

Try these 3 tips to create big savings from an LED retrofit project if you have limited capital.



What products should you retrofit to LED first?

We are asked that questions frequently and the answer is pretty simple.

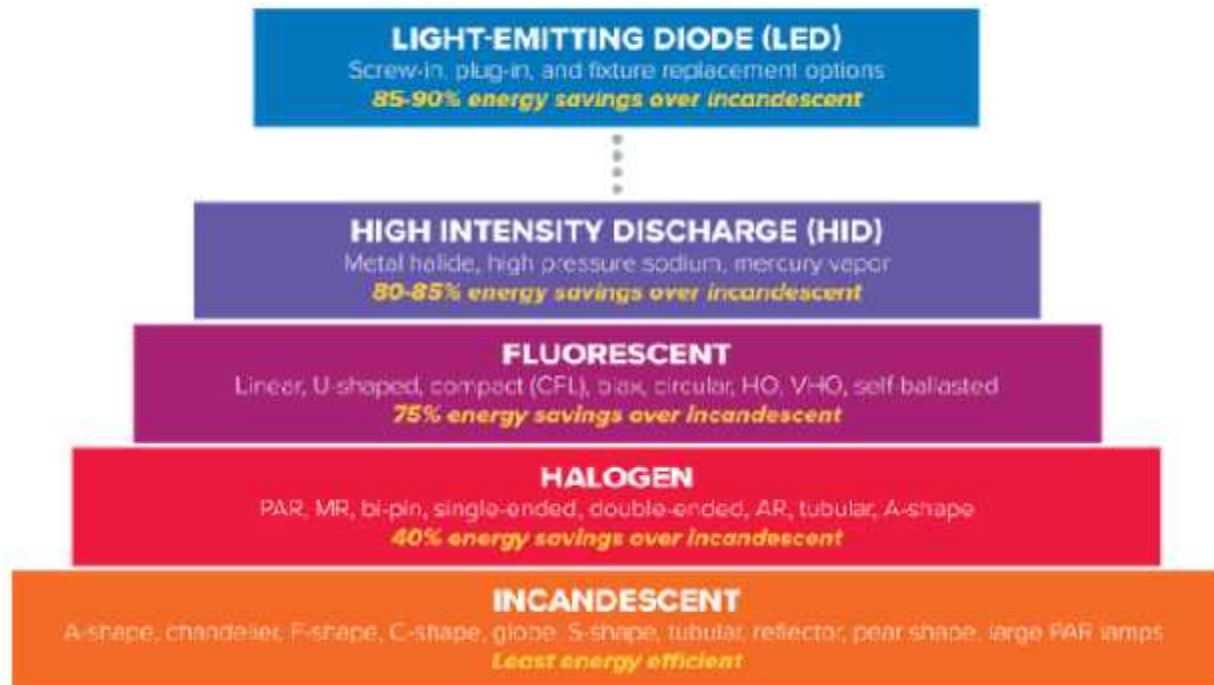
If you have any lights or fixtures in your building that still have incandescent or halogen lighting, start there first.

Retrofitting from incandescent or halogen to LED gives you the biggest energy savings and almost always the fastest return on investment. We all want to make our money back quickly on investments, right? If you're using linear or compact fluorescent lighting anywhere in your building, your lighting is already fairly efficient, especially when compared with incandescent or halogen lighting.

So where should you consider LED next? There are a number of factors to consider, from energy use to ease of maintenance. Here's a visual that will help prioritize which lighting products you should swap for LED first:

THE LIGHTING PYRAMID

As you move up the Lighting Pyramid, you increase energy efficiency and lamp life, reducing energy and maintenance costs.



How can you turn this diagram into actual recommendations that can help you make sense of the many claims made by LED lighting manufacturers? Start with three main goals:

1. Reduce energy costs needed for lighting

As you move up the lighting pyramid, the energy efficiency and lifespan of products increase dramatically. **The first step** is to find the lights that consume the most energy. **The second step** is to find the products that seem to be constantly burning out. These are commonly incandescent or halogen lighting.

Energy alone comprises at least **77 percent** of the cost of your lighting (and as much as 85 percent if you're located in a coastal, high-utility-cost region). Labor to change burned-out products, on average, is about **11 percent** of the total cost of your lighting.

You shouldn't have to sharpen your pencil to do the math here: older lighting technologies will cost you.

This is at the core of understanding the lighting pyramid. The goal here is to simultaneously reduce those two costly areas — energy and labor. A switch from incandescent to LED, for example, could save you 85 percent in energy costs and result in not having to change the light bulb in that socket for years, rather than multiple times in a single year.

2. Focus on places where the lights are on 24/7

As you consider the lighting pyramid and the impact that energy and lifespan has on your overall cost of lighting, it's clear that the areas that are on all the time are also major opportunities to save.

Think about your parking garages, common areas, lobbies, and stairwells. These lights are on all the time there.

Any area where your lights are on 24/7 is an area with a large amount of energy consumption. **"The longer the lights are on, the faster the payback"**.

Using up the energy required to light these areas is something you just can't get around, and you'll go through more replacement bulbs in these applications than anywhere else. So why not prioritize efficiency by using the least amount of energy and labor possible by not having to pay for as many replacement products? This is what changing to LED will do for you.

Think about common areas such as lobbies, garages, stairwells, and elevator landings. Not only does it look unappealing if a few lights are burnt out in that area, but it can also be safety hazard. Minimizing the number of lights out in these areas helps you to avoid both eyesores and safety concerns.

3. Look at the tough maintenance areas

The next areas you want to look at are the hard-to-reach places in your building. These are the places you need special equipment to change the lighting.

Moving to long life products in these areas will save you a significant amount of time and labor cost over time.

One client we worked with had a beautiful lobby with high ceilings and expensive imported tile flooring. It looked beautiful, but it was a costly to maintain.

The bottom line is that while payback is often driven by energy savings with LEDs, the long life ratings can have great benefits that can often be overlooked as well.

The goal with The Lighting Pyramid is to find the least expensive point of entry into LED lighting for you. Once you adopt LED, it becomes easier to retrofit and move up the pyramid.