

GETTING STARTED WITH SUSTAINABILITY

Green management begins with careful evaluation



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OK, YOU'VE GOTTEN ON BOARD AND HAVE DECIDED IT'S TIME TO ENHANCE YOUR PORTFOLIO'S SUSTAINABILITY. NOW THE QUESTION IS, WHERE DO YOU START, GIVEN THESE ECONOMICALLY CHALLENGING TIMES?

Deliver a message to senior property management executives focusing on the superior service level that your firm can provide to clients by improving their properties' sustainability, and how this will improve your firm's competitive position and increase your market share. With their commitment to a program and strategy for green real estate management, your company will leverage economies of scale by working across your management portfolio.

Additionally, you can share with owners that more sustainable operations will make income-producing properties more competitive, given the current market demands for green space. It will also allow the firm to stay ahead of future carbon emissions legislation. Use the information strategically to make the case for a sustainability program. Remember, studies have shown that better energy management is a proxy for better overall property management practices and is the cornerstone of any successful green initiative.

For both your company executives and the building owners, be prepared to answer questions and doubts. Owners are likely to raise concerns about the costs and time associated with "greening" their properties. So, remain confident and steadfast with your responses, and stress that by combining best practices and low-cost upgrades, any building can be greener and

demonstrate increased income and enhanced value. It will also help your case if you're able to provide supporting literature, case studies and an easy-to-understand first-blush cost/benefit analysis of a few initiatives to consider.

Once you have received the go-ahead to go green, the next major undertaking is to understand where you are today. Establish a baseline of performance for all the components of building and portfolio operations and business decisions that affect your environmental footprint. Measure and quantify energy usage, water consumption, waste production and recycling at your properties. Evaluate the equipment and systems in place, along with standard operating procedures, purchasing policies, investment criteria for capital projects, tenant communications and tenant improvements to better understand all current practices that will affect your green initiative.

When it's time for this first self-assessment, you have a lot of questions to ask—what are all the steps you're taking to enhance sustainability? Which areas are under your control, versus the control of building occupants? What environmental and financial benefits can you tap into or create at little or no cost? As you begin to answer these questions and review the data you've collected, your case for enhancing sustainability becomes much more realistic and achievable.

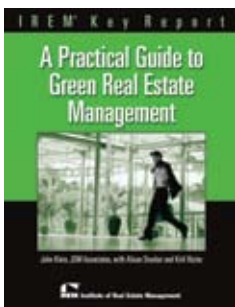
The results of this assessment will start to reveal ideas for where to start and help you identify the priorities that are important to your portfolio. Stay tuned for additional columns, which will show you how to implement improvements in these areas after you've developed a baseline. ■

DIALING FOR DOLLARS Controlling thermostats and temperatures produces low-cost energy savings



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JUST A SINGLE DEGREE CHANGE CAN SHARPLY AFFECT THE AMOUNT OF ENERGY YOU USE and the dollars you spend. Your buildings can experience energy savings between 2 to 4 percent, per degree by which set temperature points are raised or lowered during the cooling and heating seasons, respectively, (depending on location, equipment efficiencies and other factors).

Throughout the real estate industry, a very narrow range around 72 degrees Fahrenheit is typically the standard set point in both summer and winter. In practice, optimal temperatures vary, based on geographic locations, personal preferences, and even clothing styles. During the summer in Miami, for example, you may be able to raise your set point temperature as high as 76 degrees because tenants will be dressed for the hot weather outside. In colder climates—Chicago in the winter—you may be able to set the temperature at 68 degrees since tenants will bundle up against the snow and wind.

Experiment with adjusting set points one degree at a time, but remember, you won't please everyone. Aim for the set point that makes the majority of tenants comfortable *and* achieves energy management goals.

Be sure to lock or remove thermostats in publicly accessible spaces to prevent unauthorized adjustments. Evidence shows if the chief engineer controls the temperature, overall energy performance and tenant satisfaction will be greater than if tenants make frequent adjustments. Energy costs can be all over the map in the latter case and systems will work harder—increasing wear and tear. If you do allow tenants to control thermostats, reset them to the optimal set point each night so tenants' overrides are only temporary.

Another good practice is to calibrate thermostats periodically, ensuring that they are measuring the true temperature. The U.S. Environmental Protection Agency (EPA) estimates calibrating thermostats can produce whole-building energy savings of up to 3 percent. You can purchase an inexpensive temperature gauge, measure the temperature at each thermostat, compare the two readings, and if necessary, adjust the thermostat reading. Further, encourage building engineers to verify that actual temperature readings in the building match the temperatures represented in the energy management system (EMS) or building automation system (BAS).

Make sure thermostats are properly placed in areas you want to condition. Thermostats located near doorways, for example, can give a misleading picture of the temperature in tenant spaces and cause HVAC systems to work harder for no reason. Additionally, thermostat locations sometimes change as a result of space reconfigurations that happen during tenant improvements.

If you can control temperature set-backs with an EMS, optimize your HVAC schedule according to tenants' hours of occupancy. In general, during unoccupied hours, set temperatures back a minimum of 10 degrees (without going below 55 degrees during the heating season and above 88 degrees during the cooling season).

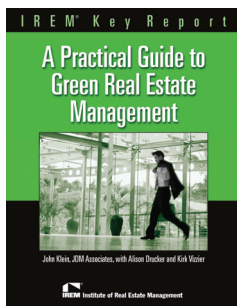
You'll find you can squeeze out energy savings just by managing temperatures. Keeping a sharp eye on energy efficiency, along with educating tenants, will reward you with more than an improved bottom line—tenant retention, a higher environmental consciousness and a reputation for progressive property management. ■

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. ■