Compact fluorescent lamps (CFLs) are widely marketed as an energy-saving replacement for incandescent bulbs—a commodity product that we’ve used for more than 100 years. We throw incandescent bulbs in our shopping cart with little or no thought, and move on to the next item on our list.

If you want to save money and help the environment by using CFLs, we applaud you! However, “going green” sometimes requires a little insight or planning. So, to help manage your CFL expectations and become an informed consumer, we’ve outlined some facts and guidelines to assist you.

**CFL Intelligence**

- **The initial purchase price of a CFL is greater than an incandescent.** The CFL is not a commodity product. It uses more complex technology and is made up of several electrical components, unlike the incandescent bulb.

- **The CFL saves you money over time** because it uses less energy, lasts longer and requires less maintenance than an incandescent bulb, if properly applied.

- **CFLs have a slight warm up period of one to three minutes before reaching full brightness.** This is not a flaw in the technology. The slow start-up allows the CFL to maintain constant light output while it’s operating.

- **How you use the CFL will impact how long it lasts.** In a “hot” environment with little airflow around the fixture, the life of the CFL can be shortened because heat builds up. An example of a “hot” environment would be a recessed “can” or downlight. However, a CFL will thrive in a table lamp application where the fixture is exposed to airflow.

- **A CFL can appear dimmer than expected. You can avoid this by using the “Divide by 3 Rule.”** A CFL requires fewer watts than an incandescent to give off the same amount of light. Manufacturers use a 4:1 ratio for the wattage of an incandescent relative to a CFL. However, CFL performance can vary based on temperature and position, so we recommend a 3:1 ratio instead. For example, replace a 60 watt incandescent with a CFL that uses 20 watts, not 15 watts. You’ll still use only a fraction of the energy, while avoiding the possible disappointment of a dim lamp.

- **Not all CFLs can be used with a dimmer.** If you intend to use the CFL for dimming, just make sure the label on the box indicates that it can be dimmed. The same holds true if you want a “3-way” CFL bulb to change the level of light output in your table lamp. The label should indicate that capability.

- **The color of light provided by CFLs has its pros and cons.** CFLs are sold in different Correlated Color Temperatures (CCTs), so they can be tailored for different decors (warm or cool). This is impossible with an incandescent lamp. Beware, however, that color consistency can vary for the same type and manufacturer of a CFL. Two CFLs of the same type can look slightly different when seen side-by-side.

- **Buy CFLs with the ENERGY STAR label.** The label indicates that the product meets strict energy efficiency guidelines set by the US EPA and the US DOE.

- **CFLs contain a very small amount of mercury,** an essential element in CFLs that allows them to be energy efficient. ENERGY STAR recommends that you don’t dispose of CFLs with your ordinary household garbage and take advantage of local recycling options. If you break a CFL by accident follow US EPA guidelines found on the ENERGY STAR Web site at www.energystar.gov/cfls.

- **Keep your receipt for your CFL purchase.** Studies show that if electronics are going to fail, it is likely to happen early on.