Green Tips
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Last holiday season, I was delighted to discover that Costco in Silverdale carries strings of holiday lights that use LEDs instead of the usual bulbs. They come in clear white as well as in colors and shine more clearly and brightly than the old variety. We put up a couple of strings on small trees in our yard last year, and just purchased another string for indoor use this season. Hopefully we'll be seeing these replace the old-style lighting more and more, for all the reasons provided in the article below, which I have shamelessly lifted from the November 2007 GreenTips published on-line monthly by the Union of Concerned Scientists.

— Leslie Marshall

LED Lights Make Your Holiday Greener

Twinkling lights on trees and houses are an icon of the holiday season, but their energy consumption might put a damper on your celebratory mood: this year's holiday lights could generate as much global warming pollution as about 250,000 cars, according to UCS research. Most of this electricity is needlessly wasted, because the mini and C-7 incandescent lights used by most homeowners are only about 10 percent efficient.

There are a variety of ways to decorate the home without using electricity, but families who enjoy the look or tradition of holiday lights can save money and help protect the environment by switching to LED (light-emitting diode) holiday lights. LEDs employ semiconductor technology to convert electricity into light directly, resulting in significant energy savings. An LED uses approximately 0.04 watt of electricity, compared with 0.45 watt for a mini incandescent light bulb and 7 watts for a C-7 incandescent bulb.

LEDs provide several other benefits as well:

- Safety – LEDs stay cool to the touch, posing less of a fire hazard compared with incandescent lights. In addition, their low energy consumption allows you to connect up to 25 strands of lights end to end without overloading a circuit.
- Durability – The small size and solid construction of LED bulbs make them less likely to break.
- Long Life – LED bulbs can last up to 100,000 hours or more, which is equivalent to more than 10 years of continuous indoor use. If a single bulb in an LED strand does happen to fail, the remaining bulbs will continue to work.

While they have a higher purchase price (they cost about two to three times more than incandescent lights), LED holiday lights quickly pay for themselves through energy savings. Using the national average residential rate of 11.06 cents per kilowatt-hour, it costs only 32 cents to use 300 LED lights for five hours per day for 45 days. In comparison, using incandescent mini lights or C-7 lights for the same amount of time would cost $3.36 and $52.25, respectively. This does not include replacement costs for incandescent light strands, which do not last as long as LED strands. You can reduce your energy costs even further by using solar-powered LED lights, which can be used indoors or out. Regardless of which bulbs you use to light up your holiday, you can maximize their efficiency by plugging them into an automatic timer and using mirrors and tinsel around indoor lights to increase the lighting effects.