

Building Energy Asset Score: Building Upgrade Guide¹

LIGHTING SYSTEMS

Lighting upgrade considerations should include existing lighting levels (e.g., daylighting, other lighting that will stay in place) plus the lamp wattage, light output, and ballast factor of the replacement lighting. When changing lamp types, it is important to choose the appropriate ballasts. One-for-one lamp replacement can cause areas to be over lit if higher output lamps are selected; in this event, consider delamping, removing unnecessary light bulbs or fixtures, or choosing a lower ballast factor while ensuring that light levels meet applicable standards for occupancy use.

Given the efficient nature and many benefits of light-emitting diode (LED) technology, upgrading to LED lighting is the only recommendation given in an Asset Score Report.

Asset Score Report Recommendations:

Upgrade to LED Lighting

Cost: \$\$

The light-emitting diode (LED) is one of today's most energy-efficient and rapidly-developing lighting technologies. Quality LED light bulbs last longer, are more durable, and offer comparable or better light quality than other types of lighting. LEDs may use at least 75% less energy, and last 25 times longer, than incandescent lighting. More information on the benefits of LED lighting and on choosing appropriate LED lamps for your application is available from the DOE LED Lighting site: <https://www.energy.gov/energysaver/save-electricity-and-fuel/lighting-choices-save-you-money/led-lighting>.

¹ The complete Asset Score Building Upgrade Guide is available at:

https://buildingenergyscore.energy.gov/assets/energy_asset_score_recommendations_guide.pdf