

# Resource Efficiency Policy Context

20 May 2022



# Legislative/policy drivers

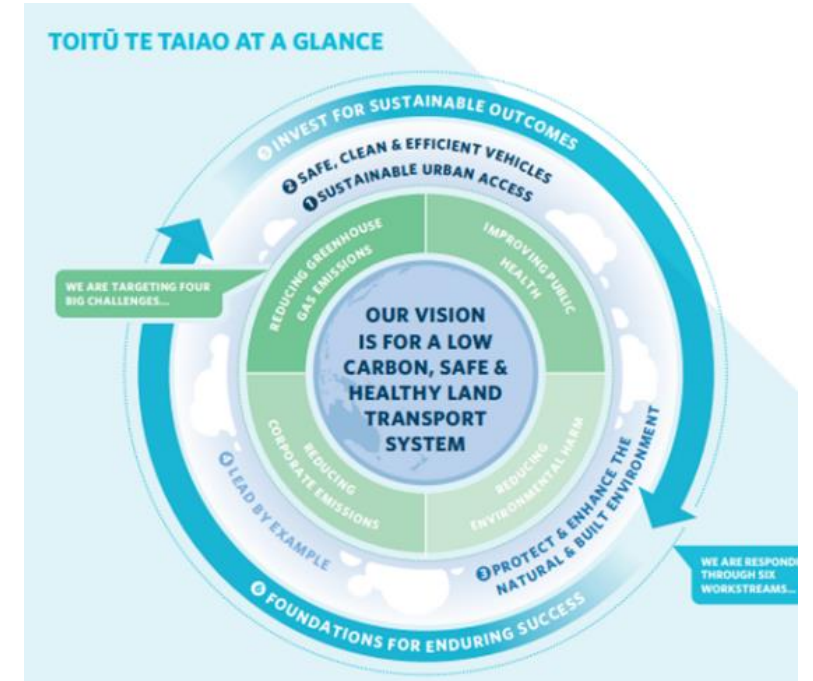
- **Climate Change Response (Zero Carbon) Amendment Act 2019**
  - Target of net zero GHG emissions by 2050 (except agriculture)
  - Framework for Emissions Reduction Plan.
- **Emission Reduction Plan** refers to Managing whole-of-life carbon dioxide emissions in transport infrastructure on p192:
  - A whole-of-life approach to transport emissions should consider emissions that arise from constructing and maintaining transport infrastructure.
  - Crown agencies will be expected to measure, verify, report and reduce emissions from their operations under the Carbon Neutral Government Programme.
- **Carbon Neutral Government Programme**
  - Government agencies should aim to be carbon neutral by 2025 (applies to Waka Kotahi corporate emissions)
  - Requires we measure, verify and report **all** our emissions.



Under the CNGP, we will need to measure and reduce **construction, maintenance** and **operational** emissions from Waka Kotahi infrastructure activities

# Waka Kotahi strategy

- [Toitū Te Taiao – Our Sustainability Action Plan | Waka Kotahi NZ Transport Agency \(nzta.govt.nz\)](https://nzta.govt.nz)
- Toitū Te Taiao, Workstream 3 Protect and enhance the natural and built environment:
  - 3.a Develop and implement a resource efficiency and waste minimisation strategy and supporting policy, measures and targets.
  - 3.b Identify quick wins to embed resource efficiency and waste management practices into core practice.
  - 3.c Facilitate a national conversation on resource efficiency addressing sustainability of aggregate supply
  - 3.d Incentivise and champion innovation.
- [Te Hiringa o Te Taiao – our resource efficiency strategy \(nzta.govt.nz\)](https://nzta.govt.nz)
- Te Hiringa o te Taiao describes what we need to do to enable changes in behaviour, innovation and ways of doing business that drive sustainable sourcing and use of materials, waste minimisation and emissions reductions, while providing the same service benefit.



- Challenges
- Focus areas
- Headline actions
- Monitor Progress

Large consumption of virgin materials	Regional shortages of premium aggregate materials	Low levels of recycling	Large production of waste materials from construction and demolition going to landfill/cleanfill	Significant carbon footprint and energy use
Sustainable sourcing and use of resources		Waste minimisation	Reduced energy and carbon	
<ol style="list-style-type: none"> <li>1. Facilitate a national conversation on resource efficiency for the wider infrastructure sector</li> <li>2. Support the increased uptake of recycled and alternative materials while optimising our use of virgin resources.</li> <li>3. Empower our contractors to move to a zero waste to landfill mind-set on our projects.</li> <li>4. Empower our contractors to deliver low carbon projects.</li> <li>5. Initiate and support a behaviour change across Waka Kotahi and industry.</li> <li>6. Incentivise and champion innovation</li> </ol>				
Annual monitoring & reporting to feed into Tiakina (e.g. through contract KPIs, Sustainability Rating Tools)				



# Waka Kotahi operational policy requirements

Our policy framework:

- [Resource Efficiency Policy for Infrastructure Delivery & Maintenance](#) which applies to new contracts.
  - Evaluate opportunities for resource efficiency throughout business case phases, project and maintenance stages
  - Develop a Resource Efficiency and Waste Minimisation Plan
  - Report on energy use, material use, carbon footprint, water consumption and waste
- [Climate change policy for land transport infrastructure](#) in development, to
  - measure, consider and aim to reduce emissions throughout the lifecycle of land transport projects, including construction, maintenance, operational and enabled emissions
  - manage climate related hazards.
- Existing maintenance contracts are covered by the KPI for Resource Efficiency [KRA Performance Framework Guidelines v6.06 - 1 July 2022](#) ([nzta.govt.nz](https://nzta.govt.nz))

## RESOURCE EFFICIENCY POLICY FOR INFRASTRUCTURE DELIVERY & MAINTENANCE

V1.1 FEBRUARY 2021<sup>1</sup>

The Resource Efficiency Policy for Infrastructure Delivery & Maintenance requires the following:

### Waka Kotahi infrastructure improvement projects

All Waka Kotahi infrastructure improvement projects shall as a minimum and in accordance with P48 Resource Efficiency Specification and the draft Resource Efficiency Guideline:

- **Evaluate opportunities for resource efficiency during the early business case phases and at subsequent project stages.**

This evaluation shall be aligned with the business case and project lifecycle requirements of Minimum Standard Z/19 – Environmental and Sustainability.

- **Develop a Resource Efficiency and Waste Minimisation Plan (REWMP).**

This REWMP shall outline actions that will be taken to reduce energy and greenhouse gas emissions, increase uptake of recycled and alternative materials, reduce use of virgin and high carbon intensity materials, reduce water consumption and reduce waste. This may be incorporated into a broader Environmental Management Plan for the project.

- **Report on energy use, material use, carbon footprint, water consumption<sup>2</sup> and waste, if the project is of 12-months duration or longer.**

### Waka Kotahi maintenance contracts

All maintenance contracts shall as a minimum:

- Develop a Resource Efficiency and Waste Minimisation (REWMP) Plan as part of their Environmental Management Plan to identify and implement opportunities to reduce energy and greenhouse gas emissions, increase uptake of recycled and alternative materials, reduce use of virgin and high carbon intensity materials, reduce water consumption and reduce waste.

The REWMP plan shall be developed in accordance with the Guideline for Preparing an Environmental Management Plan and draft Resource Efficiency Guideline.

- Report to Waka Kotahi, at least annually, on energy use, material use, carbon footprint, water consumption and waste in accordance with the draft Resource Efficiency Guideline.
- Include at least one resource efficiency initiative within their environmental KPIs.
- Work with the procurement team and wider project team to ensure the 'Environmental and Sustainability' Target Outcome Area of the Broader Outcomes Strategy aligns with, and/or complements the resource efficiency outcomes pursued as a secondary benefit on any project.

### KPI Measure 3.1.7 Resource Efficiency and Waste Minimisation

Intent

- Contractors identify and implement opportunities to reduce energy and greenhouse gas emissions, increase uptake of recycled and alternative materials, reduce use of virgin and high carbon intensity materials, reduce water consumption and reduce waste.
- Contractors provide relevant data to complete a basic carbon footprint to Waka Kotahi on a quarterly basis, using available data and estimation. Where data can be neither accurately measured nor meaningfully estimated, the gaps are clearly articulated.

This KPI is measured and not scored in the 2022/23 financial year.<sup>3</sup>

# Waka Kotahi guidelines and tools

- Draft Resource Efficiency Guideline published in May on [Tools, standards and specifications | Waka Kotahi NZ Transport Agency \(nzta.govt.nz\)](https://www.nzta.govt.nz/assets/Highways-Information-Portal/Technical-disciplines/Resource-efficiency/Maintenance-resource-efficiency-and-waste-minimisation-reporting-form.xlsx)
- The draft guideline enables the resource efficiency policy to be implemented by outlining requirements for developing a resource efficiency and waste minimisation plan, evaluating opportunities, target setting and reporting.
- Template for maintenance reporting

<https://www.nzta.govt.nz/assets/Highways-Information-Portal/Technical-disciplines/Resource-efficiency/Maintenance-resource-efficiency-and-waste-minimisation-reporting-form.xlsx>



## DRAFT RESOURCE EFFICIENCY GUIDELINE FOR INFRASTRUCTURE DELIVERY AND MAINTENANCE

May 2022  
V1.0

### Resource efficiency guideline for infrastructure delivery and maintenance

- [DRAFT Resource efficiency guideline for infrastructure delivery and maintenance \[PDF, 1.3 MB\]](#)
- [Appendix B: Opportunities register and initiatives tracker \[XLSX, 63 KB\]](#)
- [Appendix D: Tier 3 Resource efficiency and waste management plan progress report template \[DOCX, 155 KB\]](#)
- Appendix E: Data reporting templates:
  - For maintenance contracts: [Maintenance resource efficiency and waste minimisation reporting form \[XLSX, 51 KB\]](#)
  - For projects: [Project resource efficiency reporting template \[ZIP, 323 KB\]](#)
- [Appendix F: Resource efficiency and waste minimisation plan progress report template \[DOCX, 151 KB\]](#)
- [Appendix G: Resource efficiency project close-out report template \[DOCX, 145 KB\]](#)
- [Appendix H: Resource efficiency case study template \[DOCX, 53 KB\]](#)

### Template for maintenance contract resource efficiency reporting

[Resource efficiency and waste minimisation data collection form \[XLSX, 51 KB\]](#)

A data collection spreadsheet has been developed to support the Resource Efficiency Policy and the Resource Efficiency & Waste Minimisation (REWM) Key Performance Indicator measure, under the July 2022 Waka Kotahi KRA Performance Framework Guidelines.

[KRA performance framework guidelines \(July 2022\) \[PDF, 1.3 MB\]](#)

The spreadsheet is intended to be used by network maintenance suppliers on a monthly basis to report on the use of various carbon emission categories within their operating networks. The data will be used by Waka Kotahi to estimate greenhouse gas emissions from network activities and will be reported through the Tiakina te Taiao Sustainability Monitoring Report.

[Tiakina Te Taiao – Our Sustainability Monitoring Report](#)

The current version of this spreadsheet (Version 1) is limited primarily to data capture. Subsequent versions will have the capability to translate the data into equivalent carbon emissions.