# Climate Change Policy for Land Transport Infrastructure Activities

23 August 2023

## Objectives

1 To reduce greenhouse gas emissions associated with construction, maintenance and operation, and use of the land transport network.
2 To manage the risks that climate related hazards pose to, and the risks that arise from, land transport infrastructure.

## Application

This policy should be applied to the planning, design and delivery of all infrastructure improvement and operations and maintenance activities where Waka Kotahi is the primary entity or partner responsible for the activity. Application of the policy should be reflected in relevant business cases or equivalent planning processes, including asset or operational plans (for example in the State Highway Asset Management Plan and in lifecycle asset management plans).

Approved organisations are encouraged to implement the policy requirements for the equivalent activities that are funded by the National Land Transport Fund.

## Climate change mitigation (reducing emissions)

As a minimum, Waka Kotahi will achieve the objectives by:

- Assessing the greenhouse gas emissions associated with:
  - infrastructure construction
  - operation and maintenance of the transport network
  - vehicle use of the transport network
  - infrastructure end-of-life (decommissioning)

  at an appropriate level of detail for the scale of the activity and the stage of the assessment within the decision-making lifecycle (for example more detail would be expected in a later business case phase, such as a detailed business case, compared to a programme business case).
- Using this information to reduce emissions throughout the lifecycle of transport system activities.
- Assessing emissions arising from vehicles using the transport network in the context of:
  - national transport emissions reduction targets, national and sub-national light vehicle kilometres travelled (VKT) reduction targets, and freight emission reduction targets set by the Emissions Reduction Plan[1]

[1] *Te hau mārohi ki anamata – towards a sustainable, productive and inclusive economy:* Aotearoa New Zealand's first emissions reduction plan (published 16 May 2022)

    - national and regional land transport plans and programmes, to provide a network and system view as well as a project-based view, and taking into account cumulative emissions impacts.

- Avoiding and reducing emissions from construction, maintenance and operations, and end-of-life of land transport infrastructure in order to meet the emission reduction objectives of the Carbon Neutral Government Programme and emission reduction targets set by Waka Kotahi.
- Applying relevant Waka Kotahi policies, including the Resource Efficiency Policy for Infrastructure Delivery and Maintenance and/or the Sustainability Rating Scheme Policy, that set requirements for measuring and reporting on whole-of-life construction, operation and maintenance emissions and establishing emission reduction targets (if required) within procurement documentation.

# Climate change adaptation

As a minimum, Waka Kotahi will achieve the objectives by:

- Commencing climate change risk assessment at the early phases of business case development and lifecycle asset management planning, and continuing through subsequent planning, design, construction, maintenance and operation.
- Identifying, assessing and treating risks from climate-related hazards to the infrastructure asset or activity by:
    - considering direct risks that cause damage, increase maintenance or replacement costs, accelerate deterioration, or disrupt services
    - considering indirect risks from impacts on interdependent systems or assets.
    - using appropriate hazard data and considering multiple climate projections and time horizons to assess risk
    - engaging with relevant stakeholders including iwi/Māori in identifying risks and treatment options
    - where appropriate, identifying sequencing of treatments, adaptation pathway options and potential thresholds and triggers for adaptation responses.
- Identifying interdependencies and potential downstream risks that might arise from the project, including how the project contributes to broader community resilience to climate-related hazards.
- Setting requirements for climate change risk assessment processes, monitoring and reporting in all relevant procurement documentation.
- Documenting and commissioning any operational management requirements for monitoring the identified thresholds and triggers, and implementing future sequenced treatments.