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Lighting the Way to Lower Electric Bills

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I recently discussed how I lowered my electric bill from 8KWh/day to just 4.7KWh/day using simple easy to implement techniques, such as using Compact Fluorescent Light (CFL) bulbs for versus Incandescent bulbs for lighting. Here's why CFL lighting makes so much common sense for your wallet and sustainable living.

Overall Importance of Lighting and CFL
According to the US Department of Energy (DOE), lighting accounts for one quarter of electrical demand in the US at a cost of $37 Billion a year. DOE says CFLs "are the most significant lighting advance developed for homes in recent years," and that their "energy savings and superior longevity make CFLs one of the best energy efficient investments available."

Energy Use
CFL bulbs use 70-75% less electricity than traditional incandescent bulbs. That means that light from an 11w fluorescent bulb compares to a 40w incandescent bulb, but uses 72% less energy. (14w compares to a 60w incandescent, 20w to a 75w, and 25w to 100w). The main problem with Incandescent bulbs is that 80-90% of the electrical energy gets lost as heat.

Longevity and Cost
They last about 10 times longer than incandescents too. This means that for a slightly higher up front cost for the CFL, you will save on running costs in lower electricity bills and you will save on replacement bulbs. CFLs cost less than $10 and will net the buyer between $30 and $70 in savings over its lifetime on electricity bills and replacement bulbs

Reduction of Greenhouse Gases
The lower electrical demands reduce the amount of carbon emission depending on the source of that electricity. Each CFL replacing a regular bulb prevents emissions of 1,000 to 2,000 pounds of greenhouse gases (CO_2) and 8 to 16 pounds of polluting sulfur dioxide from power plants, as well as eliminating the need to produce, and ultimately discard, up to a dozen incandescent bulbs.

Opportunity
There are nearly 3 billion light sockets in the U.S., most of which are candidates for CFL replacement, but very few residential sockets use CFLs. CFLs are available from local hardware and home-improvement stores.

Sources: Safe Climate
Improvements Catalogue]
Energy Star