

HELP PROTECT THE CLIMATE

Climate change is a real and urgent challenge affecting people and the environment worldwide.

Human activities such as electricity production and transportation add significant amounts of carbon pollution to the atmosphere. This carbon pollution, along with other greenhouse gases, is the primary cause of most of the global temperature rise observed over the past 50 years.

Global warming has already led to rising sea levels, melting glaciers, and shifting rainfall patterns, among other changes. Unchecked carbon pollution can lead to long-lasting changes in our climate that threaten human health, society, and ecosystems. To learn more about climate change and what you can do to reduce its impacts, visit epa.gov/climatechange.

DO YOUR PART

Choosing energy-efficient products and practicing simple energy saving measures reduces the amount of carbon pollution added to the atmosphere. EPA's ENERGY STAR program offers tips and product information to help you do your part in protecting your family and your community from the effects of climate change now and in the future.

If every American household replaced the 5 most frequently used light fixtures or the bulbs in them with ENERGY STAR certified lighting, we would prevent greenhouse gas emissions equivalent to the emissions from 10 million cars and save \$8 billion in annual energy costs.

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Helping you save money and protect the climate through energy-efficient products and practices.



WHAT IS ENERGY STAR?

ENERGY STAR is a widely recognized and trusted label on products that meet strict energy-efficiency requirements set by the U.S. Environmental Protection Agency (EPA). ENERGY STAR certified products are third-party certified and subject to ongoing verification testing.

Products that have earned the ENERGY STAR help you save energy and money without sacrificing performance. By using less energy, these products also help reduce greenhouse gas emissions that contribute to climate change.

Today, the ENERGY STAR label can be found on more than 65 different kinds of products found in our homes and workplaces including lighting, appliances, office equipment, consumer electronics, and heating and cooling equipment. Energy-efficient new and renovated homes, as well as schools, government buildings, and commercial and industrial buildings also can earn the ENERGY STAR.

Learn more at energystar.gov



ENERGY STARCERTIFIED LIGHTING

Choosing ENERGY STAR certified lighting helps save energy and money on utility bills. On average, ENERGY STAR certified bulbs and fixtures use about 75 percent less energy than standard incandescent models. Replacing a traditional bulb with an ENERGY STAR certified bulb can save more than \$40 in electricity costs over its lifetime.* To save even more, replace your most frequently used fixtures and bulbs with models that have earned the government's ENERGY STAR.

With ENERGY STAR certified fixtures, consumers can realize significant savings—a total savings of \$45** in the example below that replaces an incandescent ceiling-mount fixture with an ENERGY STAR certified model.

Expenditures	ENERGY STAR Certified Fixture Replacement (one pin-based 13W bulb)	Incandescent Fixture (one 60W bulb)
Initial Investments (fixture costs)	\$53	\$40
Energy Costs	\$14	\$65
Bulb Replacement Cost	\$0	\$7
TOTAL COST	\$67	\$112

ENERGY STAR certified models are now available across a variety of lighting products. Look for the ENERGY STAR when you're shopping for the following:

- Compact fluorescent light bulbs (CFLs)
- LED light bulbs or fixtures
- Indoor fixtures
- Recessed lighting
- Outdoor fixtures
- Floor and table lamps
- Decorative light strings

*Based on a 13W CFL with a life of 8,000 hours and a 60W incandescent bulb with a life of 1,000 hours at \$0.11 per kWh.

**Based on a pin-based CFL life of 10,000 hours (about 9 years with average use of 3 hours per day) and an incandescent bulb life of 1,000 hours at \$0.11 per kWh, \$0.75 per incandescent bulb.

BENEFITS OF ENERGY STAR CERTIFIED LIGHTING

Consider these benefits when purchasing ENERGY STAR certified bulbs and fixtures.

Long Life – Bulbs that have earned the ENERGY STAR last 6 to 25 times longer than standard incandescent light bulbs—convenient for hard-to-reach fixtures. Note that while most ENERGY STAR certified fixtures come with pin-based CFLs or LEDs built in for long lasting, hard-wired energy savings, some certified outdoor fixtures offer their energy efficiency benefits through the use of photocells and motion sensors, and are compatible with incandescent bulbs in these cases.

High Quality – ENERGY STAR certified fixtures and bulbs offer the same amount of light as incandescent or halogen lighting, while providing a true and natural color without the flicker, hum, or buzz of their infamous fluorescent predecessors.

Safety and Reliability – ENERGY STAR certified light bulbs must be UL listed for fire safety (Underwriters Laboratories, Inc.). ENERGY STAR certified lighting runs cooler, providing the same amount of light as incandescent bulbs, but only producing a quarter of the heat. All lighting models are tested and meet strict specifications for energy efficiency and quality and come with a 2- or 3-year warranty.

Attractive Design and Convenience — ENERGY STAR certified fixtures and bulbs combine attractive design with features created to make life easier and match the décor of your home. Fixtures that have earned the ENERGY STAR come in hundreds of styles and are available at most home centers, lighting showrooms, and specialty stores. Most certified fixtures are sold with the efficient bulb or light source included; all outdoor models come with daytime shutoff or motion sensor features, and many indoor models have dimming or three-way capabilities. It's a good idea to check the packaging or manufacturer's website for compatibility with your lighting controls, such as dimmers and timers, to get the most out of your ENERGY STAR certified lighting products.

Same Amount of Light, Fewer Watts – ENERGY STAR certified bulbs provide the same amount of light, or lumens, as traditional bulbs, but use a smaller amount of energy, or watts. To find the right ENERGY STAR certified bulb for your needs, compare lumens on the packaging.

For example, if you are looking for a light bulb that gives off the same amount of light as a 60W incandescent bulb, look for an ENERGY STAR certified bulb that puts out 800 lumens or more (see table below).

Incandescent Light Bulbs	Minimum Light Output	Common ENERGY STAR Certified Light Bulbs
WATTS	LUMENS	WATTS
40	450	9-13
60	800	13-15
75	1,100	18-25
100	1,600	23-30
150	2,600	30-52

To make it easier to compare light bulbs the Federal Trade Commission has designed a new label that provides information about lumens (brightness), estimated annual operating cost,

Brightness	Lighting Facts Per Bu		
870 lumens	Brightness	870 lu	
	Estimated Yearly Energy Cost Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use		
Estimated	Life Based on 3 hrs/day	5.5	
nergy Cost 1.57 per year	Light Appearance Warm	С	
	2700 K		
	Energy Used	13	

how long the bulb should last, and light appearance. The latter will help you find the color of light you find more pleasing (warm yellowish to cool white).







