

## The Conservation Zone: Energy Efficient Lighting



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### Lights! Lumens! Action!

My role as Chief Energy Conservation Officer is to ensure conservation and energy efficiency play a vital role in Ontario's ongoing energy strategy.

Since it's cheaper to save energy than to make it, a big part of today's conservation culture involves finding ways to save energy. Replacing incandescent bulbs with energy efficient, or "smart" lighting is one of the brightest ideas yet. Imagine the effect if all 12.5 million Ontarians put their minds to saving energy every day using these simple suggestions. I believe it can happen...one light bulb at a time. Together, let's do it!

Did you know that energy efficient lighting...

- ✓ uses less energy?
- ✓ produces just as much light?
- ✓ lasts longer than standard bulbs?
- ✓ saves you money on your energy bill?

Today, an average home has about 30 plus light fixtures. Next time you're shopping for replacement bulbs, or installing a new fixture, take a few moments to find the most energy efficient choice available.

In the past decade, the selection of energy efficient lighting products has significantly improved. This translates into more products that can replace virtually any kind of lighting application you need in your home or business.

While energy efficient lighting does cost slightly more than traditional light bulbs, these products are generally much longer-lasting and use much less energy. In my mind, this makes them not only energy efficient, but also very cost efficient in the long run. When you shop for energy efficient lighting and look at labels, keep in mind that you want to find bulbs with the desired light output (*lumens*), with the lowest wattage (*amount of electricity used to produce light*).

**Energy-saving incandescent bulbs:** these are regular light bulbs that come in slightly lower wattages. Use them anywhere you would use a regular incandescent, and trim your energy use by ten to 15 per cent. Remember, when using incandescent bulbs, dimmers and timers help save even more.

**Compact Fluorescent lights (CFLs)** provide the same light as higher wattage incandescent bulbs, and use a quarter to a third of the energy. They can be direct screw-in replacements for incandescents in many

applications, and like fluorescent tubes, last much longer. But when the bulbs do finally burn out, check with your local municipality for proper disposal.

**Fluorescent tubes:** now available in a range of hues (Cool White, Deluxe Cool White, Standard Warm, and Deluxe Warm White), fluorescents can be used in many areas of your house. Using 60 to 80 per cent less energy than incandescents, this is a huge energy saver. They also last 10 to 20 times longer.

**Halogen:** perfect for track lighting, pot lights and outdoor security lighting, these are the "Cadillac" of incandescent lighting. Halogens use about 40 per cent less electricity and last two to four times longer than traditional bulbs. They're also very useful in customized applications.

**Incandescent:** In certain applications, incandescent bulbs just might be the best alternative. If this is the case, consider using timers and dimmers to use electricity wisely.

And don't forget – the simplest way to save lighting energy is to turn lights off when you're not using them!

As Chief Energy Conservation Officer, I issue a friendly challenge to all Ontarians to think about how you use energy, every day, and find new ways to conserve it.

"The Conservation Zone" is designed to help you find easy ways to start saving energy and become part of Ontario's growing conservation culture.

**The role of the office of the Ontario Chief Energy Efficiency Officer is to develop, coordinate and stimulate electricity conservation and demand management. For more energy-saving tips, visit our website at [www.conservationbureau.on.ca](http://www.conservationbureau.on.ca).**

## Supplementary Information

### Title: Energy Efficient Lighting: Part 2

In addition to using energy efficient lighting products in your home, there are other devices that you can use, both indoors and outside, to help you use less electricity.

#### Dimmers

Dimming incandescent and fluorescent lamps saves energy, increases the life of the lamps and adds a range of lighting levels to your lighting system. The ability to dim lamps can enhance the versatility or aesthetics of your living and entertainment room, bedroom, dining room and kitchen. All incandescent lamps are "dimmable"; however, not all fluorescent lamps can be dimmed. They require a special ballast and a dimming interface. Many compact fluorescent lamps (CFLs) are not suitable for use with dimmers.

**Tip:** you'll save more energy by replacing a 100-watt bulb with a 60-watt bulb, than you will by dimming the 100-watt bulb to provide the lower light output. There are many affordable models of dimmers available for purchase at any hardware store.

#### Automatic Timers

Automatic timers save energy and control your interior or exterior lighting by turning them on and off at pre-set times. Most modern timers are digital, easy to operate, affordable and can be programmed from 24 hours to seven days. Many are also plug-in products, so you don't need to worry about installation.

**Tip:** look for timer mechanisms that have manual override and a good power disconnect. Some digital timers do not operate CFL lamps efficiently; ask for advice when buying timers for CFL products.

## **Motion Sensors**

In residential applications, outdoor security lights can account for a large portion of overall lighting energy costs, and are often left on when not needed. Motion sensors are a good choice for controlling outdoor security lighting. The motion sensor keeps the lights on as long as there is movement. After motion has stopped (lapse time is adjustable), the detector switches the lights off.

Here are some other sites to visit for more information:

[www.energy.gov.on.ca](http://www.energy.gov.on.ca)

<http://www.hydroonenetworks.com>