

Waste Management and Minimisation Plan 2022- 2028 DRAFT

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Document Date	28 July 2022
Doc Set ID	586781

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Abbreviations

Bylaw	South Waikato District Council Solid Waste Management and Minimisation Bylaw 2021
CCAP	Climate Adaptation Action Plan
Council	South Waikato District Council
CRS	Container Return Scheme
C&D	Construction and demolition waste
District	South Waikato District
e-waste	Electronic waste
ESL	EnviroWaste Services Ltd
ETS	Emissions Trading Scheme
ICI	Industrial, commercial, institutional waste
MfE	Ministry for the Environment
MOH	Medical Officer of Health
MRF	Materials Recovery Facility
SWAP	Solid Waste Analysis Protocol, 2018
TS	Transfer Station
WA	Waste Assessment 2022
WMA	Waste Minimisation Act 2008
WMF	Waste Minimisation Fund
WMMP	Waste Management and Minimisation Plan
WWTP	Wastewater Treatment Plant

Executive Summary

Why do we need a plan?

Managing and minimising waste is a key Council responsibility, and this 2022 Waste Management and Minimisation Plan (WMMP) will set the strategy for our solid waste activities, services and infrastructure for the next six years. We are guided in the development of this strategy by the Waste Minimisation Act, which encourages waste minimisation to protect the environment from harm, and to provide environmental, social, economic and cultural benefits.

In the four years since the last WMMP Council has made significant changes to waste and recycling infrastructure and service delivery. Our forecast of future demand for waste and diversion services provides Council with key opportunities to build on these changes and lead the district towards lower resource use and lower environmental impact in line with national initiatives proposed by Ministry for the Environment (MfE).

The landfill levy doubled to \$20 per tonne in 2021 and will increase incrementally to \$60 per tonne in 2024. Our increasing revenue from the national Waste Levy Fund provides Council with potential to add services and/or infrastructure that may have previously been unaffordable. The WMMP is key to Council being well positioned to strategically spend our increasing revenue.

How well are we doing?

- In 2021 our per capita waste to landfill was 449kg, well below the national average of 680kg per capita
- We diverted 3,000 tonnes from landfill, mostly recycling, greenwaste and sewage sludge
- Our transfer stations received 11,400 tonnes of waste for landfill, but 45% of that could have been recycled, recovered or composted
- We collected 2,500 tonnes of waste from kerbside wheelie bins, but nearly half of that was food waste that could have been composted.

We made good progress against actions and targets in our 2018 WMMP except in the areas of waste education and diverting waste materials from landfill. This plan has a greater focus on waste awareness across all sectors of our community and addresses the national and global move towards a circular economy. A circular economy (make-use-recycle, *repeat continually*) rather than the existing linear model (take-make-use-dispose) will make a significant impact towards a sustainable future, creating local job opportunities, providing long term cost savings and reducing the amount of harmful waste produced.

Our targets 2022-2028

The Action Plan contains 25 actions which we can take to better manage and minimise our waste and meet the challenges that may impact our progress towards a circular economy. The actions will all contribute to our proposed targets:

- 1. Kerbside food waste collection is implemented in urban areas by 2025**
- 2. Waste minimisation information is provided, or readily available, to 100% of our community by 2026**

3. Our diversion rate increases to 50% of the district's waste disposed to landfill by 2027

This document has three parts

Part A – Strategy

Part A outlines Council's commitment to manage and minimise waste in ways that meet legislative requirements, identifies the plan's goals, objective and targets and Council's responsibility to provide the community with the services and infrastructure to meet those targets.

Part B – Action Plan

Part B sets out the program of action for achieving the vision, goals, objectives and targets of the Waste Management and Minimisation Plan (WMMP) as identified in Part A. The action plan includes proposed timelines, funding options, and the objectives that each activity will meet.

Part C – Appendices

Part C includes the Waste Assessment 2022, which is the primary supporting document to the WMMP, plus additional information that relates to this WMMP.

Part A - STRATEGY

1 Introduction

Globally, there is an estimated 2 billion tonnes of solid waste being produced annually with developed nations being the worst offenders. The fast-growing regions of Sub-Saharan Africa, South Asia, the Middle East and North Africa, are expected to double or triple their waste generation over the next few decades and the World Bank predicts that by 2050 our global waste will have risen to 3.4 billion tonnes per year. That is an inconceivable amount of waste.

Here in New Zealand, we may be perceived as clean and green by the rest of the world, but we have significant problems with our waste and recycling. As a nation we generated 17 million tonnes of waste last year, of which 13 million ended up in landfills.

“When we buy a product, we also buy any waste associated with the product. We are all responsible for waste. It starts with us. It ends with us”

recycle.co.nz

1.1 Purpose of this plan

The current Waste Minimisation Act 2008¹ (WMA) requires Council to regularly review the way we manage our waste services. When the 2018 WMMP was written, Council was considering all options for provision of future waste services. In the four years since then we have made significant changes to our waste infrastructure and service delivery. There has also been a global shift in recycling markets, a worldwide pandemic which has rocked economies, a general acceptance that we are already living in a climate crisis, and an increasing environmental awareness of the impacts of waste. We are rethinking how we use resources and how we can move towards a circular economy that helps keep our resources in use instead of becoming waste.

The direction for this WMMP is set by the WMA and the New Zealand Waste Strategy 2010². The WMMP considers all aspects of waste within the district in line with the order of priority stated in legislation i.e. reduce, reuse, recycle, recover, treatment and disposal. Waste is defined as 'waste to landfill', and the term 'diverted materials' refers to materials collected for recycling or recovered for composting, or other recovered or treated materials that are diverted from landfill.

1.2 Current status of plan

There is a three-part process to review the WMMP. First is the need to obtain up-to-date data by undertaking a Solid Waste Analysis Protocol (SWAP) survey and audit. This was completed in December 2021 and provided the comprehensive data that council needs to make informed choices about future waste issues. This data was essential for the second stage which was the detailed development of the Waste Assessment 2022 (WA) which was adopted by Council on 17th March 2022. This draft WMMP is the third stage and is the strategy document which guides all Councils solid waste activities and is structured on the WA. It provides objectives and policies for achieving effective and efficient waste management and minimisation within the district and the methods for achieving these.

¹ New waste legislation is being developed and is likely to be enacted in 2024

² MfE will present a new waste strategy ('Taking responsibility for our waste') to cabinet in 2022

Section 50 of the WMA requires a WMMP to be reviewed no longer than six years after its adoption. This WMMP, once formally adopted, will remain relevant until 2028. Any review of the WMMP must be preceded by a Waste Assessment in accordance with section 51.

1.3 Review of our previous plan

Our last WMMP, completed in 2018, included a set of targets and an action plan. This section provides a summary of our achievements against these targets and actions.

1.3.1 Progress against our WMMP 2018 targets

Our primary focus in 2018 was the decision on the future of our remaining landfill at Tokoroa. A comprehensive review of the available options led to Council's decision to close the landfill in 2020 when consent expired. A transfer station was constructed on the site and commenced operation on the day following landfill closure.

Our waste per capita target was achieved in 2021 with a 22% decrease on the 2018 figure. At 449kg per person we are now in the lower range of local authorities, and well below the national figure of 680kg per person.

We need to improve in the areas of education and waste diversion and have therefore placed additional focus on these activities in our 2022 WMMP. These are areas requiring inter-related improvement, where better waste education leads to increased resource recovery and diversion of waste from landfill.

1.3.2 Key action areas since 2018

Many of the actions identified in the 2018 WMMP are completed on an annual basis and are ongoing projects into this plan. Some of the key areas of progress are outlined here:

Kerbside collections

September 2021 saw a shift to wheelie bins for our kerbside rubbish and recycling collections. Glass continues to be collected in crates to avoid contamination of other recycling. The new service has been well-received by the public. Organic waste makes up 50% by weight in the rubbish wheelie bins and it is proposed to address this through the introduction of kerbside food waste collection.

Infrastructure

Tokoroa landfill closed in October 2020 in accordance with the resource consent. A transfer station was constructed at the site and opened for operation in November 2020. Waste from Tokoroa and Putāruru transfer stations is hauled out of district for disposal at commercially owned Hampton Downs landfill.

Ongoing problems with contamination at the recycling drop-off centres resulted in removal of two rural sites, and the implementation of secure fencing, reduced hours and better supervision across the remaining three sites. This has improved the quality of the collected recycling and increased the aesthetics of the sites.

Education and raising awareness

Council continues to support the nine Enviro Schools in our area. We also received funding from the contestable Waste Minimisation Fund for a 3-year project (now in Year 2) to improve waste-awareness in our community. This ongoing project takes a multi-layered approach to raising waste awareness with a focus on the waste hierarchy and personal responsibility for managing our waste.

2 Our current situation

This section outlines key factors that influence the challenges and opportunities which drive this strategy. It also provides a summary of the volume and composition of our waste and diverted

materials, and an overview of our existing services and infrastructure. Our district-specific issues are discussed.

2.1 Key factors influencing our current waste situation

Progress against the 2018 WMMP (also refer section 1.5)

We made good progress against actions and targets in our 2018 WMMP except in the areas of waste education and our diversion rate. This is reinforced in the data from our SWAP audit 2021 and provides the impetus to focus on waste education and awareness across all sectors of our community.

We cannot expect change unless we provide our community with the information and ability to make change

Changing global and national recycling markets

International recycling markets tumbled after China introduced their National Sword Policy in 2018. While this created short-term difficulties, it prompted New Zealand to refocus on our own recycling infrastructure. The Government is investing \$124 million in several recycling infrastructure initiatives across the country as part of the Covid-19 Response and Recovery Fund.

Contracts for our waste and recycling services (also refer section 13)

Council contracted with EnviroWaste Services Ltd (ESL) in 2020 to deliver our waste services over the next 10+5 years. Our intention to add kerbside food waste collection and more resource recovery infrastructure at our transfer stations is compatible with ESL's commitment to promoting sustainable processes, resource recovery and waste minimisation, and we should be confident of successful outcomes.

SWAP audit and survey findings

Organic waste continues to be our most significant waste type to landfill, both in the kerbside collection and at transfer stations. Removing food waste from the waste stream has multiple benefits and this is reflected in our actions and targets.

The SWAP audit clearly shows that large volumes of construction and demolition waste are still disposed to landfill. MfE propose a national response to this increasing waste stream through additional research, sector support, investment in resource recovery processing infrastructure and consideration of future regulation for waste separation.

Waste Assessment 2022 (also refer Attachment 1)

The preferred options for managing and minimising waste were identified in the Waste Assessment 2022. From these options we have developed the specific activities which are required to meet objectives and targets of the WMMP. These are detailed in the Action Plan (section 11).

Climate change impacts

Council is developing a Climate Adaptation Action Plan (CCAP) which is expected to be adopted later in 2022 and will likely impact our waste minimisation activities. Council's approach will be to engage and consult as widely as possible to develop a well-designed policy to reduce the carbon footprint of the district. The CCAP will identify risks, assess opportunities in the changing scenario, and follow an equitable and inclusive approach to develop an effective, ambitious, and technically achievable emissions reduction plan.

Climate change has accelerated the need to find ways to reduce the generation of waste in the first place and manage the waste we do create. Avoidance, reduction and reuse of waste will help reduce pressure on earth's natural resources while also reducing emissions of greenhouse gases created

through mass production and the burning of fossil fuels to create plastic. It is unacceptable that the fossil fuel industry is considering a huge expansion in plastic production as it sees its primary business squeezed due to concerns over the climate crisis.

Emissions trading scheme

The New Zealand Emissions Trading Scheme (ETS) is a key tool for meeting domestic and international climate change targets. The waste industry has been included in the scheme since 2013. Organic waste in a landfill breaks down and naturally produces landfill gas which includes methane, a greenhouse gas. Commercial landfills invest heavily in technology and infrastructure to enable capture of most of the landfill gas generated.

Our current tonnage of waste to Hampton Downs landfill has the potential to emit 15,000 tonnes of carbon annually. Although Hampton Downs landfill has a landfill gas capture system in place it cannot capture all the methane gas that the landfill generates, and a proportion is still released. The gas capture system reduces this potential to 1,700 tonnes of carbon. However, if we can remove all possible divertible materials, potential emissions would drop to 7,400 tonnes, and the gas capture system would further reduce this potential to 844 tonnes.

MfE waste work program (also refer section 14)

In response to global challenges MfE have developed a broad work programme which is focused on accelerating New Zealand's transition from a linear economy, with its 'take, make, dispose' approach to a low-emissions circular economy. There is a greater emphasis on

- Setting the direction for waste reduction by developing a new Waste Strategy, developing new waste legislation and developing a long-term infrastructure plan for the next 15 years
- Increasing investment in waste reduction initiatives and infrastructure through the WMF and the Covid-19 Response and Recovery Fund, Plastics Innovation Fund and remediating contaminated sites
- Making system level changes such as increasing and expanding the waste levy, standardising kerbside collections and implementing a beverage container return scheme
- Addressing problems with individual products and materials through product stewardship, phasing out single-use and hard to recycle plastic packaging, reducing organic and food waste, reducing construction and demolition waste and controlling hazardous substances
- Strengthening compliance, monitoring and enforcement and improving contaminated land management

The work currently being undertaken to develop a new Waste Strategy for NZ, along with new legislation to replace the Waste Minimisation Act 2008 and Litter Act 1979 may be completed within the next 12 months. While this may impact some of our proposed targets and actions, our Action Plan should be considered a live document and can be reviewed to address specific issues.

National move to a circular economy

The essential concept at the heart of the circular economy is to 'ensure we can unmake everything we make'. The circular economy is based on three principles, as outlined in Figure 1 below



Figure 1: Key concepts in a circular economy, image courtesy the Ellen MacArthur Foundation

The circular economy has numerous benefits over our current linear economy, including:

- Long-term cost savings
- Increased local job opportunities
- Encouragement of technical innovation
- Reducing the amount of harmful waste produced
- Reversing our impacts on climate change

When a product's component materials are reused rather than landfilled, not only is that material no longer waste but new raw materials are not required to be extracted.³

“Today’s economy is massively wasteful. Most of the materials we use, we lose, the things we make are consistently under-utilised, and our efforts to fix it treat the symptoms, not the cause”

Andrew Morlet, expert on the circular economy

Emissions Reduction Plan (also refer Section 15)

Government recently released their first Emissions Reduction Plan which builds on steps already taken to address climate change. In 2019, 94% of waste emissions were biogenic methane, largely generated by the decomposition of organic waste such as food, greenwaste, wood and paper waste. Although waste contributes a small percentage of our total emissions, biogenic methane has a warming effect 28 times greater than carbon dioxide. The direction of this WMMP aligns with the objectives of the Emissions Reduction Plan.

The Emissions Reduction Plan includes the following key focus areas for waste:

- Enable households and businesses to reduce organic waste
- Increase the amount of organic waste diverted from landfill
- Reduce and divert construction and demolition waste to beneficial use
- Explore bans or limits to divert more organic waste from landfill
- Increase the capture of gas from landfills
- Improve waste data and prioritise a national licensing scheme

³ MfE ‘Why transition to the circular economy’

“Changing the way we think about waste, alongside improving our services and waste infrastructure will enable communities and businesses to build resilience”

Emissions Reduction Plan

2.2 Summary of the tonnage and composition of waste and diverted materials

Although it is important to know the changes in tonnage of waste being disposed through our transfer stations and collected from kerbside, the composition of the waste is key to identifying which waste streams to target for recycling and diversion.

Waste tonnes and composition – Transfer Stations

Landfill tonnage in the past ten years fluctuated primarily because waste flows are price sensitive and are not constrained by geographic boundaries. Variance in regional gate fees, preferential pricing for commercial operators, acceptance of out-of-district waste, and acceptance of special wastes all influence where waste eventually meets land.

In the calendar year 2021 we received a combined total of 11,438 tonnes of waste at the TS, with the three main sources being ICI waste (5,600 tonnes pa), Council kerbside collection (2,516 tonnes pa) and C&D waste (2,000 tonnes pa), as shown graphically in Figure 2 below. It is estimated that of the total, approximately 3,000 tonnes came from out-of-district.

Residential waste comprised over half of all loads into the TS, but only 9% of the total weight of waste as many loads of residential waste are relatively small, often only a few rubbish bags. Organics made up one quarter of residential waste.

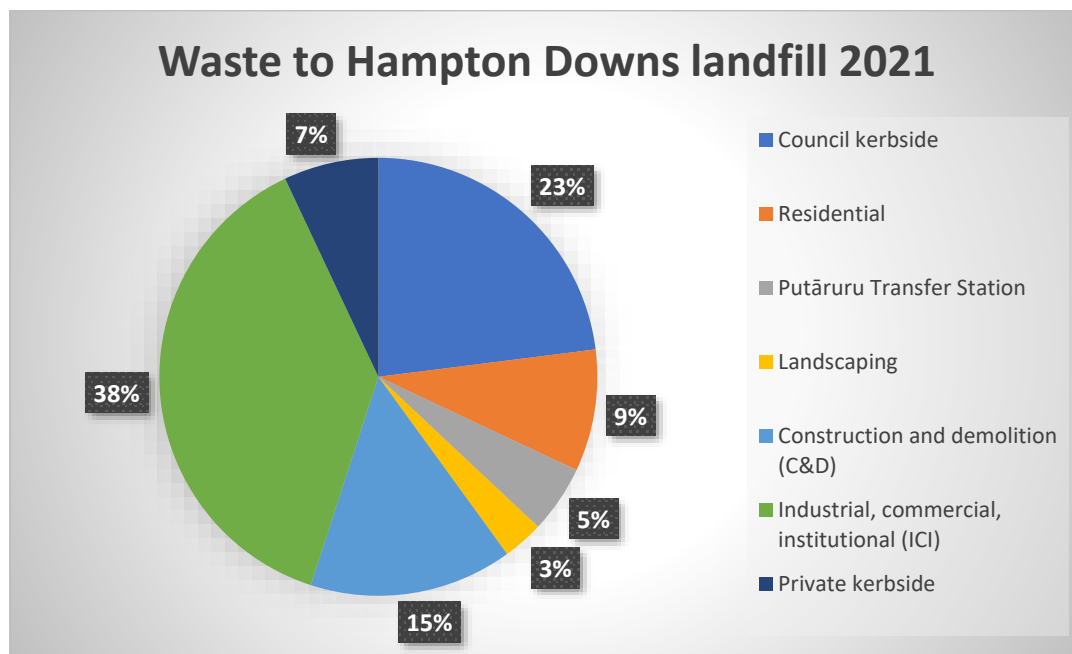


Figure 2: Source of waste to landfill

Of the general waste disposed at Tokoroa TS, theoretically 44%, or 5,000 tonnes per year could be recycled, recovered, or composted. The two biggest components that could be recycled or composted are rubble / cleanfill (880 tonnes per year) and kitchen waste (720 tonnes per year).

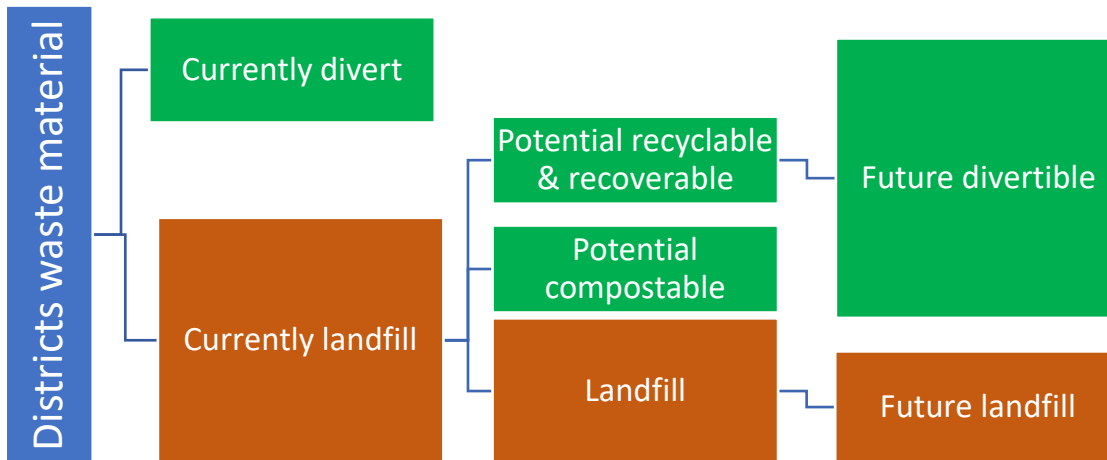


Figure 3: Diversion potential of our waste to landfill

The Emissions Reduction Plan aims to support the building and construction sector to minimise waste through research and improved capability. This work will be scoped by MfE in collaboration with the Ministry of Business, Innovation and Employment program of Building for Climate Change. The outcomes are expected to directly reduce the volumes of waste being landfilled.

Waste tonnes and composition – kerbside collection

In 2021, 2,500 tonnes of kerbside waste were collected, with organic waste making up 52% of the total. Kerbside organics consist of

- Kitchen waste 85%
- Greenwaste 8%
- Other 7%

Plastics make up 12% of kerbside waste and consist primarily of soft plastics and non-recyclable plastics.

Overall, 61% by weight, of materials in kerbside could have been recycled or composted. This equates to 1,530 tonnes per annum and is a theoretical maximum, as no system can divert all of a material.

If kitchen / food waste is removed from the kerbside waste stream and collected weekly in a separate small wheelie bin (23ltr is the industry standard), it becomes clear that the kerbside rubbish collection (red lid) could be reduced to fortnightly as there would be space available in the bin and most of the malodorous waste has been removed.

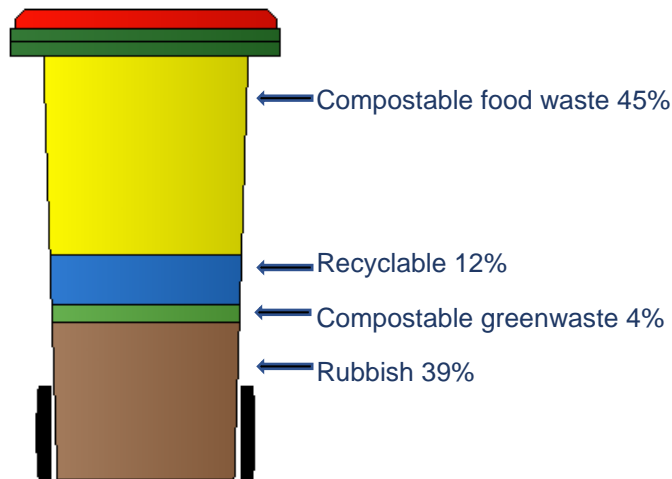


Figure 4: Diversion potential of kerbside rubbish

External impacts on kerbside recycling collection

The volume and types of plastics in our kerbside waste stream will be impacted by the NZ Plastic Packaging Declaration, which is a joint commitment by local and multi-national companies to use 100% reusable, recyclable or compostable packaging in their NZ operations by 2025 or earlier.

The Plastic and Related Products Regulation 2022 will see a raft of single use plastics banned by 2025, including plates, bags, cotton buds, drinking straws, fruit labels and some polystyrene products. Items will be phased out in three stages between late 2022 and July 2025.

There will be considerable impact from the MfE Transforming Recycling programme of work which proposes a Container Return Scheme (CRS) for beverage containers (glass, plastic and metal), improvements to household kerbside recycling to improve the quality and quantity of material collected, introduction of kerbside food waste collection and requiring businesses to collect their food waste separately from general waste.

The CRS will result in reduced volumes from kerbside recycling collection and recycling drop-off facilities, although we won't know the full impact until the CRS has been operational for some time. Nationally, the volume of glass beverage containers recycled far exceeds plastic and metal beverage containers so we would expect the biggest impact will be on our glass collection. MfE are proposing recovery targets for a CRS of 85% by year 3, and 90% by year 5, which suggests that the more successful the CRS the less financially viable it will be to offer kerbside glass collection at all.

Diverted tonnes and composition

In 2021 our diversion of material from landfill was 3,050 tonnes, comprised primarily of recycling and greenwaste as shown graphically in Figure 5 below. Recycling collected at kerbside and drop-off centres is processed at the Materials Recovery Facility (MRF) in Hamilton. Greenwaste is mulched and then collected by MyNoke for vermicomposting at their Kinleith site. Sludge from our Wastewater Treatment plants (WWTP's) is also processed at the MyNoke site.

Our overall diversion rate as a percentage of disposal is 36%. Targeted diversion can quickly bring results.

Even if we can only remove half of the food waste from the current kerbside rubbish collection, our total diversion rate as a percentage of disposal could exceed 50%

Diversion can also be achieved through small, specialised programmes such as collection networks for batteries and cell phones which have recently been introduced in our district. Although the volumes are not significant, batteries contain corrosive materials and heavy metals that can contaminate the environment, and the valuable metals in cell phones can be extracted and reused. Facilities to accept household hazardous waste and waste oil are available at our TS.

Some potential materials for diversion are best managed at a national level. Electronic waste (e-waste) is a growing environmental and political problem with an estimated 57.4 million tonnes generated globally in 2021. Most e-waste contains some valuable recoverable metals (e.g. gold, copper, steel and aluminium) that can be recycled to make new goods, reducing demands on raw materials. Unfortunately, it can also contain toxic materials, such as lead, phosphorus, mercury, cadmium and brominated flame retardant plastics.

Informal processing of e-waste in developing countries can lead to adverse human health effects and environmental pollution. E-waste is one of the six priority products which will be regulated under the MfE product stewardship programme. Other priority products are packaging, tyres, agricultural chemicals and their containers, farm plastics, refrigerants and synthetic greenhouse gases.

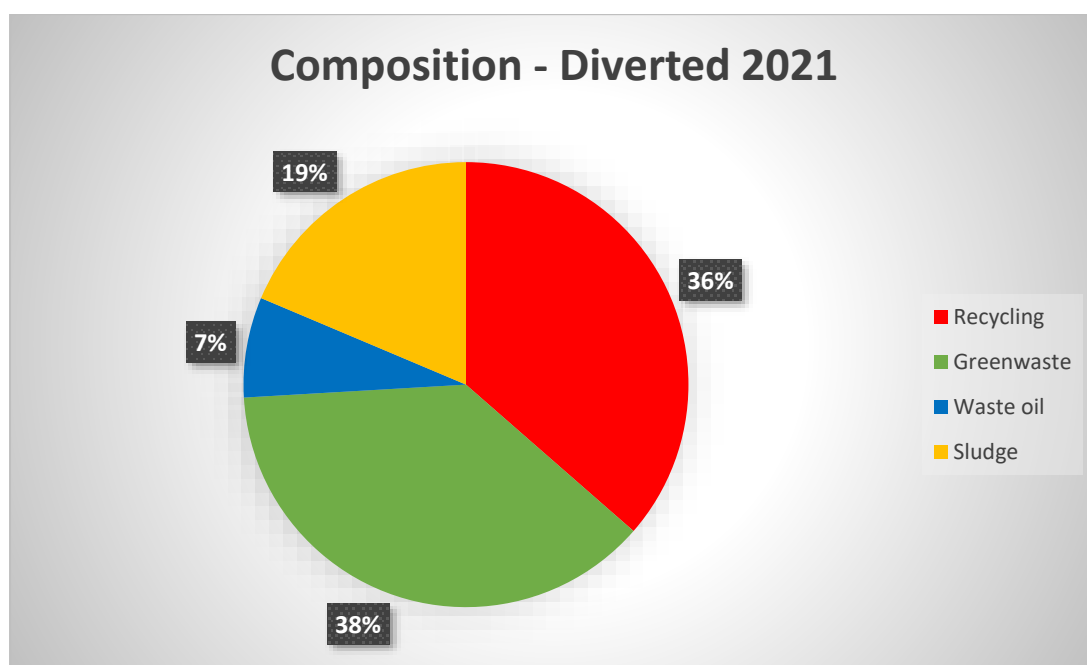


Figure 5: Composition of diverted materials

To make meaningful progress in minimising our waste to landfill we need to divert the biggest offenders from our overall waste stream. Initiatives should be directed at a specific material type from specific activity source, such as kitchen waste in household kerbside collection.

Table 1: The Big Three Offenders / Opportunities

Divertible material	Activity Source	Tonnes per year
Kitchen / food waste	Kerbside rubbish	1,180
Rubble – cleanfill	Construction and demolition	880
Kitchen / food waste	Institutional, commercial, industrial	720

MfE are proposing that commercial business will be required to divert food waste from landfills by 2030. Although business waste is not a council activity, Council may take a facilitation role, especially with smaller businesses.

“New Zealand businesses generate 25% of all food waste that goes to landfill. Along with reducing greenhouse gas emissions, separating out food scraps can help businesses identify ways to reduce food waste and save money”

Hon David Parker, Minister for the Environment

2.3 Overview of existing waste infrastructure and services

Council owns three closed landfills (Tokoroa, Putāruru, Tirau), two transfer stations (Tokoroa, Putāruru) and three recycling drop-off centres (Tokoroa, Putāruru, Tirau). The facilities provide environmentally compliant, safe and convenient locations for residents to dispose of waste and recyclable materials. The facilities are managed, operated and maintained in accordance with resource consent conditions, contractual requirements and industry best practice.

Council has a comprehensive waste services contract in place for 10-year + 5-year period from November 2020. The services provided by the contract include

- Operation of the Tokoroa TS and Putāruru TS and haulage of waste to Hampton Downs landfill for disposal
- Kerbside rubbish and recycling collection for our four urban areas
- Processing of our collected recyclables at Hamilton MRF
- On-site assistance and advice provided to our customers on a rotation basis at both TS, the three recycling drop-off centres and for kerbside collection

Council also contracts with MyNoke to transport and process all TS greenwaste at their vermicomposting facility at Kinleith.

2.4 Summary of district-specific challenges

The broad challenges identified through the Waste Assessment, which are specific to our district include:

- Diverting large volumes of organic waste away from landfill
- Supporting our community to become more ‘waste-aware’
- Providing additional resource recovery facilities and services

Addressing these challenges will make a positive contribution to reaching our goals and targets for waste minimisation. These challenges are addressed through the Action Plan section 11.

3 Policies, plans and regulation

3.1 Guiding policies, plans and legislation that affect the WMMP

National legislation and policy context that informs our WMMP includes:

- Waste Minimisation Act 2008⁴

⁴ New legislation to be enacted in 2024

The WMA emphasises and promotes waste minimisation. The purpose of the WMA is to 'encourage waste minimisation and decrease waste disposal to protect the environment from harm and to provide environmental, social, economic and cultural benefits.'

The WMA outlines the responsibilities of territorial authorities in relation to waste management and minimisation including:

- ✓ Review its existing WMMP every six years and develop and adopt a new one
- ✓ Promote effective and efficient waste management and minimisation within their districts
- ✓ Spend the funding provided by the national waste levy on matters to promote or achieve waste minimisation in accordance with their WMMP

- New Zealand Waste Strategy 2010⁵

This is the Government's core policy document for waste and provides direction to local councils, businesses and communities on ways to

- ✓ Reduce the harmful effects of waste to the environment and human health
- ✓ Improve the efficiency of resource use
- ✓ Capitalise on potential economic benefits

Also relevant to waste management and minimisation on a broader scale are:

- Local Government Act 2002
- Resource Management Act 1991
- Hazardous Substances and New Organisms Act 1996
- New Zealand Emissions Trading Scheme
- Litter Act 1979
- Health and Safety at Work Act 2015
- Health Act 1956

There are several key international agreements that New Zealand is party to which may impact our domestic legislation for waste minimisation and disposal, including:

- Montreal Protocol
- Basel Convention
- Stockholm Convention

3.2 Statutory requirements

In preparing this WMMP, Council has

- Given regard to the NZWS, including the probable changes in new Waste Strategy
- Considered the waste hierarchy
- Considered the requirements of the LGA in assessing and making decisions on the best and most practicable options for addressing our community's waste management needs
- Given regard to the Waste Assessment when developing our action plan
- Considered the effects on existing service, facilities and activities of using waste levy funding for our waste minimisation initiatives

⁵ New strategy expected late 2022

4 Vision, goals, objectives and targets

4.1 Our vision

Council has an overarching vision for the District which is **'healthy people thriving in a safe, vibrant and sustainable community'**, and it is this vision which guides our provision of waste management and minimisation services and infrastructure.

4.2 Our goals, objectives and targets

To help achieve our vision, we have developed the following goals and objectives

Goal 1 Education – increase environmental awareness in our community

Objective 1.1 Provide ongoing waste education, information and resources to our schools

Objective 1.2 Engage our community and provide information and resources to support positive action by individuals and community

Goal 2 Minimise waste – reduce the harmful effects of waste to our health and environment

Objective 2.1 Reduce the total quantity of waste to landfill, with a focus on wastes that create the most harm

Objective 2.2 Investigate and implement new services, facilities or alternatives that will encourage minimisation of waste through reduce, reuse and recycle

Objective 2.3 Promote targeted behaviour change campaigns to minimise litter and illegal dumping

Goal 3 Increase diversion – support resource recovery businesses at a local level where the benefits flow directly back into our community

Objective 3.1 Increase the quantity of diverted material through reduction, reuse, recycling and recovery

Objective 3.2 Implement kerbside food waste collection in urban areas

Goal 4 Sustainability – ensure our waste infrastructure meets the changing needs of the district

Objective 4.1 Collaborate with Iwi, local business, community groups and government to support a transition to a circular economy

Objective 4.2 Ensure our waste services and facilities are compliant, support our climate change targets and have the flexibility to meet the changing needs of our community

Our targets 2022 - 2028

Our targets provide a clear and measurable way to determine how well Council is achieving its goals.

1. Kerbside food waste collection is implemented in urban areas by 2025

2. Waste minimisation information is provided, or readily available, to 100% of our community by 2026

3. Our diversion rate increases to 50% of the district's waste disposed to landfill by 2027

4.3 Council's intended role

Council will continue to provide a range of services under contract to the private waste sector. These services provide safe, efficient and effective ways for our residents to dispose of waste and recyclable materials at transfer stations, recycling drop-off centres, and through kerbside collections.

Council will continue to provide or facilitate education and waste awareness programs for our communities. We will advocate to central government on specific waste issues that impact our ability to meet our goals.

Council will continue to build relationships with Iwi, businesses, neighbouring councils, education providers, charitable trusts, local industrial recyclers and the private waste sector to improve the district's ability to meet its goals for waste management and minimisation.

4.4 Protecting public health

The Health Act 1956 requires Council to ensure the provision of waste services adequately protects public health. In respect of Council-provided waste and recycling services, public health issues will be addressed through setting appropriate performance standards for waste service contracts. Council must ensure performance is monitored and reported on, and that contract structures can address issues that may arise.

Privately provided services will be regulated through local bylaws. Uncontrolled disposal of waste, for example in rural areas and in cleanfills, will be regulated through local bylaws and legislation.

The Medical Officer of Health was consulted in the development of the WA and their review is included at the end of Attachment One. We consider that the proposals identified in this WMMP will adequately protect public health

5 Proposed methods for achieving effective and efficient waste management and minimisation⁶

5.1 Key waste and diverted material streams and how they are currently managed

The key waste and diverted materials streams have been identified through weighbridge data and SWAP survey and are included in the WA (refer Appendix One).

The current methods of managing waste and diverted materials in the district are summarised below.

⁶ Section 5 is primarily for the draft version that goes out for consultation. The final WMMP will have less detailed information here.

Table 2: Current management of waste and diverted materials

Waste stream / service	How these are currently managed
Residential waste	Council contracted kerbside collection in 4 urban areas, private kerbside collection service, Putāruru Transfer Station and Tokoroa Transfer Station.
Residential recycling	Council contracted kerbside collection service, Council recycling drop-off centres, Putāruru Transfer Station, Tokoroa Transfer Station.
Commercial waste	Private waste collection, Putāruru Transfer Station, Tokoroa Transfer Station.
Commercial recycling	Private recycling collection, take-back schemes with suppliers.
Greenwaste	Putāruru Transfer Station, Tokoroa Transfer Station, private greenwaste collectors.
Litter and illegal dumping	Litter bin servicing and removal of illegally dumped waste under Council contract, managed by Parks
Hazardous waste	Tokoroa Transfer Station accepts and stores domestic quantities for collection, treatment and disposal off-site by authorised hazardous waste contractor. Commercial quantities deal directly with an authorized hazardous waste contractor.
Farm waste	Private waste collection, bury or burn on-farm, on-farm landfill, Agrecovery for agricultural plastics recycling.
Cleanfill	Landfill, private clean fills or other private disposal.
Waste education	Support for waste education program in schools on a demand basis, support for regional council's EnviroSchools program
Waste oil	Putāruru Transfer Station and Tokoroa Transfer Station accept and store waste oil. This is collected and recycled or treated by waste oil operators.
E-waste	The SWAT e-waste recycling facility in Tokoroa accepts all e-wastes.
Information	Other reuse, recycle, recovery and treatment services provided locally are listed on Council's website 'What Goes Where' guide. This guide is updated on an on-going basis as new services arise. Council's regular publication In Touch is delivered to all residents and includes relevant waste news and advice.

5.2 Options for the future

The WA (refer Appendix One) assessed the options for future waste infrastructure and services for the district. A common set of categories for comparing options was used in the assessment. It provided a broad comparison of the sustainability of the various options by including an economic, environmental, social and cultural, and operational assessment.

The options assessment is summarised here and provides a framework for our Action Plan in Part B.

Table 3: Summary of options assessment

Key area	Options	Council's role	Possible funding sources	Impact on Council goals
Services	Introduce kerbside food waste collection in urban areas	Service provider	Waste levy Targeted rate	*Reduces harmful effects of waste to our health and environment *Support resource recovery businesses at a local level where the benefits flow directly back into our community
Infrastructure	Upgrade functionality of Putāruru Transfer Station to improve recycling and recovery activity, and to improve health and safety at the site	Service provider	In LTP for 2023-24	*Reduces harmful effects of waste to our health and environment *Improved health and safety at the site *Ensure our waste infrastructure meets the districts changing needs
Infrastructure	Tokoroa Transfer Station addition of resource recovery centre	Service provider	In LTP for 2024-26	*Reduces harmful effects of waste to our health and environment *Ensure our waste infrastructure meets the districts changing needs
Education	Structured waste education program for schools	Service provider	Waste levy	*Increase environmental awareness in our community *Reduces harmful effects of waste to our health and environment
Education	Encourage behaviour change across all members of our community when managing their waste	Educator / facilitator	Waste levy	*Increase environmental awareness in our community *Reduces harmful effects of waste to our health and environment
Education	Facilitate and encourage local businesses to act sustainably in all areas of their work	Educator / facilitator	Waste levy	*Reduce the harmful effects of waste to our health and environment *Increase environmental awareness in our community
Education	Introduce home composting and worm farms to rural and lifestyle households	Educator / facilitator	Waste levy	*Reduce the harmful effects of waste to our health and environment *Increase environmental awareness in our community
Data	Improved knowledge of farm wastes and construction & demolition waste	Facilitator	Waste levy	*Reduce the harmful effects of waste to our health and environment *Increase environmental awareness in our community
Regulation	Target illegal dumping and littering through strong enforcement and consistent messaging	Enforcement	Waste levy	*Reduce the harmful effects of waste to our health and environment

Partnerships	Implement a contestable Waste Grant for community groups	Partner / facilitator	Waste levy	*Will depend on the project
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6 Funding this plan

Council has a range of options available to fund our waste activities and these are summarised below. Proposed funding for individual programs of action, services or initiatives is documented in the detailed Action Plan in Part B.

6.1 Plan implementation funding

The options available to fund our waste activities include:

General rates – a rate that is paid by all ratepayers

User charges – paying for services you use e.g. transfer station gate fees

Targeted rates – a rate that is set to fund a particular activity. It can align to the provision or availability of service

Waste Levy Funding – central government distributes 50% of the funds raised from the waste disposal levy to local authorities on a population basis. The money must be applied to waste minimisation activities outlined in the Council's WMMP

Waste Minimisation Fund – MfE allocates the remaining 50% of the levy money on funding projects. Anyone can apply to the WMF for funding

Private sector funding – the private sector may undertake to fund certain waste activities where it is financially sound to do so. Council may collaborate with the private waste sector where a partnership is likely to deliver better value for ratepayers and will assist in achieving the goals of the WMMP

Sales of recovered materials – revenue from the sale of materials for reuse or recovery could partially offset the cost of some initiatives

6.2 Waste levy

For every tonne of waste sent to landfill the Government currently applies a \$20 levy under the WMA. Although we no longer have our own landfill, Council charges the levy to customers at our transfer stations and in turn, the Hampton Downs landfill charge Council. The levy will increase incrementally to \$60 by 2024. Our revenue from the levy is estimated at \$180,000 for this financial year. The impact of the levy is tabled below and will provide increased funds to support our waste minimisation activities. These figures do not consider any reduction (nationally) that the levy is expected to achieve.

Table 4: Waste Levy

	Levy rate (excl GST)	Council tonnage	Cost	National levy revenue	Return rate	Estimated levy revenue to Council
2021-22	\$20	8,438	\$168,760	\$70,000,000	0.26%	\$182,000
2023-24	\$60	7,290	\$437,400	\$210,000,000	0.26%	\$546,000

7 Monitoring, evaluating and reporting progress

Progress against each of the actions detailed in the Action Plan section 11 will be reported to Council through annual reports. Reporting to MfE on expenditure of council's waste levy revenue will be undertaken annually as per MfE requirements.

Indicative measures for each of the key action areas are tabled below. Specific measures for each action will be developed and agreed as part of the implementation of the WMMP.

Table 5: Monitoring and Reporting

Theme	Indicative Measures	Progress reported
Services	Customer surveys Contract compliance (KPI's) SWAP audits Weightrax reports Service requests	Annual report Council records KPI reporting MfE waste levy expenditure report
Infrastructure	Customer surveys Contract compliance (KPI's) SWAP audits Weightrax reports Service requests	Annual report Council records KPI reporting MfE waste levy expenditure report
Education and engagement	Education program outcomes WMF project outcomes Service requests	Annual reports WMF reports MfE waste levy expenditure report
Data	All waste data collected in accordance with the National Data Waste Framework and Waste Levy Fund reporting	MfE waste levy expenditure report Annual report
Regulation	Service requests	Annual report
Partnerships	Details of support and collaboration agreed Contracts in compliance	Annual report Council reports Contract records

Part B – ACTION PLAN

8 Introduction

The Action Plan has been developed from the Statement of Options identified in the Waste Assessment, through internal staff workshops. These actions are expected to meet the forecast demand for services and support the goals and objectives for waste management and minimisation.

The action plan tabled below in section 11 sets out all the activities we may take, the proposed timeline, how each activity will be funded, and the objectives which the activity will address. Actions provided here are for services and initiatives that Council already provides or intends providing over the next six-year term of this WMMP.

9 Funding structure (see also Part A section 6)

Our waste, recycling, resource recovery and waste education services are funded through rates (providing flexibility for different service levels), fees and charges, levy revenue and external funding including the contestable Waste Minimisation Fund. The set rates for 2022-23 are:

Waste Collection Charge - \$175.43

District Recycling Charge - \$41.71

10 Targets and measurement

Our targets provide a clear and measurable way to determine how well Council is achieving its goals.

Table 6: Methods of measuring targets

Target	Method of measure
Target 1. Kerbside food waste collection is implemented in urban areas by 2025	<ul style="list-style-type: none"> ✓ Contract with kerbside collector ✓ Participation data from kerbside collector ✓ Contract with food waste processor ✓ Tonnage data from food waste processor ✓ Purchase and distribution of food waste bins ✓
Target 2. Waste minimisation information is provided, or readily available, to 100% of our community by 2026	<ul style="list-style-type: none"> ✓ Online traffic to Council waste pages ✓ Number of schools attended by waste educator ✓ Maraes implementing Para Kore 'Zero Waste Marae by 2025 ✓ In Touch publication distribution data ✓ WMF project data ✓ Participation data from resource recovery activities at transfer stations
Target 3. Our diversion rate increases to 50% of the district's waste disposed to landfill by 2027	<ul style="list-style-type: none"> ✓ Weightrax data ✓ Data from resource recovery centres at transfer stations ✓ Sludge volume from WWTP

11 Action Plan Tables

The Action Plan provides immediate actions that we can take in the short-term as well as our longer-term approach to managing our waste and meeting any challenges that may impact our progress towards a circular economy. The actions are grouped into the same key areas as the options assessment in the WA.

11.1 Services

Ref	Action	New or Existing	Timeframe	Potential funding source	Objectives
1	Review our existing kerbside collection to identify service improvements that will reduce contamination levels in our recycling, and reduce our waste to landfill	New and Existing	2022 Ongoing	Rates	2.1 2.2 3.1 4.2
2	Introduce a kerbside food waste collection service in urban areas, where it is financially viable and environmentally sustainable to do so	New	2024	Rates Levy	3.2 4.2
3	Investigate the provision of compost bins and worm farms (at discounted cost) to households to encourage sustainable management of their organic wastes	New	2026	Rates Levy	2.1 2.2 3.1
4	Continue to support e-waste recovery and household hazardous waste collection. Review and expand the types of hazardous waste collected as new treatment and disposal methods develop	New and Existing	Ongoing 2025	Rates Levy	2.1 2.2 3.1
5	Encourage households to utilise existing services for garden waste such as home composting, delivery to transfer stations or private collections	New	2025	Rates Levy	2.1 3.1

11.2 Infrastructure

Ref	Action	New or Existing	Timeframe	Potential funding source	Goals and Objectives
6	Provide residents with access to transfer stations for waste disposal and drop-off facilities for recycling	Existing	Ongoing	Rates	1.2 2.1 3.1 4.1 4.2
7	Upgrade the functionality of Putāruru Transfer Station to improve recycling and recovery activity. Review the types of material accepted for recovery as new markets develop	New	2024	In LTP for 2023-24	1.2 2.1 2.2 3.1 4.1 4.2
8	Expand the resource recovery services available at Tokoroa Transfer Station. Review the types of material accepted for recovery as new markets develop	New	2026	In LTP for 2024-26	1.2 2.1 2.2 3.1 4.1 4.2
9	Safely manage and monitor all closed landfills to ensure compliance and ongoing environmental protection	Existing	Ongoing	Rates	4.2

11.3 Education and Engagement

Ref	Action	New or Existing	Timeframe	Potential funding source	Goals and Objectives
10	Structured waste minimisation education is made available for schools	New	2025	Levy Rates WMF	1.1
11	Provide community-targeted waste minimisation awareness and behaviour change programs	New	2025	Levy WMF	1.2 4.1
12	Provide and promote an online directory which is comprehensive and practical and includes all services available for diversion within the district, or within the region	Existing	Ongoing	Rates	1.2 2.3 4.1
13	Introduce a targeted campaign to local shops and small businesses to encourage sustainability in all areas of their business	New	2026	Levy Rates WMF	1.2 2.1 4.1
14	Provide practical workshops for households to encourage home composting and worm farming to manage their organic waste	New	2025	Levy Rates WMF	1.2 2.1 4.1

11.4 Data

Ref	Action	New or Existing	Timeframe	Potential funding source	Goals and Objectives
15	Maintain our existing data collection tools to monitor and report on our waste and diversion data, waste related complaints and our KPI's	Existing	Ongoing	Rates	2.1 2.3 3.1
16	Undertake a SWAP audit every 3 years, or before and after significant service changes mandated by central government	Existing	2024	Rates	2.1 2.3 3.1
17	Liaise with other councils, MfE and / or farming industry groups to investigate the extent and nature of farm waste in our district, the methods used for disposal, and the specific waste problems faced by our rural community	New	2026	WMF	2.1 2.2 4.1

11.5 Regulation

Ref	Action	New or Existing	Timeframe	Potential funding source	Goals and Objectives
18	Continue to manage illegal dumping through enforcement and education, using consistent messaging to achieve behaviour change	Existing	Ongoing	Rates	1.2 2.3
19	Support regional and national campaigns to actively reduce littering and illegal dumping	New	2022 Ongoing	Rates	1.2 2.3
20	Support community group clean-ups of litter and illegal dumping	Existing	Ongoing	Rates	1.2 2.3
21	Support procurement processes that focus on waste reduction and address climate change	New	2023 Ongoing	Rates	4.2

11.6 Partnerships

Ref	Action	New or Existing	Timeframe	Potential funding source	Goals and Objectives
22	Support MfE in developing and implementing their waste work program	New	2022 Ongoing	Rates Levy	4.1 4.2
23	Encourage our Iwi community's commitment to waste minimisation through the Para Kore program for 'Zero Waste marae by 2025'	New	2025	Rates	4.1 4.2
24	Encourage community groups and private sector to implement resource recovery activities that will enhance local economic development	New	2028	WMF	1.2 2.2 4.1
25	Implement an annual contestable Waste Grant for community group projects that address waste management and minimisation	New	2025	Levy	1.2 2.2 4.1

Part C –APPENDICES

12 Waste Assessment 2022

Attachment ECM #579489

13 Solid waste and resource recovery contracts

Table 7: Summary of key contracts

Contract	Type of Service	Length	Contract start date
EnviroWaste Services Ltd	Operate transfer stations at Tokoroa and Putāruru	10 years + 5 year right of extension	November 2020
	Haulage and disposal of waste at out-of-district commercial landfill		
	Kerbside collection of rubbish and recycling, and collection from recycling drop-off centres		
	Recycling processing		
MyNoke Ltd	Process mulched greenwaste via vermicomposting	3 years + 3 year right of renewal	September 2021

14 Government waste work programme

Ministry for the Environment (MfE) have a work programme for waste which is focused on accelerating New Zealand's transition from a linear economy, with its take, make, dispose approach to a low-emissions circular economy. Broadly the work programme comprises:

- Setting the direction for waste reduction
 - ✓ Development of a new waste strategy - expected to be in place mid-2022
 - ✓ Looking at issues and options for developing more comprehensive waste regulation to replace the WMA and the Litter Act – expected to go through during 2023
 - ✓ Development of a long-term infrastructure plan – to give a national view of the waste investment New Zealand needs over the next 15 years – in place mid-2022
- Increasing investment in waste reduction initiatives and infrastructure. Currently investing in:
 - ✓ Supporting projects that increase the reuse, recovery and recycling of materials through the WMF
 - ✓ Funding a range of resource recovery infrastructure projects through the Covid-19 Response and Recovery Fund
 - ✓ Investing \$50 million over four years in projects that find ways to use less plastic and make what we do use reusable or recyclable through the Plastics Innovation Fund
 - ✓ Funding regional councils and unitary authorities to remediate contaminated sites on behalf of landowners
- Making system level change
 - ✓ Increasing and expanding the waste levy to provide additional revenue for the promotion and achievement of waste minimisation

- ✓ Standardising kerbside collections to divert more rubbish from landfill, reduce consumer confusion and support higher quality recyclables
- ✓ Investigating a beverage container return scheme to address low recovery rates of beverage containers and high litter rates
- Addressing problems with individual products and materials
 - ✓ Developing end-of-life solutions for six agreed priority products – plastic packaging, tyres, electrical and electronic products, agrichemicals and their containers, refrigerants and farm plastics
 - ✓ Phasing out certain single-use plastic items and hard to recycle plastic packaging
 - ✓ Reducing environmental harm from outdoor storage of tyres
 - ✓ Reducing organic and food waste
 - ✓ Reducing construction and demolition waste
 - ✓ Controlling hazardous substances
- Strengthening compliance, monitoring and enforcement
 - ✓ Strategy for improving compliance, monitoring and enforcement
 - ✓ Improving contaminated land management

15 Government Emissions Reduction Plan

Government have released their first Emissions Reduction Plan. For the waste sector, the Government will make it easier to reduce organic waste and manage it responsibly. Broadly the key actions for waste are:

- Enable households and businesses to reduce organic waste
 - ✓ Encourage behaviour to prevent waste at home
 - ✓ Enable business to reduce food waste
 - ✓ Support participation in improved kerbside collections
- Increase the amount of organic waste diverted from landfill
 - ✓ Improve household kerbside collections of food scraps and garden waste
 - ✓ Invest in organic waste processing and resource recovery infrastructure
 - ✓ Require the separation of organic waste
- Reduce and divert construction and demolition waste to beneficial uses
 - ✓ Support the building and construction sector to minimise waste through research and improved capability
 - ✓ Invest in sorting and processing infrastructure for construction and demolition materials
 - ✓ Enable the separation of construction and demolition materials
- Explore bans or limits to divert more organic waste from landfill
 - ✓ Investigate banning organic waste from landfill by 2030
- Increase the capture of gas from municipal landfills
 - ✓ Regulations will require landfill gas capture at municipal (Class1) landfills
 - ✓ Feasibility studies will determine the need for additional landfill gas capture requirements
- Improve waste data and prioritise a national waste licensing scheme
 - ✓ Develop a waste licensing scheme
 - ✓ Improve information on greenhouse gas emissions from waste disposal