



The Power of Human Connections



comfort

affordability

peace of mind

## Shine with ENERGY STAR

ENERGY STAR® is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy that helps us save money and protect the environment through energy-efficient products and practices. Quality and performance are built into the ENERGY STAR guidelines.

### Control the Cost of Lighting

Nationwide, artificial lighting consumes about 12% of a household's electricity use. The average U.S. household has more than 40 sockets for light bulbs, ranging from table lamps to ceiling fixtures. Use of new lighting technologies can reduce lighting energy use in homes by 50%–75%. Upgrading 15 of the inefficient incandescent light bulbs in your home could save you about \$50 per year.

### ENERGY STAR Performance

ENERGY STAR qualified CFLs can last eight times longer than standard incandescent bulbs, which can save you more than \$30 in lower energy costs over its lifetime. ENERGY STAR qualified CFLs also generate about 70% less heat than standard incandescent lighting. This means they are cool to the touch, keep your home more comfortable, help reduce home cooling costs, and are safer to use in fixtures that have paper or fabric shades.

To earn the ENERGY STAR label, bulbs must provide at least three times more light output per watt than standard incandescent bulbs. That means you get the same amount of light at only one-third the cost!

In addition, ENERGY STAR qualified CFLs must turn on instantly, produce no sound and fall within a warm color range or be labeled for cooler color tones. With an average rated life of 8,000 hours, an ENERGY STAR qualified CFL that is used 3 hours per day has a life of about 7 years.

## Where to Use

Qualified ENERGY STAR CFLs provide the greatest savings in fixtures that are on at least two hours per day. Put them where you leave the lights on the most, such as the family/living room, kitchen, and dining room, to achieve the most savings.



### Fixtures Save Too

ENERGY STAR qualified fixtures use only about one-third of the energy, when compared to traditional lighting, the savings can justify the investment to replace your existing standard fixtures. Always look for the ENERGY STAR label on new fixtures.

ENERGY STAR qualified fixtures come in hundreds of decorative styles including portable fixtures such as table, desk, torchiere and floor lamps; and hard-wired options such as wall, ceiling, chandelier, under cabinet, and vanity fixtures. If you need a ceiling fan/light combination unit, ENERGY STAR qualified fixtures are almost 50% more efficient than conventional units. You can also find ENERGY STAR qualified fixtures that deliver convenient features such as dimming on indoor models and automatic daylight shut-off and motion sensors on outdoor models.

The information in this brochure has been provided by:

ENERGY STAR (<http://www.energystar.gov>)

Federal Trade Commission (<http://www.ftc.gov>)

U.S. Department of Energy Lighting Facts (<http://lightingfacts.com>)

## How to Choose

Finding the right ENERGY STAR qualified CFL for your home is easy! Just ask yourself: What shape and size will fit in the fixture? How much light do I need in the room? What color of light will look best? Use the chart to the left to find your fixture and then see which shapes are available.

NOTE: Be sure to check the CFL packaging for any restrictions on use. For example, fixtures that are enclosed, or that are connected to a dimmer, light sensor or three-way switch require CFLs that are suited to those conditions. Choose only CFLs that are labeled as being safe for use in your specific fixture.

How to Choose the right ENERGY STAR Qualified Bulb	Table/Floor Lamps	Pendant Fixtures	Ceiling Fixtures	Ceiling Fans	Wall Sockets	Recessed Cans	Track Lighting	Outdoor Covered	Outdoor Flood
Spiral	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cone/A-shaped	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Globe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tube	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Candle	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Indoor Reflector	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Outdoor Reflector	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

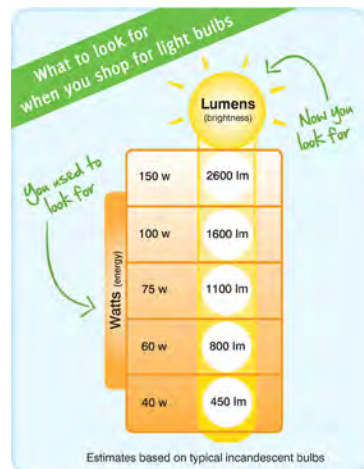
## Changes in Lighting Options

Federal regulations enacted by Congress in 2007 are phasing in new efficiency standards for all general-purpose light bulbs as of January 1, 2012. The result is that consumers are no longer able to purchase incandescent bulbs starting with 100-watt bulbs in 2012 and ending with 40-watt bulbs in 2014.

Today's Bulbs	After the Standard	Standard Effective Date
100 watt	≤ 72 watts	January 1, 2012
75 watt	≤ 53 watts	January 1, 2013
60 watt	≤ 43 watts	January 1, 2014
40 watt	≤ 29 watts	January 1, 2014

Light bulbs outside this range and certain specialty lights are exempt from these new standards.

## What is a Lumen?



**Lumens = Brightness**

**Watts = Energy**

A lumen is a measurement of light output. Unlike watts, which measure the power consumed by the bulb, lumens indicate the amount of light produced.

## What are My Lighting Choices?

Three of the most common energy-efficient lighting types include halogen incandescents, CFLs, and LEDs.

### Halogen Incandescents — about 25% energy savings

Halogen incandescents are simply energy-efficient incandescent bulbs. These bulbs have a capsule inside that holds halogen gas around a filament to increase bulb efficiency and lifespan. This type of incandescent bulb is about 25% more efficient and can last up to three times longer than traditional incandescent bulbs. They are available in a wide range of shapes and colors and can be used with dimmers.

### CFLs — about 75% energy savings

Compact fluorescent lamps (CFLs) are simply curly versions of the long tube fluorescent lights you may already have in a kitchen or garage. Because they use less electricity than traditional incandescents, typical CFLs can pay for themselves in less than nine months, and then start saving you money each month. An ENERGY STAR-qualified CFL uses about one-fourth the energy and lasts ten times longer than a comparable incandescent bulb that puts out the same amount of light.

CFL bulbs are available in a range of light colors, including warm (white to yellow) tones that were not as available when first introduced. Some are encased in a cover to further diffuse the light and provide a similar shape to the bulbs you are replacing.

Fluorescent bulbs contain a small amount of mercury, and they should always be recycled at the end of their lifespan. Many retailers recycle CFLs for free.

### LEDs — about 75% – 80% energy savings

The light emitting diode (LED) uses the same technology as the little indicator light on your cell phone, but designed to light your home. It is one of today's most energy-efficient and rapidly developing technologies. ENERGY STAR-qualified LEDs use only 20% – 25% of the energy and last up to 25 times longer than traditional incandescent bulbs.

LED bulbs are currently available in many products such as replacements for 40W and 60W traditional incandescents, reflector bulbs often used in recessed fixtures, and small track lights. While LEDs are expected to be more expensive at this early stage, their long life and energy savings cost less to operate.



## The Right Light

The ENERGY STAR labeling will make it easy for you to find a qualified CFL with the amount of light equivalent to the incandescent bulb you are replacing. Common terms used on the packages will include “Soft White 60” or “60 Watt Replacement”.

You can also check the lumen rating on the label to find the right bulb. The higher the lumen rating, the greater the light output. To determine which ENERGY STAR qualified CFL will provide the same amount of light as your current incandescent bulb, consult the following chart:

Incandescent Bulbs (watts)	Minimum Light Output (lumens)	ENERGY STAR Qualified Bulbs (watts)
40	450	9 to 13
60	800	13 to 15
75	1,100	18 to 25
100	1,600	23 to 30
150	2,600	30 to 52

## Go for Five

If you replace 5 regular light bulbs that burn 3 hours a day with ENERGY STAR qualified CFLs, you could save an average of 1,880 kWh, or about \$190 in electricity costs, over the lifetime of the CFLs. That's enough energy to run your ENERGY STAR qualified refrigerator for more than 4 years or to light your whole house for nearly a year!