

Light Rail Stage 2A City to Commonwealth Park

Sustainability Fact Sheet

Stage 2 light rail to Woden is being constructed in two stages for a faster project delivery. The first stage (2A) will extend the line from the City to Commonwealth Park, while the second stage (2B) will take light rail all the way to Woden.

An Environmental Assessment (EA) has been prepared for Stage 2A as part of the project's planning and works approval process. This fact sheet outlines the key points you need to know on how Stage 2A is contributing to a more sustainable future for Canberra.



Artist impression of the new Commonwealth Park light rail stop.

'By extending the light rail network to Woden, Canberra would be better equipped to provide more public transport options, reduce traffic congestion, reliance on cars and urban sprawl, and transition to a net zero greenhouse gas emissions future.' – (Section 1.1, page 2 of the EA)

Sustainability goals and benefits

The Light Rail Stage 2A City to Commonwealth Park project supports the following key ACT Government themes and actions:



Contributing to reaching the ACT Government's net zero greenhouse gas emissions goal by 2045



Reducing car dependency



Providing environmentally responsible public transport



Supporting sustainable urban growth that responds to a growing population

The impact of climate change on the project

As Australia continues to experience impacts from climate change, a risk assessment was done to ensure the light rail infrastructure is resilient to the effects of climate change.

Extreme rainfall that causes flooding, extreme heat and increased frequency and intensity of bushfires are expected to pose the greatest climate change related risks to Light Rail Stage 2A now and in the future. Management and mitigation measures have been developed to address identified risks.

Rainfall, runoff and flooding

Measures include provision and sizing of pipes and drainage infrastructure, water sensitive urban design, and selection of pavements designed to sustain both more rainfall and drier conditions.

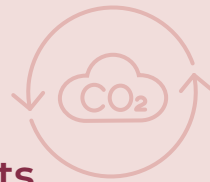
Extreme heat and bushfires

Measures include use of more temperature resistant materials, selecting landscape features and plantings that resist drought and hotter conditions, designing irrigation systems to reduce water loss through evaporation, and implementing health and safety plans that include extreme heat and bushfire smoke response measures.

Following implementation of identified measures, no 'extreme', 'very high' or 'high' risks remain for the modelled scenarios.

The use of green track will also reduce the urban heat island effect, and help the ACT Government to achieve 30 per cent permeable surfaces by 2045 (*Canberra's Living Infrastructure Plan*).





Project priorities and commitments to sustainability

The Light Rail Sustainability Policy sets the themes and objectives for light rail projects, including Stage 2A. The project design has considered environmental, social and economic sustainability. In addition, the project has identified the following sustainability priorities that focus on promoting and supporting the overarching Light Rail Sustainability Policy:



Leadership in sustainability

Sharing knowledge about sustainability, setting sustainability targets and embedding governance to support sustainable outcomes



Ngunnawal engagement

Identifying and creating opportunities to improve connection with Ngunnawal Country through design and engagement



Reducing Scope 3 greenhouse gas emissions

Selecting materials with a lower energy footprint, minimising waste, recycling, and using local materials and suppliers

Carbon offsets

A carbon offset is the removal of one tonne of carbon dioxide equivalent (CO₂ -e) of GHG emissions, which compensates for emissions made elsewhere. Light Rail Stage 2A will be carbon neutral for all Scope 1 and 2 emissions. Carbon credits may be purchased through the voluntary carbon market to meet this requirement.

Infrastructure sustainability

The ACT Government is a member of the Infrastructure Sustainability Council (ISC). The Project will pursue an Infrastructure Sustainability (IS) rating under the ISC Rating Scheme.

Construction greenhouse gas emissions

The construction of Light Rail Stage 2A is estimated to generate just over 17,000 tonnes of carbon dioxide equivalent greenhouse gas emissions. Scope 1 direct emissions including fuel consumption by construction vehicles and equipment represents 55% of the estimated emissions. Scope 3 indirect emissions including production and transportation of materials and waste represent 45% of estimated emissions. The Project will generate zero Scope 2

greenhouse gas emissions due to the uptake of the ACT's renewable energy.

There is expected to be positive long-term greenhouse gas benefits for the ACT, through the use of the ACT Government's renewable energy to power the light rail vehicles, and contributing to a shift away from single occupant private vehicle use.

Following the hierarchy of 'avoid, reduce, replace and offset' emissions,

mitigation measures have been identified, including a no-idling policy for vehicles and construction equipment, using alternatives to diesel including solar panels, mains power and biodiesel, timer-controlled lighting, using lower 'embodied energy' materials, minimising construction waste, procuring locally, and implementing a Carbon and Energy Management Plan.

Have your say

As part of the planning approval process for the Light Rail Stage 2A project, a Works Approval has been submitted to the National Capital Authority (NCA) and a Development Application has been submitted to the ACT Planning and Land Authority (ACTPLA).

To have your say on the project, you can make a submission to the NCA or ACTPLA.

Visit act.gov.au/lightrailtowoden to learn more about the project and how to have your say.

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