



"Zero waste is a bug and once you catch it, it influences everything you do – what you buy, what you eat, your everyday choices."

Community waste champion

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Front cover: Proactive community engagement is key to Auckland Council's zero-waste vision. Waitākere's Zero Waste Learning Centre helps educate and engage schools to grow a new generation of waste champions.

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Mihi

I te timātatanga ko Te Kore i takea mai ai ko te ao tūroa

e nohoa nei e tātou.

I hua mai i reira

ko Ranginui e tū iho nei,

ko Papatūānuku e takoto ake nei.

Ko te korowai ahurei o te rangi

me te takapau horanui o te whenua

e tāwharau nei i a tāua

i te tangata i te wā o te ora.

Engari, ko tō rāua oranga tonu anō hoki

kei roto i ngā ringaringa o tēnā me tēnā o tātou.

Kāhore he mea i hua ake

i a Papatūānuku

e kore e kōpakina

ki tōna uma i te otinga. He ao para kore tēnei

i tōna orokohanga mai.

Nā tāua, nā te tangata ia i huri

hei tukunga parahanga. Me hoki anō ia i a tātou

hei ao para kore i te mutunga.

E te iwi toko ake rā tātou.

Whītikihia ko te maro Ope Taua

o Papatūānuku,

ko Kaupapa-Rua te tikanga, kimihia he mahi hōu te whai,

ko hangarua te whakamataara,

ko para kore te taumata whakaaro nui.

Tūturu whakamaua kia tina!

Mā wai rā a Papatūānuku e tiaki

mei kore māku, mei kore māu? In the beginning there was The Void

and from it, came the world

that we now inhabit.

From there came

Ranginui, Father Sky who dwells above

and Papatūānuku, Mother Earth here below.

The fine cloak of Heaven

and the outstretched rug of Earth

who have sheltered you and I -

humankind through this life.

Their own survival however,

rests in the hands

of each and every one of us.

There is nothing borne

of the natural world

that doesn't, in the end

return to the bosom of Papatūānuku.

This was a world of zero waste

in the beginning.

We, humankind alone turned it

into a dumping ground.

We must make her

waste-free once more.

So, take a stand as a people.

Let us gird ourselves as Warriors

of the Earth, and assent to

Re-purpose being the plan,

Re-use being the driver,

Recycle being the catch-cry

and zero waste - the bold goal.

Let us set ourselves to the task, till it is done!

Who else will care for Mother Earth

if it isn't me.

and it isn't you?

Foreword - Korero Huaki

Ko te oranga o Ranginui rāua ko Papatūānuku tonu

kei roto i ngā ringaringa o tēnā me tēnā The survival

of Father Sky and Mother Earth rests in the hands

of each and every one of us

As Auckland grows, so too does its waste, particularly from the construction and development sectors. If we keep going as we are, the amount of waste we send to landfill will continue to increase.

We know we **can** do better. We've already met the first target of the first Waste Management and Minimisation Plan 2012 (WMMP). We've reduced household waste by 10 per cent in the years 2010-2016. It's a great start. Now, we need to include commercial waste streams, where around 80 per cent of our waste to landfill comes from.

Doing better with waste is an opportunity: to make the most of the resources we have, create jobs, stimulate innovative design and economic development, and protect our communities and our environment.

This plan sets out to continue the collaborative approach of the first plan, working with communities, businesses, mana whenua and mataawaka. We particularly want to work more closely with business and industry to find ways to reduce commercial waste and divert waste materials into new economic activities.

We treasure this place, and hope that you'll join us in making a difference to its future.

Phil Goff Mayor of Auckland A Zero Waste future for Auckland. That's what we're aiming for, and this plan is another step towards our vision.

This plan outlines how the council and Aucklanders can work together to reduce waste, and generate a host of other benefits along the way. Community Recycling Centres will create jobs; tackling food scraps will help households save money. A container deposit scheme will reduce the burden on councils and ratepayers, and help reduce litter.

By doing the right thing with waste, we'll be a step closer to solving other challenges too. Marine pollution, climate change, and social inequity are all issues where waste is part of the problem, and where Zero Waste can be part of the solution.

We release this plan with strong endorsement for our approach. We have received the national WasteMINZ award for excellence, for our commitment to creating a Resource Recovery Network. And, we have won the international C40 Cities for Climate Change Zero Waste award.

Zero Waste in Auckland is a movement that's growing from the ground up. So many wonderful champions, from community groups to iwi, have made waste minimisation a way of life within our communities. They're committed to the cause, and I'm proud that Auckland Council supports them.

Now, we want to grow the movement to include more businesses and organisations across Tāmaki Makaurau.

As this plan says, waste is everyone's business. I encourage you to get involved and help us work together to deliver the Zero Waste future that Auckland deserves.

Penny Hulse Chair, Environment and Community Committee

1 Executive summary – Whakarāpopototanga Matua

Ko Hangarua te whakamataara.

Ko Para Kore te taumata whakaaro nui.

Re-cycle is the catch-cry.

Zero waste is the bold goal.

This is Auckland Council's second WMMP, setting the direction for waste management and minimisation in Auckland.

It confirms and continues the vision set out in the first plan in 2012: Zero Waste by 2040.

Auckland aspires to be Zero Waste by 2040, taking care of people and the environment, and turning waste into resources.

We want to continue leading on the 20 per cent of waste the council is directly responsible for, and increase our efforts to work with the private sector to address the 80 per cent of waste that is commercially managed.

We want to strengthen our relationships to enable this work to happen, including relationships with waste-producing businesses, the waste minimisation and management industry, mana whenua, mataawaka, and community organisations.

1.1 What we have achieved since 2010: change is possible Ngā mea kua oti i a tātou mai i te tau 2010: ka taea te aha te whakarerekē

- Household waste dropped by 10 per cent from 160kg/person in 2010 to 144kg/person in 2016. Waste from our own administrative offices dropped by 30 per cent.
- We began standardising domestic waste and recycling services to create an
 efficient collection service, and help Aucklanders minimise their waste and reduce
 their waste disposal costs.

 New region-wide services, such as the onsite inorganic collection and Community Recycling Centres, have begun diverting useful materials from landfills. They are also creating jobs, offering training, and connecting people with their communities.

1.2 Where we are: a substantial challenge

Te wāhi kei reira tātou: he whāinga nui tonu

- In 2016, we sent 1.646 million tonnes of domestic and commercial waste to landfill

 that's more than one tonne for every Aucklander.
- Household waste to landfill is dropping, but commercial waste to landfill grew significantly between 2010 and 2016, largely due to a spike in construction and demolition waste. The amount of plastic and organic waste going to landfills has also increased.
- There are significant barriers to doing better, ranging from lack of financial incentives to our rapid population growth.

1.3 Where we want to be in 2040: Zero Waste

Te wāhi e aro ana tātou kia ekeina ā te tau 2040: Para Kore

Zero Waste is about making the most of the resources we have, using them for their highest and best value, and sending nothing to landfill or to incinerators.

In practice, this means:

- waste minimisation is integrated into design, manufacturing, retailing, and consumer choices
- materials are used in ways that preserve value, minimise environmental impacts and conserve natural resources
- products are designed and used according to the waste hierarchy, staying as high on the hierarchy as possible
- some waste can be eliminated before it is even made, by being designed out of products and processes
- resources can be used and reused, through better systems for repurposing and remanufacturing materials into other goods.



It brings economic, social, cultural and environmental benefits.

- Businesses auditing their processes through a Zero Waste lens can drive resource efficiency, innovation and productivity gains.
- Zero Waste can drive changes in household purchasing, cutting expenses as well as waste.
- The amount of recyclable material sent to landfill from domestic and commercial sources in 2016 could instead have generated between \$15 million and \$73 million.¹

Zero Waste is also about embracing Te Ao Māori – aligning with Te Ao Māori and the tradition of kaitiakitanga to sustain and restore our collective resources to enhance the mauri of taonga tuku iho.

¹ Eunomia, August 2017. Estimate of the Value of Auckland's Potentially Recyclable Materials: Prepared for Auckland Council. This is a desktop assessment. It represents gross value (i.e. it doesn't consider the costs of recovery), and excludes materials for which the cost of recovery cannot be met through sale of the materials. Recovery values could be higher than estimated if materials can be recovered earlier in the disposal process.

1.4 How we're going to get there: a step at a time, together Me pēhea tātou e tae atu ki reira: Mā te kotahi tonu te whakatepe i te kō

We'll continue with, and strengthen, the first WMMP's three targets to reduce:

- all waste in the region
- domestic waste collected by council-contracted services the waste we generate in our own, council, operations.

Targets

Total regional waste

Reduce total council- and private-sector-influenced waste to landfill by 30 per cent by 2027 (from the baseline of 832kg to 582 kg per capita per year)

Domestic waste

- a. Reduce domestic kerbside refuse by 30 per cent by 2021 (from 160kg to 110kg per capita per year)
- b. After 2021, reduce domestic kerbside refuse by a further 20 per cent by 2028 (from 110kg to 88kg per capita per year)

Council waste

- a. Reduce council's own in-house office waste by 60 per cent per capita by 2024 (from a 2012 baseline)
- b. Work across council to set a baseline for operational wastes and, by 2019, put in place targets for reduction.

We have the greatest influence over the 20 per cent of waste that we manage, for example, through domestic kerbside collections and the Waitākere Transfer Station. With more direct influence over collection systems, we can really lead the way and show the potential for waste minimisation.

However, most of Auckland's waste is commercially managed, and we have fewer tools to influence behaviour. This means we need to work with industry to promote waste minimisation. We also need new, national policy to drive change such as improvements to, and an increase in, the waste levy, and introducing mandatory product stewardship schemes.

This new WMMP has three goals, supported by nine objectives as shown below.

A. Minimise waste generation

- Advocate for stronger regulatory incentives to reduce waste
 2. Advocate for product stewardship to avoid or reduce waste at source
- Increase individuals' sense of personal responsibility for waste reduction

B. Maximise opportunities for resource recovery

- 4. Develop infrastructure and processes to enable resource recovery
- 5. Identify local economic development opportunities through resource recovery
- 6. Achieve operational efficiencies in Council's domestic waste and recycling services

C. Reduce harm from residual waste

- 7. Restrict organic and other harmful waste going to landfill
- Reduce the incidence of litter and illegal dumping
- Continue to manage residual waste effectively and efficiently while progressively reducing Auckland's reliance on landfills

Currently, the Waste Minimisation Act 2008 places responsibility for waste management and minimisation on the council rather than on the generators of waste. Our challenge is to find the most effective initiatives and ways to achieve a Zero Waste Auckland within budget.

Partnerships with communities, businesses, mana whenua and mataawaka will be critical in reaching our goal.

Using the tools we have, and acting within existing budgets, we've identified nine priorities, as shown in the tables below. The amount budgeted for waste services in the long-term plan remains around the same for the next decade.

As new arrangements for domestic collection services become business as usual, new activities will become possible within the budget. We will be able to reprioritise our internal resources to focus on opportunities for waste minimisation within commercial waste streams.

The two largest items we will deliver are the new kerbside collection service for food scraps, and facilities for the Resource Recovery Network (another seven sites across the region).

The resource recovery infrastructure plan, to be developed as part of implementing this WMMP, may identify the need for further new infrastructure projects to help us to meet our Zero Waste target.

These will need to be externally funded, potentially through MfE's Waste Minimisation Fund and in partnership with the private sector. Alongside this, we expect commercial enterprises will be investing in developing new resource recovery infrastructure, for example to handle construction and demolition waste (C&D).

The plan sets out detailed actions to achieve these priorities and more.

Targets Actions 1. Advocate for an increased waste levy 2. Advocate for product stewardship 3. Address three priority commercial waste streams: a. C&D waste Total regional b. Organic waste waste c. Plastic waste 9. Work in 4. Continue establishing the Resource Recovery partnership Network with others 5. Focus on reducing litter, illegal dumping and marine to achieve waste a Zero Waste 6. Continue to transition to consistent kerbside waste Auckland **Domestic** and recycling services waste 7. Deliver the domestic kerbside food waste collection Council 8. Address waste diversion from the council's own waste operational activities

Pr	iority action	What we will do	The result we want to see by 2024
1.	Advocate for an increased waste levy	Work with other councils and industry to advocate strongly to central government for an increase in the waste levy and a review of the waste levy structure.	Stronger financial incentives make resource recovery preferred ahead of landfilling.
2.	Advocate for product stewardship	Advocate for a mandatory, nationwide container deposit scheme for beverage containers and schemes for other products such as e-waste, tyres and batteries. Support voluntary initiatives.	Responsibility for end-of-life disposal moves from ratepayers to producers and consumers. Incentives for products to be designed for reuse and recycling.
3.	Address three priority commercial waste streams (construction and demolition, organic and	Lead by example with council construction and demolition waste. Partner with industry to identify alternatives to landfill for these waste streams.	A 30 per cent reduction in total waste to landfill by 2027.

	plastic waste)		
4.	Continue establishing the Resource Recovery Network	Establish 12 Community Recycling Centres and the Waitākere Resource Recovery Park. Develop a long-term resource recovery infrastructure plan.	A network of thriving community hubs is in place across Auckland, supporting waste minimisation.
5.	Focus on reducing litter, illegal dumping and marine waste	Coordinate prevention efforts across the council group. Work with communities and other stakeholders to develop local solutions for hot-spot areas. Investigate options to improve enforcement activities.	People take responsibility for their waste in public places, and the environment is cleaner and tidier.
6.	Continue transitioning to consistent kerbside waste and recycling services	We will deliver these services to households across Auckland*: pay-as-you-throw refuse collection, (weekly, changing to fortnightly over time) recycling collection (fortnightly) collection of food scraps for urban areas (weekly) inorganic collection (annually) *With some variation to account for local conditions	Households make full use of services to minimise their waste and reduce their disposal costs.
7.	Deliver the domestic kerbside collection of food scraps	Progressively introduce to urban areas, starting in Papakura. Rollout complete by 2021.	Urban households are managing food scraps and refuse costs by using the service. Some are motivated to reduce the food waste they generate, and to compost at home.
8.	Address waste diversion from our own operations	Extend the target for waste reduction in our administrative offices from 30 per cent to 60 per cent. Categorise and quantify our operational waste, and establish appropriate targets for reduction.	We lead by example, with better knowledge of waste generated across our operations, and plans in place to significantly reduce waste to landfill.
9.	Partner with others to achieve a Zero Waste Auckland	Continue the range of community- led, council-supported programmes. Work with the business sector to reduce and divert commercial waste streams.	Communities, businesses, mana whenua and mataawaka are engaged in finding solutions to reduce Auckland's waste.

2 Introduction- Kupu whakataki

What's in this chapter

- The true cost of waste
- The barriers we face in Auckland
- Purpose of this plan.

2.1 The true cost of waste – Ko te utu tūturu o te tuku para

Waste is everyone's business. We all have an impact on the amount of waste we generate, and on where that waste ends up.

Every tonne of waste that is landfilled comes at a cost. We currently spend around \$113 million per year on domestic waste services, including refuse, recycling and inorganic collection. We spend another \$5 million to \$8 million each year looking after old landfills. This is the visible cost to you, paid through a combination of disposer-pays, targeted and general rates, and waste levy funding.

However, our waste is like an iceberg – many more costs are hidden below the surface, affecting the economy, the environment and our communities (see figure 1).



Figure 1 The waste iceberg

2.2 The barriers we face in Auckland – Ngā aukatinga kei mua i a tātou i Tāmaki Makaurau

The council faces significant barriers to doing better with waste in Auckland, including:

- lack of financial incentives to divert waste from landfill, including an effective waste levy and product stewardship schemes like a container deposit scheme
- the low cost of landfilling compared to diversion costs
- direct influence over only 20 per cent of waste generated in Auckland, and very limited influence over the 80 per cent waste that is commercially managed²
- rapid population growth, meaning more construction and demolition, and more consumer waste.

2.3 Purpose of this plan – Te take mō te Mahere

This plan contains an approach to manage and minimise all our waste, whether it is collected by the council or by commercial waste companies. It outlines how we plan to achieve effective, efficient waste management and minimisation. It also provides the funding rationale for waste services and for where funding from the waste levy will be spent.

The first Auckland WMMP in 2012 focused on integrating the seven different local council services into one cost-effective, region-wide system for collecting household refuse and recycling. That system is well underway, so this WMMP takes a wider look – to waste that is commercially managed.

Through this plan, we want to recognise and support waste minimisation efforts in other sectors and to build the relationships to enable this work to happen. This includes relationships with waste-producing businesses, the waste minimisation and management industry, mana whenua, mataawaka and community organisations.

² In this plan, we refer to 'the 20 per cent' of waste that is managed by council, and 'the 80 per cent' that is commercially managed. These numbers are broad allocations, a useful way of visualising the scale of the waste challenge that we face in Auckland – the exact proportion of waste in each category will shift from year to year.

3 Vision – Te Tirohanga Whānui

He ao para kore tēnei i tōna orokohanga mai.

Me hoki anō ia i a tātou hei ao para kore i te mutunga.

This was a world of zero waste in the beginning.

We must make her waste-free once more.

What's in this chapter

- Our vision
- Is Zero Waste possible?
- Linear versus circular economies
- Te Ao Māori

3.1 Our vision – Tō mātou tirohanga whānui

Auckland aspires to be Zero Waste by 2040, taking care of people and the environment, and turning waste into resources.

Zero Waste is about making the most of the resources we have, using them for their highest and best value, and sending nothing to landfill or to incinerators. What is currently considered waste is redefined as a valuable resource that can be used again.

Here's the internationally accepted definition:

"Zero Waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use.

Zero Waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them.

Implementing Zero Waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health."

Zero Waste Initiative Alliance

In practice, this means:

- waste minimisation is integrated into design, manufacturing, retailing, and consumer choices (see figure 2)
- materials are used in ways that preserve value, minimise environmental impacts and conserve natural resources
- products are designed and used according to the waste reduction hierarchy, staying as high on the hierarchy as possible (see figure 3)
- some waste can be eliminated before it is even made, by being designed out of products and processes
- resources can be used and reused, through better systems for repurposing and remanufacturing materials into other goods.



Figure 2 Zero waste in practice

3.2 Is Zero Waste possible in Auckland? Ka taea rānei te noho para kore i Tāmaki Makaurau?

It's not yet technically or economically feasible to divert all materials from landfill. There is no viable method for reusing or recycling many of the products in use today, and the products that will replace them haven't yet been invented.

However, Zero Waste has been widely adopted around the world:3

San Francisco is seeking to be Zero Waste by 2020. Since starting the
programme in 2002, they achieved 80 per cent diversion from landfill by 2014 (60
per cent from households). 4 Having an ambitious target has encouraged the city
to innovate beyond business as usual.

³ The Network of European Zero Waste Municipalities has 364 members. Major cities in the US with Zero Waste goals include New York, Los Angeles, San Diego, Minneapolis, Oakland, Washington D.C., Seattle, San Francisco, Austin, and Dallas.

⁴ SLR Consultants March 2017. Waste Management Options Review and Modelling – Executive Summary Review for Auckland Council.

 South Australia has enjoyed significant economic benefits from its adoption of zero waste policies. Over a decade, their Zero Waste Industry Program has returned a net benefit of around AU\$7.8 million. For every dollar the State

Government invested in resource efficiency, industry received AU\$6.70 in direct cost savings. ⁵

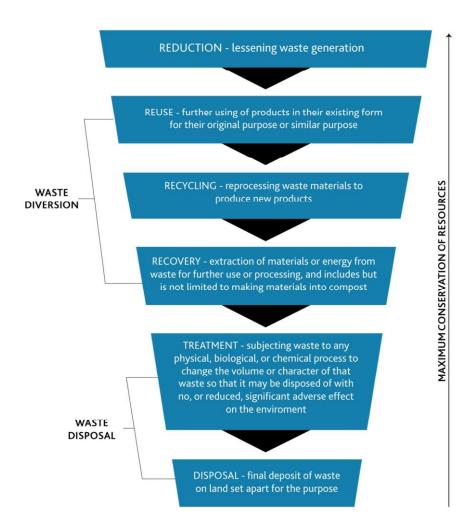


Figure 3 The waste hierarchy

⁵ Green Industries SA, 2017. *Benefits of a Circular Economy in South Australia*. Adelaide: Government of South Australia.

We can do a lot to move towards Zero Waste right now. Much of what ends up in landfill today could be usefully diverted and repurposed. High-level estimates of the value of recyclable materials currently going to landfill suggest that, in 2016, Aucklanders threw away between \$15 million and \$73 million of recyclable materials.⁶

Turning waste into commodities and resources

Zero Waste doesn't mean the end of the waste industry. Rather, it means their services will change. Increasingly, waste businesses will become commodity and resource businesses skilled at redirecting materials to their next productive use.

Internationally, many companies are redesigning their processes and repurposing their waste in sectors as diverse as farming, fashion, computing and car manufacturing. Similar opportunities exist here. For example, shifting from landfilling to diverting materials would create new jobs. The *Wasted Opportunity*⁷ report says increasing the waste levy could generate up to 9000 new jobs per year. It could even be more if the infrastructure to reprocess materials were built here, rather than having most materials exported, as happens now.

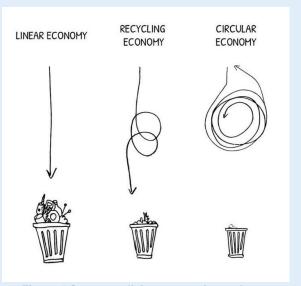


Figure 4 Conceptualising economies and waste Source: Pierre-François Kaltenbach

3.3 Linear vs circular economies – He ohanga takahanga ara kotahi he ohanga tahuri noa rāne

One way to think about Zero Waste is to look at how materials are used in the economy. Most goods go through a linear process: make, use, dispose. A lot of time and money goes into making products, but the 'use' stage can be surprisingly short given how much energy and materials they take – think disposable coffee cups, mobile phones, cheap clothing, or bottled water. Then, goods are disposed of, usually to landfill. There may be recycling, but it is often inefficient, with less than five per cent of the value of the original materials being retrieved.⁸

⁶ Eunomia, August 2017. Estimate of the Value of Auckland's Potentially Recyclable Materials: Prepared for Auckland Council. This is a desktop assessment. It represents gross value (i.e. it does not take into account the costs of recovery), and excludes materials for which the cost of recovery cannot be met through sale of the materials. Recovery values could be higher than estimated if materials are able to be recovered earlier in the disposal process.

⁷ A Wasted Opportunity: Using the Waste Disposal Levy to Create Economic and Environmental Advantage for Aotearoa New Zealand. Eunomia, June 2017.

⁸ McKinsey Center for Business and Environment, October 2016. The Circular Economy: Moving from theory to practice

There is another way – the circular economy. This aims to make the best use of resources, with products that are made to last and "made to be made again" (see figures 4 and 5).

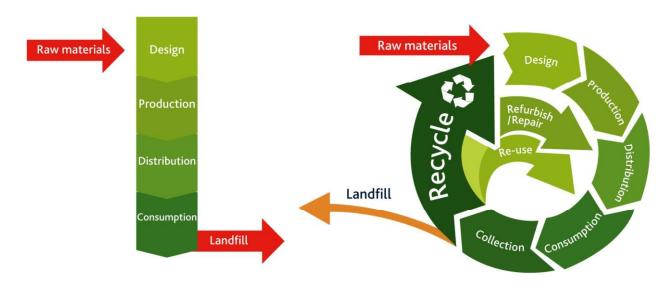


Figure 5 Linear vs circular economies

3.4 Te Ao Māori – The Māori world

I te tīmatatanga ko Te Kore i takea mai ai ko te ao tūroa e nohoa nei e tātou.
I hua mai i reira ko Ranginui e tū iho nei, ko Papatūānuku e takoto ake nei.
In the beginning there was The Void, and from it came the world that we now inhabit.
From there came Father Sky who dwells above and Mother Earth here below

We can bring another dimension to Zero Waste, by aligning with Te Ao Māori and the tradition of kaitiakitanga – the active obligation to sustain and restore our collective resources to enhance the mauri of taonga tuku iho.

Māori creation narratives vary but have consistent key themes. For Auckland's mana whenua, creation of the tangible world stems from Te Kore (The Void). It precedes Papatūānuku (Mother Earth) and Ranginui (Father Sky) our primeval parents, whose children separated them, bringing forth the world of light. Their children, or atua had influence over specific domains (e.g. the winds, the forest, plants, and the sea) and the creation of elements within each domain including humankind.

These stories of the origin of the universe reinforce the relationship between people and the environment. For Auckland's whānau, hapū and iwi, they have a specific kaitiakitanga role and obligation to people, the environment, and the next generation, ensuring cultural knowledge and practices continue.

Traditionally, a closed loop waste system returned all toenga (remains/leftovers) back to Papatūānuku, without detriment to the whenua, awa (waterways), or moana (ocean). Tikanga (practices) determined appropriate mechanisms to manage this system. For example, human organic matter was not mixed with toenga kai and other compostable materials. The contemporary concept of para kore (zero waste) is a customary practice that brings mātauranga Māori (Māori knowledge and expertise) and tikanga into the sustainable waste management sector. It recognises the extrinsic costs of waste on the aquatic and terrestrial environments, and who will inherit these costs.

Long-term behavioural change is required to protect Papatūānuku, Tāne and Tangaroa. Recognising the kaitiaki obligations of mana whenua and the atawhai (kindness and generosity) obligations of all Māori and Aucklanders to Tāmaki Makaurau is necessary for change.

Incorporating mātauranga and tikanga Māori into solutions and decision-making by partnering with whānau, hapū, iwi, and communities will create change and facilitate the transfer of knowledge and actions to and for future generations.

4 Context - Horopaki

What's in this chapter

- Scope of this plan
- Legislation
- Relevant local plans, policies and bylaws

4.1 Scope of this plan – Te korahi o te whakatauira WMMP

This WMMP is the product of a six-yearly statutory review process, with a long-term view to 2040. It maintains the strategic direction set in the first WMMP, within the same budget envelope.

It covers all waste and diverted materials within Auckland, including materials managed by the council and by the private waste industry.

All solid, liquid and gaseous wastes that are contained for disposal to landfill, or diverted to cleanfill, managed fill or other treatment and/or resource recovery operation are considered to fall within the scope of this plan.

Liquid and gaseous wastes that are directly emitted to the air, land or water are dealt with by the RMA and are addressed by other council strategies and plans (e.g. wastewater).

The WMMP is a standalone document, but is part of a much wider waste programme that includes:

- 1. Auckland's Waste Assessment 2017: This document:
 - reviews progress against the 2012 WMMP
 - reassesses future demands for collection, recycling, recovery, treatment, and disposal services across Auckland
 - reconfirms goals, objectives and targets to support the vision of Zero Waste to landfill by 2040
 - develops and assesses options to meet future demand and achieve desired outcomes for waste minimisation
 - reviews options for waste management and minimisation against other Auckland Council objectives, such as reducing carbon and increasing resilience. It is attached as Appendix One.
- 2. Tīkapa Moana Hauraki Gulf Islands Waste Plan (see below). The plan is attached as Appendix Two.

The Hauraki Gulf Islands

In recognition of the unique nature of the Hauraki Gulf Islands, the council has created the Tīkapa-Moana Hauraki Gulf Islands Waste Plan, a specific waste plan reflecting the aspirations of the island communities and mana whenua. This is attached as Appendix Two.

We provide waste services to four islands – Waiheke, Aotea Great Barrier, Rakino and Kawau. Their isolation and the expense of shipping materials off island for disposal or recycling make waste services much more expensive than on the mainland. This cost is currently subsidised from region-wide rates funding, with the intent to reduce the subsidy over time.

The islands waste plan outlines a practical approach to how waste management on the Hauraki Gulf Islands can support the goal of Zero Waste. It addresses household and business refuse and recycling, food waste and green waste, C&D materials, inorganic material and household items, and marine and boat user refuse and recycling.

It guides the strategic direction for managing refuse transfer stations, landfills, and resource recovery centres. It also has strong focus on encouraging behaviour change, supporting waste minimisation education, and fostering innovative solutions.

4.2 Legislation – Mana ā-ture

We are required to prepare a WMMP under the Waste Minimisation Act 2008 (WMA), as part of our responsibility to promote effective and efficient waste management. The Act encourages waste minimisation and a decrease in waste disposal to:

- protect the environment from harm
- provide environmental, social, economic and cultural benefits.

In preparing this plan, we considered the New Zealand Waste Strategy 2010 and the following legislation:

- Local Government Act 2002 (LGA)
- Local Government (Auckland) Amendment Act 2004
- Resource Management Act 1991
- Climate Change Response Act 2002
- Biosecurity Act 1993
- Civil Defence Emergency Management Act 2002
- Hazardous Substances and New Organisms Act 1996
- Health Act 1956
- Health and Safety at Work Act 2015

Litter Act 1979

The plan has been designed to meet the requirements of the Waste Minimisation Act 2008 and the Local Government Act 2002 in particular, by including all practicable options to achieve the council's waste minimisation objectives, and ensuring actions are cost-effective, efficient and appropriate to present and anticipated future circumstances. Acknowledging fiscal constraints, the focus of this plan is to do the best that is possible with the available funding. This will allow us to be ready and responsive when new technology and solutions emerge.

We have paid particular attention to section 17A of the Local Government Act. This requires the council to review the cost-effectiveness of current arrangements for meeting the needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions.

A review of waste services was undertaken in the lead up to the release of the draft plan, to review strategic opportunities to improve value for money in the council's operations. The findings of the review align with the WMMP's strategic direction, and make some recommendations to improve processes for implementation. Due to statutory timelines under the Waste Minimisation Act, a number of the review's recommendations were not concluded before this plan was adopted. They will continue to inform the implementation of actions in the plan.

See the Waste Assessment 2017 for further discussion of the impact of legislation on the planning and delivery of waste services.

Te Tiriti o Waitangi / The Treaty of Waitangi

Te Tiriti is our country's founding document. It is an agreement between Māori and the Crown, and recognises the unique and special place of Māori as tangata whenua.

The Treaty is an exchange of promises. Rangatira (chiefs) agreed to a relationship where they would share power and authority with the Governor (now the Crown), within different spheres of influence. In return rangatira were promised they would retain authority over their hapū and territories.

There are key differences between the Māori and English text of the Treaty. Today its principles bridge the difference between the two texts and allow the Treaty to adapt to future circumstances. They are are the core concepts that underpin both texts of the Treaty.

This foundation of the Treaty is especially relevant to Auckland which has the largest Maori population in New Zealand. Nineteen iwi are represented in Auckland and many mataawaka call Auckland home. There are various statutory obligations requiring the Auckland Council to consider the Treaty principles and enable Māori participation in decision-making, in recognition of the Treaty guarantee of tino rangatiratanga (chieftainship – authority over hapū and territories).

4.3 Policy – Kaupapa here

The following local plans, policies and bylaws are also relevant to this plan:

- The Auckland Plan 2012
- Auckland Unitary Plan
- Low Carbon Auckland
- · Auckland Growing Greener
- Thriving Communities
- Auckland Civil Defence and Emergency Management Group Plan 2016 2021
- Solid Waste Bylaw 2012
- Revenue and Financing Policy 2017
- Iwi management plans.

5 Guiding principles – Ngā Mātāpono Ārahi

What's in this chapter

- · Our guiding principles
- Māori priorities

5.1 Our guiding principles – Ō mātou mātāpono ārahi

Work together

- Recognising that communities, mana whenua, mataawaka, industry and other stakeholders need to understand and be involved in developing solutions.
- Promoting waste reduction behaviour by engaging the community through direct involvement, education and community-based programmes.
- Recognising the interdependence between the WMMP and other council policies, bylaws, plans and programmes.

Value Te Ao Māori

- Recognising the shared aspirations of mana whenua and mataawaka, their unique roles and responsibilities that they play.
- Ensuring the teachings of Te Ao Māori underpin and inform waste management decisions.

Be sustainable

- Applying the internationally recognised waste hierarchy, moving as far up the hierarchy as possible.
- Recognising kaitiakitanga, which takes an integrated view of the environment and the relationship between all things.
- Considering the social, cultural, environmental and economic impacts of waste decisions.
- Supporting improving energy efficiency and reducing greenhouse gas emissions.
- Ensuring that our short-term waste management decisions enhance our long-term prospects and aspirations to be a Zero Waste city.
- Building our resilience to changing local and global conditions.

Act fairly

- Ensuring that wherever possible, the generator of waste should be responsible for paying the true cost of managing waste, thereby encouraging waste reduction.
- Considering the needs of different groups in the community, and providing support so that all Aucklanders can participate equally, for example to ensure an equitable transition to new services.

Make the best use of every dollar spent, and be affordable

- Aiming to deliver the most cost effective and efficient solutions to meet the requirements of the Waste Minimisation Act 2008 and the NZ Waste Strategy while maximising waste diversion and minimising costs to ratepayers.
- Making it possible for households to reduce the cost of their waste disposal through use of rates funded recycling and diversion services.
- Promoting innovation and lateral thinking to solve intractable waste problems.
- Using waste to generate business opportunities and community benefits.

Check progress and adapt to improve

- Collecting accurate data to enable sound decision-making.
- Monitoring and evaluating waste initiatives and reporting annually to measure progress and allow for continuous improvement.

5.2 Māori priorities - Ngā kaupapa Māori matua

The following were identified as priority actions by mana whenua and mataawaka through engagement on this plan or drawn from iwi management plans. They have been aligned to

five values identified in Te Kōhao o te Ngira⁹ and applied in the context of Auckland Council's Waste Management and Minimisation Plan.

Rangatiratanga

Exercising self-determination

- Partners in decisions over management, use and protection of taonga.
- Mana whenua pūrākau (narratives) and practices are supported and resourced at a local level.
- Support mana whenua capacity and development of social enterprise aspirations in resource recovery and waste management programmes.
- Develop mataawaka social enterprise aspirations in resource recovery and waste management programmes.
- Ensure iwi have an active role in waste minimisation and management as informed by iwi management plans.

Kaitiakitanga

Our active obligation to sustain and restore our collective resources and taonga tuku iho.

- Ensure that resource use and waste management occurs in a manner consistent with Te Ao Māori.
- Protection of Papatūānuku; no new landfills, reduce the harm of hazardous waste and old and existing landfills.
- Advocate to central government to increase of the waste levy.
- Advocate for product stewardship and producer responsibility to central government.
- Protect waterways and ecology which receive waste and waste water.

Kotahitanga

Unity through partnership to protect taonga.

- Develop respectful and innovative partnerships for waste minimisation in order to restore the mauri of Papatūānuku.
- Incorporate mātauranga and tikanga Māori into community awareness programmes on sustainable waste minimisation and management practices.

Manaakitanga

Nurturing relationships, looking after both people and taonga and taiao and fostering mutual respect.

⁹ Te Kōhao o te Ngira is a draft mana whenua framework to guide decision-makers in the Auckland Region. It was prepared in 2007, as a response to the Long Term Sustainability Framework for the Auckland Region.

- Nurture, care and respect for cultural and natural heritage values in waste minimisation and management practices with regard to wāhi tapu, sacred areas, sites of significance and customs.
- Ensure the recognition of freshwater, geothermal resources, land, air, coastal resources in waste minimisation and resource management.

Whanaungatanga

The power that comes from relationships that galvanise people to action through shared activities and values.

• Develop vibrant Para Kore generations and communities by passing on tūpuna korero, knowledge and actions.

Valuing Te Ao Māori to manage and minimise waste

Para Kore ki Tāmaki is a Māori programme that integrates mātauranga Māori and Zero Waste principles and practice. Based on the concept of kaitiakitanga its success stems from a direct connection to the aspirations of whānau, hapū, iwi, and hapori Māori.

Ngāti Whātua Ōrākei have a long-standing commitment to Zero Waste. In 2013, Auckland Council partnered with them to work alongside marae across Tāmaki Makaurau to identify the most effective way of diverting para (waste) from Papatūānuku. For example, resources from the kāuta (kitchen) were used to close the loop enabling a return to traditional ways of gardening and the keeping of chickens and pigs.

The long-standing leadership of Ngāti Whātua o Ōrākei in promoting a Zero Waste kaupapa in Auckland, and the nationally established Para Kore Marae Incorporated programme, were starting points for us to engage with mana whenua and mataawaka. This engagement led to a highly successful Māori-developed and implemented approach for Zero Waste in the region – Para Kore ki Tāmaki.

By respecting cultural knowledge and whakaakoranga a ngā tūpuna (ancestral teachings) significant quantities of recycling and organic waste were diverted from landfill. Marae and Māori communities embraced the programme and reached out to Kōhanga Reo and Kura Kaupapa Māori.

6 The current situation – Te tūāhua ināia tonu nei

Ko Kaupapa-rua te tikanga,

Kimihia he Mahi Hōu te whai,

Ko Hangarua te whakamataara.

Ko Para Kore te taumata whakaaro nui

Re-purpose is the plan,

Re-use is the driver,

Re-cycle is the catch-cry.

Zero Waste – the bold goal

What's in this chapter

- Setting course for a Zero Waste
 Cleanfill and managed fill Auckland
- Waste services and infrastructure
- Waste to landfill
- Implementation of the first WMMP Recycling and diversion

6.1 Setting course for a Zero Waste Auckland – Te whakatau ara mō te Tāmaki Makaurau Para Kore

We need to understand more about where we're at – our current state – before we can make progress towards our Zero Waste vision and targets. The information contained in this chapter is drawn from the Waste Assessment 2017, carried out to review progress against the 2012 WMMP, reassess future demand for services, and identify options for the future. More detailed background is available in the Waste Assessment, included as Appendix One.

6.2 Waste to landfill – Mai i te para ki te papa purunga whenua

In 2016, Aucklanders sent 1.646 million tonnes of waste to landfill. Around 14 per cent came from household kerbside collections, and 86 per cent from commercial and other activities. That's over one tonne of rubbish for every Aucklander.

Those 1.646 million tonnes of waste would cover Eden Park to the height of one and half Sky Towers.

A growing challenge

Forty per cent more waste was sent to landfill in 2016 than in 2010 when Auckland Council was amalgamated. Population growth and our building boom have contributed to significantly more construction and demolition waste, with much greater quantities of rubble, concrete and other building materials going to landfill.

There have also been notable increases in the amount of organic waste and plastics being landfilled.

Much of this waste could potentially be diverted to other uses. Rubble and concrete could be reused in infrastructure projects, more plastics could be recycled, and organic waste could be turned into compost or energy.

As our population grows, we expect rates of waste to landfill to continue increasing, unless we decouple waste generation from population and economic growth (see figure 6).

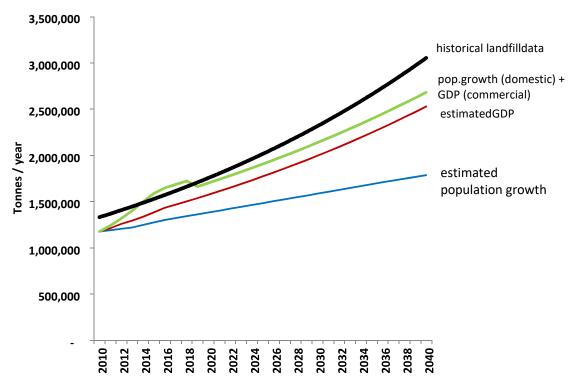


Figure 6 Auckland regional waste to landfill projections



Domestic waste is slimming down

Fourteen per cent of the total waste to landfill in 2016 came from the weekly household kerbside collections. That has decreased from 160kg per person in 2010 to 144kg per person in 2016.

The proportion of recyclables (e.g. bottles, cans, cardboard) in household refuse has decreased, but the amount of food waste has increased. In 2016, we collected around 130,000 tonnes of organic waste (mostly food waste) in household rubbish that could have been usefully diverted to other purposes.

Figure 7 Contents of the average household rubbish bin

In fact, waste audits suggest that around 65 per cent (by weight) of what is being put into household rubbish bin could be diverted into productive uses, such as composting and recycling (see figure 7). That's a potential 93 kg per year for each Aucklander.

A note on data

We follow the Ministry for the Environment's Solid Waste Analysis Protocol (SWAP) to understand what types of waste are going to landfill. This is based on sorting and weighing a representative sample of incoming waste. Each sub-sample is weighed unsorted, then manually sorted into categories and weighed again. Weights of each category are measured against the total sample weight to build into percentage proportions.

Although the data presented here is the best available at the current time, there are some limitations to its accuracy and detail because:

- · we don't manage all waste facilities in Auckland
- there are issues of commercial confidentiality for private sector operators
- there are historical differences in the way data has been collected in different parts of Auckland.

Where full data is not available, best estimates have been developed. Data collection efforts will continue to improve with the development of the National Waste Data Framework. For further discussion of data sources, methodologies and limitations, see the Waste Assessment 2017.

Greenhouse gas emissions could be reduced

Organic waste in landfills releases methane, a greenhouse gas 28 times more damaging than carbon dioxide. Auckland Council's Low Carbon Action Plan sets out to reduce greenhouse gas emissions in Auckland by 40 per cent by 2040 (against a 2006 baseline).

Although the large landfills that receive Auckland's waste use gas capture systems, we estimate they still emit 367,000 tonnes of carbon dioxide equivalents per year. ¹⁰ In 2015, around 3.3 per cent of our total emissions came from waste. This does not include the emissions generated from collecting and transporting waste to landfills.

While not as significant as emissions from transport, emissions from waste in landfill are relatively easy for us to address through simple changes to our waste practices. The composition of waste to landfill is a key issue, with organics and timber having a disproportionate effect on carbon emissions.

How do we measure up?

Figure 8 shows that Auckland produces more total waste per capita than other New Zealand cities (including commercial waste), but less domestic waste than most.

Christchurch City leads the table for domestic waste efficiency and offers a kerbside organic collection service. As the largest economic centre, our total waste to landfill is correspondingly higher.

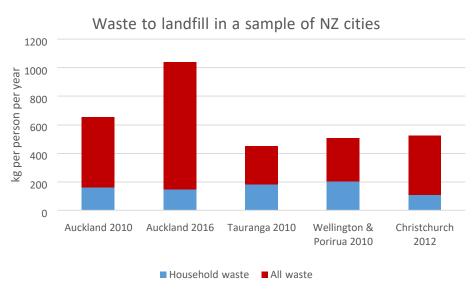


Figure 8 Comparing Auckland's waste to landfill with other NZ cities

¹⁰ For all waste to landfill. There are varying views on the rates of emissions, this estimate is based on Ministry for the Environment greenhouse gas reporting guidelines which are themselves based on 2006 IPCC guidelines. Calculations use individual landfill composition (where available). R factor (emission /gas capture) based on UK-DEFRA landfill performance review. For analytical purposes, all gases are converted to 'CO2-equivalents.' The greenhouse gas effect of one unit of methane is equal to 28 units of carbon dioxide.

Comparing with leading international Internationally, many cities have set cities: household waste diverted ambitious zero waste targets. High from landfill performing cities comparable to Auckland – Vancouverincluding San Francisco, Vancouver and Adelaide Adelaide – show common success factors, including targeting organic waste as a priority and having the council in a direct service provision role. All have achieved considerably higher rates Auckland of diverting household waste from landfill San Francisco (see figure 9). There is scope for us to continue to improve.

Figure 9 Household waste diverted from landfill in exemplar cities Source: SLR, 2017

6.3 Recycling and diversion – Te hangarua me te ahunga autaki

Industry is converting waste to resources

Auckland has a sizeable resource recovery industry, diverting and repurposing commercial waste materials for other uses. The industry tends to be organised around different materials such as concrete, metals or organic waste. Around 1.4 million tonnes were diverted from landfill in 2016. This is an example of the potential for the circular economy.

Turning waste into wealth

Here are just a few examples of industry's smart, innovative, and productive uses of waste:

- OI Glass recycles old glass into new.
- The Envirocon product stewardship scheme collects surplus concrete from construction jobs before it sets and makes it into useful products.
- Green Gorilla processes scrap plasterboard as gypsum for soil conditioning.
- Green Vision and Atlas crush concrete for use as a substitute for aggregate.
- Kalista takes construction and demolition waste and diverts it to new uses.
- Visy takes the recycling from kerbside collections and sell the materials into local and international markets to be made into new products.
- We Compost collects food scraps from commercial premises and converts it to compost.

Kerbside recycling is effective

Our kerbside recycling service collected over 130,000 tonnes of material in 2016. Threequarters of this material (by weight) was paper and glass (see figure 10). The recycling was delivered to the Visy Materials Recovery Facility (MRF) for sorting and onselling on domestic and international markets.

One note of concern is the increasing rate of contamination – items that can't be recycled going into recycling bins. This includes polystyrene and plastic bags which can jam MRF machinery. The contamination rate increased from 5 per cent in 2011 to 12 per cent in 2016, due in part to increased quality standards for recyclable materials. While 12 per cent is comparable to MRFs internationally, we believe we need to do better.

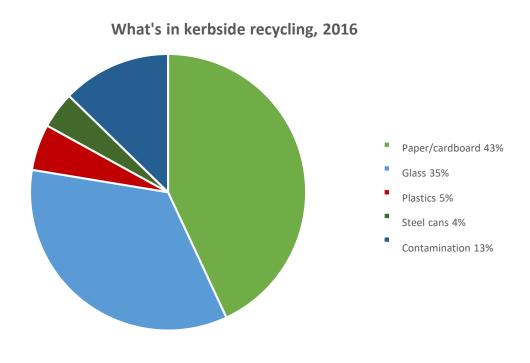


Figure 10 Composition of kerbside recycling

Inorganic collections have changed for the better

The first major change to services under the WMMP was the inorganic collection. The mix of kerbside and on-site inorganic collections around Auckland have been replaced with a booked service that comes to remove items directly from people's properties.

This allows useful goods to be diverted to community groups for reuse, and recyclable materials like metals to be diverted from landfill. We work with Waste Management Ltd

and the Community Recycling Network (now the Zero Waste Network) to deliver the inorganic service – a great example of partnership in action.

The on-site service also eliminates the problems with the previous kerbside services – unsightly mess on roadsides, health and safety issues for collectors and the public, and damage to reusable items through scavenging and bad weather. There were also frequent

cases of people taking advantage of the system by dumping their unwanted household and commercial waste wherever the inorganic collection was underway.

In 2014, when a variety of services were in place across Auckland, 27,000 tonnes of inorganic waste were collected from kerbsides and sent to landfill. In 2016, the new inorganic collection sent 6000 tonnes to landfill and diverted 2000 tonnes to other uses. User surveys of the new service have reported 87 per cent satisfaction levels.

6.4 Cleanfill and managed fill - Purunga ōpapa, āta purunga

A second life for used goods

Thanks to the inorganic collection service, over 100 community groups are making good use of items people no longer want in their homes. When items are in good condition, or in need of minor repairs only, we send them to a warehouse to be passed on to charities like the Red Cross, Habitat for Humanity, and a growing number of small community organisations creating wealth from waste.

This is the *reuse* tier of the waste hierarchy in action – finding new purposes for old goods. Whether it's building new bikes from old parts, furnishing homes, or fixing old washing machines, community entrepreneurs are finding value in waste.

As Auckland's Resource Recovery Network grows, there will be more community recycling centres, closer to your home, where you can drop off goods and find a bargain.

Cleanfill is a type of landfill that accepts only materials that, when buried, have no adverse effect on people or the environment, such as soil and rubble. A managed fill is one that accepts soil-type materials with low levels of contamination.

We have only limited data about the amount of material being deposited in these sites. Best estimates suggest the amount of fill deposited has increased, from 1.79 million tonnes in 2010, to 2.36 tonnes in 2016. This is consistent with the increase in construction and demolition waste.

Much of the cleanfill that is diverted goes to useful purposes, such as remediating land for future development. As the fill is largely inert, people's main concerns relate mostly to

truck movements. Due to the contamination aspects associated with managed fill, this material is less likely to be diverted for other uses.

One of our priorities is to review licensing of these fill sites, and to work with industry to promote diversion and appropriate disposal. While cleanfills and managed fills are an important part of the waste system, their tonnages are not included in the figures presented here, which focus on the waste that is sent to landfill.

6.5 Waste services and infrastructure in Auckland – Ngā ratonga tuku para me ngā kaupapa whakahaere o Tāmaki Makaurau

A fragmented service sector

Waste services are highly fragmented in Auckland, with large commercial enterprises, small-scale operators, and Auckland Council all contributing to management and minimisation efforts.

In general, Aucklanders receive quality services from waste service providers. There are encouraging signs the industry is responding to market signals, and shifting towards a stronger emphasis on resource recovery activities. Since the last WMMP, the commercial sector has invested in new construction and demolition plants, organic material processing facilities and new collection services.

Waste facilities that provide services to Auckland (see figure 11) include:

- five landfills three in Auckland (Redvale, Whitford and Claris), one in Northland (Purewa) and one in the Waikato (Hampton Downs)
- approximately 100 consented cleanfills and managed fills
- fourteen transfer stations nine privately owned and operated, one council-owned and operated (Waitakere), and four council-owned, privately-operated (Waiheke, Great Barrier, Warkworth and Wellsford)
- five council-owned, community-run Community Recycling Centres
- 21 privately-owned diverted materials facilities handling materials such as steel, glass, paper, timber and tyres
- three Materials Recovery Facilities handling recyclable materials from kerbside collections and some construction and demolition waste
- eight organic waste treatment facilities.

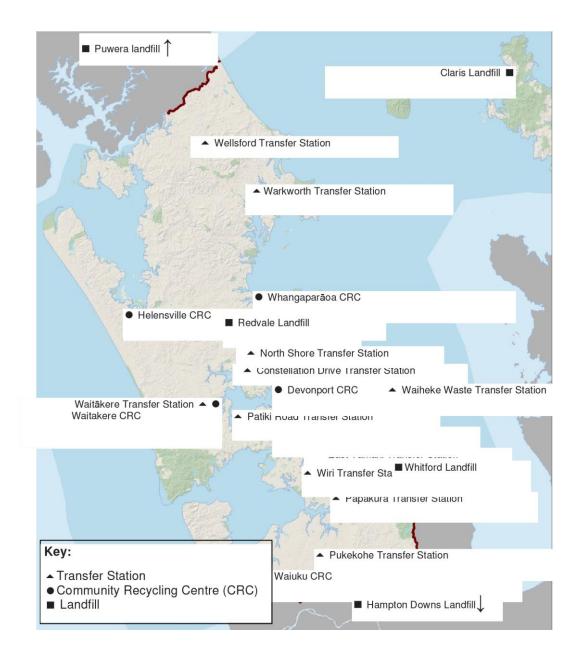


Figure 11 Map of waste facilities

Three of the five landfills are privately-owned and managed. Whitford landfill is 50 per cent owned by the council, and privately operated. The fifth, which is council-owned, is a small facility at Claris on Great Barrier Island. Private ownership of landfills is unusual in New Zealand, where local councils often own their local landfills and are better able to manage the whole supply chain.

With competition between private providers, landfill gate fees are relatively low in Auckland. This reduces the financial incentive to minimise or divert waste. We have learned from our stakeholder engagement that there is strong agreement, even among some in the waste industry, that the price of landfilling must increase to support greater industrial development of resource recovery activities.

It is difficult to quantify the level of economic activity, number of jobs, and value of the waste service sector, because the participants are so diffuse. They extend from landfills to second-hand shops and waste minimisation activities of businesses in other sectors.

Waste management is big business, every week we send....



Figure 12 Our waste services

6.6 Implementation of the first WMMP – Te whakatinanatanga o te WMMP tuatahi

Zero Waste to landfill was recognised as an ambitious target, so the first WMMP started with:

- focusing on the 20 per cent of waste that is within more direct council control through the services it provides to Aucklanders
- leading by example, getting the council's own house in order by minimising its own office wastes
- working with mana whenua, mataawaka, communities and businesses to help them drive change
- advocating at a national level for legislation that would have significant impact such as introducing product stewardship.

Standardising the council's services, leading by example, and working together have all produced positive changes.

Standardising council services

Starting in 2012, we have been progressively amalgamating seven different council-run waste and recycling systems by:

- introducing a booked on-site inorganic collection service across the region
- introducing large wheelie bins for commingled recycling across Auckland
- introducing wheelie bins for refuse collection across urban areas and a mix of bags and bins in rural areas and the Hauraki Gulf islands
- · standardising funding methods for waste services
- introducing a collection service for food scraps in urban areas.

This is the largest service change of its kind in the southern hemisphere. We expect to have all these services fully operational by 2020 (see figure 13).

Standardised service	Where	When
On-site inorganic collection	All households, region-wide	Completed
Large wheelie bins for recycling	Households in the former Waitākere, North Shore and Rodney areas	Completed
Bags to wheelie bins for refuse	Former Manukau	Completed
	Former North Shore, Rodney and Waitākere Areas	Underway
Kerbside collection of food scraps	Urban areas	By 2021
Rates-funded refuse charging	Former North Shore City Council, Waitakere City Council, Papakura District Council and Franklin District Council areas (shift from payas-you-throw)	Starting 2024/2025
	Former Rodney District Council introduce rates-funded	
Shift to fortnightly refuse collections once food scraps collection is embedded	All households across the region	After 2021

Figure 13 Summary of service changes

Community Recycling Centres: building communities

Community Recycling Centres (CRCs) are beginning to provide a range of new services for Aucklanders as part of the growing Resource Recovery Network.

CRCs are facilities where residents can drop off unwanted goods which are then sold for reuse and recycling, creating income that supports local jobs, training and volunteering opportunities.

We now have five CRCs – in Waiuku, Helensville, Devonport, Henderson and Whangaparaoa – all council-owned and community enterprise-run. We also have trials on Great Barrier and Waiheke. We've agreed to develop another seven CRCs over the next six years.

While still new, these CRCs are already delivering beyond expectations, diverting 60-70 per cent (by weight) of materials entering their sites from landfill and creating over 50 full and part time jobs. As the centres become more established, they will offer more resource recovery options to residents, diverting more material from landfill and creating vibrant community hubs.

Bedding in service changes

Standardising services across Auckland has meant changes to local systems and, therefore, changes for residents in how they manage their waste.

In the north and west, two different recycling services have been replaced with the region-wide standard, collecting all of a household's recycling in a single 240-litre recycling bin. This adds more capacity, reduces litter, and is generally more convenient for households.

A small number of residents found that the new bins were difficult for them. They were too big and unwieldy for some residents, and too difficult to wheel up some steep or long driveways. Our customer service team worked with households to find solutions that would work for them. Swapping to a smaller 120 litre bin, or attaching a towbar fitting to the car has helped to smooth the change. For residents who can't physically manage moving their bins, we have arranged for collectors to go on-site to collect and return the bins.

Leading by example

Reducing waste in our own offices shows what can be achieved. Over the last four years, separate bins for recycling, food scraps, paper and refuse in all administration buildings and cafeterias, worm farms for organic waste, and simple signage have helped staff to reduce their office waste by 30 per cent. In this way, we achieved the first target of the WMMP. Specific pilot projects have also shown the possibilities for waste reduction in the council's wider operations, particularly in construction and demolition projects.

Council shows what's possible with construction and demolition waste

Including waste minimisation in our contracts means we can minimise construction and demolition waste from our own projects, and begin to drive change in the construction industry's waste management practices.

We piloted a Zero Waste approach in some of our own construction and demolition projects:

- Three Kings Building: More than 1300 items weighing around three tonnes were salvaged and reused in the community, including insulation, carpet tiles and framing timber. Two trainees have gained skills and experience that resulted in them gaining ongoing employment. (Partners: Corbel Construction, TROW, Earth Action Trust, Greenway Demolition)
- Ranui Community House: Six tonnes of material from demolition was diverted with many of the items used in the fit out of the renovated building. This resulted in savings to the project of \$33,000. (Partners: Practec, Ranui Community House,)
- The City Rail Link has adopted an aspiration to send zero waste to landfill during construction. Contractors are being supported and challenged to design for waste minimisation, and are required to develop waste avoidance and resource recovery plans to direct their site management. (Partners: Downer Soletanche Bachy Joint Venture, Connectus, Green Gorilla, We Compost)

Working together

Bringing the plan to life with people in their own communities has been a very important part of implementing the first WMMP. A community-led approach has mobilised thousands of Aucklanders to start minimising their own waste, at home, at work and in their neighbourhoods.

Our community engagement specialists worked with communities to co-design approaches that build on their own strengths and interests. The council Waste Wise team now has multi-year agreements with 19 community partners.

We've made an effort to engage in the south where kerbside waste services are changing substantially. There are challenges to a successful transition, such as larger household sizes and lower rates of home ownership. In 2012 and 2013, we asked these communities: How will minimising waste work best for you? Their answers are the foundation for our waste wise approach:

- · local people teaching local people
- building on people's passion for food and learning how to compost
- making it fun
- · involving families, children and young people
- street- and neighbourhood-led initiatives
- growing waste champions
- creating local employment and enterprises
- modelling good waste minimisation practices.

This has created a blossoming zero waste movement in Auckland, including:

- Compost Collective facilitators, delivering home composting and food growing workshops.
- The Love Food Hate Waste Campaign, funding food waste prevention action across Auckland.
- Waste Free Parenting, engaging families and early childhood centres in waste free parenting.
- Local waste champions, showing households how to prepare for waste service changes, minimise waste, recycle right and catalyse social enterprises using waste as a resource.
- Pare Kore ki Tāmaki initiated by Ngāti Whātua Ōrākei, supporting and mentoring marae across Auckland to set up systems to support waste minimisation.
- Communities, self-organising to get rid of single use plastic bags.

Between 1 July 2016 and 30 June 2017, our community partners achieved the following:

- 186,700 people engaged
- 873 workshops and presentations
- 198 markets and events attended

- 47 Zero Waste events supported
- · 25 community groups worked with
- 1580 champions and volunteers
- 188 media interviews and articles
- 643 social media blogs, tweets, posts
- 35 groups supported to run their own waste wise projects.

Waste minimisation funding

Half of the landfill levy of \$10 per tonne goes into a national-level Waste Minimisation Fund, with half distributed to councils to spend on waste minimisation as outlined in their WMMPs. Since 2012, Auckland has received \$19.3 million from levy funding.

Our council-administered local Waste Minimisation and Innovation Fund provides up to \$500,000 each year to seed innovative waste solutions from business, mana whenua, mataawaka, schools, community groups and other organisations. Over \$2.6 million has been awarded to more than 280 projects since it started in 2013. The criteria for this fund are outlined in Appendix Four.

Here are some of the projects we've supported:

- Ecostock Supplies processes almost 35,000 tonnes of pre-consumer industrial food waste each year and processes it for stock feed
- 'Feeling Rubbish' supports blind and vision-impaired Aucklanders sort household rubbish by touch, produced by Blind Citizens NZ
- Kiwiharvest runs a fresh food rescue hub in central Auckland, to enable redistribution of wasted food from commercial operation
- Kiwi Property Group is working with the food court retailers at Sylvia Park to reduce food waste
- Gardens4Health teaches refugees how to compost and grow their own food, run by the Diabetes Project Trust based in Otara
- Roskill Bike Kitchen set up a workshop to repair and maintain bicycles recovered from landfill
- Sleepwell NZ refurbished bed products and lounge suites
- Chinese Conservation Education Trust supports residents to recycle right at home
- The Formary looks at the feasibility of diverting textile waste from landfill
- United established recycling and composting facilities for the 350 residents in its student village.

7 Looking ahead – Ka titiro whakamua ana

What's in this chapter

- Challenges for waste management and minimisation
- Other issues
- Future projections

7.1 Challenges for waste management and minimisation – Ngā tohe whakahaere me te whakawhāiti tukunga para

Achieving effective waste management and minimisation is constrained by several challenges, all of which have been considered in developing this WMMP for the next six years.

Lack of incentive for waste diversion

It is still cheaper to send waste to landfill than to divert it into other productive uses.

The waste levy, introduced by the Waste Minimisation Act 2008, was intended to put the cost of waste disposal (including economic, environmental, social and cultural impacts of landfilling) onto the disposer. The goal was to create an economic incentive to divert and recycle, and establish a funding pool for waste minimisation projects.

Although reviewed regularly, the levy remains unchanged since its introduction at \$10 per tonne. This is very low by international standards. Auckland Council, along with other councils and industry, has commissioned modelling that suggests that a higher levy would encourage substantially more diversion (see discussion in section 9.3.1). Ministry of the Environment (MfE) has signalled a commitment to continue to investigate.

The Act also promotes product stewardship, allowing for the introduction of voluntary and mandatory schemes.

Product stewardship is the responsible management of the environmental impact of a product. It aims to reduce the impact of manufactured products at all stages of its lifecycle. It shifts the main responsibility for recovery, recycling and disposal from local government to private industry, incorporating costs into the product price.

To date, no mandatory product stewardship schemes have been introduced and voluntary schemes (successful as some have been) are limited in their effectiveness. We have voluntary schemes for glass packaging, agricultural chemicals (and packaging), used oil and paint. A relatively new scheme has been introduced for soft plastics, with collection points in supermarkets and other large retail stores.

Limited ownership / ability to direct waste management decisions

Our limited ownership of waste infrastructure constrains our ability to meet statutory waste minimisation obligations. We can't make direct decisions about the 80 per cent of the waste that goes to landfill. Instead, we must find ways to encourage the commercial waste management sector in their own waste minimisation efforts.

Operating effectively within the funding envelope

Under the Act, responsibility for waste management and minimisation falls on the council, rather than on the generators of waste. Our challenge is to find the most effective initiatives and ways of working towards Zero Waste within funding constraints.

Data limitations

Robust data is an important planning tool. As noted above, the data presented in the Waste Assessment has limitations. Historically, data collection efforts have been patchy, using a variety of different methodologies.

The development of a National Waste Data Framework will improve the reliability of data collection. Our data collection efforts are generally consistent with this framework.

7.2 Other issues – Ētahi atu take

Transport inefficiencies

Waste management is a transport-intensive business, with a lot of investment in time and vehicles to move waste from collection to diversion and disposal sites. Around 40 per cent of our waste to landfill is currently trucked out of the region (a round trip of 140 – 300 km). Congestion, load efficiency and greenhouse gas emissions from transport are all considerations for future waste planning.

Managing hazardous wastes

The management of hazardous and special wastes is complex and challenging, with each waste type presenting its own set of opportunities and limitations. Products with flammable, explosive, corrosive, toxic or oxidising properties can put people and the environment at risk when discarded inappropriately, including into landfill. While the amount of hazardous waste is low in comparison to other waste types, it remains a priority due to these risks. Some of the objectives set by the Hazardous Waste Strategy include increasing public awareness of hazardous substances in the home and promoting avoidance where possible, encouraging regular cleanouts of old chemicals, and providing the public with places to dispose of chemicals that are free, safe and convenient. In the longer term Auckland Council can work with industry to explore product stewardship opportunities that present themselves for some hazardous products found in the home.

The role of energy from waste

Energy from waste is being used in some larger cities around the world to reduce waste to landfill, particularly where there is limited land available for landfilling and energy costs

are high. For example, in Stockholm, mixed waste is incinerated, and energy is recovered from the waste.

In Auckland, energy from waste may be appropriate for some hard-to-manage individual waste streams, such as timber, where there's no other viable use and the material will cause harm in landfills.

A range of issues and risks mean that large scale facilities for energy from waste, relying on a mixed waste stream, are not appropriate at this time. Building a facility would be very expensive and, once built, would require a large, ongoing supply of waste to burn. This could undermine efforts to reduce, reuse and recycle waste at its highest and best value. It does not align with our Zero Waste vision.

Responding to illegal dumping

Illegal dumping is a complex problem, with no simple solution. In 2016, we collected 1378 tonnes of dumped material in 15,393 separate callouts at a cost of around \$1 million.

Although illegal dumping doesn't add up to a huge amount by weight, and the amount being dumped is slowly decreasing, the effects are still substantial. It spoils the environment and affects people's sense of pride in their community. Our enforcement tools are limited in their effectiveness.

The most commonly dumped items are household goods, such as mattresses and domestic refuse, and commercial waste, such as tyres and construction waste. The most common sites for dumping are places no-one appears to be responsible for: vacant land, multi-unit developments, roadsides, streams, parks and reserves. Charity shops also experience a good deal of after-hours dumping in their doorways.

We're working closely with people involved in, and affected by, dumping to understand why people dump waste illegally, and to identify how to tackle the problem at its root.

We're also developing a plan with the community to build on this knowledge to further reduce illegal dumping.

Markets for recovered materials

We need to identify and strengthen markets for recovered materials, particularly in light of China's recent tightening of import rules for recyclable materials. Options include developing waste brokering schemes, and supporting changes to policies and practices that allow recovered materials to be used in place of virgin materials.

For the recyclable items collected in our kerbside service, international markets determine the value and destination of materials. We work closely with Visy (who process material from Auckland's kerbside collections) to ensure the security and reliability of market partners so that we know materials are being handled responsibly. As part of a circular economy, there would be value being able to process more recyclable materials locally, in New Zealand.

7.3 Future projections – Ngā matapae mō ngā tau e tū mai

The amount of waste generated in Auckland fluctuates over time, so future demand must take into account:

- demographic changes, including population growth, age, and household composition
- economic changes, including changes to commercial and industrial activity
- land use changes
- consumption patterns and consumer behaviour
- national policy and legislation
- the impact of waste minimisation programmes
- the impact of waste flows to and from other regions.

Population growth is running higher than models predicted, meaning construction and demolition, our largest single waste stream, will continue growing.

Estimates suggest we'll add 833,000 more people to Auckland, putting our population at 2.3 million by 2043.¹¹ Total amounts of waste to landfill will continue to climb – even as per capita targets are achieved – simply because there are more of us.

Applying a business as usual approach to rates of waste generation, without further intervention, we could be generating 2.7 million tonnes of waste to landfill annually by 2040 – nearly two-thirds more than we produced in 2016 (see figure 14).

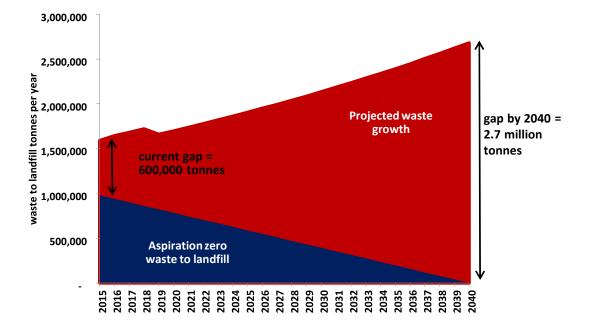


Figure 14 Auckland waste projections to 2040

¹¹ Auckland Regional Transport Model I 9.

Currently, around 40 per cent of our refuse is trucked out of Auckland for landfilling in neighbouring regions. While there is adequate landfill disposal capacity for the near- to medium-term, relying on this capacity doesn't meet our mandate to promote waste minimisation. It also ignores the other costs of waste, including transport costs.

Planning for future waste services must also consider hazards and the need to build resilience into waste management systems. Disasters can impact the delivery of regular waste services, and can create new sources of waste. Auckland is susceptible to a wide variety of hazards, such as flooding, slips, fire, and electricity outages. Less frequent events such as volcanic eruptions, earthquakes and tsunami must also be considered. The effects of climate change are likely to worsen the impact of hazard events in the future.

Auckland's planning for emergency management takes a community-based approach, recognising the value of local knowledge and vital community connections. This aligns well with the council's approach to waste services, particularly the creation of Community Recycling Centres across the region.

Meeting future waste demands

By 2024, around one-third of us will live in an adjoined dwelling. This means waste services will need to adapt. Multi-unit developments face challenges with refuse collection and recycling, with lots of individual bins on the street. In developments where waste is collected communally, there can be less incentive for residents to minimise their own waste, and fewer opportunities for on-site composting.

Our advisers work with body corporates and building managers to ensure waste services are up to standard, and to support those buildings looking to improve.

At the City Gardens Apartments in downtown Auckland, building manager Ian McLeod is doing his bit to help reduce waste to landfill. An upgrade to the building's waste room help residents to separate waste while making collections more efficient. Ian says, "We've proved that you can cut down contract costs and the time spent on waste by improving the way we organise and communicate waste systems for our residents."

8 Our waste plan – Tā mātou mahere tuku para

E te iwi, toko ake rā tātou.

Whītikihia ko te maro Ope Taua o Papatūānuku.

Take a stand as a people.

Let us gird ourselves as Warriors of Mother Earth.

What's in this chapter

- Our vision, goals and objectives
 Our role and methods
- Targets
 Monitoring and reporting
- Priority waste streams
 Options for the future

8.1 Our vision, goals and objectives – Tā mātou tirohanga whānui, ngā aronga me ngā whāinga

Figure 15 sets out the vision, goals, objectives and targets for this plan. These are largely the same as for the 2012 WMMP, but with clarifications and additions to reflect progress since the first plan was written.

Vision Auckland aspires to be Zero Waste by 2040, taking care of people and the environment, and turning waste into resources. Goals A. Minimise waste C. Reduce harm B. Maximise from residual waste generation opportunities for resource recovery Advocate for Develop infrastructure 7. Restrict organic and other harmful waste stronger regulatory and processes to enable resource incentives to reduce going to landfill Objectives waste recovery Reduce the incidence Advocate for Identify local economic of litter and illegal product stewardship development dumping to avoid or reduce opportunities through 9. Continue to manage waste at source resource recovery residual waste Increase individuals' Achieve operational effectively and sense of personal efficiencies in Council's efficiently while responsibility for domestic waste and progressively reducing waste reduction Auckland's reliance on recycling services landfills Reduce Reuse Recycle Recover Treat Dispose Total regional waste

Reduce total council- and private-sector-influenced waste to landfill by 30 per cent (from the baseline of 832kg to 582 kg per capita per year by 2027)

Domestic waste

Targets

- Reduce domestic kerbside refuse by 30 per cent (from 160kg to 110kg per capita per year by 2021)
- After 2021, reduce domestic kerbside refuse by a further 20 per cent (from 110kg to 88kg per capita per year by 2028)

Council waste

- Reduce council's own in-house office waste by 60 per cent per capita by 2024 (from a 2012 baseline)
- Work across council to set a baseline for operational wastes and, by 2019, put in place targets for reduction.

Figure 15 Vision, goals, objectives and targets

8.2 Goals and objectives – Ngā Aronga me ngā Whāinga

8.2.1 Minimise Waste Generation

A. Minimise waste generation

- Advocate for stronger regulatory incentives to reduce waste
- Advocate for product stewardship to avoid or reduce waste at source
- Increase individuals' sense of personal responsibility for waste reduction

In 2016, Aucklanders sent over 1 tonne of waste to landfill per person (from commercial and domestic sources). Following the waste hierarchy, our priority for waste minimisation and management is to *reduce* the generation of waste.

Working with individuals and communities, mana whenua, mataawaka, businesses, and central government, these objectives seek to improve decisions about how much waste is generated – through personal choices, improvements to product design and manufacturing, and stronger regulatory signals to support waste minimisation.

Key council methods: advocacy, education and public awareness campaigns, facilitation and partnerships.

8.2.2 Maximise opportunities for resource recovery

B. Maximise opportunities for resource recovery

- Develop infrastructure and processes to enable resource recovery
- 5. Identify local economic development opportunities through resource recovery
- Achieve operational efficiencies in Council's domestic waste and recycling services

Much of the material sent to landfill could be diverted for other uses, creating opportunity instead of waste. These objectives are focused on *reuse*, *recycle*, and *recover*. Fit for purpose infrastructure and processes are needed to support resource recovery. This includes industry being able to efficiently process materials and goods, and having systems that are straightforward for potential recyclers to access. Our domestic waste and recycling services, and our Community Recycling Centres, are a key interface for householders with resource recovery industries. Further infrastructure provision, for example for handling specific waste streams, will largely be the responsibility of the private sector, with the council in an enabling and supporting role.

Key council methods: seed funding, facilitation and partnership, strategic planning, provision of services and facilities.

8.2.3 Reduce harm from residual waste

C. Reduce harm from residual waste

- Restrict organic and other harmful waste going to landfill
- 8. Reduce the incidence of litter and illegal dumping
- Continue to manage residual waste effectively and efficiently while progressively reducing Auckland's reliance on landfills

Landfill disposal is regarded as a poor waste management option¹², particularly in the context of managing organic wastes which decompose over time and release methane. Litter and illegal dumping have both environmental and social effects, damaging the natural environment and harming communities' sense of pride in place.

These objectives are concentrated at the least preferred end of the waste hierarchy – *treat*, and *dispose*. While they are the least preferred methods, it is important we continue to manage residual waste effectively for public and environmental health and safety reasons. Key council methods: providing services, regulation, education and public awareness campaigns, facilitation and partnership, strategic planning, monitoring and evaluation.

8.3 Targets – Ngā Takunetanga

This WMMP sets three levels of target, continuing the approach of the first WMMP. The amount of waste in each layer decreases, from total regional waste (100 per cent), to domestic waste (approximately 15 per cent), and our own waste (a smaller, as-yet unquantified amount). At the same time, our influence increases, from least influence over the total, to more influence over domestic waste, and most influence over our own waste.

¹² SLR Consultants March 2017. Waste Management Options Review and Modelling – Executive Summary Review for Auckland Council.



Figure 16 Volume of waste versus council influence

8.3.1 Total regional waste

Total regional waste

Reduce total council- and private-sector-influenced waste to landfill by 30 per cent by 2027 (from the baseline of 832kg to 582 kg per capita per year)

This target is unchanged from the first WMMP.

8.3.2 Domestic waste

Domestic waste

- a. Reduce domestic kerbside refuse by 30 per cent by 2021 (from 160kg to 110kg per capita per year)
- After 2021, reduce domestic kerbside refuse by a further 20 per cent by 2028 (from 110kg to 88kg per capita per year)

The timeframe for target (a) has been extended since the first WMMP, from 2018 to 2021. The collection service for food scraps, which is integral to achieving this target, has taken longer to establish than originally envisaged. This revised target allows time for the service to establish. A second target is introduced, to continue to reduce domestic waste after 2021.

8.3.3 Council waste

Council waste

 Reduce council's own in-house office With the original target of 30 per cent reductions achieved, audits have shown that further reductions, in the order of 60 per cent, are possible.

waste by 60 per cent per capita by 2024 (from a 2012 baseline)

 b. Work across council to set a baseline for operational wastes and, by 2019, put in place targets for reduction. A further target will be introduced in 2019, to make reductions in our operational waste. This requires a better understanding of what waste is being generated and the scale of possible savings.

8.4 Priority waste streams – Ngā kaupapa tukunga para matua

Three commercial waste streams identified by the Waste Assessment are priorities for this plan:

- construction and demolition waste
- organic waste
- plastic waste.

They are priorities due to the high tonnage going to landfill and their diversion potential. Detailed discussion of how these priority waste streams will be addressed is included in section 9.3.3 of the Action Plan.

8.5 Our role and methods – Ā mātou kawenga, tukanga hoki

Under the Waste Minimisation Act 2008, Auckland Council has a responsibility to promote waste management and minimisation within its district. Council has direct control over only 20 per cent of the waste stream, through the contracts for domestic kerbside collections that it manages and the Waitākere Transfer Station.

Nonetheless, council's responsibility to promote waste management and minimisation, in line with the vision of zero waste to landfill by 2040, extends across the entire waste sector. The council is focused on the end goal and on how services are provided to achieve this goal. The council will support and encourage industry to contribute to a Zero Waste Auckland.

There is no simple or quick solution to get us to Zero Waste. It requires a lot of different actions, small and large, undertaken by people involved in every aspect of waste generation, diversion, and disposal. We will employ a range of methods to deliver the WMMP, including:

- 1. advocacy for legislative and regulatory changes
- facilitation and partnerships with mana whenua, mataawaka, business, and community groups, including seed funding for waste minimisation projects through the Waste Minimisation and Innovation Fund
- 3. working with industry to identify the resource recovery infrastructure requirements to achieve Zero Waste and providing some of these where appropriate
- 4. providing domestic collection services for refuse, recycling, food scraps and inorganic material (via contractors)
- 5. ongoing monitoring and evaluation of waste data
- 6. strategic planning for Auckland's future waste management and minimisation needs.

The plan has been designed to meet the requirements of the Waste Minimisation Act 2008 and the Local Government Act 2002, by including all practicable options to achieve the council's waste minimisation objectives, and ensuring actions are cost-effective, efficient and appropriate to present and anticipated future circumstances. Acknowledging fiscal constraints, the focus of this plan is to do the best that is possible with the available funding. This will allow us to be ready and responsive when new technology and solutions emerge.

8.6 Funding - Tahua pūtea

The information presented in this section is our projection for future expenditure on waste. The projections assume our services achieve a sizeable market share of domestic kerbside collection for refuse. Expenditure will be reviewed annually, as part of our annual planning processes. Any significant variations will be addressed through our regular financial decision-making processes.

Councils can use different funding methods to meet the costs of the waste and recycling services that they provide. The Auckland Council Revenue and Financing Policy (2017) sets out the following funding considerations and policy for Waste Solutions and Environmental Services, to be implemented over time in conjunction with the implementation of the WMMP:

Costs for the collection and disposal of refuse will be funded from user charges.
 However, until full implementation of the WMMP, we will use a combination of targeted rates and charges.

- Costs for recycling and resource recovery initiatives are funded from targeted rates.
- Subsidies from government and other sources are used where available.
- Where the benefit is public, or it is difficult to identify the exacerbators, the costs will be funded from the general rate.
- Borrowings are used to spread the costs fairly and prudently across different generations of ratepayers and to address cash-flow timing differences.

In 2016, our waste and recycling services costing \$113.4 million were funded as follows:

- 22 per cent from commercial revenue, mainly from pay-as-you-throw kerbside refuse collections (bags) and gate fees at the Waitākere Transfer Station
- 5 per cent from the Waste Levy administered by MfE
- 65 per cent from targeted rates charged to householders to cover the costs of recycling collections, inorganic collections and other public-good services, and refuse collections where the area pays for these through rates
- 8 per cent from the general rate, including the cost of litter collection in public spaces.

Sources of funding for council waste services, 2015/16

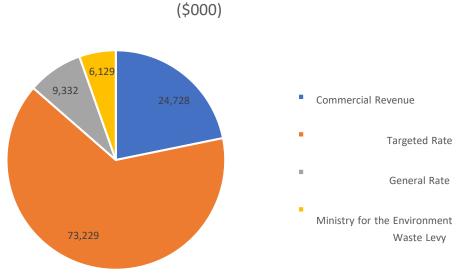


Figure 17 Sources of funding for council waste services

The decision how to fund a service or project is determined by factors set out in the Local Government Act 2002, including the type of outcomes that are achieved, with a distinction between public-good services, private-good services, and disposer-pays services:

- Public-good generally benefit the whole community and can't normally be linked to specific individuals who use the service. These services are provided to meet environmental policies and standards, and are usually funded through rates.
 Examples include refuse and recycling bins in public spaces, and education programmes.
- Private-good waste services that can be linked to specific individuals but still
 contribute to wider public benefits. The services, such as kerbside recycling
 services, are provided to meet environmental policies and, in most cases, are
 funded through rates or subsidised by other waste services or the government
 waste levy.
- Disposer-pays waste services where benefits can be linked to specific individuals, and where the services align closely with central government's policy to provide financial disincentives to minimise waste to landfill. The key example in Auckland is commercial refuse disposal collections taken to landfill.

The Act allows the council to subsidise private-good services through any surpluses from disposer-pays services. By bundling the cost of collection services, some revenue from disposer-pays can be used to offset the costs of private-good recycling services.

Expenditure on waste services by service type

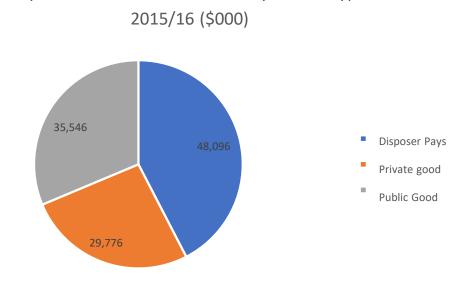


Figure 18 Expenditure on waste services by service type

In this WMMP, sources of funding for our waste services will remain the same: commercial revenue, the waste levy, and targeted and general rates. Funding from the waste levy must be spent on waste minimisation activities, as described throughout this

plan. In addition to providing funds for the Waste Minimisation and Innovation Fund, waste levy funding will be spent on ongoing implementation and strategic planning of initiatives adopted in the WMMP. A portion of it will be accumulated to offset capital costs, for example, setting up an organics processing facility.

The balance between funding sources is expected to vary over time, due to:

- the region-wide shift to rates-funded services for refuse collections, affecting approximately 45 per cent of households who have been paying for refuse disposal through disposer-pays (pay-as-you-throw)
- a corresponding introduction of targeted rates to those households, coming into line with the standard region-wide user charges
- the amount of waste levy that is raised and allocated to Auckland, which could change significantly if the waste levy is increased
- potential profit-sharing with Community Recycling Centres
- potential product stewardship schemes like a container deposit scheme, which could shift costs of disposal and diversion away from ratepayers to producers and consumers.

The amount budgeted for waste services in the long-term plan remains around the same for the next decade. The actions outlined in this WMMP will happen within that budget, but the mix of our revenue will change as areas shift to paying for their refuse collections through rates, and urban households move to the new kerbside collection of food scraps. The rate of roll-out of service changes will affect the budget. We will undertake to keep the refuse collections on a weekly basis until the kerbside collection of food scraps is well embedded. If the food scraps collection can be smoothly embedded as it is rolled out across the region, then refuse collections can move to a fortnightly service more quickly, and save money.

As new arrangements for domestic collection services become business as usual, new activities will become possible within the budget. We will be able to reprioritise our internal resources to focus on opportunities to work in partnership with others to encourage waste minimisation within commercial waste streams.

The two largest items we will deliver are the new kerbside collection service for food scraps, and facilities for the Resource Recovery Network (another seven sites across the region).

The resource recovery infrastructure plan, to be developed as part of implementing this WMMP, may identify the need for further new infrastructure projects to help us to meet our Zero Waste target. We expect commercial enterprises will be investing in developing new resource recovery infrastructure, for example to handle construction and demolition waste. Some projects may be appropriate for the council to lead. These will need to be externally funded, potentially through MfE's Waste Minimisation Fund and in partnership with the private sector.

Impact for households

Refuse collection for households will be charged through rates, with different costs for smaller and larger bins. This is a direct and visible connection between how much waste a household generates and how much it pays.

Recycling collections are priced into the annual targeted rate, as a private-good service. The kerbside collection service for food scraps will be also be paid for through a targeted rate, levied only in areas where the collection is available.

The changes to collection services will give households more control over how much they spend on waste disposal. By making full use of the kerbside collection services for recycling and food scraps, they'll be able to make use of the smaller bin sizes available at a lower charge (see section 9.3.6). They may also be motivated to make other waste reductions, such as on-site composting and changing their purchasing habits. Community programmes will support these efforts.

How can I reduce my waste costs?

Here are some simple steps you can take:

- consider what you buy especially how it is packaged
- remember to take your own bags to the shops
- compost at home
- make good use of the kerbside collection services for food scraps and recycling
- opt for the smaller bin available at a lower charge
- use our recycling search tool at makethemostofwaste.co.nz to learn how to dispose of items properly
- make use of other services, such as the community recycling centres for household goods, and the soft plastics collections for packaging

8.7 Monitoring and reporting – Mahi arotūruki, tokonga pūrongo

We have processes for monitoring and reporting progress on the WMMP, standardising data, ensuring accuracy and simplifying reporting processes. The resulting information is used to assess progress and to fine tune service delivery. It is also the basis for the Waste Assessment that accompanies this WMMP.

Progress against the actions of the WMMP is reported annually to the relevant committee (currently the Environment and Community Committee). Other reporting includes the annual report on the Waste Minimisation and Innovation Fund's funding and expenditure, submitted to Ministry for the Environment (MfE). The Ministry audits our reporting for accuracy and alignment with the objectives of the Waste Minimisation Fund. Further work is planned to improve the public reporting and visibility of the data (see Appendix 3).

8.8 Options for the future – Ētahi whiringa mō ngā tau ki mua

We developed three broad options for how waste services could be delivered over the next six years. Full information is included in the Waste Assessment. In summary, the options were:

Option One: full implementation of the WMMP 2012

This is the status quo option based on the actions agreed in 2012, focusing mostly on the 20 per cent of waste within our direct control. We would look to standardise and enhance council-provided kerbside services, including:

- the introduction of a kerbside collection service for food scraps in urban areas
- establishment of the Resource Recovery Network
- facilitating local enterprise
- advocating for product stewardship.

Option Two: increased focus on priority waste streams

This option expands the focus of the 2012 WMMP to address priority waste streams, particularly commercial sources of organic waste, construction and demolition waste and plastic waste. It builds on the actions of the 2012 WMMP to address waste streams influenced by the private sector. The main actions include:

- advocating for an increase in the waste levy
- prioritising three commercial waste streams (construction and demolition, organic, and plastic waste)
- piloting and reviewing the potential for waste avoidance and resource recovery plans for physical works
- expanding our own in-house target to include operational waste
- developing a resource recovery infrastructure plan that addresses Auckland's current and future requirements (implementation will need external funding) This option could be implemented within our current waste budget.

Option Three: investment in residual waste treatment technologies

This reduces waste to landfill by treating residual wastes in other ways. We would develop

2-3 residual waste treatment facilities, with energy from waste (mass-burn incineration

facilities) likely to achieve the best diversion performance. This option requires significant investment from both the private and public sectors in residual waste infrastructure. There would be risks regarding public acceptability, environmental performance (compared to landfills), need for certainty of supply of residual waste, and developing markets for the resulting energy and materials.

Assessing the three options

We assessed these options against criteria including the objectives and targets of the first WMMP (see the Waste Assessment for detailed discussion).

Option one would not address commercially managed waste. With projected increases in population and likely consequent construction and demolition activity, we can't meet our legislated responsibility to minimise waste if we don't not make efforts with this waste stream.

Option three requires capital investment beyond our budgets. It also doesn't support the Zero Waste vision that we have worked towards since 2012 and plan to continue in this WMMP.

Our chosen option is option two.

This strikes a balance between our legislative requirement to minimise waste and the drivers of deliverability, cost-effectiveness and efficiency. Option two increases what we're doing with the 20 per cent of waste under our influence, and begins to find solutions for the 80 per cent that is commercially managed.

9 The Action Plan – Te Mahere Kaupapa Mahi

Kāhore he mea i hua ake i a Papatūānuku e kore e kōpakina ki tōna uma i te otinga.

Nā te tangata anake ia i huri hei tukunga parahanga.

Kia hoki anō ia i a tātou hei ao para kore anō, tūturu whakamaua kia tina!

There is nothing borne of the natural world that doesn't, in the end return to the bosom of Mother Earth.

Humankind alone turned Papatūānuku into a dumping ground.

Let us set ourselves to the task of making her waste-free once more!

What's in this chapter

- Introduction
 Overview of priority actions
- Criteria for identifying and assessing

 The difference we want to see in the
 options
 next six years

9.1 Introduction – Kupu whakataki

This action plan outlines a six-year programme to achieve the WMMP's vision and targets (noting that some actions will continue to be delivered beyond 2024). It has been developed from the findings of the Waste Assessment and engagement with key stakeholders. It continues and broadens the strategic approach of the first WMMP, with Auckland Council taking a leadership role in the issue of waste minimisation.

The action plan has been designed to meet the requirements of the Waste Minimisation Act 2008 and the Local Government Act 2002, by including all practicable options to achieve the council's waste minimisation objectives, and ensuring actions are costeffective, efficient and appropriate to present and anticipated future circumstances. Acknowledging fiscal constraints, the focus of this plan is to do the best that is possible with the available funding. This will allow us to be ready and responsive when new technology and solutions emerge.

The action plan includes a funding structure, aspects of which will be updated each year as part of the council's annual plan following a period of public consultation, as required by the Local Government Act 2002. The entire WMMP will be reviewed every six years.

9.2 Criteria for identifying and assessing options – Ngā whakaritenga hei tohu me te arotake whiringa

We used the following criteria to evaluate the actions that form the Action Plan.

Environmental issues	Social and cultural issues	Economic issues
Waste minimisation (e.g. volume of waste reduction or diversion from landfill).	Health and safety considerations (including public health, staff and contractor-related issues).	Estimated whole of life cost.
Resource efficiency benefits.	Public concern and interest.	Consideration of whether revenue is generated by the initiative (where relevant).
Environmental harm.	Partnership and community involvement.	Other economic impacts, such as avoided costs or other benefits to the council or other stakeholders.
Climate change related issues impacts.	The level to which producer and consumer responsibility is supported.	Further detailed analysis, and costings and funding options will be developed for large capital-intensive projects as they are progressed.

9.3 Overview of priority actions – Tirohanga whānui ki ngā aronga matua

The table below sets out nine priority actions to contribute to the WMMP targets.

Targets

Actions

- 1. Advocate for an increased waste levy
- 2. Advocate for product stewardship
- 3. Address three priority commercial waste streams: a. C&D waste

Total regional b. Organic waste waste c. Plastic waste

- 4. Continue establishing the Resource Recovery Network
- 5. Focus on reducing litter, illegal dumping and marine waste
- 6. Continue to transition to consistent kerbside waste

 Domestic

 and recycling services waste
- 7. Deliver the domestic kerbside food waste collection

Council 8. Address waste diversion from the council's own waste operational activities

9. Work in partnership with others to achieve a Zero Waste Auckland

Figure 19 Priority actions

9.3.1 Advocate for an increased waste levy

An increased levy is essential to incentivise waste minimisation and diversion. The current levy of \$10 per tonne is too low.

The decision to increase the levy can only be made by central government. We will work with the waste and recycling industry and other councils to advocate strongly to central government to increase the levy and review its structure. This will include advocating for a careful approach to ensure changes to the levy are signalled well in advance, are introduced gradually, and do not undermine resource recovery efforts.

A wasted opportunity

The 2017 report, *A Wasted Opportunity*, ¹³ models the impacts of increasing the waste levy, and changing the way it is structured across different kinds of landfills. It was commissioned by the New Zealand Waste Levy Action Group, a consortium of public and private sector organisations representing a broad spectrum of interests in the waste sector, including Auckland and other councils. It concludes that increasing the levy should be a matter of priority for the government, given the significant increase in jobs and gross value added that would be achieved.

'There are clear economic and waste minimisation reasons for expanding and increasing the levy and for a significantly higher rate than its current default rate of \$10 per tonne.'

The report predicts that an increased levy of \$140 per tonne for landfills, \$15 for cleanfill and managed fill, and \$40 for incineration, would bring the best results for:

- · reduced waste to landfill
- increased recycling
- job creation
- · increased economic activity.

The benefits of changing the levy structure would be around double the costs (e.g. establishing new resource recovery infrastructure).

9.3.2 Advocate for product stewardship

Product stewardship schemes are a proven method to improve waste minimisation and resource recovery. Mandatory schemes, nationally implemented, will ensure a level playing field for industry and secure the necessary scale of participation.

We support introducing a mandatory, nationwide container deposit scheme (CDS) for beverage containers. This requires legislation, so we must advocate to central government, in conjunction with other councils who also support the proposal. We will seek that Auckland Council is a part of the design process for any container deposit scheme, to ensure that the system meets our communities' needs.

Other waste streams that would be good candidates for product stewardship schemes include tyres, e-waste, batteries and plastic bags.

At the same time, we will support local voluntary initiatives, particularly for products where the market involves only a small number of stakeholders.

¹³ A Wasted Opportunity: Using the Waste Disposal Levy to Create Economic and Environmental Advantage for Aotearoa New Zealand. Eunomia, June 2017.

Container deposit schemes increase recycling

Mandatory CDSs operate successfully in Australia, Europe, Canada, and the United States. After building a small cash-back deposit into the purchase price, consumers are reimbursed by bringing their beverage containers back to collection points. Such a system used to operate in New Zealand too.

CDSs result in significantly increased recycling of the containers included in the scheme – typically 70 to 90 per cent are recycled compared to 45 to 60 per cent in New Zealand.

Analysis of the potential in New Zealand finds that a CDS "would result in society being better off by between \$184 million and \$645 million" over 10 years. ¹⁴ This is the aggregate of increased recycling, reduced litter and environmental benefits. Not included in that study, but worth noting, are further benefits in terms of job creation, support for charitable organisations, and reductions in greenhouse gas emissions.

9.3.3 Address three priority commercial waste streams

With 80 per cent of waste to landfill coming from commercial sources, our priority is to encourage waste minimisation in the private sector. The council can't make changes unilaterally, but will seek to work alongside industry to encourage further waste minimisation efforts. Based on the tonnages of waste to landfill, these three streams are particularly significant.

Construction and demolition waste

This is the largest single waste stream, at around 40 per cent of total weight going to landfill. This doesn't include the greater quantities of rubble and concrete that go to cleanfill and managed fill sites.

Better planning and on-site management can help the building industry to divert materials such as metal, plasterboard and timber from landfill, and save money. Deconstruction instead of demolition reduces damage to materials and allows them to be salvaged for further use.

We have piloted the deconstruction approach in several of our own building projects, and we're looking to work with large developers to support wider uptake. There is also a role for us to help facilitate the reuse of materials, with the development of specifications and markets for recovered materials, and a waste brokering service for construction and demolition waste.

¹⁴ Davies, P. 2017. Cost Benefit Analysis of a Container Deposit Scheme (report for Auckland Council). Sapere Research Group

Organic waste

Organic waste made up around 19 per cent of total waste to landfill by weight in 2016 – 137,000 tonnes from domestic waste and 168,000 tonnes from commercial sources. It is the largest contributor to greenhouse gas emissions of all waste materials sent to landfill.

There are already good alternatives to landfilling organic waste, which can be a nutrientrich resource. Around 185,000 tonnes of organic waste were diverted from landfill in 2016 via:

- commercial composting
- processing of wasted food into animal feed stock
- · wood waste into biofuel
- feedstock for cement kilns
- rendering of animal processing wastes into tallow and other products.

Alongside the domestic kerbside collection of food scraps (see Priority Action 6), there is an opportunity to work with large food waste producers and processors to find alternatives to landfilling their organic wastes. Supermarkets, restaurants and cafes are good candidates for food waste minimisation and diversion planning, including food rescue. We will also look to work with the green waste industry to identify methods to divert more green waste from landfill.

Plastic waste

Plastic is one of the most visible forms of waste. It is a rapidly growing waste stream in Auckland at around 12 per cent of the tonnages of waste to landfill in 2016. Plastic shopping bags and other single use plastic items have become a focus for action, due to their potential for damage in the environment. Major retailers have recently announced they will be phasing out plastic bags.

Plastic bags comprise only a tiny fraction of the plastic being landfilled in Auckland. Plastic components are integrated into many everyday products that are currently sent to landfill. While some plastics are recyclable, others cannot be remanufactured currently.

In partnership with industry, we need to do more research to understand what this waste stream consists of, and what can be done to reduce it. Actions include advocating for a plastic bag levy and a CDS, and supporting community projects to reduce plastic waste.

Plastic: Ultra-convenient, cost-effective, but a growing problem in our environment

- Of the 8300 million metric tonnes of plastic made since 190, 6400 million metric tonnes have become waste. 79 per cent is sitting in landfills or the environment, 12 per cent has been incinerated and 9 per cent has been recycled. ¹⁵
- More than 480 billion plastic drinking bottles were sold worldwide in 2016.
 That's
 20,000 every second. Fewer than half were collected for recycling. ¹⁶
- Around 95 per cent of plastic packaging material value (US\$80-120 billion annually) is lost to the economy after a short first-use cycle.¹⁷
- Single-use plastic (bottles, lids, bags, etc) made up 77 per cent of the rubbish picked up by Sustainable Coastlines around NZ and the Pacific Islands (1,732,991 items, between 2010 and 2016).
- More than a third of turtles found dead on New Zealand shores, ¹⁹ and seabirds found dead on New Zealand and Australian shores have plastic in their stomachs. ²⁰
- Plastic is now being detected in drinking water and salt.²¹

9.3.4 Establish the Resource Recovery Network

As part of implementing the first WMMP, we agreed to establish 12 Community Recycling Centres over a 10-year period, to 2024. Five have opened so far, all on council-owned sites and all operated by social enterprises under contract. These centres are the start of the Resource Recovery Network, along with the soon to be developed Waitākere Resource Recovery Park (currently the Waitākere Transfer Station, to be redesigned to maximise materials recovery through the facility).

The Resource Recovery Network will make recycling convenient for residents, and empower local communities to develop local solutions, diverting waste in their own communities. As social enterprises, where profit is reinvested into the community, the

¹⁹ Research undertaken by the Massey University Coastal Marine Research Unit.

¹⁵ Geyer, R., Jambeck, J.R, and Law, K.L. 2017. 'Production, use, and fate of all plastics ever made' Science Advances Vol 3(7).

¹⁶ https://www.theguardian.com/environment/2017/jun/28/a-million-a-minute-worlds-plastic-bottle-binge-as-dangerous-as-climatechange

¹⁷ Ellen Macarthur Foundation, 2016. The New Plastics Economy: Rethinking the Future of Plastics.

¹⁸ www.sustainablecoastlines.org

²⁰ Research undertaken by Auckland Museum, the University of Tasmania, and the New Zealand Ornithological Society. ²¹ Yang, D., Shi, H. Li, L., Li, J., Jabeen, K, and Kolandhasamy, P. 2015. 'Microplastic pollution in table salts from China' in *Environmental Science and Technology* 49(22) pp 13622-13627.

CRCs will offer training opportunities, jobs, and places for people to be actively involved in their neighbourhoods.

We acknowledge that the demand for Community Recycling Centres to be established across the region is greater than we can provide for at this stage. This will be addressed

through a review of priorities, budget (including alternate funding sources) and the role of the council and other parties in the delivery of CRCs. The budget and role of the council will be considered through the ten-year budget and section 17A review.

A resource recovery infrastructure plan will look at Auckland's long-term infrastructure requirements for getting to Zero Waste. As the network develops, there may be scope to extend the range of activities and to consider how it extends to include private sector partners.

9.3.5 Focus on reducing litter, illegal dumping, and marine waste

For a complex range of reasons, waste ends up in the wrong place – our streets, parks, and waterways. Litter and illegal dumping are highly visible, spoiling the environment and affecting people's sense of pride in their communities. There is increasing evidence of the significant adverse impacts of litter on the marine environment.

A regulatory approach to litter and illegal dumping, on its own, has not proven to be effective at changing the underlying causes of littering and illegal dumping. The existing regulatory tools need to be reviewed. We also need to work closely with communities to create change in the way Aucklanders manage their unwanted items, from large furniture to cigarette butts. Localised solutions will help to address hot spot areas. We will continue to clean up the environment, and look for solutions for preventing waste entering the marine environment.

9.3.6 Continue to transition to consistent kerbside waste and recycling services

Kerbside collection services for Auckland households are a core council function, with important public health, safety and environmental considerations. Service changes under the 2012 WMMP have sought to improve performance in waste management and minimisation.

We know there is ample opportunity for households to reduce their waste.

Currently, 65 per cent of the weight of the average refuse bin is made up of food scraps and items that can be recycled through the kerbside collection service.

As weekly collections of food scraps remove the largest (and often smelliest) volume of waste from bins, we expect to reduce refuse collection to a fortnightly service. This will only occur once the kerbside food scraps collection is well embedded and a review of refuse collections has happened. Should this settling period take longer than planned,

this will require an adjustment to the current budget and it could be reflected in operational budgets in the Long-term Budget.

Reducing the frequency of refuse collections is consistent with international experience. Larger households will be able to switch to a 240L bin to manage the less frequent collection.

9.3.7 Deliver the kerbside collection of food scraps

Organic material, particularly food waste, makes up the largest proportion of waste (by weight) in the average household refuse bin. It is the largest domestic contributor to greenhouse gas emissions from waste.

We're taking a four-tiered approach to food waste to ensure it is valued as a resource:

- prevent food waste in the first place
- support redistribution of food through food rescue initiatives
- encourage home and community composting where possible
- collect the remainder with the kerbside collection of food scraps service.

Diverting food scraps from the refuse bin, and from landfill, is a key action to achieve Target 2 of the WMMP: reduce kerbside waste to landfill by 30 per cent by 2020/21. It is essential to allow households to manage their waste costs, reducing the amount of refuse that goes in the refuse collection.

Providing a collection service for food scraps was agreed to in May 2017 (resolution ENV/2017/74). On a per tonne basis, diverting food scraps is more expensive for the council than recycling or rubbish. However, the benefits are greater than the cost, given the disproportionate impact of organic matter in generating greenhouse gases in landfills.²¹

Designing the food scraps service

Introducing a new service to collect food scraps from more than 450,000 households is a big job, so we need to get it right from the start. We talked to Aucklanders, studied services elsewhere and ran several trials. Starting with 2000 homes on the North Shore for three months, the trial service was so popular it was extended and will continue to operate until the full service is introduced. Further trials in Manurewa and Papakura have helped to refine how we introduce the collections to achieve maximum uptake.

²¹ Davies, P. and Rohani, M. (2017). Cost Benefit Analysis Of an Organic Waste Collection Service in Auckland. Prepared by Sapere Research Group and RIMU for Waste Solutions, Auckland Council. Auckland Council.

How the collected food scraps will be processed has yet to be decided. Procurement of this service will take into account emissions from transporting the collected food scraps, and ensure that the nutrient value of the food scraps is captured for further use.

Here are some of the factors we have considered

What we have learned	Our response
Rural Aucklanders and Hauraki Gulf islanders told us they can manage their food scraps on their own properties and don't need a collection service.	Collection of food scraps will be for urban Auckland only. Rural Aucklanders and the Hauraki Gulf islands won't pay for this service in their rates. (We have the ability to review this as the service rolls out.)
Some rural towns and settlements may still want a food scraps service.	We will look at local options in non-urban areas.
Green waste (garden) collections are already well established by the private sector.	We will collect food scraps only.
Once people start using the bins for food scraps, they are very likely to keep using them (around 80 per cent of trial participants).	Clear communications and community-led engagement in the early weeks of service roll-out are needed to support uptake.
Trial participants liked knowing that their food scraps are being made useful again. resource.	r Instead of being locked away in landfills, food scraps will be turned into a useful
Trial participants chose to use the service for a range of positive motivations.	Communications will focus on the positive benefits of the service, including financial and environmental benefits.
Trial participants appreciated that the system is easy to use, and offered feedback about the equipment.	Kitchen caddies will be provided to make food scraps easy to handle from kitchen to roadside. The roadside bins have been modified to feature a narrower profile for easy storage and a sturdier handle.
Introducing the service is a major logistical job, requiring good communications and public engagement.	The service will roll out incrementally, starting in Papakura.

9.3.8 Improve waste diversion from our own activities

We have committed to leading waste minimisation efforts by example. We have achieved our first target, to reduce the waste generated in our offices by 30 per cent by 2018. A recent audit has identified that it is possible to achieve a 60 per cent reduction in waste from administrative offices. The challenge now is to increase reductions and extend across the whole group, including council-controlled organisations (CCOs).

We also want to broaden the focus to include the council and CCO's operational activities. This includes things like green waste from parks, waste from community facilities and council events, and waste from council-led infrastructure projects, including the City Rail Link, Panuku-led developments, and other infrastructure projects. We recognise the important role elected members can play in reducing the council's waste, and the power of council procurement processes to influence this.

Further work is required to categorise and quantify our operational waste, establishing a baseline of how much waste council generates. From there, we can determine appropriate targets. This will happen by 2019.

Zero Waste events

Events on Auckland Council land need a waste plan if the event is going to generate a lot of waste, is on a sensitive site, or is going to attract more than 500 people. zerowasteevents.org.nz gives lots of helpful advice.

9.3.9 Work in partnership with others to achieve a Zero Waste Auckland

We are all responsible for waste: everyone has a part to play. We recognise that council has an important statutory responsibility to minimise waste, but we can't do it alone. The innovation, commitment and leadership needed to effect change sits within communities, mana whenua, mataawaka, businesses, and schools.

The first WMMP adopted a strong partnership approach, co-designing solutions with, rather than for, communities. We will continue this approach in this WMMP, resourcing communities to take a lead in their own waste minimisation efforts.

As the focus of the WMMP expands to the 80 per cent of waste that is commercially managed, partnerships with other sectors will become increasingly important. Our engagement with businesses and communities has identified a range of actions included in our action plan.

9.4 The difference we want to see in the next six years – Ngā rerekētanga e aro tātou kia kitea ā ngā ono tau e tū mai nei

Priority action	Result we want to see by 2024
Advocate for an increased waste levy.	Stronger financial incentives make resource recovery a preferred course of action ahead of landfilling.
Advocate for product stewardship.	Responsibility for end-of-life disposal is shifted from ratepayers to producers and consumers.
3. Address three priority commercial waste streams a. construction and demolition waste b. organic waste c. plastic waste	There are alternatives to landfill for the three largest waste streams, and we are making significant progress towards a 30 per cent reduction in total waste to landfill by 2027.
4. Continue establishing the Resource Recovery Network.	A network of thriving Community Recycling Centres is in place across the region, supporting local engagement and solutions for waste minimisation. The Waitākere Resource Recovery Park will be fully established.
5. Focus on reducing litter, illegal dumping and marine waste	People take responsibility for their waste in public places, and the environment is cleaner and tidier.
6. Continue to transition to consistent kerbside waste and recycling services for households	Across Auckland,* households will receive the following services: - rates-funded refuse collection, (weekly; potentially shifting to fortnightly subject to performance evaluation). - recycling collection (fortnightly). - collection of food scraps for urban areas (weekly) - inorganic collection, booked and collected on-site (annually). *With some variation to account for local conditions
7. Deliver the domestic kerbside collection of food scraps.	Urban households manage their food waste and refuse costs by using the kerbside service. Some are able to reduce the food waste they generate, and to compost at home.

8. Address waste diversion from our own operational activities.	We lead waste minimisation efforts by example, with better knowledge of the waste that is generated across our operations, and plans in place to significantly reduce that waste.
Work in partnership with others to achieve a Zero Waste Auckland	Communities, businesses, mana whenua and mataawaka are engaged in finding solutions to reduce Auckland's waste.

10 Action plan tables – Raupapa mahere kaupapa mahi

These tables outline the actions the council will take to implement the WMMP. Some are current and some are planned.

In this chapter:

- · Providing services to Aucklanders
- Leading by example in council's own operations
- Working with other sectors (facilitation and partnerships)
- · Identifying and establishing infrastructure
- Advocacy for improved national frameworks/mechanisms
- Consequential amendments.

New actions, additional to those agreed in the 2012 WMMP, are highlighted in blue text.

10.1 Providing services to Aucklanders – Te tuku ratonga ki ngā iwi o Tāmaki Makaurau

This section describes actions within the waste services that Auckland Council provides to Aucklanders.

- Domestic kerbide refuse and recycling
- Domestic kerbside food scraps
- Kerbside collections for commercial properties
- Services for multi-unit developments
- Services for the Hauraki Gulf Islands

- Inorganic collections
- Communications and engagement campaigns
- · Litter and illegal dumping
- Forward planning and strategy
- Monitoring and reporting

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
		Domestic kerbs	ide refuse and recycling collections		
1.	Kerbside refuse collections	Continue providing a weekly refuse collection in the former Waitākere City, North Shore City, Auckland City, Manukau City, Papakura District and Franklin District Council areas.	Residents continue to have access to a weekly, council-provided refuse collection.	Rates-funded for all areas from 2024/2025	Dispose Objective 9
2.	Kerbside refuse collections – North	Introduce a weekly refuse collection in the former Rodney District Council area.	Rodney residents have access to a weekly, council-provided refuse collection.	Rates-funded, starting 2024/2025	Dispose, Objective 9
3.	Wheelie bins	Progressively introduce wheelie bins in areas currently using bags (the former Manukau City, Waitākere City, North Shore City, Franklin District and Papakura District Council areas).	Residents currently using bags will be offered a choice of an 80-litre, 120-litre or 240-litre wheelie bin for refuse. This will improve health and safety, reduce animal strike and litter.	Rates-funded for all areas from 2024/2025	Dispose Objectives 8, 9
4.	Rates-funded	Introduce rates-funded charging in areas currently paying for refuse through pay-as-you-throw (in the former North Shore City Council, Waitakere City Council, Papakura District Council and Franklin	By using the kerbside food scraps and recycling services, householders can reduce what they out in their refuse bin. They will be able to choose a refuse bin size that suits them, and pay a different charge accordingly.	Rates funded for all areas from 2024/2025	Dispose Objectives 3,

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
		District Council areas as well as Rodney District Council) after a rates-funded collection of food scraps is introduced.			
5.	Fortnightly refuse collection	Change refuse collection from weekly to fortnightly, alternating with fortnightly recycling collection after a weekly collection service for food scraps is introduced and well embedded (subject to performance evaluation).	Residents will put their refuse out for collection fortnightly, alternating with their recycling collection. Fortnightly collections will be possible when weekly collections are provided for food scraps, reducing the quantity and odour of household refuse.	Rates-funded for all areas from 2024/2025	Dispose Objective 3, 7, 9
6.	Kerbside recycling collections	Continue to provide a fortnightly recycling collection in wheelie bins to all households. All recyclable material is collected in the same bin. The standard bin size is 240-litre, but residents can choose a smaller (120litre) or larger (360-litre) bin to suit their needs.	No change to service. Since standardisation in 2016, the service has been available to all households.	Private-good service Rates funded 2018-ongoing	Recycle, recover Objective 6
7.	Kerbside recycling collections – schools	Continue to provide kerbside recycling collection for schools, with the option of bins.	Schools are able to use the kerbside recycling collection. 660-litre on-site	Private-good service Rates funded	Recycle, recover Objective 6
		Domestic ke	rbside collection of food scraps		
8.	Food waste – urban areas	Introduce a weekly collection of food scraps in urban areas starting in Papakura in 2018 and progressively throughout the region over 2019/2020.	Residents in urban areas will be provided with a small (23-litre) kerbside bin and a 6-litre kitchen caddy. They can put food scraps out for collection every week, diverting it from landfill and reducing their waste disposal costs.	Private-good service Rates funded 2018-2020	Recover Objectives 3, 4, 6
9.	Food waste – rural areas and the Hauraki Gulf	Work with local boards, community organisations, the Compost Collective and Community Recycling Centre operators to	Solutions will be developed for rural areas and the Hauraki Gulf Islands where a kerbside collection would be less practical.	Private-good F service Rates funded	Recover

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
Islands	develop alternative, local solutions for food scraps diversion in rural areas and islands which won't receive a kerbside collection.		2018-2020	
10. Other food waste prevention measures	Continue to promote food waste prevention, food rescue initiatives and home and community composting alongside this service.	Householders will be able to learn how to compost and minimise food waste.	Private-good service Rates funded 2018-2024	Reduce, recover Objectives 3,7
	Kerbside collectio	n services for commercial properties		
11. Kerbside refuse an recycling - commercial properties	d Continue to provide kerbside refuse and recycling services to commercial properties for domestic-type refuse and recyclables (not trade waste).	Commercial properties will be provided with the same services as residents for their domestic-type wastes and recyclables. The same changes that will take place for household services (change to bins etc.) will apply.	Private-good and rates-funded service: Rates funded From 2023	Recycle, s recover and dispose Objectives 6, 9
12. Kerbside food scraps – commercial properties	Investigate the potential for commercial properties to opt in to the kerbside collection of food scraps.	Council will be able to assess the types of activities where there is a benefit for commercial properties to opt in to the kerbsid collection of food scraps.	Private-good service e Rates funded 2018 - ongoing	Recover Objectives 6, 9
	Multi-u	nit developments (MUDs)		
13. Services for MUDs (10 or more properties)	Continue working with property owners, body corporates and the waste industry to develop tailored collection services for refuse, recycling, inorganic and food scraps that meet their needs and the requirements of the Solid Waste Bylaw.	the same standard of waste and recycling services as other residents, although	service Rates funded 2018-ongoing	Recycle, recover and dispose Objectives 3, 4, 6, 9

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
14. Guidelines for handling and storage systems in MUDs	Work with property developers and waste service providers to develop guidelines that ensure adequate handling and storage systems are provided in new MUDs in accordance with the requirements of the Solic Waste Bylaw.	Easy to use waste and recycling services will be available to all MUD occupants.	Public-good service Rates funded 2018-ongoing	Recycle, recover and dispose Objectives 3, 4, 6, 9
	F	lauraki Gulf Islands		
15. Services to the Hauraki Gulf Islands	Work with communities and mana whenua to implement <i>Tikapa Moana</i> – <i>Hauraki Gulf Islands Waste Plan</i> (see Appendix Two).	Island residents and businesses will receive waste services tailored to island constraints and opportunities. Waste reduction and on- island solutions will continue to be developed.	Private-good, public- good, and disposer- pays services Rates funded 2018-ongoing	All levels Objectives 3 – 9
	Ir	norganic collections		
16. Annual inorganic collection	Continue to provide the new inorganic service introduced in 2015. All households and eligible commercial properties will receive an annual, booked collection, picked up from within property boundaries. Reusable and recyclable items will be diverted from landfill with reusable items offered to community organisations.	Residents and eligible commercial properties can access a service that allows them to dispose of unwanted items once a year in a way that benefits the community by giving reusable items a second life. At other times of the year, residents can take items to Community Recycling Centres and charities.	Private-good service Rates funded 2018-ongoing	Reuse, recover, dispose Objectives 3, 8, 9
17. Inorganic collection (e-waste)	Continue recycling e-waste collected via the inorganic collection. We will develop a register of reputable e-waste recyclers where residents can take items for disposal at other times of the year. (See also Actions 94 and 95.)	Residents can put e-waste out for recycling in their annual inorganic collection at no additional cost. At other times of the year, they can take items to a Community Recycling Centre or private recycler where a fee may be charged.	service constraints and constraints are constraints and constraints and constr	decover, treat, lispose bjectives 3, 7, 8, 9

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
18. Delivery of inorganic collection service	Review the inorganic collection service before the current contract ends in 2019 to assess the potential for partial or full delivery of services through Community Recycling Centres. Initial trials have indicated potential for rural facilities in particular to provide this service under contract to the council.	Local delivery of the inorganic collection through Community Recycling Centres would enable second-hand items to circulate more effectively in communities and potentially provide residents with a more flexible service.	Public-good service Rates funded 2018	Reuse, recover & dispose Objectives 4, 5, 7, 8, 9
	Communicati	ions and engagement campaigns		
19. Campaigns - waste minimisation, litter and illegal dumping campaigns	Run campaigns such as love Food Hate Waste and illegal dumping to raise public awareness and provide information.	Householders will have information on how to deal with problematic waste streams.	Public-good service Rates funded 2018-ongoing	Reuse, recover, dispose Objectives 3, 7, 8
20. Campaigns – council-provided waste and recycling services	Continue to run targeted communication and engagement campaigns to support and enhance the take up of existing services e.g. the Recycle Right campaign.	Residents will be encouraged to use the services available to them and have information on how to use them to maximum advantage.	Public-good service Rates funded 2018-ongoing	Recycle, dispose Objectives 3, 7, 8
. •	Support the introduction of new services, such as the kerbside collection of food scraps, with high profile, targeted communications campaigns.	Residents will be fully aware of new services when they are introduced and will know how to use them.	Public-good service Rates funded 2018-ongoing	Recycle, recover, dispose Objectives 3, 7, 8

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
22. Community engagement – new council services	Continue to partner with community organisations and individuals on targeted community initiatives in areas with specific challenges to prepare for changes in waste services, such as the introduction of the kerbside collection of food scraps.	The transition to new waste and recycling services will be smooth due to the community-led, council-supported approach prior to service changes. Residents, particularly those with specific needs and challenges (such as large families and people with disabilities), will know how to use the services and how they can minimise their waste and reduce costs.	Public-good funded Rates funded 2018-ongoing	Reduce, recycle, recover, dispose Objectives 3, 6, 7, 8
23. Research and evaluation	Update household behaviour study to better understand community values, attitudes and behaviours towards waste and support programme development and social marketing campaigns.	Residents will be communicated and engaged with effectively.	Public-good service Rates funded 2018-ongoing	All levels All objectives
24. Website	Continue to update the Rubbish and Recycling pages on the council's website, ensuring information is comprehensive and easily accessible.	Residents can readily access information on our waste services, including where to recycle and dispose of unwanted items and materials through council-provided and privately provided services	Public-good service Rates funded 2018-ongoing	Reuse, recycle, recover, dispose Objectives 3, 4
	Litter, illega	al dumping, and marine waste		
25. Illegal Dumping prevention	Develop a regional illegal dumping strategy and take a partnering approach to reduce illegal dumping.	Illegal dumping will be addressed at the root cause. Communities will be supported to develop solutions to dumping in their neighbourhoods.	Public-good service Rates funded 2018-ongoing	Dispose Objectives 3, 8, 9

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
26. Illegal dumping response	Continue to respond to illegal dumping complaints in a timely and consistent manner across the region.	Neighbourhoods will be kept clean and tidy.	Public-good service Rates funded 2018-ongoing	Dispose Objectives 8, 9
27. Illegal dumping reporting systems	Review and improve reporting systems to ensure faster and more efficient handling of illegal dumping complaints.	There will be a user-friendly way for residents to report illegal dumping.	Public-good service Rates funded 2018-ongoing	Dispose Objectives 8, 9
28. Illegal dumping enforcement	Continue to actively enforce litter and illegal dumping infringements under the Litter Act.	Neighbourhoods will be cleaner and litterfree. Litter and illegal dumping collection costs will be reduced.	Public-good service Rates funded 2018-ongoing	Dispose Objectives 3, 8, 9
29. Illegal dumping enforcement tools	Review available tools to enforce the Litter Act and, if necessary, advocate for improved legislative mechanisms.	People who litter and dump waste will be held accountable. Clearer consequences for dumping and littering will contribute to a cleaner environment.	Public-good service Rates funded 2018-ongoing	Dispose Objectives 3, 8, 9
30. Litter – service levels	Work collaboratively across the council and local boards and with external agencies that provide litter bins and loose litter cleaning programmes to provide consistent service levels and communication. This includes Community Facilities, NZTA, Auckland Transport and Kiwi Rail.	All public areas under the council's control will be clean and litter-free. Consistent communications across council departments will support the objectives of the WMMP	Public-good service Rates funded 2018-ongoing	Dispose Objectives 3, 8, 9
31. Litter – community engagement	Work with the Auckland Litter Prevention Steering Group, communities, Business Improvement Districts and local boards to continue to develop a range of tools and ongoing campaigns to encourage local communities not to litter.	Aucklanders will be encouraged to take greater responsibility for their own waste in public places. The environment is cleaner and tidier	Public-good service Rates funded 2018-	Dispose Objectives 3, 8, 9

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
32. Public place recycling	Continue to support measures to increase public place recycling in the most costeffective way. This includes public place recycling bins which encourage people to recycle when away from home. It also includes advocating for a national Container Deposit System to incentivise the return of drink containers for refunds. (See Product Stewardship)	Residents and visitors can recycle when they are away from home.	Public-good service Rates funded 2018-ongoing	Recycle Objectives 4, 6, 8
33. Marine waste	Work across the council group to coordinate issues related to waste in the marine environment.	A coordinated plan is in place to reduce waste in Auckland's harbours and waterways.	Public-good service Rates funded 2018-ongoing	Reduce, dispose Objectives 8, 9

	Forward	d planning and strategy		
34. Auckland disaster waste management preparedness and resilience plan	Produce a plan that identifies hazards and risks and outlines how waste generated because of a disaster (earthquake, flood, volcanic eruption, etc) will be managed across the region.		Public-good service Rates funded 2018-2019	Recover, dispose Objectives 4, 9
35. Economic evidence base	Quantify the wider environmental and other damages caused by landfill and whether these costs are already captured in market prices or covered by regulatory requirements, for use in business cases.	The economic evidence base for diverting waste from landfill is established.	Public-good service Rates funded 2018-2019	All levels of the hierarchy Objectives 7, 9

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
36.	Household hazardous waste strategy	Develop a household hazardous waste strategy that is consistent with national legislation and implement an action plan within six months. The strategy will address collection systems, data requirements, and public education.	opportunities to dispose of household	Public-good service Rates funded 2018-2019	Reduce, reuse, recover, treat, dispose Objectives 7, 9
37.	Green waste	Undertake research to better understand the effectiveness of existing green waste collection methods and diversion rates, and work with the green waste industry, Community Recycling Centres, and other providers to implement the findings.	Aucklanders can achieve improved green waste diversion rates.	Public-good service Rates funded, partnership opportunity 2018-ongoing	Reduce, recover Objectives 4, 5, 7
38.	Marine and boat waste systems	Develop a workable, accessible system for boat users to enable a disposer-pays system to work effectively.	Boat users will pay their share of the waste services they use, reducing the burden on island and coastal residents. Disposer-pays will provide an incentive to reduce the amount of waste produced, and impacts on the marine environment are reduced.	Public good service Rates funded 2019 - ongoing	All levels Objectives 3, 5, 6, 8
39.	Waste from small and medium enterprises	Investigate methods to meet the waste management and minimisation needs of small and medium enterprises.	The waste management and minimisation needs of small and medium enterprises are better understood. Services can be tailored to meet their requirements.	Public good service Rates funded 2018 – ongoing	Recycle, recover, dispose Objectives 3, 4, 6, 7
		Mor	nitoring and reporting		
40.	Monitoring and reporting	Continue monitoring and publicly reporting progress towards targets. Key areas that will be monitored include levels of service, compliance with legislative requirements and regulation, and waste diversion.	Residents can see on the council website how Auckland is progressing in its journey towards Zero Waste by 2040. The data will be used to inform service provision and planning.	Public-good service Rates funded 2018-2019	All levels All objectives

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objective(s)
41. Waste to landfill data	Monitor and publicly report up-to-date information on the composition of waste going to landfill from Auckland.	Businesses seeking to reduce waste to landfill or source recovered materials can make better decisions using the information provided.	Public-good service Rates funded 2018-ongoing	Dispose Objectives 7, 9
42. Benchmarking	Benchmark Auckland's progress towards Zero Waste against other cities in New Zealand and around the world.	Residents will see how Auckland compares with other cities. The comparison will be used to support and advance Auckland's progress.	Public-good service Rates funded 2018-ongoing	All levels All objectives
43. Carbon emissions reporting	Develop a cross-council carbon emissions reporting methodology to reflect progress against waste reduction targets and the Low Carbon Action Plan.	The link between waste reduction and climate change will be clear to residents, helping to explain the need for service changes that reduce waste to landfill and create a circular economy.	Public-good service Rates funded 2018-ongong	All levels Objectives 7, 9
44. Evaluation – WMMP projects	Evaluate the effectiveness of projects identified in this plan.	The value of WMMP projects will be clearly recorded, including non-financial outcomes. Future planning will take evaluation findings into account, to allow continual improvement.	Public-good service Rates funded 2018-ongoing	All levels All objectives
45. Evaluation – community programmes	Evaluate the benefits of community programmes. Indicators include reduction in waste to landfill, reach, job creation and community connectedness and resilience. It will also assess Māori outcomes.	Aucklanders can see the benefits of community-led waste minimisation programmes. The programmes can use the evaluation results to adapt and improve.	Public-good service Rates funded 2018-ongoing	All levels Objectives 3, 4, 5

10.2 Leading by example in council's operations – Te whakatauira i te āhua taki i ngā whakahaere a te kaunihera

This section describes the actions that council will take to lead by example within its own operations.

- Council performance measures
- Council and CCO procurement
- Council and CCO waste streams
- Events

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives	
		Council	performance measures			
46.	Waste performance	Include a performance measure in the council's Performance Plan to ensure waste minimisation is an organisational priority, and monitored and reported on at a senior level.	Achieving zero waste will become an organisational priority.	Public-good service Rates funded 2018-2020	Reduce, reuse, recycle, recover Objective 3	
47.	Council – CCO policies and practice	Work with CCOs to ensure WMMP objectives are reflected in their Statements of Intent.	There is consistency across the wider council family, with all parts of the organisation working towards the same objective.	Public-good service Rates funded 2018-ongoing	Reduce, reuse, recycle, recover Objective 3	
	Council and CCO procurement					
48.	Council and CCO physical works programmes	Require all council- and CCO-led physical works (new builds, refurbishments and demolitions), to produce Waste Avoidance and Resource Recovery Plans to minimise waste to landfill. This will include updating procurement processes to support this action.	The council influences the market through its own programme of physical works. It helps to set a new benchmark for the industry and encourage innovation.	Public-good service Rates funded	Reduce, reuse, recycle, recover Objectives 3, 4, 5	

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
49. Council and CCO procurement processes – recovered materials	Update council and CCO procurement processes to incentivise the use of recovered materials, including in the purchase of goods and in physical works projects, e.g. crushed concrete in road projects. Attention will be needed to identify any internal blockages that restrict their use.	The council family has significant buying power and can play an important role in creating demand for recovered resources through its procurement processes.	Public-good service Rates funded 2018-2020	Reuse, recycle, recover Objectives 4, 5
	Coun	cil and CCO waste streams		
50. Office waste	Continue to lead by example by reducing office and lunchroom waste as per target. Soft plastic recycling bins and battery collection points will be trialled to complement the existing recycling to help increase diversion.	In leading by example, the council demonstrates what is possible in other workplaces.	Public-good service Rates funded 2018-ongoing	Reduce, reuse, recycle, recover, treat, dispose Objective 3
51. Operational waste	Quantify all operational waste streams generated across the council and CCOs, and establish one or more targets to reduce these.	As one of the largest organisations and property owners in Auckland, the council creates a significant amount of waste, including construction and demolition, green waste, and events waste. It can reduce this waste, working towards its vision and targets.	Public-good service Rates funded 2018- ongoing	Reduce, reuse, recycle, recover Objective 3, 4, 5
52. Council pilot projects - deconstruction	Continue to identify suitable projects within the council's own property portfolio for pilot projects to quantify financial and nonfinancial impacts of deconstructing rather than demolishing buildings. Pilot projects to date have demonstrated the waste reduction potential of deconstruction, but more data is required to generate wider industry acceptance.	Quantifying the financial and non-financial impacts of deconstruction will provide the construction and demolition sector with the information it needs to evaluate new methodologies. It will also signal the council's growing interest in achieving sustainable outcomes through its own activities and procurement processes.	Public-good service Rates funded 2018/2019	Reuse, recycle Objective 4, 5

Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives			
53. Commercial and community lease of council property	Ensure community and commercial leases for council property require leases to have waste plans and separate materials for recycling.	Waste minimisation efforts are standardised for all council property.	Public-good service Rates funded 2018/2019	Reuse, recycle Objectives 3, 4			
	Events						
54. Council-run events	Continue requiring all council-run events to be run as Zero Waste events.	Events associated with council or council land are run consistently as Zero Waste events. Event-goers will get first-hand experience of minimising and better managing their waste.	Public-good service Rates funded 2018- ongoing	Reduce, recycle, recover Objective 3, 7, 8			
55. Events requiring an Event Permit	All public events that require an Event Permit must have a waste plan and organisers must work with the council to run their events as Zero Waste events.	Events associated with the council or council land are run consistently as Zero Waste events, with information and support available via the Zero Waste Events website. Event-goers will get first-hand experience of minimising and better managing their waste.	Public-good service Rates funded 2018-ongoing	Reduce, recycle, recover Objective 3, 7, 8			

10.3 Working with others - Te mahi tahi me ētahi atu

This section describes actions that council will take in partnership with others.

- Funding support
- Community sector
- Māori
- Commercial sector construction and demolition waste

- Commercial sector organics
- Commercial sector plastics
- Educational institutions
- Hospitals, rest homes and childcare facilities

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
		Fur	nding Support		
56.	Waste Minimisation and Innovation Fund (WMIF)	Continue running the WMIF grant scheme, distributing \$500,000 per year over two funding rounds. The purpose of the fund is to seed-fund waste minimisation projects that support the goals and objectives of the WMMP.	Businesses, community organisations, schools, Māori/iwi organisations and other entities can apply for grants to help them establish and/or significantly expand waste minimisation initiatives.	Public-good service Waste Levy 2018-ongoing	Reuse, reuse, recover Objectives 3, 4, 5
		Comr	nunity Sector		
57.	Social enterprises	Explore opportunities for social enterprises to participate in waste minimisation and resource recovery initiatives including the Resource Recovery Network. Support will be provided through the WMIF, mentoring programmes and networking.	Social enterprises can build their capacity and make the most of opportunities in waste minimisation and resource recovery. This also generates jobs and other positive social outcomes.	Public-good service Rates and waste levy funded 2018-ongoing	Reduce, reuse, recycle Objective 4, 5
58.	Zero Waste neighbourhoods	Work with communities particularly those around Community Recycling Centres to support their efforts to create Zero Waste neighbourhoods and develop local waste minimization solutions and programmes. Initiatives could include waste education programmes for local businesses, schools and households.	Zero Waste neighbourhoods are catalysts for change in Auckland with active communities taking the lead.	Public-good service Rates and waste levy funded 2018-ongoing	Reduce, reuse, recycle Objective 3, 4, 5, 7, 8
59.	Community-led initiatives	Provide support to community-led initiatives to engage with Auckland residents and businesses to promote Zero Waste and the circular economy.	Understanding of Zero Waste and the circular economy are embedded across Auckland as communities spread the message.	Public-good service. Rates and waste levy funded 2018- ongoing	Reduce, reuse, recycle, recover Objective 3
ir	norganic ncubator rogramme	Continue to support and improve the inorganic incubator programme which fosters the development of small	Individuals and organisations have a place to trial new business ideas using materials recovered from the inorganic	Public-good service Rates funded	Reuse, recycle, recover Objectives 4, 5

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
		businesses using material from the inorganic collection (with the support of contractors Waste Management Ltd and the Community Recycling Network).	collection. More items and materials are diverted from landfill as new uses are created for them.	2018-ongoing	
61.	Green waste diversion	Continue to support the Compost Collective's programme which encourages home, marae and community composting.	Residents have a wide range of options available to them to divert green waste from landfill.	Public-good Rates funded 2018-ongoing	Recover Objectives 3, 4
62.	Zero waste awards and events	Support awards and events that recognise the efforts of individuals, businesses and community organisations working towards Zero Waste.	Public recognition helps raise awareness of the passion and skill within communities and gives profile to those making a difference.	Public-good service Rates and waste levy funded, partnership opportunity 2018-ongoing	Reduce, reuse, recycle, recover Objectives 2, 3, 4, 5
63.	Waste Free Parenting and early childhood centres	Continue to deliver the Waste Free Parenting programme, supporting options for parents to reduce the amount of waste, including nappies, they put out in household refuse.	Households with children reduce the amount of waste they produce and their waste disposal costs.	Public-good service Rates and Waste Levy funded 2018-ongoing	Reduce, reuse Objectives 3, 7
64.	Zero Waste Learning Zone and Experience Centres	Continue to deliver programmes at the Zero Waste Learning Zone at Waitākere Transfer Station and at the Experience Centres at other council sites, such as the Auckland Botanic Gardens.	Aucklanders enjoy an interactive learning experience in a purpose-built facility, and learn about waste minimisation when they visit different council facilities.	Public-good service Rates and Waste Levy funded 2018-ongoing	All levels All objectives
65.	Sustainable Schools	Work with the council sustainable schools team to provide waste wise information for use in school and early childhood programmes.	Schools are supported to encourage waste wise behaviour by children and staff.	Public-good service Rates funded 2018-ongoing	All levels Objective 3
			Māori		
66.	Para Kore ki Tāmaki – expansion	Continue the development and delivery of Para Kore ki Tāmaki.	Marae, iwi, hapū, whānau, kura kaupapa Māori, kōhanga reo, and Māori organisations are supported to reduce	Public-good service Rates and Waste	Reduce, reuse, recycle, recover Objectives 3, 4, 5

	Title	Council action	What this will mean for Aucklanders their waste.	Funding method timeframe Levy funded 2018-ongoing	Waste hierarchy objectives
67.	Marae leadership	Support established Para Kore marae to take a leadership role in development of waste minimisation initiatives within their rohe.	Exemplar marae provide support to whānau, hapū, iwi and marae in their rohe. Opportunities to grow capability of the wider community.	Public-good service Rates and Waste Levy funded 2018-ongoing	Reduce, reuse, recycle, recover Objectives 3, 4, 5
68.	Mana whenua and mataawaka participation	The council works with mana whenua and mataawaka to explore opportunities for them to participate in waste minimisation and resource recovery initiatives, including the Resource Recovery Network and exploring opportunities for partnerships.	Involvement at the start of development of new projects through hui or existing forums to enable te ao Māori to influence activity. Opportunities that build the capability and capacity of Māori across waste minimisation and resource recovery – together and in their respective roles and responsibilities.	Public-good service Rates and Waste Levy funded 2018-ongoing	Reuse, recycle, recover Objectives 3, 4, 5
		Commercial sector	r – construction and demolition waste		
69.	Industry best practice	Promote best practice and celebrate business success in reducing construction and demolition waste. Methods for promotion include the council's website, case studies, supporting awards and events, and working to advance shared objectives with relevant business organisations and accreditation programmes.	Businesses adopting best practice and successfully diverting construction and demolition waste from landfill are recognised and help raise standards across the industry. Business organisations and accreditation programmes, such as Green Star, recognised as having a key role in driving change.	Public-good service Rates funded, partnership opportunity 2018 - ongoing	Reuse, recycle Objectives 3, 4, 5
70.	Support for large developers	Work with large developers such as Housing New Zealand to minimise construction and demolition waste from housing intensification projects. Emphasis will be given to finding solutions that create local benefits such as jobs and	Large housing intensification projects generate a significant amount of construction and demolition waste – as well as high public scrutiny. Maximising diversion of waste from landfill from these projects has a significant impact on what	Public-good service Rates funded, partnership opportunity 2018 – ongoing	Reduce, reuse, recycle Objectives 4, 5

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
		training opportunities.	goes to landfill. It also offers developers the opportunity to generate positive social outcomes in the communities where they operate.		
71.	Construction and demolition waste – behaviour change research	Work with the construction and demolition industry to determine what research and / or support is required to achieve waste minimisation in the industry.	Businesses in the construction and demolition sector have a better understanding of barriers and opportunities for waste minimisation.	Public-good service Rates funded, partnership opportunity 2018-ongoing	Reduce, reuse, recycle Objectives 3, 4
72.	Construction and demolition waste - waste stream composition research	Support research on the composition of the construction and demolition waste stream. This research will be made publicly available to support industry-led waste minimisation initiatives	Industry groups see what impact their products/materials are having on the waste stream and devise appropriate waste minimisation strategies. Recycling businesses have a better understanding of potential resource streams.	Public-good service Rates and Waste Levy funding, partnership opportunity 2018-2020	Reduce, reuse, recycle Objectives 4, 5
73.	Waste brokering	Work with industry representatives to investigate the potential for establishing a waste brokering service, potentially linked to an internet based waste exchange to facilitate exchange of construction and demolition materials between producers and end markets. If successful, a pilot project will be implemented.	A system that enables the exchange of construction and demolition materials between producers and end markets would have a major impact on the amount of waste sent to landfill, and would support the growth of the recycling industry. The system could be linked to the Resource Recovery Network.	Public-good service. Rates and Waste Levy funded, partnership opportunity 2018/2019.	Reuse, recycle Objectives 4, 5
74.	Recovered materials in construction	Promote projects that demonstrate the use of recovered materials in construction and work to find solutions to blockages that limit their use.	Demonstration projects help drive demand for recovered materials, creating a circular economy. Building regulations may limit the use of some materials but making it known what materials can be used in construction is a first step.	Public-good service Rates and Waste Levy funded 2018 – ongoing	Reuse, recycle, recover Objectives 4, 5
75.	Recovered materials markets	Work with the construction and demolition sector to identify issues and opportunities around developing markets for key	Materials currently sent to landfill or cleanfill can be diverted to markets, helping to create a circular economy in	Public-good service Rates and Waste	Reuse, recycle, recover Objectives 4, 5

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
		materials (e.g. crushed concrete and treated timber).	Auckland.	Levy funding 2018-ongoing	
76.	Workplace recycling on building sites	Investigate the potential for providing domestic kerbside recycling bins on construction sites to cater for workers' lunchroom recyclables.	Recycling facilities are available on construction sites like any other workplace.	Public-good service Rates funding 2019-ongoing	Recycle Objectives 3, 4, 6
		Com	mercial sector – organics		
77.	Commercial and industrial food waste – research	Continue to support research to identify solutions for commercial and industrial food waste, with an emphasis on large industrial food waste producers.	Industry has the information it needs to invest in and implement waste diversion strategies.	Public-good service Rates and Waste Levy funded, partnership opportunity 2018-ongoing	Recycle, recover Objectives: 4, 5, 7
78.	Producer – collector connections	Investigate ways to facilitate connections between small organic waste producers (e.g. cafes) and local collectors and/or processors (eg food rescue initiatives, community gardens, Community Recycling Centres.) The Compost Collective could potentially be involved in this area.	Cafés, restaurants, food retailers and other small food waste producers are helped to find alternate solutions for food scraps. Small food waste collectors and processors have help finding new clients and food waste sources.	Public-good service Rates and Waste Levy funded, partnership opportunity 2018-ongoing	Recycle, recover Objectives: 4, 5, 7
		Com	nmercial sector – plastics		
79.	Plastics to landfill - research	Institgate research to identify the composition of plastics entering landfill (predominantly from commercial waste) as the first step in developing solutions to divert this material.	Plastics, from garden furniture to packaging, contribute a large percentage of waste entering landfill. A better understanding of the composition of this plastic enables solutions to be developed to either limit their use in the first place or find recycling solutions.	Public-good service Waste Levy funded, partnership opportunity 2018-2019	Recycle Objectives 2, 4

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
		E	ducational institutions		
80.	Design professions	Work with tertiary institutions to support the promotion of Zero Waste principles in training programmes for architects, product designers etc.	Product designers, architects and others in the design professions play a crucial role in determining what happens to products and structures at the end of their useful life. Design professionals trained in Auckland will understand and be able to apply Zero Waste principles in their practice, contributing to Auckland's Zero Waste vision.	Public-good service Rates funded, partnership opportunity 2018-ongoing	Reduce Objectives 2, 3
81.	Student competitions	Support competitions that encourage secondary and tertiary students to develop innovative waste solutions for intractable waste problems.	Talented young people across the region are encouraged to think about waste issues and take part in creating a Zero Waste future.	Public-good service Waste Levy, opportunity for partnership 2018-ongoing	Reduce, reuse, recycle, recover Objectives 2, 3, 4, 5
82.	Post-graduate projects	Support will be offered to postgraduate students for projects that address waste issues, particularly in the construction and demolition industries. This could include small sponsorships and mentoring.	Postgraduate students are encouraged to work on waste issues and are linked into the network of passionate waste minimisation experts around Auckland.	Public-good service Waste Levy, opportunity for partnership 2018-ongoing	Reduction, reuse, recycling, recovery Objectives 3, 4, 5
		Hospitals, r	est homes and childcare facilities		
83.	Medical and dental wastes	Continue working with DHBs and industry to inform residents, and medical and dental professions about disposal options available for medical and dental wastes. Gaps will be identified where further work is required to find solutions to divert this waste.	Medical and dental wastes are disposed of correctly. Definitions of these waste types are included in the Solid Waste Bylaw to enable better diversion.	Public-good service Rates funded 2018-ongoing	Reduce, reuse, recycle, treat, dispose Objectives 3, 7, 9
84.	Nappies and sanitary products	Work with District Health Boards, childcare facilities and rest homes and industry to develop options to increase	District Health Boards, childcare facilities, rest homes and residents are supported to find alternative solutions and disposal	Public-good service Rates funded	Reduce Objectives 3, 7, 9

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
		diversion of nappies and sanitary products from landfill. (See also Action 61 Waste Free Parenting).	options for nappies and sanitary products.	2018-ongoing	
		Busi	ness improvement districts		
85.	Business improvement districts	Work collaboratively with Business Improvement Districts and local boards to reduce business waste.	Business improvement districts are supported to minimize waste with their membership.	Public-good service Rates funded 2-18-ongoing	Reduce, recycle, dispose Objectives 3, 8, 9

10.4 Identifying and establishing infrastructure - Tautohu me te whakatū kaupapa whakahaere

This section identifies actions to support the development of resource recovery infrastructure in Auckland.

- · Resource Recovery Infrastructure
- Resource Recovery Network

	Title	Council action	What this will mean for Aucklanders	Funding method Timeframe	Waste hierarchy Objectives
		Res	ource Recovery Infrastructure		
86.	Resource Recovery Infrastructure Plan	Develop a plan that identifies all current resource recovery infrastructure and what will be required in 10-20 years to achieve Auckland's Zero Waste goal. The plan will address the need for private-sector and council owned facilities including: • material Recovery Facilities • food waste consolidation and processing facilities • green waste consolidation and	A comprehensive infrastructure plan highlights the issues and opportunities and helps future planning for the council and the private sector. One of the issues likely to be identified is ensuring council planning processes make provision for suitable sites.	Public-good service Waste Levy 2018-2020	Reduce, reuse, recover, treat, dispose Objectives 4, 5
		processing facilities			

	Title	Council action	What this will mean for Aucklanders	Funding method Timeframe	Waste hierarchy Objectives
		 construction and demolition processing facilities specialist processing facilities (e.g. e-waste) Resource Recovery Parks Community Recycling Centres disaster waste management sites. 			
87.	Partnering with neighbouring councils	Where applicable, the council will collaborate with neighbouring councils to establish resource recovery infrastructure.	Shared infrastructure between regions provides opportunities to create efficiencies.	Public-good service Rates and Waste Levy funding 2018-ongoing	Reuse, recycle, recover Objectives 4, 5
88.	Infrastructure for recyclable materials processing	Work with central government and other local authorities across Australasia to explore what remanufacturing infrastructure should be supported to develop new markets for recycled materials (particularly from kerbside collections).	An increasing proportion of recycled materials can be processed within Australasia.	Public-good service Rates and Waste Levy funding 2018-ongoing	Recycle, recover Objectives 4, 5
		R	esource Recovery Network		
89.	Community Recycling Centres	Continue the roll-out of twelve Community Recycling Centres in accordance with the long-term strategy endorsed by council in October 2014 (REG/2014/121), including a review of priorities, budget (including alternate funding sources) and the role of the council and other parties in the delivery of CRCs.	By 2024, Auckland has 12 Community Recycling Centres where residents can take unwanted goods and materials to be reused and recycled. Social enterprises can tender for contracts to operate these facilities and work with council to create vibrant community hubs.	Private-good service Commercial revenue funding and other mechanisms such as the Waste Minimisation Fund 2018-ongoing	Reuse, recycle, recover, dispose Objectives 4, 5

	Title	Council action	What this will mean for Aucklanders	Funding method Timeframe	Waste hierarchy Objectives
90.	Second Community Recycling Centre/drop- off site for the central area	Secure an additional site for a Community Recycling Centre/drop-off site in the central area.	Provision was made for one Community Recycling Centre for central Auckland (the Waitemată / Albert-Eden / Puketăpapa local board areas) in the long-term Resource Recovery Network strategy. Due to lack of space a second facility is required to provide capacity in this highly-populated area.	Private-good service Commercial revenue funding and other mechanisms such as the Waste Minimisation Fund 2019-2021	Reuse, recycle, recover, dispose Objectives 4, 5
91.	Waitākere Resource Recovery Park	Develop the Waitākere Refuse and Recycling Station as a full Resource Recovery Park.	This is one of the busiest transfer stations in New Zealand, and the only large transfer station owned and operated by council. Redeveloping the Waitākere facility provides an ideal opportunity to divert a much greater amount of waste from landfill, and to develop a best practice site that will set a new standard for waste diversion.	Private-good service Commercial revenue funding and other mechanisms such as the Waste Minimisation Fund 2018-2021	Reuse, recycle, recover, dispose Objectives 4, 5
92.	Community Recycling Centres – household hazardous waste	As Community Recycling Centres are established and sites are upgraded, Council will include facilities to enable the public to drop-off household hazardous waste, where consents permit.	Currently, residents can drop off household hazardous waste at four transfer stations around the region. By 2024, drop off points will have transitioned to the 12 Community Recycling Centres which will be more convenient and user-friendly.	Private good funding and other mechanisms such as the Waste Minimisation Fund 2018-ongoing	Recover, treat, dispose Objectives 4, 7
93.	Rural Community Recycling Centres	Work with the operators of rural Community Recycling Centres to support the provision of rural waste minimisation services, e.g. providing collection points for baleage wrap.	Farmers and life-style block owners have access to services that help them divert farm waste from landfill. Community Recycling Centres can also provide waste minimisation advice and connections to product stewardship schemes.	Private-good service Commercial revenue funding and other mechanisms such as the Waste Minimisation Fund 2018-ongoing	Recycle, recover Objectives 4, 5

	Title	Council cotton	What this will mean for Aucklanders	Execution months of	Wests bissessbu
	Title	Council action	what this will mean for Aucklanders	Funding method Timeframe	Waste hierarchy Objectives
94.	Community Recycling Centres – regional services	Work with Community Recycling Centre operators to investigate the potential for delivering regional services locally. Facilities with discrete catchment areas like those in rural areas and the Hauraki Gulf Islands would be the first to consider. Services would be provided by operators under contract to council and could initially include inorganic collection and illegal dumping and litter control.	Community Recycling Centres with discrete catchment areas provide a wider range of services in their communities. Residents receive services that meet the same standards as the rest of the region. Community Recycling Centres can generate more income, and create local jobs and training opportunities.	Private-good service Commercial revenue funding and other mechanisms such as the Waste Minimisation Fund 2018-ongoing	Reduce, reuse, recycle, recover, dispose Objectives 5, 6, 8, 9
95.	Community Recycling Centres – organic waste	Work with Community Recycling Centre operators in rural areas and the Hauraki Gulf islands to pilot small-scale organic waste diversion services. These areas will not get kerbside collection of food scraps, so alternative solutions are needed.	Households in areas without a kerbside collection of food scraps have access to alternate organic waste services if needed.	Private-good service Commercial revenue funding and other mechanisms such as the Waste Minimisation Fund 2018-2022	Recycle, recover Objectives 4, 5, 7

10.5 Advocacy for improved national frameworks – Te kōkiri mō ētahi pou tarāwaho ā-motu pai ake

This section identifies actions needed to advocate for improved national frameworks for waste management and minimisation.

- Waste Minimisation Act
- Product Stewardship
- Asbestos
- Hazardous Waste

	Title	Council action	What this will mean for Aucklanders	Funding method Timeframe	Waste hierarchy Objectives
			Waste Minimisation Act		
96.	Waste Levy	Continue to advocate strongly to central government for an increase in the waste levy and for a review of the levy structure in collaboration with the waste and recycling industry, mana whenua and other local authorities.	An increased waste levy incentivises Aucklanders to reduce the amount of waste they send to landfill, and supports the development of businesses to divert recoverable waste into productive uses.	Public- good service Rates funded 2018-2020	Reuse, recycle, recover, dispose Objectives 1, 4, 5, 7, 9
97.	Waste Minimisation Act – industry role	Advocate to government for amendments to the Waste Minimisation Act to give industry the same responsibility as local authorities – 'to promote effective and efficient waste management'.	Auckland moves more quickly towards a circular economy and its Zero Waste goal if industry has the same responsibilities as local government under the Act. The recycling sector benefits from access to a greater amount of recovered materials.	Public- good service Rates funded 2018-ongoing	Reuse, recycle, recover Objective 1
			Product Stewardship		
98.	Container Deposit System (CDS)	Continue to advocate to government for a national CDS in collaboration with other local authorities.	CDS delivers multiple benefits for Auckland including an increase in the amount of beverage containers recycled, a decrease in the cost to council to provide kerbside recycling services, reduced litter and litter collection costs, job creation through return depots (including Community Recycling Centres), and income generating opportunities for charities.	Public- good service Rates funding 2018-ongoing	Reuse, recycle, recover, dispose Objectives 1, 2, 3, 4, 5, 6, 8
99.	Product stewardship – plastic bags, tyres, e-waste and batteries	Continue to advocate to central government for the introduction of mandatory product stewardship schemes for plastic bags, tyres, e-waste, batteries, and other products that need priority attention.	Product stewardship leads to a reduction in the use of plastic bags and consequential benefits to the marine environment. Residents can dispose of other identified products in an environmentally responsible way. Less inorganic waste is collected, so there is less burden on ratepayers. Manufacturers have more incentives to	Public- good service Rates funded 2018-ongoing	Reduce, recycle, recover, treat, dispose Objectives 1, 2, 4, 7

			design products that are easily recycled.		
100.	Voluntary product stewardship schemes	Support the introduction of voluntary, industry-led product stewardship schemes that meet best practice. This includes producers and consumers contributing to the cost of recovery and recycling.	Industries that develop responsible product stewardship schemes are supported. Industries with a small number of manufacturers/retailers (such as the mattress industry) are most likely to be able to achieve this.	Public- good service Rates funded 2018-ongoing	Reduce, recycle Objectives 1, 2, 4
			Asbestos		
101.	Asbestos in home DIY – identification	Advocate for a national solution to deal with the problem of asbestos found in home DIY projects. Currently, there is no cost-effective solution for home owners who find asbestos in DIY projects. A solution that enables home owners to identify and dispose of asbestos in a safe but cost-effective way is required.	An identification and disposal system protects the health of DIY home owners, and ensures asbestos is disposed of safely rather than being sent, illegally to landfill.	Public-good Rates funded 2018-ongoing	Treat, dispose Objectives 7, 9
102.	Commercial hazardous waste – tracking	Advocate for a waste tracking system for all commercial hazardous waste.	Aucklanders have confidence that businesses are responsibly managing hazardous waste through appropriate treatment and disposal facilities.	Public-good Rates funded 2018-ongoing	Treat, dispose Objectives 7, 9

10.6 Consequential amendments – Te whakatika ā-ture me ōna hua

	Title	Council action	What this will mean for Aucklanders	Funding method timeframe	Waste hierarchy objectives
			Consequential amendments		
103.	Solid Waste Bylaw	Review the Solid Waste Bylaw to ensure it is not inconsistent with the WMMP, and ensure any issues such as fill licensing are addressed.	The WMA states that bylaws must not be inconsistent with the territorial authority's WMMP. Specific issues such as fill licensing, medical and sanitary waste disposal and hazardous waste management can be included in the bylaw review process.	Public-good service Rates funded 2018-2019	All levels All objectives

Appendix 1 – Āpitihanga 1: Auckland Council Waste Assessment

Available at the Auckland Council website, search 'Waste minimisation and management plan 2018'

Appendix 2 – Āpitihanga 2: Tikapa Moana Hauraki Gulf Islands Waste Plan

Available at the Auckland Council website, search 'Waste minimisation and management plan 2018'

Appendix 3 – Āpitihanga 3: Monitoring and Reporting Framework

The council will monitor and report on progress towards meeting the objectives and targets of the Waste Management and Minimisation Plan (WMMP). This information is essential for evaluating how services are performing and for establishing baseline data to assist future planning.

The following table sets out indicators, targets, methods of assessment, and reporting mechanisms for key quantitative measures. Further work is planned to improve the public reporting and visibility of the data, and to expand the range of indicators that are monitored (see actions 38 to 43 in the Action Plan).

Indicator	Targets	Method of assessment	Reporting channel
	1. Domestic	kerbside waste	
Waste divertedquantitydestinationcomposition	 Short term: 30% reduction to 110kg per capita per year in domestic kerbside waste to landfill by 2021 Medium term: Further 20% reduction to 88kg per capita per year by 2028 	records (weighbridge receipts) Solid waste bylaw data	 Annual report Council website (quarterly)
Waste landfilled quantity destination composition	Short term: 30% reduction to 110kg per capita per year in domestic kerbside waste to landfill by 2021 Medium term: Further 20% reduction to 88kg per	records (weighbridge receipts) Solid waste bylaw data	 Annual report Council website (quarterly)

Indicator	Targets	Method of assessment	Reporting channel
	capita per year by 2028	Analysis Protocol assessments	
	2. Cou	ıncil waste	
Council office waste landfilled • Quantity	Medium term: 60 per cent per capita by 2024	 Council contractor records (weighbridge receipts) 	 Annual report Council website (quarterly)
Council operational wastes landfilled • Quantity	To be developed	To be developed	 Annual report Council website (quarterly)
	3. Construction a	and demolition waste	
Waste diverted from pilot deconstruction projects ul> quantity type	Number of projects Waste diverted	Council contractor records	Annual report Council website (quarterly)
	4. Household	hazardous waste	
Quantity collected and disposed	 Collected through Community Recycling Centres and other council collection points 	 Council contractor records 	 Annual report Council website (quarterly)
	5. Total w	aste to landfill	
Waste landfilled (quantity, destination, composition)	 Medium term: 30% reduction to 560 kg per capita per year by 2027 Long term: Zero waste to landfill by 2040 	 Solid waste bylaw data Solid Waste Analysis Protocol (SWAP) assessments 	Annual report Council website (quarterly)
Illegal dumping (quantity, incidences, types)	 Medium term: 30% reduction to 560 kg per capita per year by 2027 Long term: Zero waste to landfill by 2040 	Council contractor records (weighbridge receipts) Council customer relationship management (CRM) records	Annual report Council website (quarterly)
Effectiveness of council communication and waste minimisation programmes	 Medium term: 30% reduction to 560 kg per capita per year by 2027 Long term: Zero waste to landfill by 2040 	 Solid waste bylaw data Solid Waste Analysis Protocol (SWAP) assessments Behaviour and attitudinal surveys 	 Annual report Council website (annual)

Appendix 4 – Āpitihanga 4: Waste Minimisation and Innovation Fund Guidelines

The Waste Minimisation and Innovation Fund (WMIF) is a grant scheme established as one of the key initiatives of the Auckland Council's Waste Management and Minimisation Plan (WMMP).

The WMMP can be accessed on the Auckland Council website, search 'Waste minimisation and management plan 2018'

The broad aim of the fund is to support initiatives that will help achieve the vision, targets and strategic objectives of the WMMP. The fund has a specific focus on seed funding new initiatives – including developing business and community-based resource recovery centres and programmes.

The fund is open to community groups, businesses, iwi/Māori organisations, educational institutions and other community-based organisations operating in the Auckland region.

The fund has \$500,000 to distribute annually, with one funding round per year for grants of over \$5000 and two funding rounds for grants of \$5000 and under.

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Section 9	Submitting your application
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Vision and purpose

The Waste Minimisation and Innovation Fund supports the vision, targets and strategic objectives of the Waste Management and Minimisation Plan.

Vision Auckland aspires to be Zero Waste by 2040, taking care of people and the environment. and turning waste into resources. C. Reduce harm A. Minimise waste B. Maximise generation opportunities for from residual waste resource recovery Advocate for Develop infrastructure Restrict organic and and processes to other harmful waste stronger regulatory going to landfill incentives to reduce enable resource Objectives waste recovery 8. Reduce the incidence 5. Identify local economic Advocate for of litter and illegal product stewardship development dumping to avoid or reduce opportunities through Continue to manage waste at source resource recovery residual waste Increase individuals' 6. Achieve operational effectively and sense of personal efficiencies in Council's efficiently while responsibility for domestic waste and progressively reducing waste reduction recycling services Auckland's reliance on landfills Reduce Treat Reuse Recycle Recover Dispose

Total regional waste

Reduce total council- and private-sector-influenced waste to landfill by 30 per cent (from the baseline of 832kg to 582 kg per capita per year by 2027)

Domestic waste

- **Targets**
- Reduce domestic kerbside refuse by 30 per cent (from 160kg to 110kg per capita per year by 2021)
- After 2021, reduce domestic kerbside refuse by a further 20 per cent (from 110kg to 88kg per capita per year by 2028)

Council waste

- Reduce council's own in-house office waste by 60 per cent per capita by 2024 (from a 2012 baseline)
- Work across council to set a baseline for operational wastes and, by 2019, put in place targets for reduction.

Purpose of the Waste Minimisation and Innovation Fund

The WMIF has been established to disburse a portion of the funds allocated to Auckland Council from the national waste levy (currently set at \$10 per tonne). Half of the total revenue generated from the levy is allocated to territorial authorities on a population basis. This money must be spent on promoting or achieving waste minimisation as set out in local authorities' Waste Management and Minimisation Plans (WMMPs). The other half, less administration costs, is allocated to waste minimisation initiatives²², through the Waste Minimisation Fund, which is run by the Ministry for the Environment.

Local authorities may use funds from their allocation to promote or achieve waste minimisation as set out in the WMMP in accordance with section 47 of the Waste Minimisation Act 2008²³.

The Auckland Council WMMP ²⁴ establishes the purpose of its Waste Minimisation and Innovation Fund as:

- to promote or achieve waste management and minimisation
- reduce waste to landfill in accordance with the objectives of the WMMP
- to foster new ideas and encourage community participation in reducing waste to landfill.

The WMIF is primarily intended to provide seed funding to encourage and enable creative reuse and recovery and generate economic opportunities.

1. Funding outcome areas

Auckland Council wants to target priority waste streams, reduce harm to the environment and improve efficiency of resource use. The WMIF aims to do this by supporting new initiatives that complement and enhance existing programmes or address gaps or opportunities. Funding is allocated through four outcome areas:

- resource recovery initiatives and facilities
- commercial waste
- · organic waste
- community action and behaviour change.

Resource recovery initiatives and facilities

Development of a regional Resource Recovery Network (RRN) is a priority for Auckland's long-term aim to achieve Zero Waste by 2040. The RRN will provide an infrastructure that supports maximum resource recovery as well as providing local business and employment opportunities. A specific focus is the development of community and business operated resource recovery facilities.

²² MfE, Waste Minimisation Fund Guide for Applicants, website August 2012

²³ Waste Minimisation Act 2008, Section 47 (Grants)

²⁴ Auckland Council Waste Management and Minimisation Plan, June 2012

Commercial waste

Supporting business waste minimisation is a key initiative of the WMMP. The long-term target of the WMMP is to reduce total waste to landfill by 30 per cent by 2027, and as commercial waste (waste not controlled by the council) makes up approximately 80 per cent of all waste sent to landfill in Auckland, supporting business waste minimisation is a priority. The council is seeking ways to encourage development of innovative solutions for commercial waste, particularly construction and demolition waste (concrete, timber, plasterboard, insulation materials etc), commercial plastic waste and commercial organic waste.

Organic waste

Organic waste (food waste and green waste) makes up about 50 per cent (by weight) of domestic waste sent to landfill. As such, reducing organic waste is a priority for achieving Auckland's Zero Waste goal. Auckland Council will be introducing a kerbside collection of organic waste for households in urban areas in 2020/21. Initiatives that complement this service and/or enable local composting will be eligible for funding. Projects could look at reducing domestic and commercial green waste to landfill like community gardens, which have composting/mulching practices, or innovative ways to process organic waste.

Community action and behaviour change

Fostering new ideas and encouraging community participation in reducing waste to landfill is a key direction of the WMMP and a priority in the lead up to introducing standardised charging for refuse across the region once the organic waste collection has been introduced. Building community capacity for waste minimisation will be important in ensuring all Aucklanders have access to the information, education and support they need to reduce the amount of waste they send to landfill. The aim is to create enduring change in community behaviour and attitudes towards waste.

2. Who can apply?

The fund is open to community groups, businesses, iwi/Māori organisations, early childhood centres, schools, tertiary organisations and other community-based organisations operating in the Auckland region.

Eligibility criteria

- Only waste minimisation projects are eligible for funding. Projects must promote
 or achieve waste minimisation. Waste minimisation covers the reduction of waste,
 and the reuse and recycling and the recovery of materials or energy for further
 use or processing.
- The scope of the fund includes educational projects that promote waste minimisation activity only, but not general environmental education programmes.
- The fund does not cover projects that focus on waste disposal or on the treatment of wastes for disposal/clean ups.

- Projects must result in new waste minimisation activity, either by implementing new initiatives, or a significant expansion in the scope or coverage of existing activities.
- Funding is not for the ongoing financial support of existing activities, nor is it for the running costs of the existing activities of organisations, individuals or firms.
- Projects may be for a discrete funding timeframe of one to three years, after which the project objectives should have been achieved and, where appropriate, the initiative has become self-funding.
- Funding can be used for operational or capital expenditure that is required to undertake a project.
- The applicant must be a legal entity or fall under an umbrella legal entity.
- The fund will cover up to 50 per cent of the cost of the project. Applicants will need to demonstrate adequate sources of additional funding from their own or other resources, or in kind.

3. What funding is available?

The scheme will have an annual \$500,000 funding pool. If funds are not fully allocated in one year they will roll over into the following year.

Sub-categories for funding allocation are:

Category	Grant Range	When to apply
Small and simple projects	From \$250 - \$5000	April and September
Medium projects	From \$5001 - \$25,000	September
Large projects	Grants over \$25,000	September

The maximum amount that can be funded is \$50,000 per project, but larger projects may be considered on merit at the discretion of the council.

All decisions made by Auckland Council relating to a funding application will be final. An applicant may, however, re-submit an application to a future funding round.

Types of funding

One-off project funding

- Grants will only be released after receipts have been provided to council, unless by prior arrangement.
- Grants are intended to provide short-term start up funding to organisations and groups for projects or initiatives for a specific purpose or outcome.
- The recipient is required to fulfil accountability obligations at regular intervals, or following completion of project or initiative, as appropriate.

Multi-year funding contracts (for medium or large projects only)

- A multi-year contract will be for a maximum of three years to provide continuity of funding for a specified purpose or outcome.
- Council and recipient to agree a set of performance measures and indicators as a condition of support.
- Multi-year funding contracts are provided to support the council's regional objectives and outcomes as determined by the Waste Management and Minimisation Plan.

Applicants seeking a multi–year funding contract must provide evidence that secured funding will allow the group or organisation to provide services and activities that directly support the delivery of the council's strategic objectives. Applicants should be able to demonstrate to the council's satisfaction:

- a history of delivering similar services and activities or evidence that the group or organisation has the ability to achieve the project's objectives
- how secured multi-year funding will allow the group or organisation to contribute to the council's ability to meet its vision, targets or strategic objectives under the Waste Management and Minimisation Plan.
- adequate ongoing financial resources.

4. What you can apply for?

The following list provides examples of acceptable activities:

- feasibility studies and business cases
- infrastructure design and development
- materials/equipment and plant
- skills development
- trials and pilot programmes
- education programmes
- workshops, neighbourhood meetings, events, neighbourhood mentoring and social learning
- monitoring and surveys
- research and development that is not aimed at supporting the attainment of a qualification
- project execution/implementation costs.

The WMIF will not fund:

- projects that are inconsistent with Auckland Council's Waste Minimisation and Management Plan
- projects that do not involve waste generated from within the Auckland region
- retrospective projects where the funding sought is for work already completed
- debt servicing
- activities which duplicate other demonstration projects or pilot studies.

Auckland Council cannot commit to ongoing financial support, (except in multi-year funding contracts as above) and the award of a grant does not entitle the recipient to any future grant.

5. General funding requirements

Successful grant applications must:

- support the vision, targets and strategic objectives of council's WMMP 2018
- lead to measurable waste minimisation outcomes
- take place within and/or benefit the Auckland region.

Other considerations

- Grants will not be subject to GST. Costs must be listed exclusive of GST. If a group
 or organisation is not GST registered, the council will make the necessary
 adjustments to the funding application. Transport and freight costs should be
 included, if applicable.
- Generally to receive funds applicants are expected to be actively involved in the
 project and make a contribution to resourcing the project. This could include
 providing materials, in kind labour or a financial contribution. It is important to include
 this contribution on the application form.
- Successful applicants must complete and sign the Terms and Conditions of the contract before the release of funds.
- Unless otherwise agreed, projects must have started within three months of approval
 of funding and, for short-term projects, progress must be completed within 12
 months of receipt of funding. For longer-term projects, progress towards agreed
 upon targets must be made within 12 months of receipt of funding.

6. Filling out the application form

Applications will only be accepted through the funding website now in use, the <u>SmartyGrants website</u> (access to the application form will become available on the first day of the next funding round.)

Hard copy and PDF applications will no longer be accepted.

Please make sure you answer all questions in the application form as failure to provide all of the necessary information may result in funding not being allocated to you.

Only complete applications will be accepted so please make sure you include all requested attachments.

Complete the checklist at the end of the application form to make sure you have included all of the necessary information and met all the conditions.

Application costing

The application form for medium, large and multi-year grants refers to additional supporting documents (these are only required for large and multi-year grants but may be requested for medium grants).

The following table provides definitions for these.

Document	Guidance
Feasibility study Council needs to ascertain if the idea will work and if it is feasible. A feasibility study is written before the business plar identify how, where and to whom you intend to sell the relate service or product. Feasibility studies:	
	 assess competition calculate how much money an organisation needs to start the project and keep it running until it is established provide in-depth detail about the business to determine if and how it can succeed.
	It should include an overview of the business and the market, and technical and financial details regarding the project.
Business plan	A business plan provides:
	 information about the directors/shareholders/trustees age and history of the organisation staffing levels organisation's vision, mission and values any other supporting background information about the
Capability	project and the organisation. The capability statement includes the following information:
statement of the project	 Curriculum Vitae (CVs) for key staff members, detailing skills and experience organisational structure any identified risks, and how they are being managed.

7. Grant uplifting and reporting requirements

- Funding must be uplifted within 12 months of approval. Any funds not uplifted within this time will be returned to the funding pool and reallocated.
- Successful applicants will be required to submit a final report on completion of the
 project or 12 months after the grant has been approved, whichever comes first.
 Depending on the project, the council may withhold funds (or a percentage of these)
 until the project report and proof of receipts have been received.
- Medium/large and multi year grants may be required to report on key milestones as part of their contract agreement.
- Auckland Council has a policy of routinely auditing successful recipients of funding.
 This may include a visit from council staff during, or on completion of, the project.

8. Submitting your application

A link to the funding website SmartyGrants can be found at https://www.aucklandcouncil.govt.nz/grants-community-support-housing/grants/grantscalender/Pages/grant-details.aspx?itemID=58 during funding application periods as outlined in section 4.

Please make sure you answer all questions within the application as failure to provide all of the necessary information may result in funding not being allocated to you.

Make sure you include all requested attachments (quotes, supporting information etc). You can scan these and upload them with your application. Clearly identify all additional material.

Written quotes – you are required to supply evidence of the costs you are applying for. This could include a quotation from a vendor detailing the goods and services required, or a copy of an advertisement featuring the price of the product you are requesting funding for. Verbal quotes are not accepted.

If you need any assistance please contact the Waste Planning Advisor (Initiatives) on 09 301 0101 or email aucklandwastefund@aucklandcouncil.govt.nz

All funding correspondence is Private and Confidential.

Once you have submitted your application you will receive an acknowledgement email.

Your application will be assessed and you will be advised in writing of the result.

Application dates

The April fund for small grants opens at on 1 April and closes on 30 April.

The September fund for small, medium and large grants opens on 1 September and closes on 30 September.

9. What happens once you have submitted your application form?

- Auckland Council will acknowledge receipt of all applications.
- The application will be assessed and scored against the 'application assessment criteria' detailed below.
- The council will allocate the funding to successful applicants.
- · You will be advised in writing of the result.
- If you are successful, you will need to accept a contract outlining terms and conditions before any funding is released. Your application form will form part of the contract.
- Grants are made as a reimbursement once you have paid for the goods and services and you have sent in copies of the full receipts (unless prior arrangements have been made with the council).
- Once you have completed your project you will need to send in a brief report on a
 form that will be sent out to you. If you have applied for a medium or large grant or
 multiyear funding you may need to provide more than one report to the council.

10. Application assessment criteria

The criteria for the fund will be focused on the seeding of new initiatives including developing business and community-based resource recovery centres and programmes.

The following criteria will be used to assess applications:

1. Strategic alignment

Proposals must align with the strategic objectives and guiding principles of the WMMP.

2. Waste minimisation

Proposals must reduce waste to landfill and/or target priority waste streams.

3. Community participation and / or community benefit

- Proposals should encourage community participation (number and depth of engagement).
- Proposals should result in tangible community benefit (in some cases this may include private sector benefit).

4. Value for investment

- Proposals building on existing initiatives should add value and bring a fresh approach.
- Where possible proposals should address gaps in Auckland Council waste services and create new opportunities that would not otherwise emerge.
- Where possible proposals should be developed in consultation with other parties carrying out waste-related activities.
- Proposals should represent a good return on investment.
- The degree of funding for any proposal will take into account the level of risk.
- The proposal should not undermine existing initiatives or other funded proposals.

5. Quality of proposal

- The proposal has clear objectives.
- The organisation making the proposal can demonstrate capacity to deliver, ideally evidenced by experience in projects of a similar nature.
- The objectives of the proposal are measurable.
- The proposal will be technically and financially feasible, and does not represent an unacceptable level of risk to the council.

More information

More information can be found on the Auckland Council website, or by contacting the Waste Planning Advisor (Initiatives) on aucklandwastefund@aucklandcouncil.govt.nz or 09 301 0101.

Glossary – Papa kupu

Cleanfill Any landfill that accepts only material that, when buried, will

have no adverse effect on people or the environment.

Community

Recycling Centres

(CRCs)

Facilities where residents can drop off unwanted goods which are then sold for reuse and recycling, creating income that supports local jobs, training and volunteering opportunities

Construction and demolition waste

Material from construction and demolition sites, including for

example wood waste, concrete and scrap metal

Diverted material

Anything no longer required for its original purpose and, but for commercial or other waste minimisation activities, would be

disposed of or discarded.

Domestic waste

Waste from households.

Landfill

A disposal facility as defined in section 7 of the WMA,

excluding incineration.

Litter and illegal

dumping

Litter includes any refuse, rubbish, animal remains, glass, metal, garbage, debris, dirt, filth, rubble, ballast, stones, earth, or waste matter. Dumping is littering at the extreme end of the scale. It depends on the amount and nature, location and circumstances, and the resources required to remove the litter.

Mana whenua

The people of the land who have customary authority – their historical, cultural and genealogical heritage are attached to the land and sea.

Managed fill

A disposal site requiring resource consent to accept welldefined types of non-municipal waste (e.g. low-level contaminated soils).

Mataawaka

Māori whose authority resides outside the Auckland Council

region.

Mauri

Essence.

MfE

Ministry for the Environment.

MRF

Materials Recovery Facility

Organic waste

In this plan, organic waste refers to food waste (or kitchen

waste) and green waste (or garden waste).

Private-good

In the context of waste services, often refers to services that meet environmental policies and standards that are linked to specific individuals – kerbside recycling services, for example. In most cases costs are met through general rates or subsidised by other waste services or the government waste levy.

Product stewardship

People and organisations involved in the life of a product share responsibility for ensuring there is effective reduction, reuse, recycling, or recovery of the product, and manage any environmental harm arising from the product when it becomes waste. (Sometimes called extended producer responsibility.)

Public good

In the context of waste services, generally refers to services provided for the public to meet environmental policies and standards. These services – which benefit the whole community – cannot normally be linked to specific individuals who use the service. Examples are litter services, environmental promotion and education, enforcement of illegal dumping, and hazardous waste services. The cost of these services is generally met through general rates.

Resource Recovery Network A region-wide network of community recycling centres and other facilities that enable diversion of waste from landfill.

SWAP

Solid Waste Analysis Protocol, an MfE-led baseline programme to provide solid waste composition information.

Waste

Anything disposed of, or discarded, e.g. organic, electronic, or construction and demolition waste.

construction and acmontion was

WMA

Waste Minimisation Act 2008.

WMMP

Waste Management and Minimisation Plan – 2012-2018 and

2018-2024.

Auckland Waste Management and Minimisation Plan 2018, amended 2022 Te Mahere Whakahaere me te Whakaiti Tukunga Para i Tāmaki Makaurau

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