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Going 'green' without spending too much 'green'

According to the Department of Energy, energy use in commercial buildings accounts for roughly 17% of total greenhouse gas emissions in the United States. That usage costs more than



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\$100 billion per year. Shockingly, on average, 30% of the energy used in commercial buildings is wasted, yet the demand for energy resources is expected to rise dramatically — as much as 31% — over the next 25 years. Rising energy demands and prices have great impact on businesses through rising operating costs that are passed along to tenants and customers. Even without going for full Leadership in Energy and Environmental Design (LEED) certification, there are a number of ways property owners can take small steps toward establishing energy efficient and environmentally sensitive practices that will go a long way toward cutting energy use without breaking the bank.

Examine Your Needs: Do an energy evaluation of your

property and figure out where you have energy hogs. In most cases it's the HVAC systems and lighting that zap the most energy. Many local utility companies will help you do audits to determine your requirements and offer suggestions on ways your company can conserve more.

Look for ENERGY STAR: ENERGY STAR is a government-backed program helping businesses and individuals conserve by providing information on superior energy efficient products and practices. It's a good guideline to follow. Products bearing the ENERGY STAR qualified equipment label usually come pretty close to LEED standards.

Interior Fixes: Install programmable thermostats to regulate the temperature throughout the day and week. Be aware of peak use times and regulate it in off hours. Using lighting/occupancy sensors instead of light switches will save on lighting expenses. You can't forget to turn off a sensor. Once you get used to them, and you see how often the lights turn off when you are out of the room, you realize how much we waste each day. When upgrading or changing lighting, it's also important

to upgrade to more efficient LED and compact fluorescent lighting. Check for energy efficient fixtures when you're in the market to replace them. Affordable energy-efficient lighting products are readily available these days. Be sure to ask your supplier or manufacturer.

Proper insulation is another way to ensure your building envelope is working and is free of drafts. This will cut down on heating costs and minimize total energy usage, as the systems have to work less to maintain indoor the climate.

A simple and effective solution to save energy is installing one-inch mini blinds on the windows. This can make a remarkable difference in energy management. This simple act alone can help you cut way down on the building's HVAC usage by reflecting and block solar gain. Your heating and cooling systems will not have to constantly fight the solar heat gain that passes directly through the windows and heat your space.

Exterior Fixes: Use of solar bollards for outside lighting in any landscaped area. They will retain sunlight during the day and light the walkways at night.

Look for unique ways to

add unobtrusive solar panels. Some businesses, including a retail bank in Warren, NJ, have installed solar canopies and awnings. They are waterproof and can reduce the heat gain on the property, while producing needed electricity.

When selecting a roofing product, consider installing a white Thermoplastic Olefin (TPO) roof rather than standard black Ethylene Propylene Diene Terpolymer, modified bitumen, or built-up systems. It has a more highly reflective surface to cut down on solar gain and can be installed without interrupting the building operations. A white TPO roof may even extend the life of the roof and is comparable in price.

Install pavers instead of blacktop. Pavers allow for recharge, as they are not impervious like asphalt and concrete. They also lessen the heat-island effect the effects our environment as they cut down on solar gain. Pavers are one way to make it easy to go green while still getting the aesthetic you're looking for.

When irrigating plants close to the building, use a drip irrigation system. The drip soaker hoses use much less water and provide a good, consistent irrigation system.

When selecting shrubs and

bushes, it's important to go local with plantings that can sustain the locale's climate. In Arizona, for example, a property owner would want to use dry plants such as agave and cactus, while in New Jersey they should use plants that can handle wetter climates such as arborvitae and maples.

Go Local and Recycle: One of the most important things a building owner can do to cut emissions and lessen the carbon footprint is making the attempt to do business locally, within a 500-mile radius. The decreased transportation expenses alone will greatly cuts costs to the environment and the checkbook.

Use as much recycled content as possible in your day-to-day products. Also, talk to your garbage hauler to make sure they're recycling at the transfer station. Ask for your own benefit. Most trash in New Jersey is sorted and recycled, but ask to be sure.

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