

P48: Specification for resource efficiency for infrastructure delivery

v1.1 February 2022¹

1. Scope

This specification outlines the requirements for implementation of the Resource Efficiency Policy for Infrastructure Delivery & Maintenance, during the design and delivery of infrastructure improvement projects.

2. Definitions

- a) *Suitably qualified professional* means a person that has the following qualifications:
 - a relevant tertiary degree or equivalent
 - at least eight years of relevant experience,
 - membership or preferably chartered/certified status with a relevant professional body that includes a requirement to provide evidence of continuing professional development
 - experience with at least three projects, plans and/or activities of a similar nature, scale and complexity.
- b) *Infrastructure Sustainability (IS) Rating Scheme* includes the IS Rating Tool the rating process and the ISC education and training programme as described in the IS Technical Manual V_1.2.
- c) *Resource efficiency and waste minimisation plan (REWMP)* means a plan as described in section 5.1.
- d) *Tier 1* means an improvement project with capital value >\$15 million and duration ≥12 months.
- e) *Tier 2* means an improvement project with capital value >\$2 million but <\$15 million, or >\$15 million with duration ≤12 months.
- f) *Tier 3* means an improvement project with capital value <\$2 million, for example low-cost, low risk projects.

3. Tender response

If the project is subject to a tender process that includes design the Contractor shall prepare a preliminary resource efficiency and waste minimisation plan (REWMP) in accordance with the *Resource efficiency guideline for infrastructure delivery and maintenance*.

4. Project tier requirements

4.1 Responsibilities and process

The Contractor shall:

- a) Prepare and implement a REWMP.
- b) Liaise with the Principal on progress and performance of resource efficiency practices and status of the REWMP.
- c) Develop, implement and maintain governance structures, processes, systems, and practices that meet the good practice set out in the *Resource efficiency guideline*.
- d) Promote sustainable practices, support and align to Waka Kotahi's sustainability objectives.

¹ Minor edits to v1 (July 2021) to align with the *Resource efficiency guideline*.

- e) Where the project is ≥ 12 months, report on energy use, water use, materials and waste on at least an annual basis, with a monthly breakdown.
- f) At least annually, provide an update on wider implementation of the REWMP, including key achievements, opportunities, risks and challenges.

4.2 Tier 1 requirements

The Contractor shall evaluate and implement opportunities for resource efficiency and complete a Tier 1 REWMP.

The Contractor shall report annually on:

- electricity (kWh) and fuel use (liquid and gas fuel)
- water use² (ML)
- materials by source (for example aggregates, bitumen/binder, steel, concrete per tonnage), including recycled material content
- amount of waste generated (tonnes), diverted from landfill/cleanfill and sent to landfill/cleanfill.

The Contractor shall calculate a detailed project carbon footprint.

The Contractor shall set targets for resource efficiency in accordance with the requirements of the *Resource efficiency guideline*.

The Contractor shall prepare at least one case study of a resource efficiency initiative achieved on the project that can be published on the Principal's website.

Evaluation of opportunities, REWMP, carbon footprint calculation, case study and reporting requirements shall be undertaken in accordance with the *Resource efficiency guideline*.

4.3 Tier 2 requirements

The Contractor shall evaluate and implement opportunities for resource efficiency and complete a Tier 2 REWMP.

For projects ≥ 12 months duration, the contractor shall report annually on:

- energy use (liquid and gas fuel)
- water use (ML)
- materials by source (for example aggregates, bitumen/binder, steel, concrete per tonnage), including recycled material use(tonnes)
- waste to landfill (tonnes).

The Contractor shall calculate a basic project carbon footprint.

The Contractor shall prepare at least one case study of a resource efficiency initiative achieved on the project that can be published on the Principal's website.

Evaluation of opportunities, REWMP, carbon footprint calculation, case study and reporting requirements shall be undertaken in accordance with the *Resource efficiency guideline*.

4.4 Tier 3 requirements

The Contractor shall evaluate and implement opportunities for resource efficiency and complete a Tier 3 REWMP.

² Total water (ML) from construction, maintenance, and operations; including potable/non-potable split.

For projects ≥12 months duration, the Contractor shall report annually on:

- energy use (liquid fuel in L)
- materials by source (for example aggregates, bitumen/binder, steel, concrete per tonnage), including recycled material use (tonnes)
- waste to landfill (tonnes).

Evaluation of opportunities, REWMP and reporting requirements shall be undertaken in accordance with the *Resource efficiency guideline*.

5. Reporting and documentation

5.1 Resource efficiency and waste minimisation plan (REWMP)

The Contractor shall prepare and submit to the Principal the required Tier REWMP. The 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 (EMP) for a project.

The requirements for tier 1, 2 and 3 REWMP shall follow the approach set out in the *Resource efficiency guideline*. The REWMP for tier 1 and 2 shall be prepared by a suitably qualified professional.

The Contractor shall prepare a REWMP that includes the following:

- project description, including timelines and targeted sustainability goals
- map of project boundaries
- the overarching strategy and programme for incorporating resource efficiency outcomes throughout the project
- identified opportunities and actions for resource efficiency and waste reduction for the foreseeable life of the asset
- description of roles, responsibilities and accountabilities for documentation and submittals, including:
 - identifying the overall sustainability lead and point of contact
 - identifying champions for the selected outcomes
- risk analysis plan for the implementation of the REWMP
- outline of how this plan interfaces with other environmental plans prepared for the project, including Infrastructure Sustainability (IS) Rating Scheme implementation plan (where relevant)
- process outlining the tracking and reporting of progress on resource efficiency measures to the Principal on an annual basis.

5.2 Resources and material use reporting

The Contractor shall document resource and materials use for the duration of the contract and submit an annual summary with a monthly breakdown to the Principal and via email to environment@nzta.govt.nz. The submission template is available from the Principal by request to the same email address.

5.3 Annual reporting

The Contractor shall prepare and submit to the Principal an annual report within agreed timeframes [for example, by end March, for previous year's results] summarising progress towards implementation of the REWMP. The report shall include key achievements, opportunities, risks and challenges.

5.4 REWMP review

The Contractor shall complete, at a minimum, annual reviews of implementation of the REWMP, including targets and timeframes, in accordance with the requirements of the REWMP.

All Tier 1 and 2 project reviews shall be undertaken by a suitably qualified professional.

The Contractor shall grant access to the Principal or for an expert nominated by the Principal to review and audit any documents prepared during implementation of the REWMP.