Te Whakahaere Para me te Mahere Whakaiti

Waste Management & Minimisation Plan

2022-28



ROTORUA LAKES COUNCIL
Te kaunihera o ngā roto o Rotorua

Rotorua Lakes Council

Te Kaunihera o ngā Roto o Rotorua

Ngā Ihirangi |

Table of Contents

Whakarāpopototanga Whakarae | **Executive Summary**

Kupu Whakataki | **Introduction**

Wāhanga A - Te Rautaki Whānui | **Part A - The Overarching Strategy**

- *Whakarāpopototanga o te Hanga o te Para* | **Summary of the Waste Situation**
- Horopaki ā-Ture, ā-Rautaki | **Legislative and Strategic Context**
- *Te Māherehere Anga Anamata* | **Future Planning Framework**
- *Ngā Tukanga mō te Whakaiti Para* | **Methods for Waste Minimisation**
- *Te Whaiwhai Pūtea i te WPMW* | **Funding the WMMP**
- *Whakahaerenga Mahi* | **Performance Management**

Wāhanga B - Te Mahere Mahi | **Part B - The Action Plan**

- *Ngā Wāhanga Matua* | **Priority Areas**
- *Mahere Mahi* | **Action Plan**

Wāhanga C - Ngā Āpitihanga | **Part C - The Appendices**



Whakarāpopototanga Whakarae |

Executive Summary



The Waste Management & Minimisation Plan (WMMP) is a guiding document. It describes the vision, goals and targets for waste minimisation in Rotorua, and outlines an action plan to achieve the desirable outcomes. Under the Waste Minimisation Act 2008, councils must prepare and adopt a new WMMP at least every six years.

In 2016, Rotorua Lakes Council (RLC) adopted its second WMMP (Rotorua's Waste Strategy 2016-22), which was aimed at empowering Rotorua residents to maximise waste diversion from landfills, upgrading waste services/facilities and improving Rotorua's environmental footprint. RLC has made excellent progress against the goals and targets of the WMMP 2016-22. Some of the most notable achievements include:

- Kerbside wheelie bin collections to improve H&S
- Kerbside recycling services to improve waste diversion
- Capping of Rotorua landfill for improved environment
- Contracting of waste services for better performance

These actions have resulted in the diversion of over 5,000 tonnes of recyclable materials from kerbside every year. In addition, RLC is diverting about 5,500 tonnes of green waste, 1,200 tonnes of concrete and 10,000 tonnes of biosolids every year. Together, the net diversion is about 48% of total municipal solid waste.

Municipal waste disposal to landfill in Rotorua is still relatively high (about 16,000 tonnes per year) and per capita waste generation has increased gradually over the past few years to >200 kg/year. Recent audits of kerbside rubbish and recycling bins, the trends in population growth and upcoming regulatory changes have given rise to new challenges. These include:

>50% of municipal waste in Rotorua is comprised of food and garden organics

Poor recycling awareness is resulting in loss of recyclables to landfills

Population and economic growth are expected to increase waste generation

New landfill taxes are set to increase landfill disposal costs (>$50 per tonne)



WMMP 2022-28 builds on the progress made under the current WMMP (2016-22) and aims to address the new or emerging challenges in waste management and minimisation. It identifies the gaps and opportunities, and considers transition to circular economy along with the implications of climate change. The vision, goals and objectives outlined in the WMMP (2022-28) are aimed at addressing these gaps and challenges, while delivering effective, efficient and economical waste management services in Rotorua.

WMMP 2022-28 outlines an action plan to achieve five ambitious but achievable targets.

- 30% reduction in municipal waste to landfill
- 45% reduction in recycling contamination
- Contamination-free glass collection
- 60% reduction in kerbside food waste to landfill
- 60% reduction in kerbside green waste to landfill.

To meet these targets, the major approaches will be to: (1) support and leverage Government's initiatives (e.g., landfill levy, container deposit scheme, recycling standardisation); (2) work together with mana whenua, community groups and businesses; (3) review and improve rubbish and recycling services, and; (4) implement council's new action plan. The actions outlined in this WMMP will be funded primarily via a targeted rate for waste services. New waste minimisation initiatives and educational projects will be co-funded by the waste levy grants received from the Ministry for the Environment. The progress on service delivery will be tracked by key performance indicators (KPIs) for waste services, which are reported quarterly.



"Waste contributes to about 6% of Rotorua's greenhouse gas emissions. Diversion of municipal organic waste can mitigate up to 12,000 tonnes of carbon dioxide equivalents"

The action plan listed in this WMMP considers new services and educational projects, improving data gathering and reporting, upgrading waste services and infrastructure, enhancing regulations, managing public litter bins in a better way, and assisting businesses and events in transition toward low (or zero) waste.

The priority is to develop local infrastructure for organic waste diversion for both municipal and commercial waste. These will include providing kerbside organics (food and garden waste) collection services, enabling transfer stations to collect food waste, as well as, encouraging the use of home composting.

The transformation of organic waste into compost has the potential to close the loop between waste and agriculture. It can also mitigate landfill emissions by turning organic carbon into soil. Thus, the process offers significant social, economic, environmental and cultural benefits.



Overall, this WMMP is designed to reduce Rotorua's municipal waste generation by >50% via diversion of new waste streams (e.g., organics), improvements in recycling collections and enhancing accessibility to the facilities/services. These steps have the potential to drive Rotorua's transition to a low waste and low carbon future.

Kupu Whakataki | Introduction



A Waste Management and Minimisation Plan (WMMP) is the term set in the Waste Minimisation Act 2008 (WMA) for a council's waste management and minimisation planning document. Councils must review their WMMP at least every six years.

The WMMP is intended to be the guiding document for councils to promote and achieve effective and efficient waste management and minimisation within their districts. It summarises council's objectives, policies and targets for waste management and minimisation, and outlines the tools and actions to deliver the goals, and achieve the targets. A WMMP must have regard for the waste hierarchy (Fig. 1), the New Zealand Waste Strategy (NZWS), and the council's most recent Waste Assessment (Appendix).

Rotorua Lakes Council (RLC) adopted the current WMMP (also called Rotorua's Waste Strategy) in 2016. The next WMMP is due for adoption in 2022. RLC commenced the review of the current WMMP in early 2021. During the first stage of the review, Waste Assessment 2021 was prepared following the guidelines from the Ministry for the Environment (MfE). The draft document was reviewed and endorsed by a Medical Officer of Health. The final version was approved by RLC in April 2021, and subsequently, reviewed by the MfE.



Rotorua's Waste Assessment 2021 includes:

- A description of the rubbish and recycling services within the Rotorua district
- Review of the progress against Rotorua's WMMP 2016 -22
- Reassessment of the future demand for waste services
- Future planning framework for waste management and minimisation
- Options analysis to meet the future demand

Following its approval, the Waste Assessment is used as a precursor to draft the WMMP. The key components of the WMMP are:

- The overarching strategy – an outline of the waste situation, along with the goals, objectives and targets
- The action plan – a list of activities which will be undertaken to achieve the objectives and targets
- The appendices – supporting information for the proposed objectives and actions

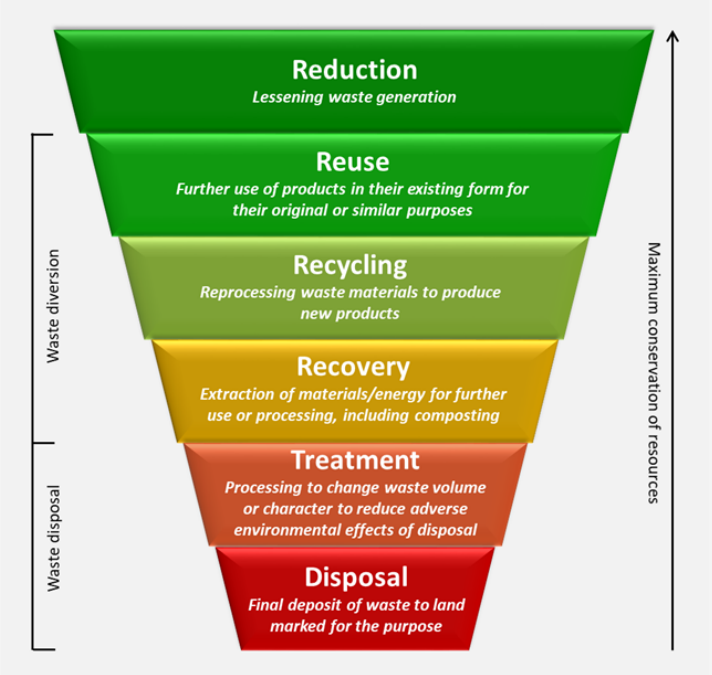


Figure 1 The waste hierarchy

The WMMPs are subject to the requirements of the Local Government Act's special consultative procedure. Once the public consultation requirements have been fulfilled and necessary amendments have been made to the WMMP, the council can formally adopt the WMMP and implement the new action plan.

In addition to meeting the legislative requirements, the WMMP has to align with council's priorities and the emerging trends in waste management, including changes in waste industry.



1. Local planning context

The WMMP is expected to be consistent with the vision, purpose and performance targets of RLC's Long Term Plan and aligned with Rotorua 2030 goals. The synergy with local planning is critical to achieve the desirable outcomes, including the aspirations of mana whenua.



2. Protection of public health

Protection of public health is the most critical aspect of the WMMP. Waste may become a public health hazard by causing disease, poisoning or physical injury. The WMMP considers the potential effects of planning decisions on public health and the steps required to mitigate potential risks.



3. Transition to circular economy

Circular economy implies reducing waste to a minimum by extracting the maximum value from resources via prolonged use, recovery and regeneration. Transition to circular economy requires heeding the waste hierarchy, which is a framework for prioritising different waste management options (Fig. 1).



4. Climate change mitigation

Waste accounts for about 6% of the greenhouse gas (GHGs) emissions in Rotorua. These emissions arise primarily from the breakdown of organic materials in landfills. RLC's Climate Action Plan 2020 seeks to divert organics from landfill for mitigation of these emissions.



5. Te Āo Māori

Circular processing of waste aligns well with māori mātauranga and Te Arawa Climate Change Strategy. Waste minimisation practices that help protect the environment are linked to the preservation of taonga and the spirit of kaitiakitanga.

Wāhanga A - Te Rautaki Whānui |

Part A - The Overarching Strategy

This section contains a summary of the waste situation, along with the goals, objectives and targets.



Whakarāpopototanga o te Hanga o te Para |

Summary of Waste Situation



"Most of the households and businesses in Rotorua receive Council's kerbside collection services or dispose of rubbish and recycling at one of the four rural transfer stations."

Ngā rahinga para | Waste quantities

Fig. 2 shows the tonnage of municipal waste to landfill, as well as, the amount of waste received by the Rotorua landfill (now operating as a transfer station) between 2017 to 2020. The municipal waste to landfill varied between 800-1,600 tonnes per month. Average monthly municipal waste collection in 2017 was 1,114 tonnes, which increased gradually to 1,385 tonnes in 2021.

The increase in municipal waste could be attributed to the growing population and the number of households, as well as, a growing tourism and visitor industry in Rotorua. Recent kerbside waste audits have indicated that many households are using the rubbish wheelie bins for garden waste disposal. In fact, garden waste makes up 24-30% of Rotorua's municipal waste (equivalent to about 4,000 tonnes per year).

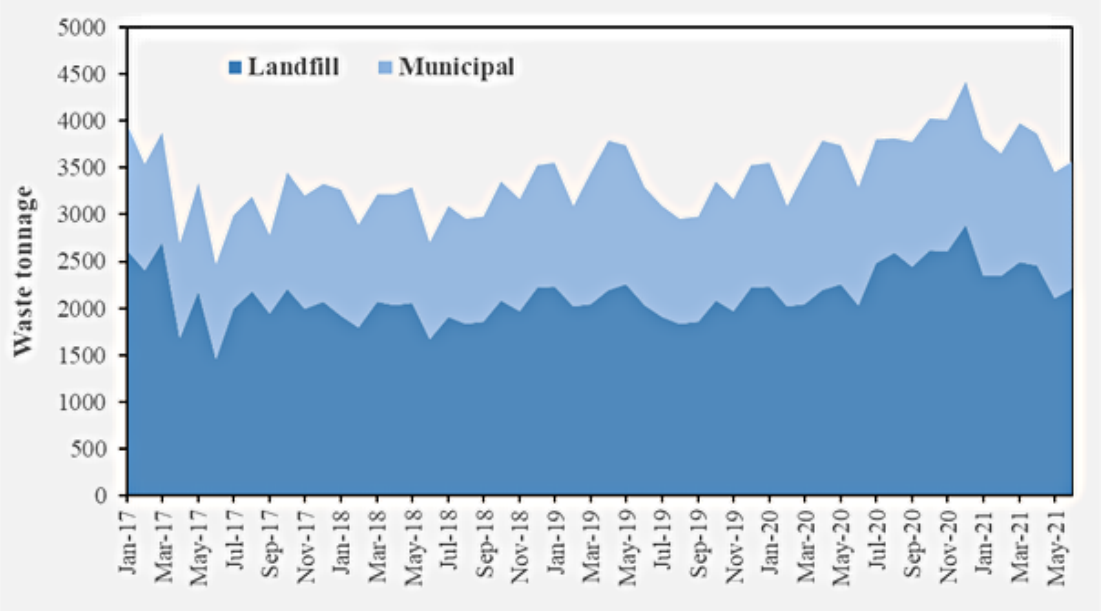


Figure 2 Landfill and municipal waste tonnage in Rotorua

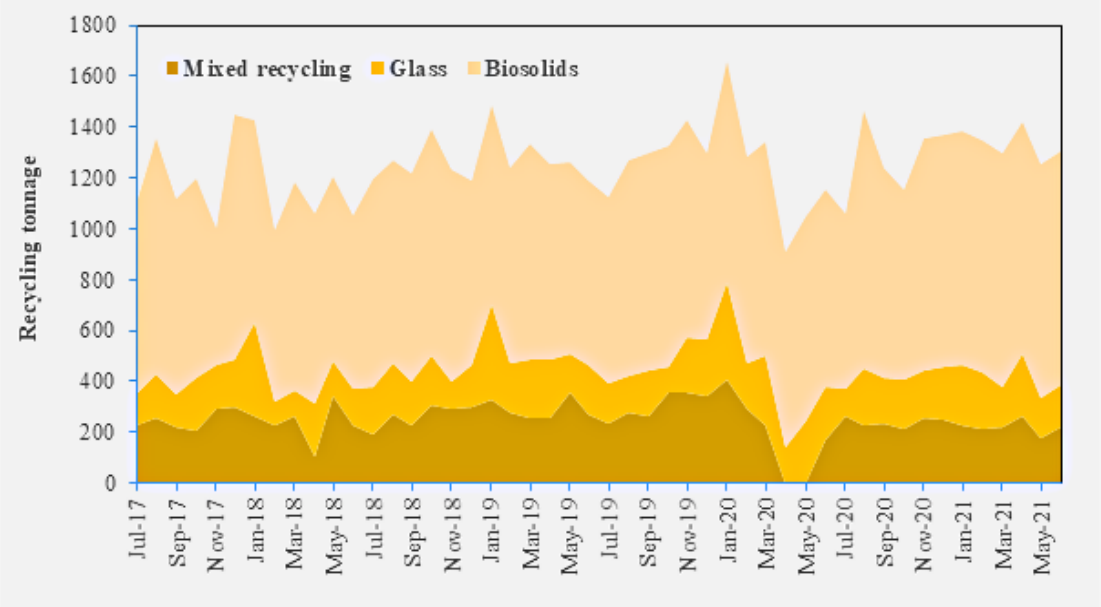
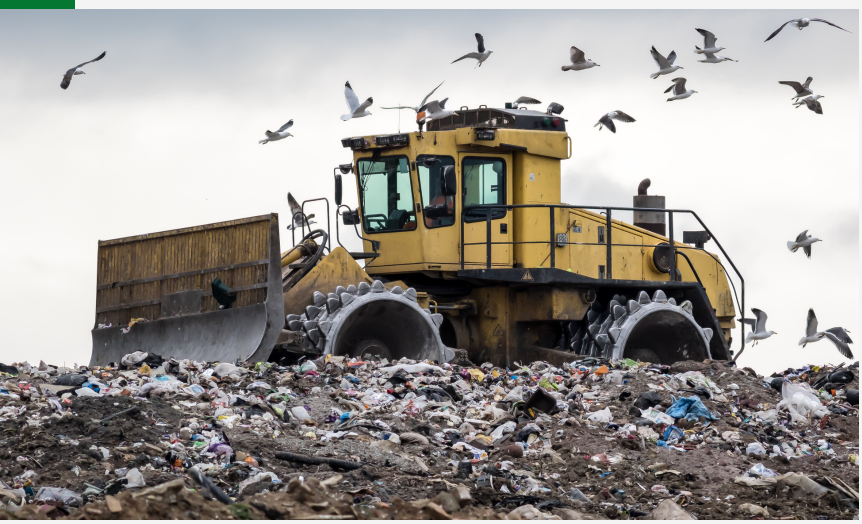


Figure 3 Municipal recycling and biosolids tonnage in Rotorua

Waste generation in Rotorua during 2017, 2018, 2019, 2020 and 2021 was 181, 190, 203, 212 and 212 kilograms per capita per year, respectively. These trends are consistent with the national trends, and comparable to waste generated by other councils, which provide similar rubbish and recycling services. Nevertheless, it is important to acknowledge high per capita waste generation in Rotorua, and the need to address these challenges.



"Rotorua landfill was capped in 2018 and the site is now being operated as a refuse transfer station (RTS) to collect waste for disposal at Tirohia landfill."

Rotorua landfill RTS received 1,400-2,900 tonnes of waste per month between 2017 and 2021. However, these numbers do not give a complete picture of the waste-to-landfill situation in Rotorua. Another RTS, operated by Waste Management, is consented to collect up to 30,000 tonnes of waste per year. Rotorua also has a private landfill for collection of construction and demolition waste, including asbestos. Thus, it is likely that the Rotorua districts sends about 60,000 tonnes of waste (municipal and commercial) to landfill every year.

Fig. 3 shows recycling collection in Rotorua between 2017 and 2021. Since kerbside-recycling services commenced in 2016, RLC's recycling collections have improved by up to 40% to reach above 5,000 tonnes per year. This represents diversion of >25% of municipal solid waste (excluding biosolids). RLC also diverts 16,000-17,000 tonnes of green waste, concrete and biosolids every year, and achieves total municipal waste diversion of 48%.

Since 2019, recycling collections in Rotorua has decreased by 5-10%. This can be attributed to the changes in the recycling industry arising from disruptions in overseas recycling markets. The limitations on the international shipping of contaminated plastics and lack of onshore recycling facilities in New Zealand mean that very limited items can be recycled. Although the situation has improved significantly over the past two years, changes in recycling systems have altered public behaviour. Many households now struggle to grasp what could or could not be recycled, resulting in a relatively high recycling contamination.

The Covid lockdown of March 2020, which led to the shutdown of the recycling industry and disrupted recycling collections across New Zealand, also impacted recycling behaviour adversely. Councils are now facing an uphill task of re-engaging the residents to improve recycling quality. On the positive side, the central government is considering recycling standardisation across New Zealand, which can help councils in managing recycling contamination more effectively.

Te wāhanga para | Waste composition

Fig. 4 shows the kerbside waste composition in Rotorua, based on the audits conducted in December 2020 and June 2021. Organic materials made up >55% of the waste, including about 26% of garden waste and 27% of food waste. There were seasonal variations in the volume of the garden waste. During summer, garden waste made up about 60% of the organic waste stream but it decreased significantly during the winter months.

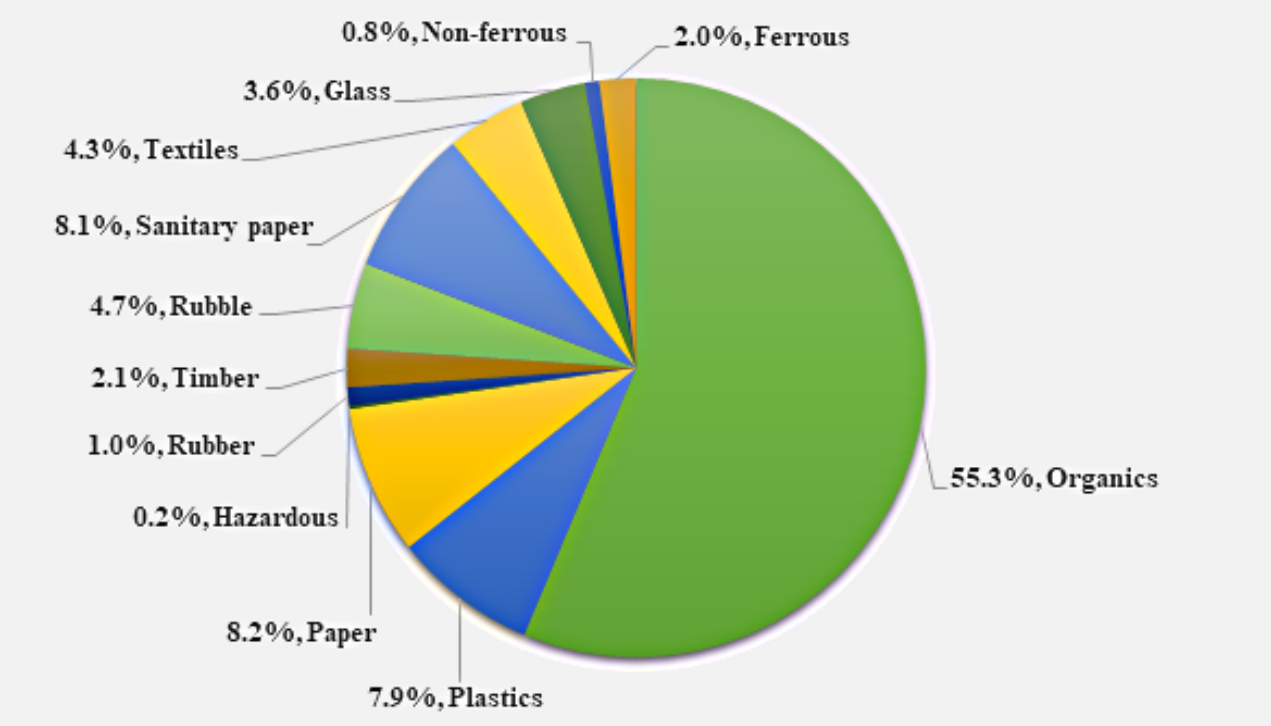


Figure 4 Composition of Rotorua's kerbside waste stream

Paper, plastics and sanitary paper (e.g., toilet tissues, kitchen towels, diapers, and sanitary pads) made up about 24% of the kerbside refuse, each contributing about 8%. About 82% of the paper in the rubbish bins could be recycled via council's kerbside recycling services. Similarly, over 20% of the plastics in the rubbish bins, and most of the glass and metals, could be recycled via council's kerbside recycling services, or using recycling drop-off facilities.

Overall, 13% of the rubbish could be diverted via existing services. Most of the organic materials in the rubbish stream were compostable. Since paper can be considered compostable, along with some sanitary papers (e.g., tissues), it is reasonable to assume that >60% of the kerbside rubbish was compostable.
The waste audits results present a good case for organics diversion in Rotorua to drive waste minimisation. Another important approach to reduce Rotorua's waste-to-landfill would be to educate residents and create awareness to reduce the amount of recyclables in the rubbish bins.

Te wāhanga hangarua | Recycling composition

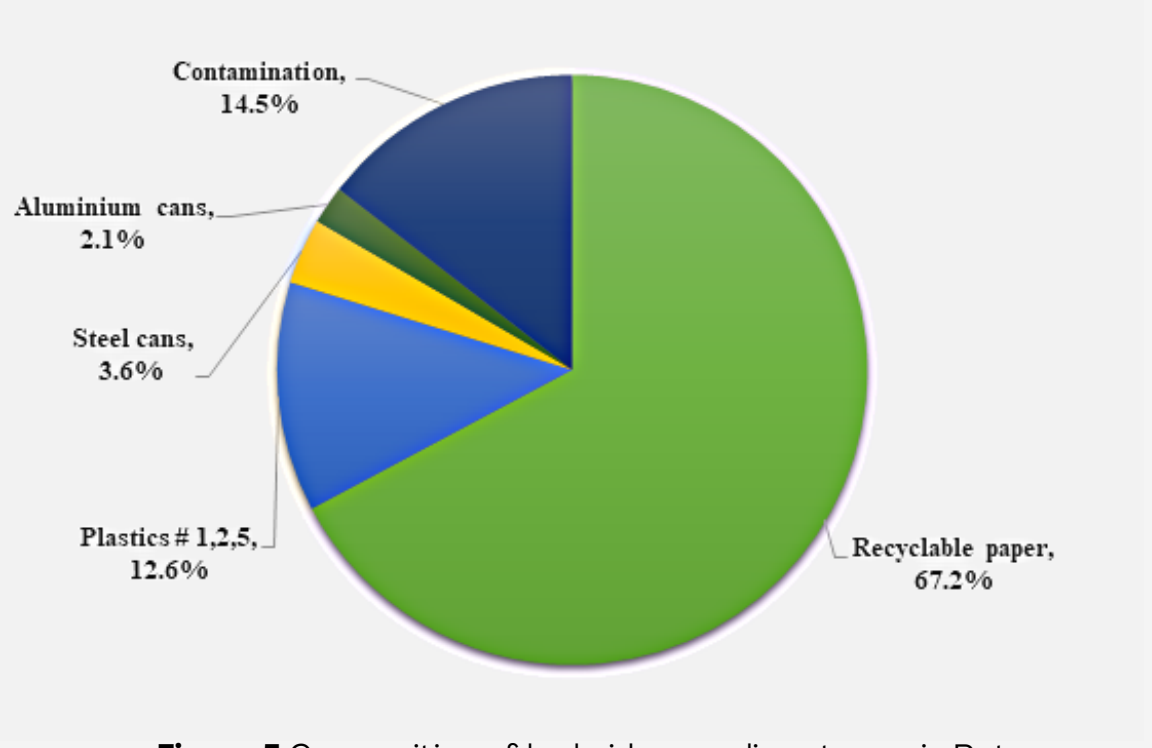


Figure 5 Composition of kerbside recycling stream in Rotorua

The composition of materials in kerbside mixed recycling bins is shown in Fig. 5. Recyclable paper made up the majority of the materials, and represented 67.2% of the total weight. The second largest component were Plastic (#1, 2, 5) bottles & containers, which represented 12.6% of the total weight. Contaminants made up about 14.5% of the recycling stream. These included non-recyclable paper and plastics, metals, glass and other materials.

The recycling bins in Rotorua have significant levels of contamination. During FY20/21, average recycling contamination was over 23%, compared to 15-16% of contamination observed in previous years. The deterioration in recycling quality is a result of changes in the recycling industry and international markets. A number of items, which were previously recyclables, can not be recycled now. Besides, the lockdown of 2020, which disrupted recycling services throughout the country, has changed public behaviour towards recycling bin usage.

Hiahia anamata | Future demand

Several factors are likely to affect waste management and minimisation services in future. These include:



Population growth – Rotorua's population is projected to increase by up to 12,000 within the next 10 years. This is expected to generate an additional 250 tonnes of municipal waste.



Economic activity – Strong employment growth is projected in Rotorua until 2051. A strong economic activity is likely to increase waste generation per capita.



Tourism growth– Over the next 10 years, the number of visitors in Rotorua is expected to increase significantly. This will create pressure for waste disposal facilities, such as transfer stations, while increasing Rotorua's waste footprint.

"The increasing waste volume in Rotorua is not sustainable. New initiatives are required to reduce per capita waste to landfill"

Based on waste generation trends and expected increase in population and consumption, municipal waste generation in Rotorua is likely to be about 18,000 tonnes/year by 2030, as shown in Fig. 6.

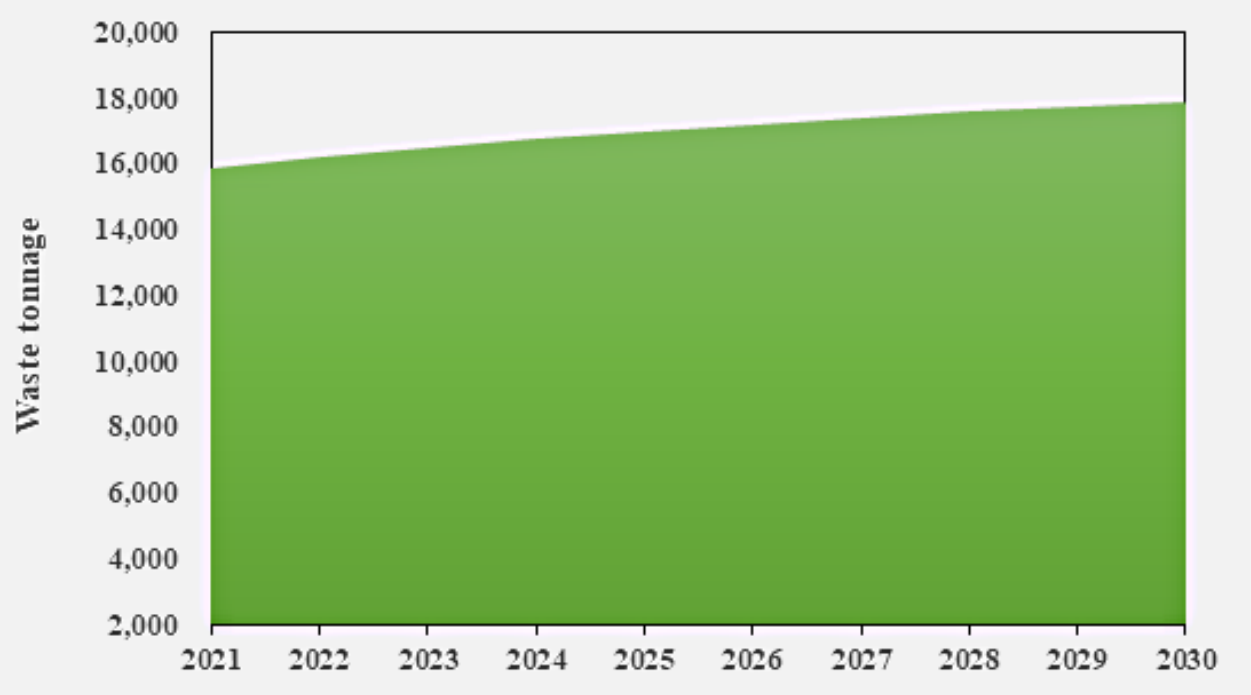


Figure 6 Projections of municipal waste generation in Rotorua

The analysis of factors driving demand for waste services in Rotorua suggests that an increase in demand over time is inevitable due to the projected increase in the number of households and the population. However, the normalised waste generation (per household or per capita) is unlikely to decrease significantly under current levels of service. Awareness on climate change and sustainability, as well as, policy interventions by the government are likely to influence consumer behaviour towards waste minimisation. Similarly, new waste services to improve diversion from landfills (e.g., kerbside organic waste collection) have the potential to lower the district's waste footprint significantly.



Diversion of organic waste from landfill is a top priority in the transition to circular economy and a low carbon future.

Ngā wero matua | Key challenges

Based on the review of the current services, future demand considerations and compliance with recent or emerging legislations, a number of gaps have been identified. These are (in no specific order):



- Lack of kerbside organics waste diversion services in Rotorua, which is resulting in high volumes of municipal organic waste going to landfill.
- Limited food waste collection and processing facilities in Rotorua, which is resulting in significant volumes of commercial food waste going to landfill.
- Absence of processing options for compostable packaging, which is deterring zero waste events.
- Absence of kerbside waste collection services in some rural areas, which is discouraging some residents from recycling.
- Relatively high level of recycling contamination, which is resulting in recyclables going to landfill.
- High levels of illegal dumping and littering instances, which are affecting the environment adversely.

Horopaki ā-Ture, ā-Rautaki |

Legislative & Strategic Context



"The principal solid waste legislation in New Zealand is the Waste Minimisation Act 2008. Its purpose is to encourage waste minimisation to protect the environment from harm and obtain environmental, economic, social and cultural benefits."

Under the WMA, councils "must promote effective and efficient waste management and minimisation within its district" (section 42). Part 4 of the WMA requires councils to develop and adopt a WMMP. The development of a WMMP is a requirement modified from Part 31 of the Local Government Act 1974, but with even greater emphasis on waste minimisation.

To support the implementation of a WMMP, section 56 of the WMA provides councils the ability to: (1) develop bylaws; (2) regulate the deposit, collection and transportation of waste; (3) prescribe charges for waste facilities; (4) control access to waste facilities, and; (5) prohibit the removal of waste intended for recycling.

Under section 44 of the WMA, councils must have regard to the New Zealand Waste Strategy 2010 (NZWS) in preparing their WMMP. The NZWS provides the government strategic direction for waste management and minimisation in New Zealand.



"The New Zealand Waste Strategy 2010 sets two high level goals: (1) reducing the harmful effects of waste, and; (2) improving the efficiency of resource use. " The goals are set to expand in the new Waste Strategy being considered by the Government.

The framework for waste management and minimisation in New Zealand is governed by several other legislations, in addition to the WMA and the NZWS. These include:

- Local Government Act 2002
- Resource Management Act 1991
- Climate Change Response (Emissions Trading Reform) Amendment Act 2020
- Litter Act 1974
- Health Act 1956
- International agreements and other legislation.

The central government is currently considering a number of new regulations and initiatives to improve waste minimisation in New Zealand. The WMA and the NZWS are under review. Consultation on Recycling Standardisation and Container Deposit Scheme is in progress. The landfilll levy is set to be increased to $60 per tonne by 2024, and consultation on regulated product stewardship for some specific waste items has been concluded. As the new regulations come into effect, they will assist councils in planning and delivering waste minimisation services and initiatives more effectively.

Te Māherehere Anga Anamata |

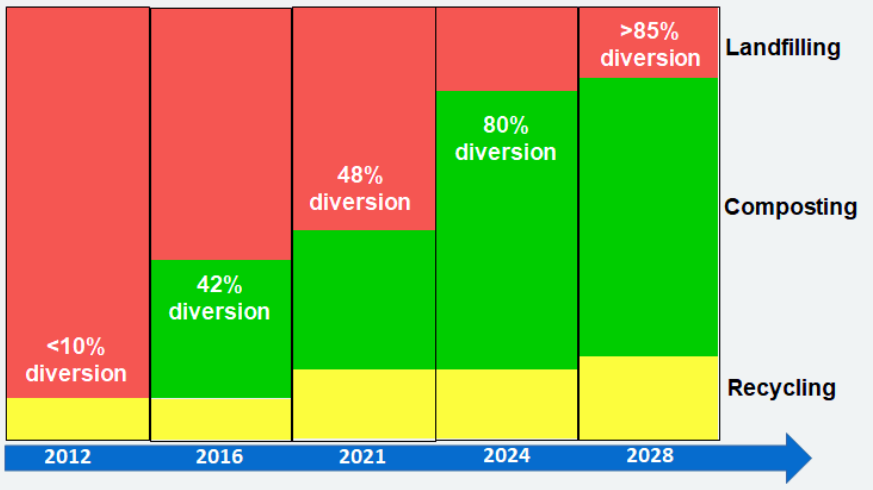
Future Planning Framework



"To empower Rotorua communities to minimise waste generation, and maximise waste diversion and resource recovery, by offering convenient, effective and innovative waste services."

RLC's vision for waste minimisation is consistent with the WMA and the NZWS. It also aligns with council's long-tern plan, Rotorua Vision 2030, Climate Action Plan 2020 and Te Arawa Climate Change Strategy.

"Municipal waste diversion in Rotorua has increased gradually from 10% to 48% since 2012, and this WMMP aims to improve it to >85%.



The vision is supported by four major goals, ten objectives and five targets. These have been described below:



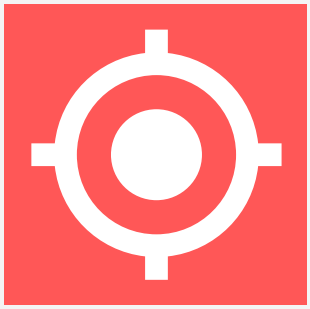
Whāinga | **Goals**

- Create awareness on the waste hierarchy
- Reduce the harmful effects of waste on environmental and public health
- Facilitate transition to circular economy in waste management
- Consider climate change mitigation in planning



Whāinga Motuhake | **Objectives**

- Reduce per capita municipal waste to landfill
- Reduce the amount of contaminants (based on weight) in the recycling collection
- Reduce greenhouse gas emissions from waste collection and disposal services
- Increase the tonnage of materials diverted from landfill via recycling or recovery
- Create local resource recovery infrastructure
- Upgrade landfill leachate collection and monitoring infrastructure
- Increase community awareness on waste minimisation and diversion
- Create awareness among businesses to reduce commercial waste to landfill
- Increase the number of zero-waste events in Rotorua
- Improve litter bin services across the district



Paetae Whāinga | **Targets**

- 30% reduction in municipal waste to landfill
- 45% reduction in recycling contamination (from 22% to 12%)
- Contamination-free glass collection
- 60% reduction in kerbside food waste to landfill
- 60% reduction in kerbside green waste to landfill

Ngā Tukanga | **Methods**

- Supporting and leveraging central government's work programme
- Working together in partnership with mana whenua, community groups and businesses
- Rubbish and recycling services review and improvements
- Implementation of council's action plan as outlined within the WMMP 2022-28

Te Whaiwhai Pūtea i te WPMW | Funding the WMMP



"Council-provided waste services are funded by: (1) general and targeted rates; (2) external grants (e.g., MfE waste levy), and; (3) revenue from facilities operations."

Targeted rates ($254.46 per household per year in FY 21/22) cover about 80% of the operational costs and support household waste collection, disposal and recycling. General rates and other revenue sources cover the remaining 20% of the operational costs, including (but not limited to) litter bin services, waste minimisation activities and facilities maintenance. The 80/20 split has been effective and will continue in future.

Councils receive, based on population, a share of national waste levy funds from the MfE. The WMA requires councils to spend waste levy funding to promote waste minimisation. The funding can be used on education and communication, services, policy research and reporting. It can also be used to provide community grants, support contract costs, or co-fund relevant infrastructure capital. In addition, each council may make an application for contestable waste levy funds from the Waste Minimisation Fund. RLC intends to use the waste levy funds for a range of waste minimisation activities and services as set out in the action plan.

Council may apply for other external grants to cover costs related to specific projects and services. Some revenue is also generated by the operation of the facilities (e.g., recycling centre), which are used to offset the operating costs.



Whakahaerenga Mahi | Performance Management

The performance of RLC's waste services is measured by eight KPIs, related to waste disposal, recycling, resource recovery, H&S and customer feedback.

KPIs	Current target	Comments
Reduction in municipal waste to landfill	≤ 210 kg/capita/year	To be reduced to <110 kg/capita/year by 2024/25
Recovery of recyclable materials	≥5,000 tonnes	Revised in LTP 2021
Collection and recycling of green waste at landfill	≥5,000 tonnes	Revised in LTP 2021
Collection and recycling of concrete at landfill	≥1,000 tonnes	Revised in LTP 2021
Reduction in kerbside recycling contamination	<22%	To be reduced to <12% by FY 24/25
Kerbside food and garden waste diversion	>50 kg/capita/year	Expected to commence in FY 23/24
Customer satisfaction with waste services	90%	-
Compliance with landfill resource consent	100%	-

Wāhanga B - Te Mahere Mahi |

Part B- The Action Plan

This section provides detailed information about activities to achieve the objectives and targets, and how they will be carried out and resourced.



Ngā Wāhanga Matua | Priority Areas



1. Extend kerbside rubbish and recycling collection services to all rural communities



2. Plan and provide new kerbside collection services for organic (putrescible) waste



3. Enable local resource recovery infrastructure (e.g., local organics processing facility)



4. Improve post-capping landfill management and maximise waste diversion



5. Engage with the community on waste minimisation and improve waste behaviour



6. Advocate and support good waste minimisation efforts by other councils, community groups and residents



7. Improve waste data collection for both municipal and commercial waste and report the findings periodically



8. Improve solid waste bylaw and act in regulatory capacity to control and minimise undesirable waste



9. Map the public litter bins in Rotorua and optimise their capacity and positioning



10. Engage business communities and event organisers to minimise commercial waste to landfill



Task 1:
To extend kerbside rubbish and recycling collection services to all rural areas

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
A1	To include all areas of Ngakuru, Horohoro and Upper Atiamuri in kerbside waste collection services	New	Ongoing	Targeted rate	Recycling
A2	To draft and implement a policy for extending kerbside waste services to newly sealed rural roads	New	FY 22/23	Targeted rate	Recycling
A3	To engage rural/lakes community using rubbish bags in some areas to switch to bin collections	New	FY 22/23	Targeted rate	Recycling



Task 2:
To minimise organic (putrescible) waste to landfill

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
B1	To collect and process food and garden organics from kerbside	New	FY 23/24 (expected)	Targeted rate	Recovery
B2	To provide residents and businesses garden waste drop-off facility at the landfill or other areas	Existing	Ongoing	User pays	Recovery
B3	To provide residents and businesses food waste drop-off facility for composting	New	FY 23/24 (expected)	User pays	Recovery
B4	To run home composting workshop and incentivise people to start home composting or worm farming	Existing	Ongoing	Waste levy funds	Recovery
B5	To create an event waste minimisation guide and support event organisers in reducing event waste	New	FY 22/23	Waste levy funds	Recycling and recovery
B6	To create awareness among food retailers or eateries on food waste minimisation and diversion	New	FY 22/23	Waste levy funds	Recycling and recovery

Task 3:
To explore setting up local resource recovery infrastructure

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
C1	To support establishing a local resource recovery facility for processing food and garden organics	New	Ongoing	Industry partnership	Recovery
C2	To support the operation of Red Cross (or another) shop in diverting reusable goods from landfill	Existing	Ongoing	Goods sale	Reuse
C3	To relocate and upgrade the recycling centre with improved services	New	FY 22/23 (planning starts)	General rates	Recycling

Task 4:
To improve post-capping landfill management and maximise waste diversion

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
D1	To improve environmental benefits by planting native trees around the capped landfill cells	New	Ongoing	General rate	Disposal
D2	To upgrade leachate collection and monitoring infrastructure for improved environmental outcome	Existing	Ongoing	General rate	Disposal
D3	To improve stormwater collection infrastructure for improved environmental outcome	Existing	Ongoing	General rate	Disposal
D4	To remove and recycle legacy tyres stored at the landfill site	New	FY 22/23	Waste levy funds	Recovery

Task 5:

To engage Rotorua community on waste minimisation and educate to improve waste behaviour

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
E1	To run recycling awareness campaigns using social and print media and participate in national recycling campaigns	Existing	Ongoing	Waste levy funds	Reduce, reuse, recycling
E2	To audit kerbside recycling bins to minimise recycling contamination and educate residents	Existing	Ongoing	Waste levy funds	Recycling
E3	To review and update recycling instructions on kerbside wheelie bin/crate for effective communication	New	FY 23/24	Waste levy funds	Recycling
E4	To provide car seat recycling facility at the recycling centre	Existing	Ongoing	Waste levy funds	Recycling
E5	To prepare and disseminate recycling guide for holiday home owners and visitors	Existing	Ongoing	Waste levy funds	Recycling
E6	To improve glass collection from popular tourist destinations over summer holidays	Existing	Ongoing	Waste levy funds	Recycling
E7	To plan and implement new initiatives to reward good recycling behaviour	New	FY 22/23	Waste levy funds	Recycling



Task 6:

To advocate and support good waste minimisation efforts by other councils, community groups and residents

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
F1	To support Para Kore (or other groups) in running waste education initiatives among Maori communities	Existing	Ongoing	Waste levy funds	Reduce, reuse, recycling
F2	To setup a waste minimisation grant to assist local communities in waste minimisation efforts	New	FY 23/24	Waste levy funds	Recycling
F3	To create awareness on littering and encourage/assist the community in litter clean-up	Existing	Ongoing	Waste levy funds, general rates	Recycling

Task 7:
To improve waste data collection and reporting

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
G1	To collect data on households with repeated recycling contamination and plan a targeted education campaign	New	FY 22/23	Waste levy funds	Reduce, reuse, recycling
G2	To report data on recycling contamination as a key waste services KPI	Existing	Ongoing	Targeted rate	Recycling
G3	To continue collecting data on waste and recycling collection and landfill refuse transfer station	Existing	Ongoing	Targeted rate	Recycling

Task 8:

To act in regulatory capacity to minimise undesirable waste (e.g., illegal dumping)

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
H1	To review and update Rotorua's solid waste bylaw (after upcoming changes in the WMA and the Litter Act)	New	FY 24/25	General rate	Recycling, disposal
H2	To install cameras at transfer stations to discourage recycling contamination and illegal dumping	Existing	Ongoing	General rate	Recycling
H3	To plan enforcement actions for households not heeding recycling instructions repeatedly	New	FY 22/23	Waste levy funds	Recycling
H4	To transfer the clean-up costs for littering and dumping to the offender, wherever possible	New	FY 23/24	General rate	Disposal



Task 9:

To map and rationalise public litter bins and consider options for waste diversion

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
I1	To GPS map all the public litter bins in Rotorua district and make it available on council's website	New	FY 22/23	General rate	Disposal
I2	To optimise litter bin placement, bin types and their capacities for the best outcome	New	FY 22/23	General rate	Disposal
I3	To review litter bins usage for recycling and take steps to improve compliance with recycling guidelines	New	FY 23/24	Waste levy funds	Recycling
I4	To consider litter bins for compostable waste, and if possible, plan an education campaign on their use	New	FY 24/25	Waste levy funds	Recovery
I5	To prepare an asset management plan for litter bin and plan renewal of litter bins in the CBD	New	FY 23/24	General rate	Disposal



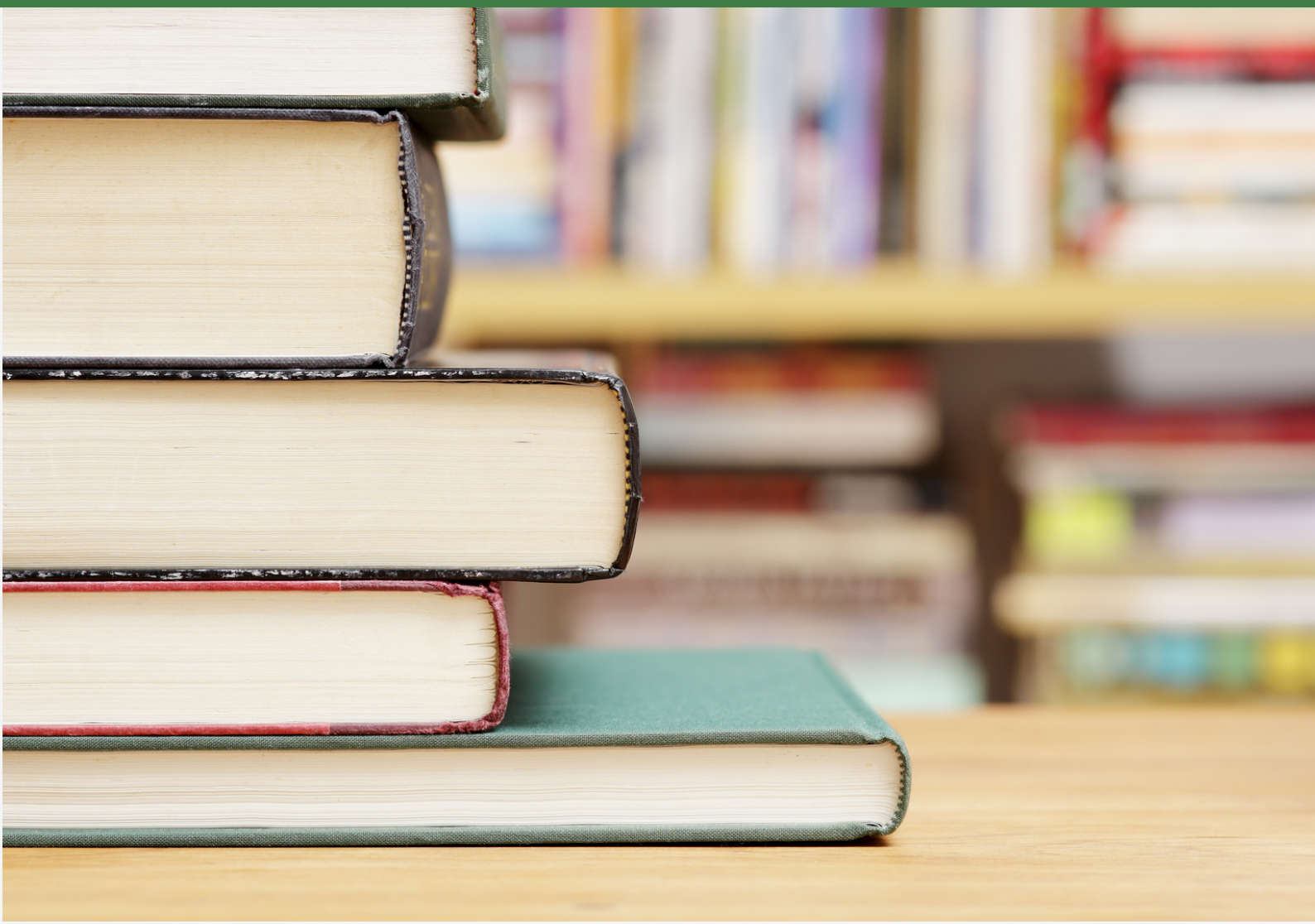
Task 10:
To reduce commercial waste to landfill

Item no.	Specific actions	New/existing action?	Implementation timeframe	Funding source	Hierarchy position
J1	To plan and implement initiatives to incentivise businesses for waste minimisation and diversion	New	FY 23/24	Waste levy funds	Recycling, recovery
J2	To educate businesses on good glass recycling practices	New	FY 23/24	Waste levy funds	Recycling
J3	To create opportunities for businesses to be able to identify and divert recyclables and compostable materials	New	FY 24/25	Waste levy funds	Recycling, recovery

Wāhanga C - Ngā Āpitihanga |

Part C - The Appendices

This section includes links to supporting document. These include Waste Assessment 2021, recent waste audit reports, climate action plan 2020 and WMMP 20166-22. External links to proposed Government regulations, i.e., New Zealand Waste Strategy and Emissions Reduction Plan, have also been provided.



Mōhiotanga Āwhina |

Supporting Documents





Waste Assessment 2021
Click here to access the public document on RLC website.

Composition of RLC's Kerbside Rubbish and Mixed Recycling Collections 2020/21
Click here to access the public document on RLC website.





Climate Action Plan 2020
Click here to access the public document on RLC website.

Proposed New Zealand Waste Strategy
Click here to access the public document on MfE website.





Proposed Emissions Reduction Plan for New Zealand
Click here to access the public document on MfE website.

Waste Management and Minimisation Plan (WMMP) 2016-22
Click here to access the public document on RLC website.

