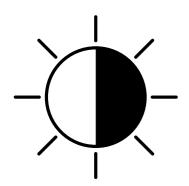


What is LED?

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

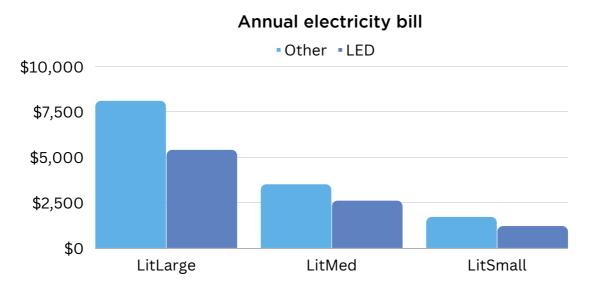






LED Economics

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.







Data explanation

Data and information used is from the Australian Energy Foundations' Chip the Charge report, published in May 2022 and funded by Tennis Victoria.

Cohort Name	Description	No. Lit Courts	Num Clubs
UnliT	Medium club, no lights.	0	202
LitSmall	Small club with lights.	2	150
LitMed	Medium club with lights.	5	258
LitLarge	Large club with lights	10	150







LED Pitch

Use the template below and any information from the document above to support your pitch for LED!

Dear [RECIPIENT],

The installation of LED lighting at [AFFILIATE VENUE] addresses many of our stakeholder organisations' policies and strategies as well as those of Tennis Victoria and the Victorian State Government.

Tennis Victoria's Strategic Plan through 2024 details a purpose to create safe, inclusive and thriving Victorian tennis communities, enabling more people to play more often. A strategic focus is to optimise the use, management and access to facilities, thereby creating a sustainable future for venues.

Tennis Victoria has identified environmental sustainability, specifically, the need to reduce energy usage, as a key focus in the 2024 Strategy. Tennis Victoria, in conjunction with the Australian Energy Foundation (AEF), recently researched the impact of energy usage by community tennis facilities across the State. The study found that community tennis venues currently spend an estimated \$2.6M on grid electricity annually and emit an estimated 7.48M tonnes of CO2 annually (AEF, 2022).

The Victorian Government's Climate Change Strategy details a commitment to net-zero emissions by 2050, and a pledge to accelerate Victoria's transition to a clean and efficient energy future.

[INSERT SPECIFIC COUNCIL STRATEGY/PLAN BELOW, EXAMPLE GIVEN]
Brimbank City Council, in their Brimbank Climate Emergency Plan, has committed to shifting to 100% renewable energy for council operations by 2030, and the entire Brimbank municipality by 2040 as part of their five actions to tackle the climate emergency.

The research completed by Tennis Victoria and the Australian Energy Foundation, examined a cross-section of venues across the state, with varied numbers of courts and club house sizes.







According to this research, the conversion of all existing non-LED lighting at tennis venues across Victoria would result in an annual:

- 30%, or 2280 tonnes (equivalent volume of gas in 388 large hot air balloons) reduction in CO2 emissions
- 45% reduction in peak electricity demand
- Savings of \$1,424,375 in energy and maintenance to community venues

In addition, if solar panels were installed across all tennis venues in Victoria, this would achieve an annual:

- 69%, or 5,220 tonne (776 large hot air balloon) reduction in CO2 emissions
- Savings to community tennis clubs of over \$690,000.

With a full LED upgrade and an installation of 18 solar panels per club, it would be possible for Tennis Victoria's affiliated venues to achieve net-zero emissions from electricity.

Although we are only one [CLUB/VENUE], through funding of LED, [AFFILATE NAME] can contribute to the reduction of greenhouse gases, and support government initiatives to achieve milestones required to alleviate the current climate emergency. We are already taking action to support our environment through the following initiatives:

[add/remove from list]:

- Game On Recycling collecting and recycle tennis balls
- Tread Lightly national recycling initative taking unwanted sport and active lifestyle footwear and responsibly recycles it here in Australia to give it new life
- Upparel uniform and clothing recycling
- Appliance review energy efficient equipment in use at the venue including air conditioning, dishwasher
- All electric venue no gas in use at the venue

Installation of LED will also led to reduction of costs for venue operations. This cost reduction can be [ADJUST TO VENUE PLANS] passed on to community and club members through lower cost membership or court hire. Alternatively, funds can be redirected to more community based activations such as [ADJUST TO VENUE ASPIATIONS] running more events or competition, hiring a part administrator to reduce volunteer burden or engage with education opportunities across mental health or diversity and inclusion programs.

[CLUB/CENTRE SIGN OFF]



