

GOING GREEN?

WANT TO BE MORE ENERGY EFFICIENT?

WE ARE HERE TO HELP!

Dear Wholesalebulbs Members

We will be sending out periodic communications with conservation ideas, education and discounted offers on products and services to help our members and readers save money on water and energy conservation. This first communication is about the benefits of energy efficient lighting.

Regular incandescent and halogen light bulbs are very inefficient. In fact, over half the energy consumed by an incandescent light bulb produces heat, not light. Compact Fluorescent light bulbs are more efficient than incandescent bulbs. A Fluorescent bulb typically uses 65%-75% less energy than a standard incandescent bulb to provide the same amount of light. Another benefit of Fluorescent bulbs is that they last up to 10 times longer than a regular light bulb. This means once you install them you will not be replacing them for a long, long time.

Although the up-front cost of a Fluorescent bulb is typically higher than a standard incandescent bulb, the cost savings over the life of the bulb can be striking. Below we have outlined two applications for energy efficient Fluorescent lighting.

The first energy savings example listed below is for indoor lighting. The average home in the USA has 60 interior light fixtures. Most of these light fixtures would lend themselves really well to Fluorescent Lighting. If the bulbs in these fixtures were changed to energy efficient Fluorescent Bulbs a homeowner could expect to save between \$1,250 and \$1,500 per year.

The second energy savings example listed below is for outdoor lighting. Many homes in the USA have outdoor lighting for security, safety and style. This application is **not** for low voltage landscape lighting, but the standard 120 volt candelabra, decorative or flood lighting that is typically attached to the exterior of the home. When these lights are left on overnight or even for 3-5 hours per night a lot of money is being spent on energy. By converting these bulbs to energy efficient Fluorescent Bulbs a homeowner can expect to save about \$1,000 per year.

Annual and Life Cycle Costs and Savings for 60 CFLs in 4,500 Square Foot Home

Energy Rate (SDGE Rate above Baseline Band)

Assume Average Wattage is 65 Watt Incandescent

Assumes Average Usage of 2 Hours per day per bulb

| | 60 ENERGY STAR Qualified Units | 60 Conventional Units | Savings with ENERGY STAR |
|--------------------------------|---|--------------------------------------|---|
| Annual Operating Costs* | | | |
| Energy cost | \$315 | \$1,478 | \$1,163 |
| Maintenance cost | \$0 | \$237 | \$237 |
| Total | \$315 | \$1,715 | \$1,399 |

Annual and Life Cycle Costs and Savings for 20 CFLs in Outdoor Application
Assumes \$0.29 Energy Rate (SDGE Rate above Baseline Band)
Assumes Average Wattage is 30 Watt Incandescent
Assumes Average Usage of 2 Hours per day per bulb

| | 20 ENERGY STAR Qualified Units | 20 Conventional Units | Savings with ENERGY STAR |
|---------------------------------------|---|--------------------------------------|---|
| <u>Annual Operating Costs*</u> | | | |
| Energy cost | \$184 | \$1,051 | \$867 |
| Maintenance cost | \$0 | \$315 | \$315 |
| Total | \$184 | \$1,367 | \$1,183 |

The bottom line is that you'll save money by replacing standard incandescent or halogen light bulbs with Fluorescent bulbs.

Most electricity in the U.S. is produced by coal-fired power plants. The problem is that for every kilowatt hour of electricity generated by a coal-fired plant, the EPA estimates that 1.43 lbs of greenhouse gases are released into the atmosphere. By switching to energy-saving Fluorescent light bulbs, you will lessen greenhouse gas emissions into the atmosphere. In 2007, Americans saved \$1.5 billion by switching to ENERGY STAR qualified CFLs. The energy saved could light all the households in a city the size of Washington, DC for over 30 years. Put another way, changing these bulbs removes as much greenhouse gas pollution as planting 2.85 million acres of trees or taking 2 million cars off the road each year.

Now for the most important and exciting part. Fluorescent Bulbs have seen huge performance improvements over the past three years! You can now purchase Fluorescent Bulbs which look and perform just like your Incandescent Bulbs. Fluorescent Bulbs are offered in all of the shapes you need including: Candelabra, Traditional Edison A Shape, R20,R30,R40, PAR 20, PAR30, and PAR38 Reflector/Flood lights for recessed lighting applications, Globes, and more. Fluorescent Bulbs which produce the SAME WARM YELLOW LIGHTING you are used to with incandescent lighting are available today. That color is 2700K on the Kelvin color scale.

In the past Fluorescent bulbs were not available for dimmable switches. Now with the integration of IC's into fluorescent bulbs "dimmable" fluorescent bulbs are now available and perform well.

The only performance difference between a typical Fluorescent Bulb and Incandescent Bulb is that the Fluorescent Bulb will take 30 to 45 seconds to come up to full light output when it is initially turned on. The Incandescent Bulb takes less than 5 seconds to come up to full light output. For this reason it is not recommended to use Fluorescent Lighting in areas where you are turning the lights on and off all the time.