



4 Key Questions About the New Light Bulb Legislation

by Linda Longo

1. Are certain types of light bulbs being banned?

“The word ‘ban’ is incorrect,” explains Brian Brandes of light bulb manufacturer SATCO Products. “The legislation is meant to improve the efficiency of lighting. There is nothing in the law that stipulates that CFLs are the mandatory replacement. The government is *not* telling you which type of bulb to buy. Actually, this legislation is no different from the automotive miles-per-gallon requirements.”

Brandes points out that Americans will continue to have choices as to which type of lighting they prefer. “The new FTC Lighting Facts label, which go into effect in January, will help educate consumers as to which lamp types are more efficient by showing the cost to operate per year based on a national average of 0.11 per kilowatt hour,” he states.

2. What am I supposed to replace my 100-watt incandescent bulbs with after January?

“There are several options,” says Joe Rey-Barreau, consulting director of education for the American Lighting Association (ALA) and an associate professor at the University of Kentucky’s School of Interior Design. “One is the 72-watt halogen-incandescent that is available today, and looks and performs just like a standard 100-watt incandescent. It produces slightly less light than a 100-watt, but 72 watts is the standard that has been set by federal legislation for replacing the 100-watt models. It is also important to select a bulb with a ‘warm’ color temperature such as 2700K and 3000K.”

Brandes agrees. “Your first choice and least-expensive option would be a halogen or xenon hybrid that will just meet the efficiency requirements and minimum life ratings,” he notes. “These bulbs will look, light and dim just like the 100-watt versions they replace.”

Another alternative according to Brandes is a halogen IR (infrared-coated) bulb. These will provide higher efficiency and three times longer life than the halogen-xenon ones, but at approximately twice the price.

Rey-Barreau adds that a 26-watt, medium-base compact fluorescent lamp (CFL) offers the same amount of light as the 100-watt incandescent, but uses one-quarter of the

electricity. It will also last 10 times longer. If the 100-watt bulb you are replacing is dimmable, Rey-Barreau advises selecting a dimmable version of the 26-watt CFL.

The next phase of the legislation will affect the 75-watt incandescent bulbs. Rey-Barreau says one replacement option is a 53-watt halogen incandescent that performs and looks similar to a 75-watt incandescent, although it produces slightly less light. In CFLs, a 20-watt model will produce the same amount of light and use one-quarter of the energy.

3. When should I use a CFL versus an LED?

CFLs have achieved a level of performance that matches incandescents in color and far exceeds incandescent in energy efficiency, according to Rey-Barreau. “Therefore, CFLs are a good choice for replacing incandescent in task lighting, table lamps, or ambient lighting fixtures,” he explains. There is a caveat when it comes to recessed lighting: “One issue is to identify whether or not the recessed fixture is designed for a general service bulb or a reflector version. If it is designed for a general service bulb, then medium screw base CFLs will work well,” he states. “However, if the fixture is designed for a reflector-type of bulb, most CFLs that are in the reflector shape will provide much less light than the incandescent versions.”

LEDs as replacement bulbs are currently only available as 40-watt equivalents. They are much more efficient than incandescent and have a life that is 20 times that of an incandescent, however, Rey-Barreau says their high price tag is still an issue for the time being.

“Most likely LEDs will be the overall winner in a few years to come,” Brandes comments. “Right now LEDs are as efficient as CFLs, but their efficiency is predicted to surpass CFLs within the next two years. LEDs have a much longer life – approximately three times or greater than CFLs. They dim well, have greater color rendition, better light control and they work well in cold temperatures (all a bit challenging with CFLs), but LEDs come at a higher cost. However, as with any new technology, the early inductions will bear a higher price tag, but prices will drop as volume increases.”

4. What should I be looking for on the box when I shop for light bulbs now?

For starters, take a tip from Terry McGowan, the ALA’s director of engineering and owner of Lighting Ideas Inc. “You must learn a new word: lumens,” he says. “That’s how light output is measured worldwide. Then get familiar with the labels printed on light bulb cartons. Those labels are required by law and give the power rating of the bulb, the rated light output, plus the life rating.”

For example, a 100-watt incandescent is rated for 1600-1700 lumens of light output depending upon the manufacturer and the rated life of the bulb. To get the same light output in one of the new CFLs or LEDs, find one with the same 1600 rated lumens. Knowing the rated watts of the new bulbs won’t tell you anything about light output – it’s the lumens that matter.

According to McGowan, “Once you’re thinking of light output as ‘lumens’ instead of ‘watts,’ the rest is easy.”

Here are the ratings of the most common incandescent bulbs:

40-watt incandescent = 450 lumens

60-watt incandescent = 800 lumens

100-watt incandescent = 1600 lumens

“As you shop for efficient bulbs, just match the lumens from the chart above to the lumen ratings for the bulbs that you see on the shelf,” McGowan advises. “Remember, the lumen ratings are always printed somewhere on the bulb carton.”

Still confused about the light bulb legislation and how to select the right light bulb for the job at hand? Go to your nearest ALA-member lighting showroom for expert advice. Visit www.americanlightingassoc.com to find a store in your neighborhood.