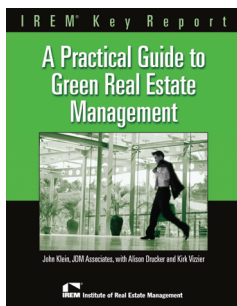


LIGHT SWITCH Low-cost lighting solutions and technology can reduce energy use and expenses



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NOW THAT YOU HAVE A GREEN PROGRAM GOING AND YOU'VE STARTED ADJUSTING YOUR THERMOSTATS, WHAT ELSE CAN YOU DO TO GREEN YOUR OPERATIONS?

Lighting improvements offer a practical way to green operations and shrink expenses in a tough economy. Recent studies show that lighting systems use over 20 percent of America's electricity. In commercial buildings they can use up to 40 percent.

The best method for reducing lighting costs is to simply turn out the lights! Scan common areas for lights that are on unnecessarily. Pay special attention to elevators—many are lit 24/7. Educate tenants on the importance of turning out lights and using efficient lighting alternatives. Host a lunch-and-learn session, post information on your building's Web site—be creative. In 2008, TIAA-CREF provided compact fluorescent lights (CFLs) to each of its employees and each employee of the tenant companies in its investor-owned office buildings. They also installed almost 150,000 CFLs in the residents' apartments within their multi-family portfolio.

Instruct night and weekend security staff to turn off lights as well. Ask janitorial staff to team-clean so they use lights in one area at a time. Night cleaning can account for 25 percent of lighting usage in an office building.

You should also consider installing motion sensors in restrooms, closets, maintenance areas, conference rooms and elevators. In stairwells, install dimmable lights on motion sensors. If you already use occupancy sensors, investigate reducing the amount of time that lights remain on. Additionally, revisit the energy management system (EMS) and timer schedules to see if

lights can be turned on later or off earlier.

Always perform routine maintenance and ensure that controls work properly. Test and calibrate timers and sensors, and conduct walk-throughs to verify that systems operate according to their design, especially at night and on weekends.

Take inventory of all installed lighting. Make lighting purchases a separate line-item to "shed light" on savings opportunities. Replace incandescent lights with ENERGY STAR-qualified CFLs, cold-cathode compact fluorescent lamps (CCFLs), or light-emitting diodes (LEDs). CFLs last 10 times longer and use 75 percent less energy than incandescents. For linear fluorescents, upgrade all existing tubes with high-efficiency, high-lumen 28 or 25 watt T8s. Replace MR16s with compatible LEDs as well. They will last about 20 times longer, conserve 80 to 90 percent of the energy, trim lighting costs by 75 percent, cut maintenance costs by 96 percent and generate less heat.

If interior lighting levels appear too bright, consider de-lamping—removing excess tubes. Use task lighting in work areas to provide light where it is needed most and reduce overhead lighting. In areas with windows or skylights, install photocells to decrease lighting during daylight hours.

When upgrading any lighting system, check for utility provider rebates and government incentives, and make sure tenants operate their systems properly.

Now is the time to brighten up your bottom line and reduce operating costs. No- and low-cost solutions and technologies, and a greater awareness of light use, will help you save money. ■