As part of the ACT Government's Climate Adaptation Strategy, trials of new innovations are increasing the ability of our community to adapt to climate change impacts, reduce greenhouse gas emissions and build a more sustainable city.

CLIMATE ADAPTATION INNOVATION

Luminescent surfacing to existing asphalt cycle path

This sustainability innovation has added a luminescent 'top coat' surface to an existing 220 metre section of cycle way in Bruce Ridge, Belconnen.

DETAILS

A luminescent top coat surface treatment has been applied to a 220 metre section of asphalt path located in the Bruce Ridge Nature Reserve. This highly used route links facilities that are frequented day and night by cyclists and pedestrians like the GIO Stadium, the Australian Institute of Sport and the Canberra Institute of Technology.

INNOVATION

The trial began in late 2015 with the objective of testing viability of this luminescent surface treatment as an alternative to conventional powered lighting, particularly through nature parks and areas where the provision of lights may be undesirable due to wildlife impacts or cost prohibitive in connecting to the electrical grid or installing localised power with photovoltaic cells.

The product combines fine aggregate with phosphorescent minerals in a binder and is applied with a 'broom'. The surface absorbs sunlight during the day to provide eight or more hours of indirect illumination at night. The treatment provides non-powered (passive) light and the trial has demonstrated good wearability and high user acceptance.

As part of the ACT Government's commitment to improving the active travel network for pedestrians and cyclists, Roads ACT is carrying out further investigations to inform future use sites within the ACT. This could include using the luminescent surface to enhance night-time wayfinding or pavement messaging.

SUSTAINABILITY BENEFITS

- Encourages more use of active transport, including walking and cycling at night time, thereby reducing carbon emissions.
- Provides alternative lighting options to traditional powered lights in specific areas, also reducing emissions.

CO-BENEFITS

- Improved connectivity between community facilities, increasing access, for example to GIO stadium.
- Lighting for cyclists and pedestrians in areas where it is difficult to provide powered lighting.
- Lower light pollution than produced by traditional powered lighting on wildlife in the vicinity of the path.
- Supports healthy living through the expansion of pathways for active travel.

Canberra's climate is already changing, and in future the ACT can expect more EXTREME WEATHER EVENTS.

Heatwaves
will become hotter, more frequent and last longer.

Droughts
will increase in severity and frequency.

Storms
will become more intense, causing flash flooding.

Bushfire
weather will become more dangerous.

A certain amount of warming is already locked in. The ACT Government is committed to ensuring Canberra adapts to the changing climate, so that it can remain a vibrant, resilient and liveable city.

What do you think of the path after sunset? Let us know at climatechange@act.gov.au