



**LEADSUN**

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# CASE STUDY

## CLIENT

City of Melton

## PROJECT

Melton Botanic Garden  
pathway lighting

## TRADITIONAL CUSTODIANS

The Wadawarrung and Wurundjeri  
People of the Kulin Nation.

## City of Melton shines solar light on botanic garden paths

Poor illumination on a central stretch of shared pathway within the Melton Botanic Garden limited the local community's safe use of this significant public space. Leadsun's solar light installation provided an eco-friendly solution for the popular garden habitat.

Situated west of Melbourne, the Melton Botanic Garden displays a fantastic range of Australian native and non-indigenous plants that thrive in the local climate. The garden attracts a wonderful range of wildlife, including birds, microbats, reptiles and insects. Recognised as a valuable living asset for research, conservation and education purposes, the garden provides accessible pathways, BBQs, amenities and picnic areas for community recreation and enjoyment.

### Friends urge Council for better path lighting

Whilst a wonderful place to walk, jog, ride or play during daylight hours, the perceived lack of safety in the darker evenings and early mornings restricted the use of the garden. Poor lighting prevented people from exercising, playing, connecting and being in nature, before dawn and after dusk. In particular, women and gender-diverse people may have felt unsafe visiting the area. Therefore, dedicated volunteer group, Friends of the Melton Botanic Garden, encouraged the City of Melton council to install sustainable lighting along key shared pathways.

A trusted supplier of high-quality solar lights to the City of Melton, Leadsun were engaged to design and install a strategic lighting solution for the garden, covering several hundreds of metres of pathway – from the Darlingsford Boulevard entrance to the central Amphitheatre. Lighting was also positioned to illuminate the Lakewood Boulevard car park entrance into the garden, the toilet amenities and a waterway boardwalk.





## Wildlife, shade and light spill considerations

With abundant wildlife inhabiting the garden ecosystems and essential dark-sky compliance requirements, Leadsun used consistent and layered warm 3000K LED lights, each with a compact sleek-design battery and solar panel unit atop an attractive satin black powder-coated pole.

Also, tree shade along the pathway had the potential to reduce solar power generation. So Leadsun incorporated several large 'master' solar panels in well-lit locations to power their own light and a 'slave' light positioned in a shady spot. Low-level trenching of safe low-voltage DC electricity cables was required to connect these 'master-slave' pairs and shine the right light intensity on specific pathway sections.

Plus, Leadsun technicians applied zero-tilt LED conditions and installed shields on the back of all light units near residential properties bordering the garden, particularly along the western side and northern end of the system. These tilt and shield controls effectively prevented any light from spilling into nearby residences and disturbing the occupants.

## Leadsun FREEDOM lighting makes twilight garden visits safer

Since Leadsun's next-generation pathway lighting solution has been in place, the general public and local community can visit a safer garden beyond daylight hours, expanding the effective hours of use of this valuable municipal resource.

City of Melton's Open Space Planning Team Leader, Adrian Cope, said, "The feedback from the Friends of the Melton Botanic Garden has been very positive. The recent lockdowns have seen an increase in the use of the Melton Botanic Garden, and anecdotal evidence suggests that the use of the path network has extended later into the evening as a result of the lighting that was installed."

The light installation included a SMART web-based EDGE control system to enable the City of Melton to remotely re-program individual lights for different seasons or circumstances and monitor performance without visiting the site. Armed with smart city capabilities, the City of Melton can add cameras, duress buttons and other sensors if the need for greater public safety ever arises.

## Leadsun Products Used

<b>P Cat. lighting compliance</b>	PP5
<b>Number of lights</b>	15
<b>Solar module size &amp; series</b>	60W FREEDOM
<b>LED output &amp; programming</b>	10W - illuminate at DIM Mode 20% from dusk till dawn
<b>Pole &amp; Footing type</b>	Lowerable powder-coated, ragbolt
<b>Additional solutions</b>	EDGE, PIR sensors & Source-Remote



*We acknowledge the Traditional Custodians of the land on which this project was undertaken, the Wadawarrung and Wurundjeri People of the Kulin Nation. We recognise their continuing connection to land, waters and culture and we pay our respects to Elders past, present and emerging.*