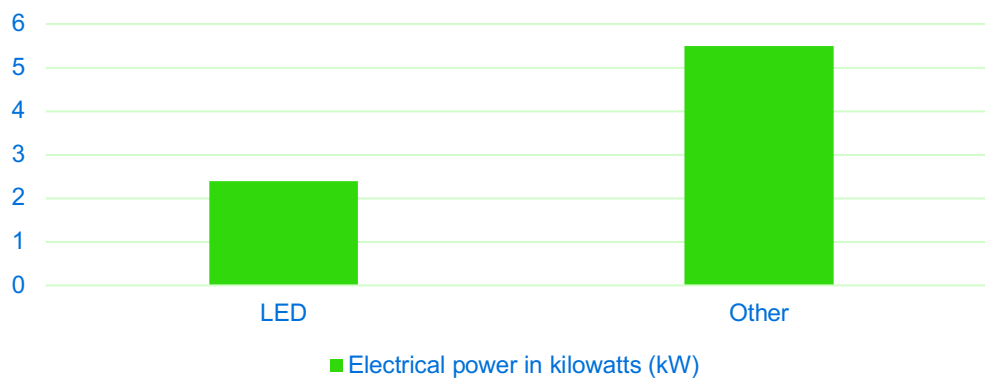


ENVIRONMENT & SUSTAINABILITY – LED: ENERGY EFFICIENT LIGHTING

LED stands for light-emitting diode, and there are currently approximately one quarter of lit courts in Victoria using LED, with the remainder using less- efficient types of lighting such as metal halide. A court lit by LED lights is assumed to consume 2.4 kilowatts (kW) of electrical power while the lights are on. Lighting power consumption increases to 5.5 kW if non-LED lights are used. If a court is upgraded to LED, power and energy consumption are reduced by 44%.

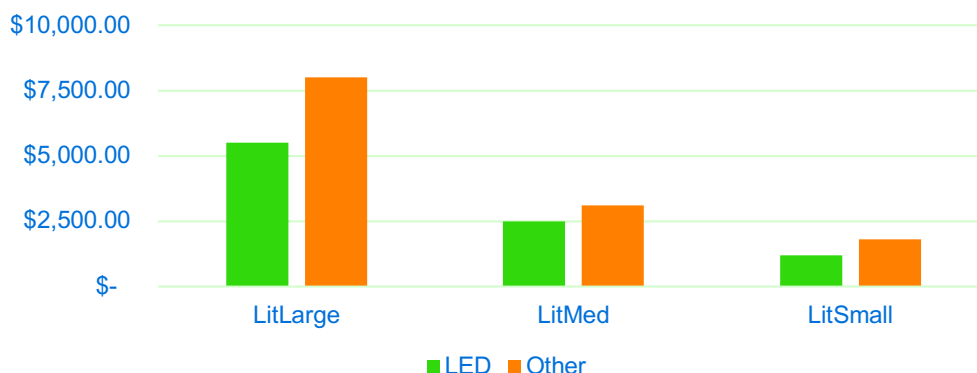


Benefits of LED

- ✓ Brighter lights
 - Easier to play under
 - Safer for participants
- ✓ No globe replacement
 - Reduce waste
 - Reduced expense annually
- ✓ Lower energy consumption
 - Lower cost to run decreased emissions

Economics of LED

LED upgrades are more expensive up front, but maintenance and energy costs are generally reduced.



The cost to upgrade a court to LEDs depends on several factors, including:

- ✓ Whether existing poles can be reused, including foundations.
- ✓ Court layout allowing multiple courts to be served by the same poles.
- ✓ The use of low poles or high poles.

Allowing for a mix of such cases, information from lighting contractors via Tennis Victoria indicates that average cost to upgrade a court to LED lighting is around \$20,000.

A metal halide light bulb lasts for around 5 years. Since it costs about \$2,250 to replace, the average annual cost per court is about \$450. In contrast, LEDs just require occasional cleaning for an annual cost of around \$125 per court, so the net benefit is around \$325 per court. Annual electricity savings from LEDs amount to about \$300 per court. Adding these gives a total annual benefit of around \$625.

Dividing the upfront cost by annual benefit gives an economic payback time of 31 years. Generally, payback times longer than 10 years are considered unattractive. However, LED lights provide non-financial benefits such as a better playing experience, especially for older players.