



Is LED lighting right for you? What to consider

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LEDs are all the rage now. LED vendors are advertising to a wide audience; they are being accepted. We know that LED lights produce the same, if not better, quality of light compared to standard types (no tint or fading) using less than half of the electricity. LEDs can now be dimmed, and can be made to resemble the lights they replace and fit into their ballasts with little additional effort, yet maintain the major energy cost savings.

While LED bulbs often offer a payback of three years or less, it is critical to not just go to the store and buy and install LEDs, but to plan out a replacement project to maximize your financial and operational benefits. Here are some things to consider.

Do an illumination survey. Before you replace your lights, take this opportunity to determine other changes to lighting. Are there areas that are relatively dark - relative to the need? Are there areas that are overlit? Perform an illumination survey. And don't forget your exterior space, too, for security. Before you replace lights, determine where additional or different ballasts and lamps may be necessary for proper illumination and where you can remove some or have fewer lamps in a fixture.

When and where to install LEDs. OK, you are becoming convinced of the value of LEDs. However, given the sheer number of your fixtures, it may not be financially prudent to replace every existing bulb with LEDs right away. Thus, it may be best to prioritize. If you cannot replace all your lights at once, then replace, as a first priority, your least efficient lights and/or the lights used the most hours. You don't want to miss the opportunity to save; it is better to do this than to wait.

Save even more with lighting controls. Even LEDs use electricity needlessly if they are left on for extended periods with nobody around. Therefore, consider lighting controls, such as occupancy sensors and daylighting, sensors that dim artificial light as sunlight enters a room. LEDs can be installed that are compatible with these control types. In offices, occupancy sensors ensure that lights are not left on all night when nobody is around. In warehouses and storage and utility rooms that often go many hours, if not days, without activity, sensors will save, too. In multifamily buildings, hallways and stairwells go many hours without use. Smart buildings (for example, the Parkchester complex in the Bronx) save by using sensors for dim light at all times, but switch to bright light in less than a second when the elevator opens to a floor and someone steps out or enters a stairwell. Which places in your building get sunlight and can benefit from daylighting?

Light locations. Do you currently have lights in inconvenient places that take a huge effort to replace? If so, prioritize LED bulbs in these locations to save you labor and equipment rental expenses. I had a client that rents a cherry picker once every third year to replace burned out bulbs from a very high ceiling. As luck would have it, the day after the job was done one time, a light went out! With LEDs generally lasting over 50,000 hours, the frequency and cost of replacing LED lights from an inconvenient spot drops markedly. Remember that reduced light replacement activity frees

up your maintenance crews to perform other needed tasks. And fewer trips by your personnel up the cherry picker or ladder means lower risk of an accident for your company.

CCES has the experts to perform an evaluation of your lighting needs - to perform an illumination study and determine the best priorities for a lighting upgrade to give you the maximum financial benefits. We can manage and implement a complete turnkey lighting upgrade for you. Besides our technical expertise, we can help you apply for and get applicable Con Ed or NYSERDA incentives for such an upgrade. Contact us today at 914-584-6720 or at karell@CCESworld.com.

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