

ENERGYwise

FOR YOUR BUSINESS



Commercial Lighting – New & Retrofit

Lighting accounts for more than 40 percent of commercial sector electricity consumption in the United States. Designing and implementing an efficient lighting system in your business will help you achieve tremendous savings. Get started now and improve your bottom line!

Dakota Electric can give you the advice you need to get started. The result will be recommendations for cost-effective solutions that will save you money and improve your lighting system.

Value for your business

- Lighting system paybacks often range from one to four years. Some projects can achieve payback in less than one year depending on circumstances with return on investment (ROI) ranging from 5-25 percent.*
- Improve safety and reduce energy use.
- Increase system control with energy-saving occupancy sensors and automatic controls.
- Improve employee productivity and sales by enhancing lighting quality in work stations and retail areas.
- Reduce cooling loads – less waste heat is given off by new lamp and ballast technology.

Who can participate?

Any commercial, agricultural or industrial member can apply. Offices, retail and warehouses are the largest contributors to commercial lighting energy use.**

What you'll receive

Rebates ranging from \$2 - \$125 per lamp/fixture are available to qualifying members who purchase and install energy-efficient lighting products.

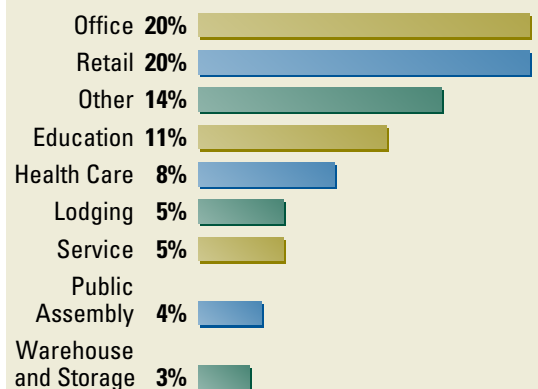
* Payback and ROI vary by project

** Sources: American Council for Energy-Efficient Economy, Department of Energy 2002

Illuminating Engineering Society (IES) light levels are recommended.

- Energy-efficient electronic and cathode-disconnect ballasts must meet the following performance criteria:
 - Power factor greater than .90
 - Total harmonic distortion (THD) of less than .20
 - Current crest factor (CCF) of less than 1.7
 - Class A sound rating
 - UL approved, class P
 - Three year manufacturer's equipment warranty
 - Ballast factor greater than .7
- Compact fluorescent lamps (CFL) must meet the following criteria:
 - Power factor greater than .90
 - Total harmonic distortion less than .35

Lighting Energy Use by Building Type



Your Touchstone Energy® Partner

Good investments are hard to find – focus on lighting and improve your bottom line



A Dakota Electric business account executive worked with Macy's staff in Burnsville to install efficient lamps that save the store money and energy as well as enhance shoppers' experience.

What you need to do

- Check with Dakota Electric to verify funding availability and program parameters.
- Installation must be complete before funds will be issued.
- Itemized invoices from equipment vendors must accompany rebate application.
- Invoices must itemize labor charges, quantity and price of the equipment installed.

- Invoices must include manufacturer and model numbers for the installed equipment.
- Dakota Electric reserves the right to conduct inspections.
- The maximum rebate amount is limited to 50 percent of the project costs and \$100,000 annually per member.

Lamp recycling

Fluorescent and high-intensity discharge lamps contain small amounts of mercury. Mercury is harmful to the environment, and placing the lamps in garbage is illegal. To learn how to lawfully dispose of the lamps, visit www.earth911.org or call the Minnesota Pollution Control Agency at 651-296-6300.

Contact the Energy Experts®

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Lighting rebate allows Macy's to get more light for less money

What do window shopping and the first in-store Santa have in common with replacing light bulbs? They are all things Macy's has done to enhance shopper experience.

Macy's Burnsville replaced more than 3,000 60-watt lamps with 25-watt lamps, a change staff hopes will impress customers as much as it has impressed them. "Although the new lamps use less energy, we actually get twice as much light," said Doug Nelson, regional facilities manager of Macy's North. "It's an incredible difference."

With lighting accounting for nearly 50 percent of its electric bill, Macy's Burnsville also expects reduced energy use

from the new lamps, which will save an estimated 337,000 kilowatt hours annually. Additionally, the new lamps will reduce maintenance needs and produce less heat, reducing summer cooling load. "The lights have a 2 1/2 year life expectancy," said Nelson. "The staff has already noticed they are spending less time changing out lamps."

Even with all of the benefits, a retrofit would not have been possible without a nearly \$50,000 rebate from Dakota Electric. "The rebate made it possible," said Larry Kunz, operating vice president, facilities maintenance for Macy's North. "Because the initial purchase price of the lamps is more [than the old lamps], the rebate makes it financially sensible. We have either replaced or are planning to replace lamps in every store location where a similar rebate program is available."

Programs subject to terms, conditions and change without notice.

