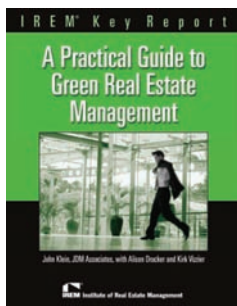


LIGHTEN YOUR LOAD Reduce energy consumption in buildings by unplugging electronics



JOHN KLEIN (JKLEIN@JDMGMT.COM) IS THE PRINCIPAL OF JDM ASSOCIATES. HE CO-AUTHORED THE NEW IREM KEY REPORT, A PRACTICAL GUIDE TO GREEN REAL ESTATE MANAGEMENT WITH JDM'S ALISON DRUCKER AND KIRK VIZZIER.

PURCHASE A COPY OF THE IREM KEY REPORT A PRACTICAL GUIDE TO GREEN REAL ESTATE MANAGEMENT AT WWW.IREM.ORG.



FOOTBALL IS A GAME OF INCHES. YOU FIGHT FOR EVERY YARD TO MAKE A FIRST-DOWN OR TOUCHDOWN. IN ENERGY MANAGEMENT, WE FIGHT FOR EVERY QUARTER POINT OR HALF POINT OF REDUCTION. IT ALL ADDS UP.

Computers, printers, copiers, fax machines, coffee makers and cell phone chargers use energy in increments; refrigerators and vending machines use a bit more. When all these devices are in use at one time, the energy adds up. Collectively, plug loads account for 20 to 30 percent of an office building's energy consumption.

Before addressing plug loads at your building, look around your home, as an example. You may be surprised by the number of devices that use electricity continuously. These "energy vampires" constantly drain energy while plugged in, even if they're turned off. They also generate heat, increasing the cooling required. Perform an inventory of all equipment plugged in within your building and you may be shocked—pardon the pun.

At the office, completely unplug equipment, where practical, or plug several pieces of equipment into a power strip that's turned off at the end of every day. This stops the continual use of stand-by power. Place signs near energy-consuming equipment to remind tenants to unplug devices manually.

When equipment *is* in use, ensure it's the most efficient available. Establish a policy to only buy ENERGY STAR qualified lighting and equipment, such as vending machines and refrigerators, which use up to 75 percent less energy. Encourage tenants to do the same, and consider putting this policy in leases. See

www.energystar.gov/products for qualified product categories.

Task lighting should use compact fluorescent lights (CFLs) or light-emitting diodes (LEDs). Also consider delamping overhead lighting in areas where ambient and task lighting is sufficient. Using a 5-watt LED instead of two 32-watt lamps dramatically reduces overall consumption.

Implementing a building policy for energy-efficient office equipment can benefit performance significantly. Using 2,000 ENERGY STAR computers instead of typical models, for example, would save \$100,000 or more annually, according to ENERGY STAR data. And that's just for computers—consider the savings achievable from other equipment.

It is also important to educate your tenants. Recommend that tenants use power management software to turn off computers and monitors when they're not in use and put them into "sleep" mode after a few minutes. Discourage or prohibit tenants from bringing space heaters into the office; these devices counteract the effectiveness of HVAC systems.

Additionally, you will benefit from enhancing contractor awareness about energy used during tenant improvements. Power tools, construction lights, space heaters and portable A/C can really hurt energy performance. It is critical to walk daily through spaces under construction to make sure unnecessary equipment is unplugged and lights are off. You should also make sure windows and doors are closed, and shades are down.

By being more conscious of plug loads and ways to reduce them, you can improve a building's energy performance and save money. ■