which energy saver globe should I buy to replace a 60, 75, 100 or 150 watt regular globe?

The ranges below provide wattage equivalents (that produce the same amount of light) for regular incandescent and energy saver globes.

25 watt incandescent globe = 5-7W energy saver globe

40 watt incandescent globe = 8-10W energy saver globe

60 watt incandescent globe = 11-14W energy saver globe

75 watt incandescent globe = 15-17W energy saver globe

100 watt incandescent globe = 18-22W energy saver globe

150 watt incandescent globe = 23-27W energy saver globe

Does frequent switching reduce the life of energy saver globes?

An energy saver globe's life is affected by switching. The current standards for 'Energy Recommended' accreditation requires over 3,000 switching cycles per 8,000 hours of tested life.

Energy Savers – FAQ's

I have dimmer switches in my house. Can you dim energy saver globes?

There are new energy saver globes available today that can operate and dim on ordinary domestic dimmer switches. Philips dimmable energy saver globes are now available in Australia.

Can energy saver globes interfere with other electronic devices?

Electromagnetic fields are an everyday fact of life for people in industrialised countries. There is more and more talk now of “electro-smog”. Electromagnetic fields (EMF) occur wherever electricity is involved.

Lamps and energy saving globes both create EMF. All lighting systems sold by the member companies of the ELC, however, are well within the national and international limit values. EMF depends not only on the control gear and the lamp but also on the design of the luminaire. Specialists and institutions such as the WHO are responsible for defining the limit values. The limit values are confirmed by the WHO and the International Radiation Protection Agency (IRPA) and incorporated in EU legislation.

Energy Savers – FAQ's

I've heard that energy saver globes switch on and off 50 times per second.

Can they cause medical problems such as epileptic-type fits, mental disturbances?

Energy saver globes give a constant, flicker free, non-stroboscopic light. They operate at high frequency through their electronic controller at between 30,000-50,000 hertz (normal mains voltage cycles at just 50 hertz or cycles per second).

A small number of cases have been reported by people who suffer from reactions to certain types of linear fluorescent globes. In the majority of these cases, the globes in question were used in offices, restaurants (in certain European countries) and in limited places in domestic households (such as kitchens and garages) and were almost certainly triggered by OLD technology which operated on a conventional (Copper-Iron) ballast with a low frequency (<50Hz mains frequency). This is not the case with new energy efficient linear fluorescent globe technology which unlike earlier energy efficiency technologies, operates on high frequency drivers (for example, certain fluorescent globes operate on 50kHz or 50,000Hz).

Energy Savers – FAQ's

I've heard that energy saver globes switch on and off 50 times per second. Can they cause medical problems such as epileptic-type fits, mental disturbances? (cont.)

The health related problems can therefore be avoided if consumers opt for new technologies such as integrated energy savers (CFL-i) in households and other sources using high frequency drivers (e.g. linear fluorescents and HID) in other applications (such as offices, restaurants etc).

Are energy saver globes safe to use for people with light sensitivity conditions or Lupus?

People affected from light sensitivity or lupus sufferers (a chronic autoimmune disease – of which sensitivity to ultraviolet light is a key symptom) could be affected by either the intensity of the light (i.e. the lumens of the globe), the spectral property of the light (particularly when the light contains more blue) or when a globe radiates a small amount of ultra-violet (UV) light.

There is a small amount of UV generated by fluorescent lights (such as CFL-is). But this is fractional if you compare this to natural daylight. For the many energy savings globes (such as CFL-is) that do generate higher quantities of UV and blue light, filters are now used to reduce radiation.

Energy Savers – FAQ's

General tips for people who are sensitive to light

- If you suffer from a special light sensitivity do not expose yourself directly to the light source. Use indirect light via a white surface, as, in many cases, during reflection UV-radiation will be absorbed (depending of course on the type of surface and material/paint used).
- Special covers can be used to fully filter the last bits of harmful radiation from the globes. For example, Plexiglas or special glass UV filters will filter most of the UV light.
- Use yellow filters to filter the blue light.
- Reduce time of exposure and quantity of light by dimming the lights when possible.
- Use light sources with a warm colour tone.

Energy Savers – FAQ's

Do energy saver globes contain Mercury? Is it harmful?

Compact fluorescent globes contain a small amount of mercury, an essential component in the operation of the globe. Most energy saver globes contain between 3-5mg of mercury, by comparison a typical thermometer has between 500 and 3,000mg of mercury.

When sealed within the globe the mercury is harmless, however as with any harmful substance care should be taken when the globe is broken.

What do I do with an energy saver globe when it burns out? What is the proper disposal procedure?

Energy saver globes are safe to use in your house. No mercury is released when the bulbs are in use and they pose no danger to you or your family when used properly. However, energy saver globes are made of glass tubing and can break if dropped or roughly handled. Care should be taken when removing the globe from its packaging, installing it, or replacing it. Always screw and unscrew the globe by its base, and never forcefully twist the energy saver globe into a light socket by its tubes.

Energy Savers – FAQ's

What do I do with an energy saver globe when it burns out?







What is the proper disposal procedure? (cont.)

If you break an energy saver globe, please take the following steps:

- Ventilate the room for 20-30 minutes.
- Use gloves to remove all the pieces.
- Do not use a vacuum cleaner.
- Do not throw energy saver globes away in your household garbage if better disposal options exist.
- If your local waste management agency offers no other disposal options except your household garbage, wrap the energy saver globe in newspaper and place and seal the energy saver globe in a plastic bag before putting it in the trash.

For more information please visit: www.environment.gov.au/settlements/waste/lamp-mercury.html

Switching to the correct energy saving globes

Incandescent Globe Wattage*		Energy Saver Globe Wattage*
 25W*	→	5W
 40W*	→	8W
 60W*	→	11/12W
 75W*	→	14W
 100W*	→	20W
 120W*	→	23W

*Guide only. Actual light output not equivalent.

Cool daylight or Warm white globes?



To create a crisper, cooler atmosphere, use Philips Energy Savers in the following environments:

- Hall
- Outdoor
- Bathroom
- Kitchen



To create a warm white atmosphere similar to an incandescent globe, use Philips Energy Savers in the following environments:

- Lounge
- Dining
- Bedrooms
- Lamps