

# ENERGYwise

## FOR YOUR HOME



### High-Efficient Lighting

If every American home replaced their 5 most frequently used light fixtures or the bulbs in them with ones that have earned the ENERGY STAR, we would save \$8 billion each year in energy costs and prevent greenhouse gases equivalent to the emissions from 10 million cars.

#### ENERGY STAR® Qualified CFLs:

- Use about 75 percent less energy than standard incandescent bulbs and last up to 10 times longer
- Save about \$30 in electricity costs over each bulb's lifetime
- Produce about 75 percent less heat, making them safer to operate and cut energy costs associated with home cooling
- Are available in different sizes and shapes to fit in almost any fixture, for indoor or outdoor use

#### Where to use CFLs:

For maximum energy savings, ENERGY STAR® recommends using qualified CFLs in fixtures that are on for substantial amounts of time each day—from 15 minutes to several hours.

#### How to choose the right CFL:

Follow these guidelines for matching the right CFL to the right fixtures to ensure long-lasting, properly performing lighting.

- CFLs perform best in open fixtures that allow airflow such as table and floor lamps, wall sconces, pendants and outdoor fixtures.
- For recessed fixtures, it is better to use a reflector CFL than a spiral CFL since the design of the reflector evenly distributes the light down to your task area.
- If a light fixture is connected to a dimmer or a three-way socket fixture, you'll need to use an ENERGY STAR qualified CFL that specifies compatibility with those fixtures.

#### ENERGY STAR® Qualified LEDs:

- Use about 75 percent less energy than standard incandescent bulbs and lasts a minimum of 25,000 hours, or 22 years based on average household use
- LEDs produce very little heat, cutting energy costs associated with home cooling
- Comes with a minimum three-year warranty
- Available with dimming on some indoor models and automatic daylight shut-off and motion sensors on some outdoor models

#### What are LEDs?

LEDs (light-emitting diode) are small light sources that become illuminated by the movement of electrons through a semiconductor material. LEDs can be integrated into all sorts of products to provide white and colored light, such as flashlights, light bulbs and integrated light fixtures.



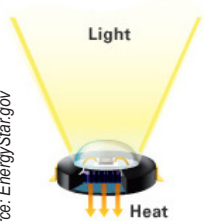
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# The average U.S. home has about 30 light fixtures; a simple switch to ENERGY STAR lighting can save you hundreds per year on your electric bill!

**LED vs. CFL:** LEDs emit light in a specific direction, whereas an incandescent or fluorescent bulb emits light and heat in all directions.



In a CFL, an electric current is driven through a tube containing gases. This reaction produces ultraviolet light that gets transformed into visible light by the fluorescent coating (called phosphor) on the inside of the tube. A CFL releases about 80% of its energy as heat.



LED lighting products use light emitting diodes to produce light very efficiently. The movement of electrons through a semiconductor material illuminates the tiny light sources we call LEDs. A small amount of heat is released backwards, into a heat sink, in a well-designed product; LEDs are basically cool to the touch.

## WHAT TO LOOK FOR WHEN PURCHASING LIGHT BULBS

Instead of shopping for watts, look for lumens. Here's a helpful comparison chart.

Watts (energy)	Lumens (brightness)	
	150-W	2,600 lm
100-W	1,600 lm	
75-W	1,100 lm	
60-W	800 lm	
40-W	450 lm	

Estimates based on typical incandescent bulbs.  
Source: U.S. Federal Trade Commission

### CFL & LED rebate coupon!

- Up to \$1 rebate per ENERGY STAR® rated CFL. Rebate cannot exceed 50% of the total cost and cannot be used with other CFL promotions.
- Up to \$3 rebate per ENERGY STAR® rated LED. Rebate cannot exceed 50% of the total cost and cannot be used with other LED promotions.
- Rebate available for residential members only.
- Rebate will be issued as a credit on your electric bill. Allow 6-8 weeks for processing.
- Fill out the coupon below. Bulbs must be installed at address provided on coupon.
- Indicate number of bulbs purchased (must match receipt). Purchases of 25 or more bulbs require pre-approval and are subject to on-site inspection. Call 651-463-6243 for pre-approval.
- Submit coupon, original sales receipt and ENERGY STAR label from package within 60 days of purchase date.
- Mail to: Dakota Electric Association, Attn: Rebates  
4300 220th Street West, Farmington, MN 55024

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ Zip \_\_\_\_\_  
 Account Number \_\_\_\_\_

#### CFL Rebate

#### LED Rebate



Number of bulbs: \_\_\_\_\_ Number of bulbs: \_\_\_\_\_  
 X up to \$1 each: \_\_\_\_\_ X up to \$3 each: \_\_\_\_\_  
 Total rebate due: \_\_\_\_\_ Total rebate due: \_\_\_\_\_

### Contact the Energy Experts®

Dakota Electric Association  
 4300 220th Street West  
 Farmington, MN 55024  
 651-463-6243 • 800-874-3409  
[www.dakotaelectric.com](http://www.dakotaelectric.com)

Programs and prices are subject to terms, conditions and change without notice.



Your Touchstone Energy® Partner