

Lighting

COMPACT FLUORESCENT LIGHT BULBS

When Canadians want to save energy and money and help the environment, they look for the ENERGY STAR® symbol to identify energy-efficient products.

ENERGY STAR Qualified Compact Fluorescent Light Bulbs (CFLs)

All CFLs are an energy-saving alternative to either halogen bulbs or the more traditional incandescent bulbs. A halogen bulb can burn as high as 540°C (1000°F) and can potentially cause burns or fires. Standard incandescent bulbs have changed very little from the first light bulb of 1879. These old-fashioned light bulbs waste energy, as only 10 percent of the energy used contributes to light; the other 90 percent is wasted as heat.

A new generation of CFLs now meets stringent specifications for long life, energy savings, start time, colour and brightness. These ENERGY STAR labelled CFLs also feature designs that distribute the light evenly, providing high-quality, warm and inviting light without the flickering and humming of older fluorescent bulbs. ENERGY STAR qualified CFLs can help save money on utility bills by using less energy to keep your business or home cool and bright.

In this publication, the terms "bulb" and "lamp" can be used interchangeably.



ENERGY STAR qualified CFLs come in a variety of creative shapes, colours, temperatures and levels of brightness. They provide the same high-quality light as incandescent bulbs and generally operate at temperatures of less than 38°C (100°F). Why spend money heating rooms with lighting?

In order to ensure customer satisfaction, ENERGY STAR qualified CFLs must meet minimum light outputs in order to claim to be a replacement for the higher wattage incandescent bulb.

Minimum Light Output

Incandescent (Watts)	Energy Star Qualified CFL (Minimum lumens)
40	450
60	800
75	1100
100	1600
150	2600

A typical ENERGY STAR qualified CFL lasts up to five years, which is 10 times longer than an equivalent incandescent bulb, and uses 75 percent less energy. This means that over the life of one CFL, you can avoid replacing up to 10 incandescent bulbs! The super-efficient per-





formance of CFLs also means that you can save at least \$25 in energy costs over the life of each CFL that replaces an incandescent bulb (based on a minimum life of 6000 hours at \$0.10 per kWh).

ENERGY STAR qualified CFLs emit the same amount of light as standard bulbs but have lower wattage ratings and therefore use less energy.

Use the following table as a guide when replacing standard incandescent bulbs.

General Wattage Equivalency Guide for Replacing Incandescent With CFL Bulbs

Standard Incandescent (Watts)	ENERGY STAR Qualified CFL (Suggested watts)
40	10
60	15
75	20
100	29
150	38

This chart is provided as a guide only. Check the product packaging to determine the equivalent wattage.

How Do Compact Fluorescents Qualify for the ENERGY STAR Symbol?

Compact fluorescents must meet stringent specifications for lumens per watt, lumen depreciation, colour quality and average rated lamp life. They must carry a one-year warranty and be labelled to indicate lumen output and expected product life.

ENERGY STAR in General

ENERGY STAR is the symbol for energy efficiency for many products in Canada, the United States and other countries. Buildings and homes that are equipped with ENERGY STAR labelled products have lower operating costs because these products use less energy than conventional products while offering the same or better performance. From an environmental perspective, improving energy efficiency reduces greenhouse gases that contribute to climate change.

Manufacturers who are not already enrolled in the ENERGY STAR program in the United States and who wish to use the ENERGY STAR symbol in Canada must sign an administrative arrangement with Natural Resources Canada's (NRCan's) Office of Energy Efficiency (OEE) and certify that the products to be labelled meet ENERGY STAR specifications. Manufacturers of ENERGY STAR labelled products that qualify in Canada and those who are enrolled in the U.S. ENERGY STAR program must supply NRCan with a Canadian contact if they wish to benefit from NRCan's marketing and promotional activities.

ENERGY STAR Labelled CFL's are Now Available

NRCan's OEE promotes the international ENERGY STAR symbol in Canada and monitors its use. This has created more opportunities for manufacturers of lighting products to use the ENERGY STAR symbol to promote and sell qualifying products across Canada. In turn, this results in increased demand and availability of energy-efficient products.

For more information on ENERGY STAR in Canada, visit the Web site at energystar.gc.ca, or call the publications line at 1800 387-2000 (toll-free).



Leading Canadians to Energy Efficiency at Home, at Work and on the Road

The Office of Energy Efficiency of Natural Resources Canada strengthens and expands Canada's commitment to energy efficiency in order to help address the challenges of climate change.



