

Waste Management & Minimisation Plan

2018 - 2024

Gisborne District Council



Combining imagination and science to repurpose waste

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Disclaimer

This Waste Management & Minimisation Plan 2018 was prepared using information gathered from a variety of sources to complete the Waste Assessment. Data has been sourced from the private sector or has been compiled from Council data sources and reports. While every effort has been made to achieve a reasonable degree of accuracy in this Waste Assessment, it must be noted that there are significant limitations due to the level of data availability.



Executive Summary

This is the second Waste Management and Minimisation Plan (WMMP) prepared by Gisborne District Council. The first WMMP was adopted in 2012 and has been reviewed as part of the preparation of this plan.

Since 2015, there has been an increase in the amount of waste our community sends to landfill. Over the same time, the amount of material we recycle has also dropped slightly. This matches a national trend in increasing waste to landfill and declining recycling tonnage.

This Waste Management and Minimisation Plan sets out what we intend to do over the next six years to make sure we manage our waste as best we can for the benefit of our community, our local economy, and our environment.

Current 2017 Statistics



RECYCLING
5,924 TONNES



**RUBBISH TO
LANDFILL**
14,161 TONNES



ORGANIC
10,000 TONNES

Of particular concern is the fact that:



**WASTE TO
LANDFILL**
INCREASING



RECYCLING
DECREASING



**LACK OF
REGULATION**
(NO BYLAW)

In preparing the draft plan we have considered a range of data and information and taken account of our obligations under various pieces of legislation.

The key information that has shaped our draft plan includes the following:

- We have a statutory duty to not only ensure waste is managed effectively and efficiently, but also to minimise it.
- The amount of waste we are sending to landfill is increasing.
- Our kerbside waste and recycling performance needs to improve.
- Food and green waste represent the largest fractions of material being landfilled. This is potentially the biggest opportunity to throw less away.
- There is potential opportunity to recover value from the waste stream through social enterprise initiatives.
- We have a reliance on landfill disposal and no council owned waste facilities.
- We do not have a solid waste bylaw.

Council intends to focus on the avoidance, reduction and minimisation of waste. We will make the most of our waste resources, foster innovation and maximise the opportunities that can be created from resource recovery. Council adopted this plan on 14 May 2018.

This Waste Plan sets out goals, objectives and targets to guide us towards waste avoidance, reduction and recovery. Thirty-three activities are detailed and will be carried forward into the Council's Long-Term and Annual Plans to ensure the resourcing is available to deliver on our Plan.

Proposed activities for consideration include:

- Consider alternative rubbish and recycling collection options.
- Developing and implementing a solid waste bylaw – this will help council set standards and gather data so we can plan and manage waste better.
- Working to deliver consistent and effective forms of waste communication and education around waste services and waste minimisation, so households and communities are inspired and supported to play their part.
- Investigating and, if feasible, developing a resource recovery network – including facilities for construction and demolition waste, E-waste, food and/or other organic waste which create employment opportunities.
- Collaborating with other local government organisations, NGOs, and other key stakeholders on undertaking research, lobbying and actions on various waste management issues such as (but not limited to) product stewardship, electronic waste, tyres, and plastic bags.

VISION

Gisborne District: A prosperous region, where each person takes responsibility for using resources wisely so that we can reduce harm to the environment.

GOALS

What we want to achieve!

1.

Improve our waste and recycling performance.

2.

Doing the best by our community and environment.

OBJECTIVES

1. To continually reduce the total quantity of waste we send to landfill.
2. To provide environmental, social, economic and cultural benefits by increasing the amount of waste diverted from landfill via reuse, recovery and/or recycling.
3. To investigate the use of social enterprise initiatives and alternative waste technologies for environmental and economic benefit
4. To improve data collection and reporting systems across both the district and nationally.
5. To actively engage the community and provide information, education and resources to support community actions.
6. To work with local businesses and organisations to actively promote waste reduction at a local level.
7. To use council influence to advocate for increased or mandatory producer responsibility for problematic wastes i.e. tyres, E-waste, plastic bags.
8. To work with service providers to identify efficiencies while maintaining or improving service levels.
9. To consider both the environmental and health and safety impacts of all options and ensure that these impacts are taken into account in councils decision making process.
10. Gisborne District Council is a leader by example in minimising waste

Part A: Strategy

1.0 Introduction

This Waste Management and Minimisation Plan is prepared in accordance with the requirements of the Waste Minimisation Act 2008 ('the Act').

1.1 Purpose of the plan

Managing waste and ensuring good outcomes for the community can be a complex task. We need to look after our environment, protect people's health, and make sure that this is done at an acceptable cost to the community.

Councils have a statutory role in managing waste, and are required to promote effective and efficient waste management and minimisation within their districts. A key part of doing this is to adopt a Waste Management and Minimisation Plan (WMMP).

This WMMP sets the priorities and strategic framework for managing waste in the district. Once the plan is adopted, the actions will be carried forward into the Long Term and Annual Plans to ensure the resourcing is available to deliver the plans' goals and objectives.

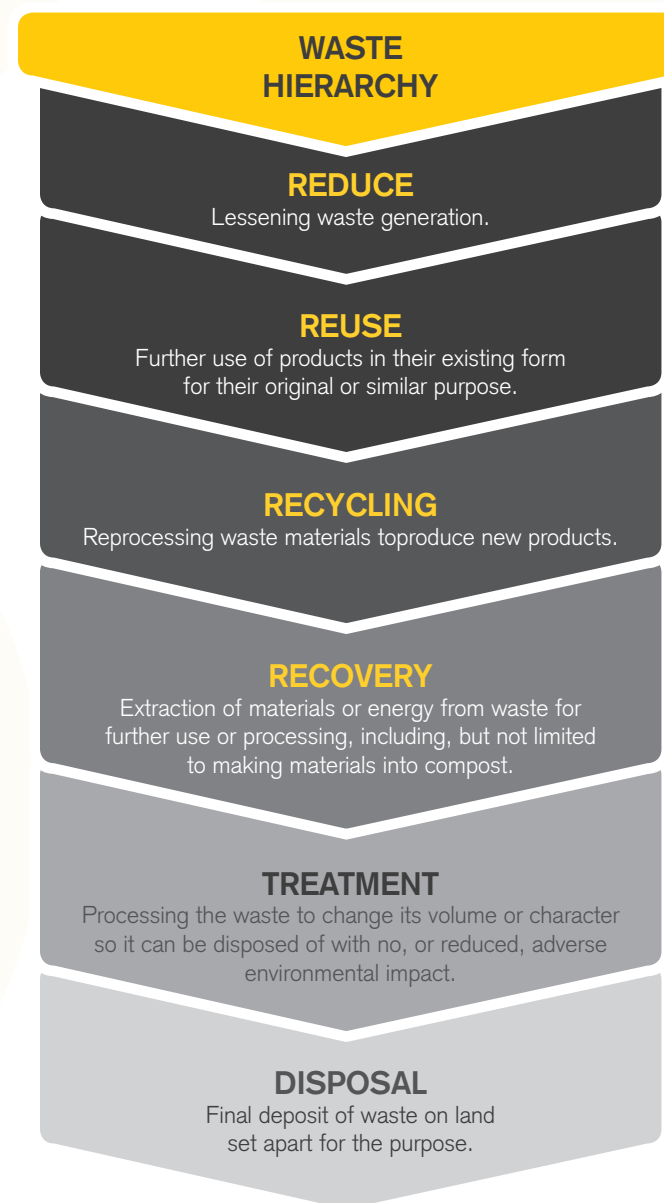
1.2 What does the plan have to contain?

The WMMP must meet requirements set out in the Waste Minimisation Act. It must:

- consider the 'waste hierarchy'
- ensure waste does not create a 'nuisance'
- 'have regard to' the New Zealand Waste Strategy and other key government policies
- consider the outcomes of the 'waste assessment' (this is a review of all information that we have about the current waste situation in Gisborne)
- follow the Special Consultative Procedure set out in the Local Government Act (2002).

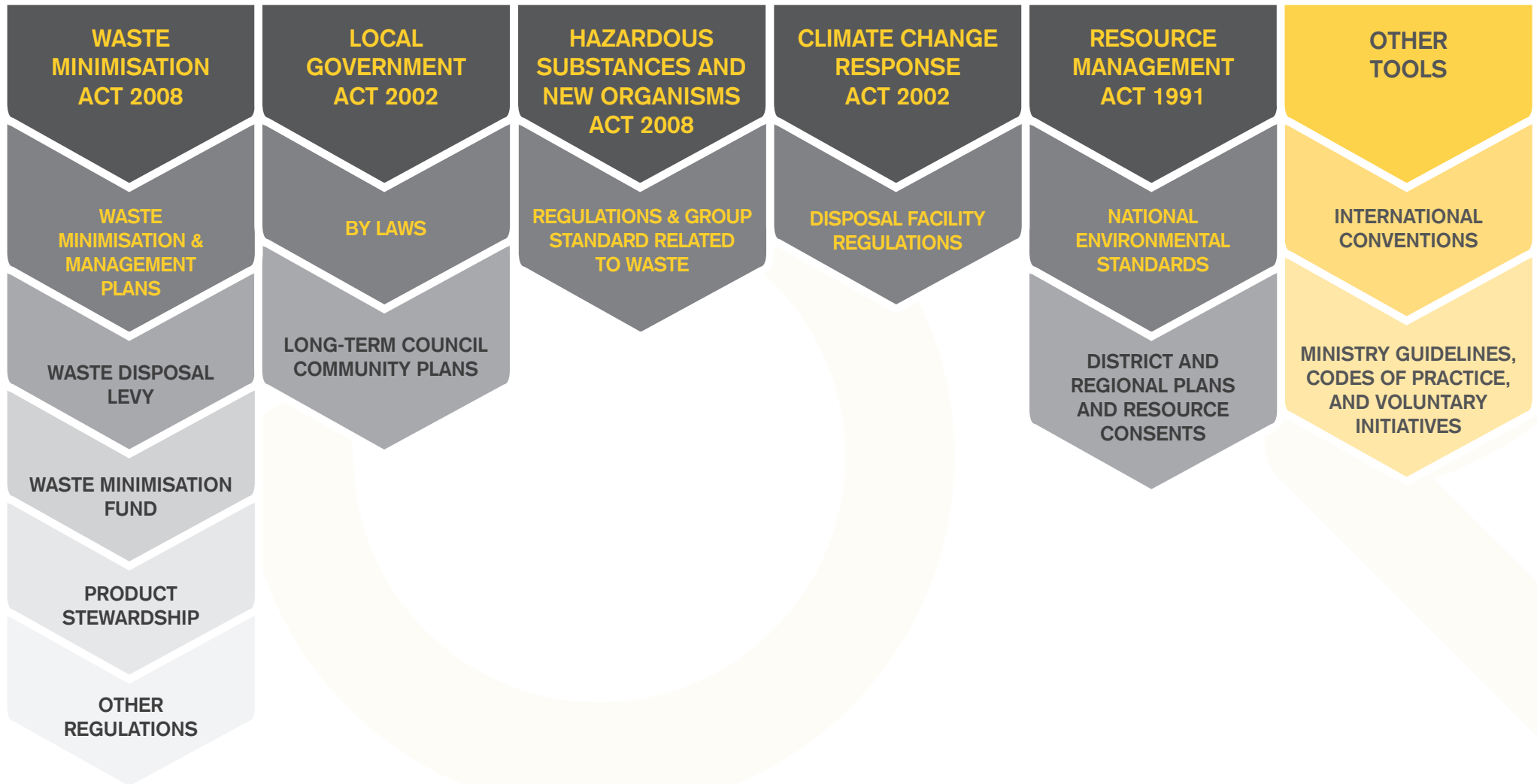
Figure 1: The waste hierarchy

Source: www.mfe.govt.nz



NEW ZEALAND WASTE STRATEGY

LEGISLATIVE FRAMEWORK



1.3 Status and review of the plan

The WMMP covers the period 2018 to 2024. In line with the requirement of section 50 of the Act, this plan will be reviewed at least every 6 years after its adoption. The council may elect to review any or all aspects of the plan at any time prior to 2024, if they consider circumstances justify such a review.

1.4 Structure of this document

This plan is in three parts.

PART A: Strategy. This contains the core elements of the strategy including vision, goals, objectives, policies and targets. It essentially sets out what we are aiming to achieve, and the broad framework for working towards the vision.

PART B: Action plans. The action plans set out the proposed specific actions that could be taken by the councils to achieve the goals, objectives, and targets set out in Part A. These actions provide more detail around specific actions each council will undertake to support the regional goals and objectives as well as meeting local needs.

PART C: Background information. This part contains the background information that has informed the development of the WMMP. Most of this information is contained in the Waste Assessment, which is included in Part C.

2.0 What We Have Considered

In preparing this WMMP we have taken into account a wide range of considerations including the following:

- Information on the waste we generate and manage in our district
- Projections of how our population and economy might change over time
- Resident and ratepayer surveys and other resident feedback. Tiaki Para - What's the Future Tairāwhiti
- The waste hierarchy
- Public health
- The potential costs and benefits of different options to manage our waste
- Rural and urban waste pathways
- Gisborne's geographical location and access to recycling markets

The detail of the above information is contained in the Waste Assessment (and other supporting documentation), which is presented in Part C.

We have also taken into account a large number of plans, policies and legislation and their requirements. These include the following:

- Tairāwhiti First - Council's Long-Term Plan (2015-25)
- He Huarahi Hei Whai Oranga - Tairāwhiti Economic Action Plan
- The Waste Minimisation Act (WMA) 2008
- The Local Government Act (LGA) 2002
- The Hazardous Substances and New Organisms (HSNO) Act 1996
- The Resource Management Act (RMA) 1991
- The Health Act 1956
- The Health and Safety at Work Act 2015
- Climate Change (Emission Trading) Amendment Act 2008
- The New Zealand Waste Strategy (NZWS)
- Waste Assessments and Waste Management and Minimisation Planning: A Guide for Territorial Authorities (2015)

3.0 The Waste Situation

3.1 The Gisborne District

The Gisborne District poses some unique challenges when it comes to waste. There is a lot of diversity, with the large urban environment of Gisborne City through to numerous rural settlements across the East Coast.

Gisborne is blessed with many natural assets, which are key to our community's prosperity and wellbeing. Our fertile soils, freshwater resources and warm climate provide the prerequisites for a booming agricultural and horticultural sector. The economy is also in a growth phase which is evident through the increase of waste to landfill.

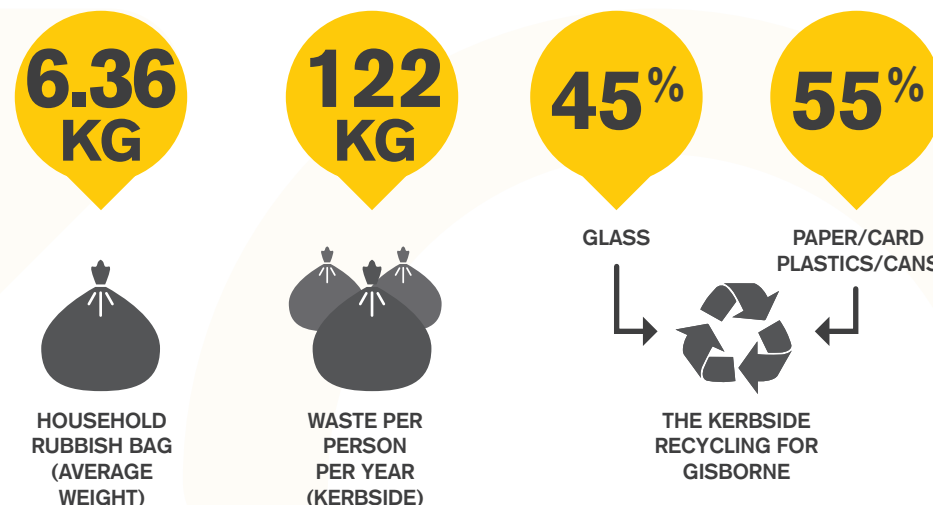
Gisborne's geographical remoteness restricts, to some degree, the availability of markets for recovered materials and waste. The complexities of geography, people, and wastes create a wide range of challenges when planning more effective waste management and minimisation across the district.

Also of note is the limited options for waste disposal. There is only one Class 1 landfill disposal facility in the Gisborne District. The Waiapu landfill in Ruatoria provides a critical level of service for the rural community and receives waste from the rural transfer stations at Tokomaru Bay, Te Puia Springs, Ruatoria, Tikitiki, and Te Araroa as well as Council's Ruatoria kerbside waste collection. The future operation role of Waiapu Landfill is uncertain.

All waste from Gisborne Resource Recovery Transfer Station (RRTS) is transferred to a Class 1 landfill in Tirohia (near Paeroa, in the Bay of Plenty).

3.2 What We Know

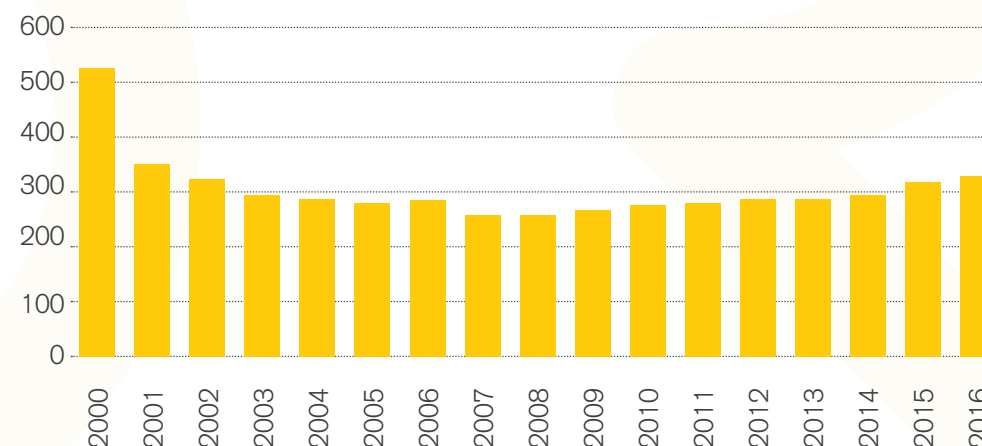
We know that in line with national trends, the overall tonnage of waste that we send to landfill has increased over recent years. At the same time the amount of recycling has decreased slightly. We know from the 2017 Solid Waste Analysis Survey on our waste composition that 26% of the waste we send to landfill is either food waste or green waste; which could easily be composted. We also know that if the community diverted everything possible through the existing services and facilities nearly 6000 tonnes of waste could be diverted from landfill.



It should be acknowledged that while we do have some good data, there are also gaps in our knowledge. For example at this stage we have no accurate data on the amount of agricultural waste being disposed of to farm tips or through other disposal options.

How much waste is there?

Figure 2: Average monthly kerbside refuse tonnage



The above chart shows the total amount of waste collected from kerbside collections each year. The quantity of waste sent to Class 1 landfills from the district has been fairly static over the 2011 – 2016 period. However there has been a slight upward trend since 2014 which is in line with economic activity.

3.0 The Waste Situation

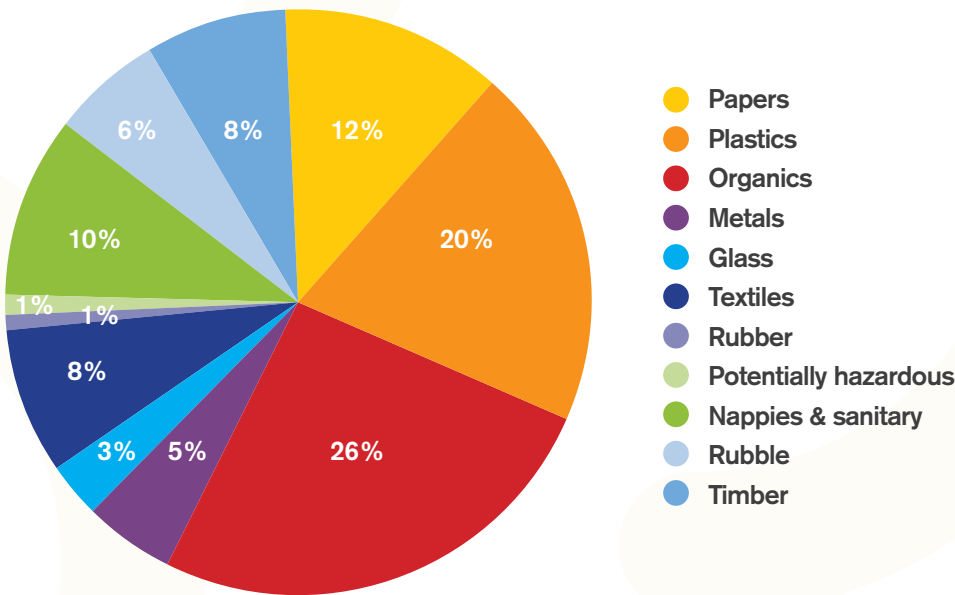
3.3 Where does it come from?

These next sections focus on the waste that goes to landfills (Class 1), which is material that potentially creates the most environmental harm

3.4 Composition of waste to Class 1 landfills

The following chart shows the types of materials we throw out. The biggest single amount is organic waste, which is food and garden waste from households and organisations. Most of this material could be recovered for composting. We also throw away lots of plastic, paper, metal, and glass, which can be recycled.

Figure 4: General waste to Class 1 landfill (excluding cleanfill)



3.5 Are there more than one type of landfill?

Landfill are separated into classes based on the level of environmental engineering employed in their construction:

- Class 1** Tirohia Landfill where the majority if Gisbornes waste is sent is Class 1 landfills. These are well engineered facilities designed to minimise the impact of the waste on the environment.
- Class 2** Gisborne has two Class 2 landfills that can take some construction waste like wood, plastic or glass.
- Class 3-4** Landfills mostly just take inert material like soil and rock, from construction and roading projects. They aren't allowed to take any smelly or hazardous waste. (There are no Class 3-4 Landfills in Gisborne District.)

3.0 The Waste Situation

3.6 Diverted material

Last year we threw away 14,161 tonnes of material into Class 1 landfills, however during the same time we recovered 15,924 tonnes. This diversion is through a mixture of council and commercial operations and is shown in the table below:

Figure 5: Material recovered 2016/2017

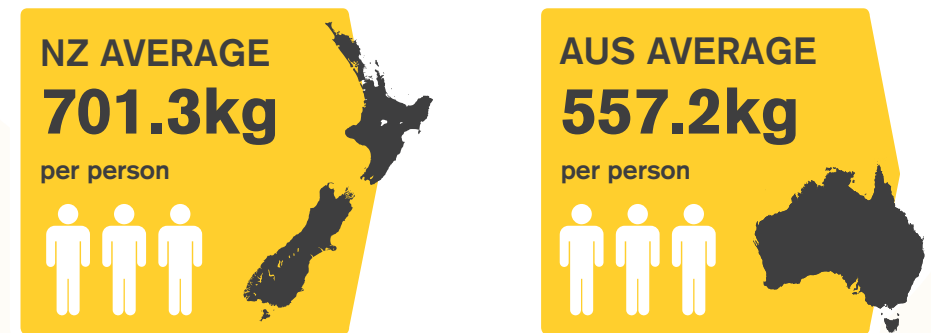
| Type of recovery | Tonnes per annum |
|----------------------------|------------------|
| Kerbside recycling | 2,553 |
| Drop - off recycling | 1,141 |
| Commercial recycling | 2,230 |
| Existing organic diversion | 10,000 |
| Concrete | 5,017 |
| TOTAL | 20,941 |

The largest quantity of material recovered is from commercial composting which is a privately operated site. Only 20% of material processed into compost comes from the Gisborne Resource Recovery Transfer Station. Gisborne sends an additional 3491(26%) tonnes of compostable waste to landfill as it is mixed with general waste and at this stage too difficult to recover. Gisborne's kerbside recycling collection accounts for 16% of the total diversion.

3.7 Waste minimisation performance

3.7.1 Per capita comparisons

To determine how well we are doing in terms of waste minimisation it is useful to compare ourselves with other parts of New Zealand and internationally.

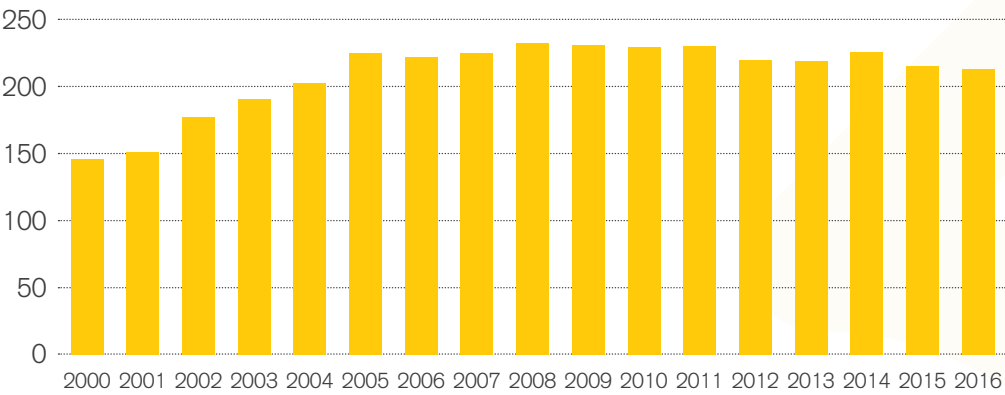


Last year 296 kilograms per person of waste was sent to Class 1 landfill, from the Gisborne District. The per-person total includes commercial sector waste entering the resource recovery transfer station.

When including waste that is currently sent to Class 2 Landfills (10,039 tonnes) the total waste disposal per person is increased to 506kg per year. When we look at how much waste from households we send to Class 1 landfills, we perform well against other Council user pays rubbish bag collections from around New Zealand. A total of 122 kilograms per person, per year is collected by our current rubbish bag collection.

3.0 The Waste Situation

Figure 5: Gisborne’s kerbside recycling 2000 – 2016 Average Monthly Recycling Tonnages



When it comes to household recycling, Gisborne City kerbside recycling collected 2553 tonnes of recyclables in 2016. This is the lowest since the introduction of this service in 2004. Total recycling for the district for 2016 was 5,924 tonnes. This equates to 42kg per household.

3.7.2 Diversion potential

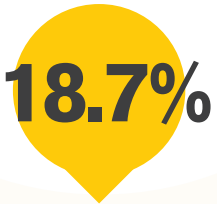
The table below shows what materials could be more effectively diverted from landfill.



POTENTIAL
DIVERSION



ORGANIC WASTE
TO LANDFILL
EACH WEEK



RECYCLABLE MATERIAL
ACCOUNTS FOR 18.7%
OF WASTE TO LANDFILL

Table 2: Diversion potential of levied waste to Class 1 landfills

| Diversion potential of overall waste stream to landfill - 4-31 March 2017 | % of total | Tonnes per week | Tonnes per annum (indicative only) |
|---|------------|-----------------|------------------------------------|
| RECYCLABLE AND RECOVERABLE MATERIALS | | | |
| Paper - Recyclable | 5.7% | 15 T | 758 T |
| Paper - Cardboard | 4.3% | 11 T | 570 T |
| Plastics - Recyclable | 1.9% | 5 T | 259 T |
| Ferrous metals - All | 3.8% | 10 T | 503 T |
| Non-ferrous metals - All | 1.1% | 3 T | 149 T |
| Glass - Recyclable | 1.4% | 4 T | 186 T |
| Rubble - Cleanfill | 0.6% | 2 T | 82 T |
| SUBTOTAL | 18.7% | 48 T | 2,509 T |
| COMPOSTABLE MATERIALS | | | |
| Organics - Kitchen/food | 20.9% | 54 T | 2,798 T |
| Organics - Comp. Greenwaste | 2.8% | 7 T | 374 T |
| SUBTOTAL | 23.7% | 61 T | 3,172 T |
| TOTAL - DIVERTABLE MATERIALS | 42.4% | 109 T | 5,681 T |

Approximately 42% of our waste could, theoretically at least, be diverted from landfill disposal. The largest divertible component is kitchen/food waste. The second largest is recyclable paper and cardboard, which comprises 10% of the total. Household recyclable materials such as glass and metal make up nominal fractions and this should be considered in any review of existing services.

3.0 The Waste Situation

3.7.3 Kerbside market share

Due to perceived convenience, the household wheelie bin market is highly competitive nationally. This has led to a number of councils losing significant market share and even reviewing their role in providing waste collections. Other councils have opted to impose licensing conditions on waste operators as a way to influence increased diversion. At present there is nothing to prevent an established waste operator expanding a wheelie bin collection to compete directly with council's rubbish bag methodology. This issue raises the question of whether the current council rubbish bag service is meeting the needs of the majority of the community and whether it will continue to do so. The December 2017 Residents Satisfaction Survey revealed that 90% of residents were happy with the existing kerbside rubbish collection.

3.7.4 Projections of future demand

Total waste and recovered material quantities in the Gisborne region are estimated to grow slowly over the next 10 years in line with population and economic growth. For the purposes of projecting total waste quantities, it has been assumed that kerbside refuse, greenwaste, and all recyclables will grow in line with population. With the exception of the rural refuse transfer stations which the GDC's Environmental Scan 2017 – Trends and Implications Report - predicts a decrease in the population serviced by these facilities.

3.8 Key issues

The Waste Assessment looked across all aspects of waste management in the region and identified the main areas where we could improve our effectiveness and efficiency in managing and minimising waste. In no specific order these were:



1. Data.

There is room for improvement in the quality and management of data. Accessible, reliable, consistent data enables better decision making.



2. No Solid Waste Bylaw.

Council does not have a Solid Waste Bylaw consequently limiting their ability to influence waste diversion through regulatory measures.



3. Transport and disposal of waste.

The majority of waste is transported to the Tirohia Landfill (310km away). The future of the Councils Waiapu Landfill is also being reviewed. Working collaboratively with Wairoa Council on landfill disposal and management options.



4. Cleanfills.

The need to improve information received on the two operating Class 2 Landfills including the tonnage and type of materials accepted.



5. Council Kerbside Collections.

The need to maximise the efficiencies of the existing kerbside collections and ensure best health and safety practice



6. Refuse levels and trends.

The amount of rubbish produced is increasing



7. Recycling level and trends.

The amount of recycling diverted is declining.



8. Organic waste.

At 26% of the waste stream, food and green waste represent the largest fraction of material being landfilled. This is potentially the biggest opportunity to improve diversion.



9. Social Enterprise.

The need to consider the viability of social enterprise in recovering value from the waste stream and the ability to generate employment and youth development opportunities



10. Regional Issues.

- Large increase in wood bark generation likely
- Unknown amount of waste entering farm pits
- Geographical location impacts feasibility of some recycling schemes
- No council control over city transfer stations

4.0 Vision, Goals Objectives and Targets

4.1 Vision

As part of the Waste Assessment process the existing vision was revised. The new vision for this Waste Management and Minimisation Plan is:

A prosperous region, where each person takes responsibility for using resources wisely so that we can reduce harm to the environment.

4.2 Goals and objectives

The vision will be realised through the achievement of a set of supporting goals and objectives. The proposed goals and objectives are as follows:

GOAL To Improve our waste and recycling performance

- 1. Objective:** To continually reduce the total quantity of waste we send to landfill.
- 2. Objective:** To provide environmental, social, economic and cultural benefits by increasing the amount of waste diverted from landfill via reuse, recovery and/or recycling.
- 3. Objective:** To investigate the use of social enterprise initiatives and alternative waste technologies for environmental and economic benefit
- 4. Objective:** To improve data collection and reporting systems across both the district and nationally.

GOAL Doing the Best by Our Community and Environment

- 5. Objective:** To actively engage the community and provide information, education and resources to support community actions.
- 6. Objective:** To work with local businesses and organisations to actively promote waste reduction at a local level.

- 7. Objective:** To use council influence to advocate for increased or mandatory producer responsibility for problematic wastes i.e. tyres, E-waste, plastic bags.
- 8. Objective:** To work with service providers to identify efficiencies while maintaining or improving service levels.
- 9. Objective:** To consider both the environmental and health and safety impacts of all options and ensure that these impacts are taken into account in councils decision making process.
- 10. Objective:** Gisborne District Council is a leader by example in minimising waste

4.3 Targets

The following district wide waste minimisation targets are proposed. The pursuit of these targets will largely depend on the initiatives and resources that are put forward by council.

- 1.** A 20% reduction in the total waste sent to Class1 landfills by 2024.
- 2.** A 40% decrease in organic waste by 2024 (kerbside collections).
- 3.** A 20% increase in recycling by 2024.

It is important to recognise, however, that council has a range of statutory duties, such as the need to deliver local public services in a way that is most cost-effective for households and businesses in accordance with the Local Government Act 2002 (s10(b)). In addition, under the Waste Minimisation Act 2008 council must encourage waste minimisation and decreased waste disposal (s3, 2008).

As such, councils have a range of factors to consider when deciding how they will achieve effective and efficient forms of waste management and minimisation within their district. As this Waste Management and Minimisation Plan spans a six year time frame a number of external and internal factors will continue to shape and inform council's waste management and minimisation actions.

It should be noted that consumer trends, lifestyle choices, and product design all have the potential to impact councils ability to reach set targets.

5.0 Proposed Methods for Achieving Effective and Efficient Waste Management and Minimisation

5.1 Our intended role

Council is responsible for a range of contracts, facilities and programmes to provide waste management and minimisation services to the residents and ratepayers in order to deliver the vision goals and objectives set out in this plan.

Council intends to oversee, facilitate and manage a range of programmes and interventions to achieve effective and efficient waste management and minimisation within the Gisborne District.

5.2 Proposed methods

The key methods that are proposed and the issues that they will address are shown in the table on the right.

In the pursuit of effective and efficient waste management and minimisation, Council will oversee and manage a range of activities and programmes to encourage positive behaviour change. These are detailed under Actions on page 18 of this WMMP.

| | Method | Issues addressed |
|----------|--|--|
| A | Consider a range of optimised kerbside systems that maximise diversion and are cost effective for communities. | <ul style="list-style-type: none"> • Council kerbside refuse market share • Low recycling levels • Declining recycling • Organic waste |
| B | Investigate and if feasible develop recovery network /social enterprise operation to extract value from the waste stream and provide youth development opportunities | <ul style="list-style-type: none"> • Low recycling levels • Declining recycling • Organic waste • Youth development |
| C | Deliver enhanced engagement, communications, and education programmes. | <ul style="list-style-type: none"> • Low recycling levels • Declining recycling |
| D | Collaborate on and lobby for waste minimisation policies and strategies, for example product stewardship. | <ul style="list-style-type: none"> • Low recycling levels • Declining recycling |
| E | Develop a Solid Waste Bylaw if applicable, to provide Council with a regulatory toolkit – to include licensing provisions. | <ul style="list-style-type: none"> • Cleanfills • Data • Council kerbside refuse market share • Regulation |
| G | Implement National Waste Data Framework and utilise the framework to increase strategic information. | <ul style="list-style-type: none"> • Data |

The WMMP is essentially a policy 'blue print' that details the actions council will take to meet the objectives and goals set out to minimise waste. It must be stressed that any specific initiative that does not have funding approval through the Annual Plan/Long Term Plan processes would be subject to the Better Business Case process to ensure effectiveness and affordability is thoroughly considered.

6.0 Funding actions

Section 43 of the Waste Minimisation Act requires that the councils include information about how the implementation of this plan will be funded, as well as information about any grants made and expenditure of waste levy funds.

There is a range of options available to the Gisborne District Council to fund the activities set out in this plan. This includes the following:

- **Uniform Annual General Charge (UAGC).** A charge that is paid by all ratepayers.
- **User charges.** Includes charges for user-pays collections as well as transfer station gate fees
- **Targeted rates.** A charge applied to those properties receiving a particular council service
- **Waste levy funding.** The government redistributes funds from the \$10-per-tonne waste levy to local authorities on a per capita basis. Fifty percent of the money collected through the levy must be returned to councils. This money must be applied to waste minimisation activities.
- **Waste Minimisation Fund.** Most of the remaining 50% of the levy money collected is redistributed to specific projects approved by the Ministry for the Environment. Anyone can apply to the WMF for funding for projects.
- **Sale of recovered materials.** The sale of recovered materials can be used to help offset the cost of some initiatives.
- **Private sector funding.** The private sector may undertake to fund/supply certain waste minimisation activities, for example in order to look to generate income from the sale of recovered materials etc. councils may look to work with private sector service providers where this will assist in achieving the WMMP goals.

It should be noted that councils who own transfer stations and/or landfills, are able to set the fees at these facilities and can derive income from these activities. In accordance with s46 (2) of the Act, the councils can charge fees for a facility that are higher or lower than required to recover the costs to provide the service, providing the incentives or disincentives will promote waste minimisation. Gisborne's ability to consider this option is limited by the fact they do not own the facilities currently handling the majority of waste.

The potential sources of funding for each of the actions are noted in the tables in Part B of the WMMP. Budgets to deliver the activities set out in this plan will be carefully developed through the Annual Plan and Long Term Plan processes undertaken by council. The approach taken will be to implement as many of the activities as possible while controlling costs and, where possible, taking advantage of cost savings and efficiencies.

6.1 Waste minimisation levy funding expenditure

The WMA requires that all waste levy funding received by councils must be spent on matters to promote waste minimisation and in accordance with their WMMP. Waste levy funds can be spent on ongoing waste minimisation services, new services, or an expansion of existing services. The funding can be used on education and communication, services, policy research and reporting, to provide grants, to support contract costs, or as infrastructure capital.

Council receives, based on population, a share of national waste levy funds from the Ministry for the Environment. It is estimated that Gisborne District Council will receive approximately \$180,000 in 2017/18 of waste levy funds. In addition, council may make an application for contestable waste levy funds from the Waste Minimisation Fund, either separately, with other councils, or with another party.

6.2 Grants

Council has the ability under the WMA (s47) to make grants and advances of money to any person, organisation or group for the purposes of promoting or achieving waste management and minimisation, as long as this is authorised by the WMMP, where the activities to be funded align with and further the objectives of this WMMP. Council currently uses a portion of its waste levy funds to fund waste minimisation activities upon application.

7.0 Monitoring Evaluating and Reporting Progress

7.1 Monitoring and reporting

How we will measure progress is presented in the table below. Relevant performance metrics will be developed and agreed as part of their implementation.

When referring to 'an optimised system', this essentially refers to potential improvements to the status quo that will help to: provide high levels of quality recycling, maximises both participation and diversion, reduces cost to households and which could provide additional services such as food waste collections.

| Actions | Measuring Success |
|--|---|
| Implement regional bylaw | <ul style="list-style-type: none"> • Bylaw adopted by council • Number of operators licensed • Number of bylaw infringements identified • Number of enforcement actions taken |
| Implement Waste Data Framework | <ul style="list-style-type: none"> • Framework adopted by council • Council supplies data in accordance with framework • Data completeness |
| Education engagement (Behaviour Change) | <ul style="list-style-type: none"> • Number of programmes/initiatives undertaken • Number of households reached • Awareness of communications messages |
| Optimise collection systems | <ul style="list-style-type: none"> • GDC considers optimised systems • Quantity of material recycled per capita • Quantity of household waste per capita • Quantity of organics diverted per capita • Reporting of annual volumes of waste and recycling collected via council-provided services and facilities. |
| Resource recovery network | <ul style="list-style-type: none"> • Number of facilities/ relationships established • Number of employment/training opportunities • Number of users at each site • Proportion of material separated for recycling/ recovery |
| Lobby | <ul style="list-style-type: none"> • Submissions presented • Action taken by central government to fully implement key parts of the WMA (eg product stewardship, rate of waste disposal levy etc) |
| Health and Safety | Health and Safety incident reports received from contractor at each contractor meeting |

Part B: Action Plans

8.0 Introducing the Action Plan

The following Action Plan sets out how the Gisborne District Council intends to work towards the vision, goals, and objectives outlined in Part A of the WMMP.

8.1 Considerations

It should be noted that before the actions outlined in the plans can be carried out, their feasibility will need to be established and they will need to be achievable within the council's budget. It is a requirement to state how the actions in the WMMP are to be funded, but the guidance recognises that it is beyond the scope of the WMMP to cost each of the initiatives in detail.

Council's ability to provide the existing level of service is dependent on contracting out the majority of waste services. This means that the delivery of the actions set out here will depend in large part on their inclusion in a contracting arrangement.

9.0 Gisborne District Action Plan

This section sets out the actions that council will undertake or support to deliver on the vision, goals and objectives of this WMMP.

9.1 Summary of actions

| | Action | What it can do |
|---|--|---|
| 1 | Develop and implement a Solid Waste bylaw that includes waste operator licensing provisions | This will help council set standards and gather data so they can plan and manage waste better. |
| 2 | Increase Community Engagement | We will increase investment in all areas of waste minimisation in order to better engage our community and positively influence behaviour change. |
| 3 | Implement Waste Data Framework | We will ensure consistent, high-quality data that will help us track our progress. |
| 4 | Reducing Organic Waste | We will investigate opportunities to reduce the amount of Green Waste (26%) that is sent to landfill. We will work with other Local Authorities and learn from their experiences determining what will help us reduce organic waste in the Gisborne District. |
| 5 | Smart Infrastructure | We will ensure that all waste infrastructure and services enable waste minimisation outcomes in an efficient and affordable manner. This will include a review of continued reliance on landfill disposal and associated contracts. |
| 6 | Optimise collection systems | We will work to improve collections so that they maximise diversion from landfill and are cost effective to communities. |

9.1 Summary of actions

| | Action | What it can do |
|----|---------------------------------------|---|
| 7 | Resource recovery network | We will investigate what facilities and relationships are required to achieve increased diversion from landfill and whether economic value may be extracted from the waste stream. |
| 8 | Alternative Waste Technologies | We will consider alternative technologies that may reduce the reliance on landfill disposal and which may have economic and environmental benefits. |
| 9 | Collaborate and lobby | We can work with other local government organisations, NGOs and other key stakeholders on undertaking research, lobbying and actions on various waste management issues such as (but not limited to) product stewardship, electronic waste, tyres, plastic bags, etc. |
| 10 | Contestable Waste Fund | We can provide Community funding for new waste minimisation initiatives. |



10. Actions

10.1 GDC is a leader by example in minimising waste – influencing the waste stream

| Reference and title | Description | Time frame | Funding options | New/existing/enhancement | Objectives |
|--|--|------------|---|--------------------------|---|
| 1. Resource recovery network | Investigate and if feasible, develop a region-wide resource recovery/social enterprise to extract value from waste and provide employment | 2020 | <ul style="list-style-type: none"> • General rate • Targeted rate • User charges • Waste levy | New | <ul style="list-style-type: none"> • To investigate the use of social enterprise initiatives and alternative waste technologies for environmental and economic benefit • To continually reduce the total quantity of waste we send to landfill. |
| 2. Collaborate, lobby, research and trial | Council will work collaboratively with local government organisations, non-government organisations and other key stakeholders to undertake research and actions to advance solutions to waste management issues such as, but not limited to e-waste, plastic bags, and the need for a container deposit system. | Ongoing | <ul style="list-style-type: none"> • Waste levy • General rate • Targeted rate | Ongoing | <ul style="list-style-type: none"> • To use council influence to advocate for increased or mandatory producer responsibility for problematic wastes i.e. tyres, E-waste, plastic bags. |
| 3. Review council waste minimisation resource | The council will undertake a review of the existing waste team capability to ensure sufficient resource exists to implement this plan | 2018 | <ul style="list-style-type: none"> • Existing • Rates | New | <ul style="list-style-type: none"> • Gisborne District Council is a leader by example in minimising waste |
| 4. Council may exercise its right in accordance with s46 (2) of the Waste Minimisation Act 2008 | To charge fees for a particular facility or service provided by council that are higher or lower than required to recover the costs to provide the service, providing the incentives or disincentives will promote waste minimisation. | Ongoing | <ul style="list-style-type: none"> • Existing | New | <ul style="list-style-type: none"> • To continually reduce the total of waste we send to landfill. |

10.2 To improve data collection and reporting systems - regulation and data

| Reference and title | Description | Time frame | Funding options | New/existing/enhancement | Objectives |
|--|---|--|---|--------------------------|--|
| 5. Waste Operator Licensing | Implement waste licensing for operators and collectors as part of bylaw implementation | Pending development of Solid Waste Bylaw | <ul style="list-style-type: none"> Licensing fees | New | <ul style="list-style-type: none"> To improve data collection and reporting systems across both the district |
| 6. Actively enforce, control and reduce littering and illegal dumping | Ensure systems and resources are in place to actively enforce, control and reduce littering and illegal dumping. | Ongoing | <ul style="list-style-type: none"> Licensing fees General rate Across Council approach | Enhancement | <ul style="list-style-type: none"> To consider both the environmental and health and safety impacts of all options and ensure that these impacts are taken into account in council decision making process. |
| 7. Implement Waste Data Framework | Collect and manage data in accordance with the National Waste Data Framework | 2017 | <ul style="list-style-type: none"> General rate Existing Staff Resource | New | <ul style="list-style-type: none"> To improve data collection and reporting systems across both the district and nationally. |
| 8. Improve reporting on recyclables end destination | Capture information on where recyclables are sent, and recycled. The information will be used to inform future contract decisions. | Ongoing | <ul style="list-style-type: none"> Waste levy | New | <ul style="list-style-type: none"> To improve data collection and reporting systems across both the district and nationally. |
| 9. New building recycling facilities | Work with key internal and external stakeholders to ensure new multi-unit residential and commercial buildings include allocated space for appropriate waste facilities and servicing | Ongoing | <ul style="list-style-type: none"> General rate Existing Staff Resource | New | <ul style="list-style-type: none"> To consider both the environmental and health and safety impacts of all options and ensure that these impacts are taken into account in council decision making process. |

10.3 To actively engage the community - education and behaviour change

| Reference and title | Description | Time frame | Funding options | New/existing/enhancement | Objectives |
|--|--|------------|---|--------------------------|---|
| 10. Deliver a comprehensive waste minimisation programme promoting the waste hierarchy. | Support information and education programmes that raise awareness and promote waste minimisation. Develop targeted waste minimisation information and education programmes that included, but are not limited to: Second Hand Sunday, reusable nappies, textile recycling. | Ongoing | <ul style="list-style-type: none"> Existing staff resource Existing budget Waste Levy | Existing Enhanced | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community. |
| 11. Continue to encourage and support household composting. | Household composting avoids creation of methane and transport emissions. We will endeavour to encourage and support home composting whenever possible. Increase monitoring of participants. | Ongoing | <ul style="list-style-type: none"> Existing budget Waste levy (Depending on outcome of Action 3) | Enhanced | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community actions. |
| 12. Increase kerbside recycling tonnages per capita. | Large quantities of recyclable packaging is taken to landfill, instead of being recycled. If we can reverse this trend we should be able to increase recycling tonnages per capita. | Ongoing | <ul style="list-style-type: none"> Waste levy Existing staff resource Contractors | Enhanced | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community actions. To work with service providers to identify efficiencies while maintaining or improving service levels. |
| 13. Undertake community recycling awareness campaigns. | Council will promote recycling awareness with the aim of increasing recycling rates across the city. | Ongoing | <ul style="list-style-type: none"> Waste levy | Existing Enhanced | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community actions. |
| 14. Support food recovery and food waste prevention programmes | Council will support food waste recovery and food waste prevention programmes such as: Love Food Hate Waste | Ongoing | <ul style="list-style-type: none"> Existing staff resource Existing Budget Waste Levy | Enhanced | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community actions. |
| 15. Provide Waste Minimisation support for public events | Improve waste minimisation at events held at council sites. Support event organisers to implement waste minimisation at events. | Ongoing | <ul style="list-style-type: none"> Existing staff resource Waste levy (Depending on outcome of Action 3) | Enhanced | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community actions. |

10.3 To actively engage the community - education and behaviour change

| Reference and title | Description | Time frame | Funding options | New/existing/enhancement | Objectives |
|---|---|------------|--|--------------------------|---|
| 16. Support marae and iwi groups to minimise waste | Support iwi and marae to promote and undertake waste minimisation by the provision of (but not limited to), support for the Para Kore programme | Ongoing | <ul style="list-style-type: none"> Waste levy | Existing | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community actions. To work with local businesses and organisations to actively promote waste reduction at a local level. |
| 17. Continue to support schools waste minimisation education initiatives | Continue to provide funding for the Enviroschools programme to local schools | Ongoing | <ul style="list-style-type: none"> Existing budget Waste levy | Existing budget | <ul style="list-style-type: none"> To actively engage the community and provide information, education and resources to support community actions. |
| 18. Professional development and subscriptions | To ensure Council can provide leadership, it will have appropriate memberships (e.g. WasteMinz and undertake relevant professional development and networking opportunities (e.g. Wasteminz conference, TA Sector Group). | Ongoing | <ul style="list-style-type: none"> Existing budget Waste levy where applicable | Enhanced | <ul style="list-style-type: none"> To investigate the use of social enterprise initiatives and alternative waste technologies for environmental and economic benefit To work with service providers to identify efficiencies while maintaining or improving service levels. To consider both the environmental and health and safety impacts of all options and ensure that these impacts are taken into account in council decision making process. |
| 19. Household hazardous waste disposal | Council to provide an annual household hazardous waste collection and actively promote existing disposal options for materials such as paint and oil | Annually | <ul style="list-style-type: none"> Waste levy | Enhanced | <ul style="list-style-type: none"> To continually reduce the total quantity of waste we send to landfill. To actively engage the community and provide information, education and resources to support community actions. |
| 20. Internal waste | Implement best practice waste avoidance, reduction and minimisation within council sites and operations; and share knowledge and experience gained from such activities | Ongoing | <ul style="list-style-type: none"> Existing staff resource Existing budget | Enhanced | <ul style="list-style-type: none"> To continually reduce the total quantity of waste we send to landfill. |
| 21. Waste management practices in rural and holiday areas | Encourage and where practicable support good waste management practices in rural areas and holiday communities | Ongoing | <ul style="list-style-type: none"> User pays and targeted rates Waste levy | Enhanced | <ul style="list-style-type: none"> To continually reduce the total quantity of waste we send to landfill. |

10.4 To continually reduce the total quantity of waste we send to landfill - Service and facilities

| Reference and title | Description | Time frame | Funding options | New/existing/enhancement | Objectives |
|--|---|------------|--|--------------------------|---|
| 22. Household recycling collection | Continue to deliver and optimise the household recycling service | Ongoing | <ul style="list-style-type: none"> • GDC • Waste levy | Existing | <ul style="list-style-type: none"> • To continually reduce the total quantity of waste we send to landfill. |
| 23. Household waste collection | Continue to deliver and optimise household waste collection service that supports increased diversion and a cost-effective service for households | 2020 | <ul style="list-style-type: none"> • User charges | Existing | <ul style="list-style-type: none"> • To continually reduce the total quantity of waste we send to landfill. |
| 24. Household food /green waste collection | Consider possible options for a household food/green waste collection service or other alternatives that deliver similar outcomes | 2020 | <ul style="list-style-type: none"> • GDC • Waste levy | New | <ul style="list-style-type: none"> • To continually reduce the total quantity of waste we send to landfill. • To improve data collection and reporting systems across both the district and nationally. |
| 25. Composting of Green Waste | Work with existing contractor to improve capacity for the processing of organic waste into high value compost. Without increased capacity further organic diversion may be prevented i.e. green waste/food waste collection | Ongoing | <ul style="list-style-type: none"> • GDC • Waste levy | Enhancement | <ul style="list-style-type: none"> • To continually reduce the total quantity of waste we send to landfill. • To actively engage the community and provide information, education and resources to support community actions. |
| 26. Gisborne Resource Recovery Transfer Station | Work with existing contractor to continually improve diversion rates from the transfer station This includes drop-off facilities for general waste, green waste (diverted), household recycling and other waste streams as per the contract. | Ongoing | <ul style="list-style-type: none"> • User charges • GDC waste budget/ • Waste levy • Waste minimisation fund application | Enhancement | <ul style="list-style-type: none"> • To provide environmental, social, economic and cultural benefits by increasing the amount of waste diverted from landfill via reuse, recovery and/or recycling • To continually reduce the total quantity of waste we send to landfill. • To work with local businesses and organisations to actively promote waste reduction at a local level. |

10.4 To continually reduce the total quantity of waste we send to landfill - Service and facilities

| Reference and title | Description | Time frame | Funding options | New/existing/enhancement | Objectives |
|--|---|------------|---|--------------------------|---|
| 27. Support of Tairāwhiti Environment Centre to deliver waste awareness education programme | Invest in the reach of this facility to grow awareness of waste minimisation and meet the needs of the community and council. | 2017-19 | GDC waste budget/ Waste levy | Enhancement | <ul style="list-style-type: none"> To continually reduce the total quantity of waste we send to landfill. To actively engage the community and provide information, education and resources to support community actions. |
| 28. Public place recycling and rubbish bins | <ul style="list-style-type: none"> Review the effectiveness of public place recycling bins and current locations in order to optimize performance. Develop a policy for public place recycling and the location of bins. Consider compactor bin technology | 2017-18 | Revenue GDC Waste levy for Capex only | Enhancement | <ul style="list-style-type: none"> To continually reduce the total quantity of waste we send to landfill. To actively engage the community and provide information, education and resources to support community actions. To work with service providers to identify efficiencies while maintaining or improving service levels. |
| 29. Closed landfills | Continue to manage closed landfills to ensure relevant environmental and safety standards are met and are in accordance with all relevant policies and plans. | Ongoing | Rates | Existing | <ul style="list-style-type: none"> To consider both the environmental and health and safety impacts of all options and ensure that these impacts are taken into account in council decision making process. |
| 30. Support community groups and the business sector | Provide support to businesses and community groups to develop waste minimisation initiatives and opportunities | Ongoing | <ul style="list-style-type: none"> GDC Waste levy | Existing | <ul style="list-style-type: none"> To provide environmental, social, economic and cultural benefits by increasing the amount of waste diverted from landfill via reuse, recovery and/or recycling. |

10.5 GDC is a leader by example in minimising waste - Gisborne City leadership and management

| Reference and title | Description | Time frame | Funding options | New/existing/enhancement | Objectives |
|--|---|---|--|--------------------------|--|
| 31. Develop a robust procedure for the provision of grants for community and business waste minimisation projects | Using a percentage of council waste levy funds, provide grants for stakeholder groups and individuals to develop waste minimisation initiatives. Grants are allocated under a contestable process and guided by the council strategic priorities as described in the WMMP | Ongoing | <ul style="list-style-type: none"> Existing staff resource | Enhancement | <ul style="list-style-type: none"> To provide environmental, social, economic and cultural benefits by increasing the amount of waste diverted from landfill via reuse, recovery and/or recycling. |
| 32. Collaborate with private sector and community | Work with local groups to investigate opportunities to enhance economic development through waste minimisation (eg circular economy initiatives) | Ongoing | <ul style="list-style-type: none"> Existing staff resource GDC Waste levy | New | <ul style="list-style-type: none"> To provide environmental, social, economic and cultural benefits by increasing the amount of waste diverted from landfill via reuse, recovery and/or recycling. To work with local businesses and organisations to actively promote waste reduction at a local level. |
| 33. Waste levy funding from MfE | Investigate and support applications for contestable waste levy funding from MfE for both council and community waste reduction and minimisation initiatives | Ongoing - Continue as part of waste minimisation role | <ul style="list-style-type: none"> Waste levy | Existing | <ul style="list-style-type: none"> To provide environmental, social, economic and cultural benefits by increasing the amount of waste diverted from landfill via reuse, recovery and/or recycling. |

Appendix 1: Community Reuse and Recovery Centres

Objective:

With the pending closure of Waiapu Landfill, the council could investigate the potential to establish a resource recovery centre. These facilities can recover materials through recycling, increase reuse opportunities through a store, and provide education and training activities for the local community around waste minimisation and sustainability.

In doing so they can recover value from the waste stream contributing to local economic development, provide much needed employment and training opportunities for youth and those that are currently unemployed. Overseas studies have repeatedly shown that on a per tonne basis recycling and reuse operations provide ten times more jobs than landfilling¹.

Throughout the country many communities have realised the benefits of establishing and operating a local resource recovery centre. These operations can be run by council or contractors with many successful examples operated by social enterprises.

Social enterprises are organisations that run in a business-like way but provide a social and/or environmental benefit through their activities (some are registered charities). Their establishment has transformed recycling and reuse opportunities in small remote communities similar to those found in the Gisborne District. But their impact on the local community ranges further than just the waste that they divert from landfill.

Many view themselves as training and employment centres, providing local people with the opportunities to develop skills and qualifications to go on and find local employment elsewhere. Where as many companies and organisations would see this as a negative, because of the emphasis for social good, most social enterprises view this as an objective because of the overall positive impact this has on the local community that they operate in.

They also take a roll in public education around waste minimisation and sustainability, running workshops for schools and community events. This has transformed what were once viewed as somewhere to dump your unwanted junk to a resource that is valued by the community.

Over the years these small groups of recyclers have formed a network that support each other and learn from the successes and failures of others. Any social enterprise that established within the Gisborne District would be able to join this network and receive this support.



¹ **More jobs less waste:** Potential for job creation through higher rates of recycling in the UK and EU, Friends of the Earth, September 2010

Table 1: Community Business & Environment Centre (CBEC)

| Community Business & Environment Centre (CBEC) | |
|--|--|
| Location | Based in Kaitia in the Far North of New Zealand |
| Background | CBEC was established in 1989 in response to the dramatic rise in unemployment and social problems arising from New Zealand's economic reforms of the mid-1980s. |
| Current Activities | CBEC is a community enterprise which operates a range of businesses and environmental programmes as part of an overall effort to build sustainable local economies. Businesses range from Waste Minimisation, Garden Centres, insulation, labour hire, public transport and more. www.cbec.co.nz |

Table 2: South Waikato Achievement Trust (SWAT)

| South Waikato Achievement Trust (SWAT) | |
|--|--|
| Location | Based in Tokoroa. Has initiatives in areas across central north island. |
| Background | Formed in the 1970's as a social service for accident victims and people with disabilities. |
| Current Activities | Processes 60 tonne per month of e-waste, diverts re-usables and recyclables from landfill at the South Waikato District Transfer Station, diverts industrial waste wood into a firewood enterprise. www.swat.co.nz |

Table 3: Xtreme Zero Waste Ltd (XZW)

| Xtreme Zero Waste Ltd (XZW) | |
|-----------------------------|--|
| Location | Primary resource recovery site in Raglan. Also, operates a joint venture to manage Waiuku Community Recycling Centre. |
| Background | Closure of local landfill in 1998 which was leaching toxics into the waterways, led locals to seek out an alternative to landfilling. |
| Current Activities | Resource recovery sites at Raglan and Waiuku, school and community education, kerbside and business collections, zero waste events and a range of consultancy services. www.xtremezerowaste.org.nz |

Table 4: Wanaka Wastebusters

| Wanaka Wastebusters | |
|---------------------------|---|
| Location | Wanaka and Alexandra |
| Background | Established in 1999 as a result of the Wanaka and Hawea residents not wanting to send their waste to landfill |
| Current Activities | Operating since 2000 and operating resource recovery sites in Wanaka and Alexandra and play a crucial role in recycling glass from Central Otago. Delivering recycling services to Wanaka businesses and events. Also provide quality education programmes on a range of waste minimisation activities. Employs 37 staff. |

Appendix 2: Green Waste and Food Waste Collections

The 2017 Solid Waste Survey of Gisborne's Waste composition revealed that 26% of rubbish sent to landfill was classed as organic i.e. food or green waste. This presents Gisborne District Council with the opportunity to consider how to best divert this material.

Diverting garden and food waste to composting reduces the amount of waste we send to landfill. This not only reduces what we spend on waste disposal but has environmental benefits too. When organic material enters a landfill, it breaks down slowly and produces methane (a powerful greenhouse gas). From an economic perspective, sending organic material to composting is a far cheaper option for Council to consider than sending waste to landfill. The compost that is produced then helps to feed our crops and our economy...or our garden! While the disposal of organic material is cheaper than landfill disposal, the issue to consider will be whether a collection service can be offered affordably.

Nationally a number of councils offer some kind of greenwaste or foodwaste or combined kerbside collections. Collections are either weekly or fortnightly. The councils that offer the service vary in size from the urban Christchurch City, to the smaller community of South Taranaki – suggesting that size and demographics are not a barrier to the success of kerbside collection of this waste stream.

With the exception of a smaller food only kerbside bin in Raglan almost all councils use a wheelie bins for kerbside collections.

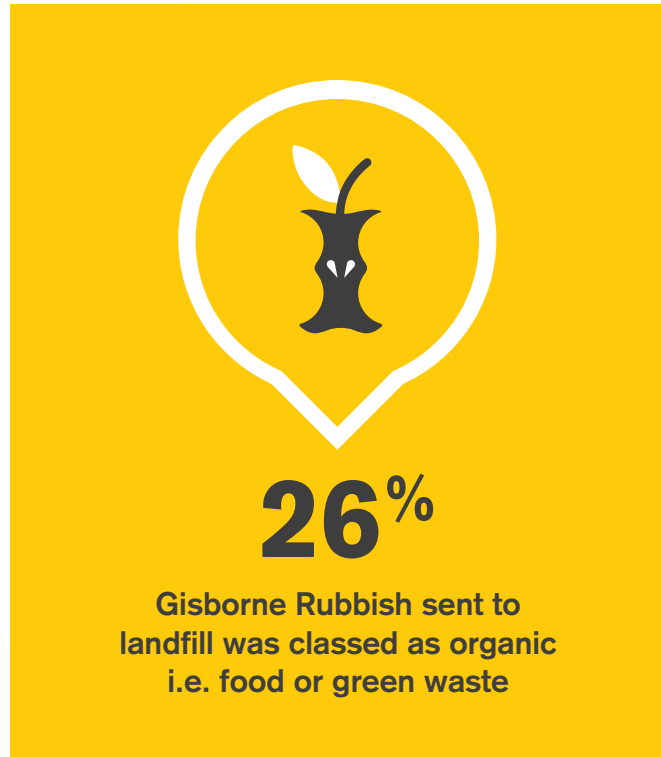


Table 5: An overview of existing organic collections

| Council | Green waste | Food waste | Receptacle | Frequency | Websites |
|--|-------------|------------|-----------------|--------------------|--|
| Kawerau District Council | Y | | 240L | Fortnightly | www.kaweraudc.govt.nz/services/rubbish-and-recycling/recycling |
| South Taranaki District Council | Y | Y | 240L | Fortnightly | www.southtaranaki.com/Council/A-Z/R/Rubbish-and-Recycling/Green-Waste-kerbside-service |
| Raglan (Waikato District Council) | | Y | Food bin | Weekly | www.waikatodistrict.govt.nz/services-facilities/refuse-and-recycling/food-waste-collection |
| Whakatane District Council | Y | | 240L | Fortnightly | www.whakatane.govt.nz/services/rubbish-and-recycling/greenwaste |
| Christchurch City Council | Y | Y | 80L | Weekly | www.ccc.govt.nz/services/rubbish-and-recycling/sorting/organics-green-bin |
| Selwyn District Council | Y | Y | 240L | Weekly | www.selwyn.govt.nz/my-property/rubbish-recycling-organics |
| Timaru District Council | Y | Y | 240L | Weekly | www.timaru.govt.nz/services/environment/waste-minimisation/kerbside-collection |

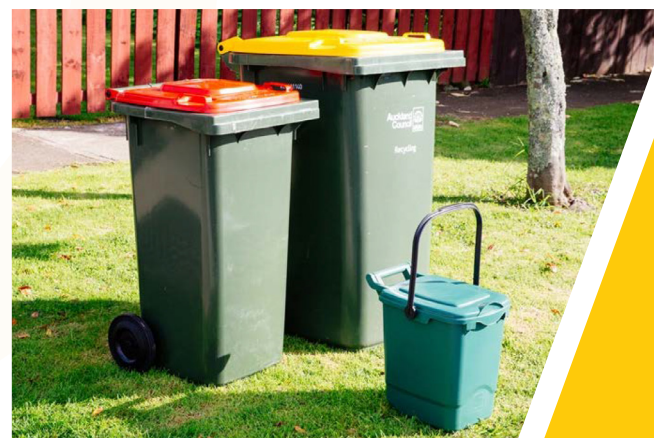
Besides providing kerbside collections, there are other options to promote the resource recovery of greenwaste/organics:

- A number of councils promote home composting, with instructions online, composting workshops, and discounts for purchasing compost bins.
- A number of councils offer reduced disposal rates for green waste at transfer stations
- One council offers free shredded green waste when collected from the transfer station.
- Other areas have commercial operators offering greenwaste wheelie bins direct to the householder.
- Council provided green waste vouchers providing residents with one free load of green waste per year.

There is no consistency or uniformity for collections or transfer station green waste disposal as each council/contractor/ has different criteria. Each collection varies dependant on the type of material the composting operation is able to process.

Auckland Council is about to roll out a household food waste collection to all urban areas between 2018 and 2020.

This will see a smaller food waste bin joining the rubbish and recycling wheelie bins already provided. Auckland Council have announced that in 2019 they will implement an organics service. However this decision comes only after more than 10 years of investigation by Auckland Council and its legacy councils. Auckland's organics collection service is part of a suite of services that will be assisted by regulation in the form of a bylaw to drive waste minimisation in the region.



2019

**Auckland Council
will implement an
organics service.**



Appendix 3: Kerbside Collection Services

During the early 2000's New Zealand experienced a move toward comingled recycling; essentially one wheelie bin where all recyclables are placed for recycling. This reduced a number of handling issues but required an expensive sorting facility to be established (Material Recycling Facility (MRF)). Comingled collections presented a number of issues which included a reduction in the amount of glass being recycled back into bottles, as well as preventing the collected paper being recycled into food grade packaging due to glass contamination.

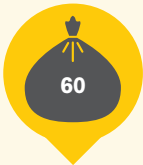








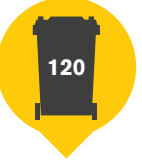

The introduction of the two-stream recycling collection(one container for glass, one for all other recyclables) service methodology began in New Zealand approximately 5 years ago to address issues of health and safety of the collectors, as well as increase the quantity, yield and quality of recyclables to assist councils meet their obligations under the WMA to reduce waste disposed to landfill.

For these reasons two-stream recycling is now being considered for an increasing number of recycling collections across New Zealand as the removal of glass resolves a number of operational issues.

Typically collecting glass separately leads to a 20% increase in the quantity of recyclables collected. As there is no glass contamination, better quality products means increased revenue from the sale of the recyclables.

Processing yields are also increased as a result of glass being separated from the other recyclables, particularly paper / cardboard. The Material Recycling Facility that processes the recyclables is generally more efficient due to less breakdowns (as glass fines can damage the mechanical systems) and the ability to more easily process a better quality of product in greater quantities.

Typically glass sorted at kerbside provides a 98% recycling outcome as opposed to comingled recyclables including glass where a far greater percentage is wasted.

| FOR CONSIDERATION | STATUS QUO |  | |  | | <ul style="list-style-type: none">• Reliance on plastic bags• Crate limits the amount of recyclables and can contribute to littering• Reliance on manual lifting |
|-------------------------------------|---|---|---|---|--|---|
| | | 60 LITRE RUBBISH BAG STICKER SYSTEM | | MIXED RECYCLING CRATE | | |
| | | SCENARIO 1 |  |  |  | <ul style="list-style-type: none">• Rates funded likely increased costs• Reduced manual handling/reduced litter• Glass kept separate• Fortnightly recycling of 240 litre bin• Increased diversion |
| | | | 120 LITRE BIN = 2 X RUBBISH BAGS | 240 LITRE RECYCLING BIN FORTNIGHTLY COLLECTION | GLASS ONLY RECYCLING CRATE | |
| | | SCENARIO 2 |  |  | <ul style="list-style-type: none">• Rates funded/likely increased cost• Ease of use for the resident• Increased diversion• Increased contamination of recycling by glass/limits end markets | |
| 120 LITRE BIN = 2 X RUBBISH BAGS | 240 LITRE RECYCLING BIN FORTNIGHTLY COLLECTION | | | | | |
| SCENARIO 3 |  |  |  |  | <ul style="list-style-type: none">• Lots of options/lots of bins/lots of space• Will increase diversion but comes with increased cost of service• Mixture of manual handling and mechanised lifting | |
| | WEEKLY RUBBISH BAG | WEEKLY 120 LITRE BIN RECYCLING | WEEKLY 120 LITRE BIN GREEN | WEEKLY GLASS ONLY RECYCLING CRATE | | |

GUIDE: 240 LITRE WHEELIE BIN = 4 RUBBISH BAG EQUIVALENT
120 LITRE WHEELIE BIN = 2 RUBBISH BAG EQUIVALENT



Appendix 4: Glossary of Terms

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|--------------------------|--|--|--|
| C&D waste | generated from the construction or demolition of a building including the preparation and/or clearance of the property or site. This excludes materials such as clay, soil and rock when those materials are associated with infrastructure, such as road construction and maintenance, but includes building- related infrastructure. | Managed fill | A disposal site requiring a resource consent to accept well-defined types of non-household waste, eg low-level contaminated soils or industrial by-products, such as sewage by-products. Properly referred to as a Class 3 landfill. |
| Cleanfill | A cleanfill (properly referred to as a Class 4 landfill) is any disposal facility that accepts only cleanfill material. This is defined as material that, when buried, will have no adverse environmental effect on people or the environment. | MfE | Ministry for the Environment. |
| Disposal | Final deposit of waste into or onto land, or incineration. | MGB | Mobile garbage bin – wheelie bin. |
| Diverted material | As defined within the Waste Minimisation Act, means anything that is no longer required for its original purpose and, but for commercial or other waste minimisation activities, would be disposed of or discarded. | MRF | Materials recovery facility. |
| Domestic waste | Waste from domestic activity in households. | MSW | Municipal solid waste |
| ETS | Emissions Trading Scheme | New Zealand Waste Strategy (NZWS) | A document produced by the Ministry for the Environment in 2010. |
| Food waste | Any food scraps – from preparing meals, leftovers, scraps, tea bags, coffee grounds. | Putrescible, garden, waste | Plant-based material and other bio-degradable material that can be recovered through composting, digestion or other similar processes. |
| Green waste | Waste largely from the garden – including hedge and/or tree clippings, and/or lawn clippings. | Product Stewardship | 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 the product life cycle. |
| Hazardous waste | Waste that can cause harm or damage to people or the environment like strong chemicals. | Recovery | As defined in the Waste Minimisation Act (2008): a) Means extraction of materials or energy from waste or diverted material for further use or processing; and b) Includes making waste or diverted material into compost. |
| Landfill | Tip or dump. A disposal facility as defined in S.7 of the Waste Minimisation Act 2008, excluding incineration. Includes, by definition in the WMA, only those facilities that accept 'household waste'. Properly referred to as a Class 1 landfill. | Recycling | The reprocessing of waste or diverted material to produce new materials. |
| LGA | Local Government Act 2002. | | |
| LTP | Long Term Plan. | | |



Appendix 4: Glossary of Terms

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|--------------------------------|---|-------------------------|---|
| Reduction | As defined in the Waste Minimisation Act (2008), means: a) Lessening waste generation, including by using products more efficiently or by redesigning products; and b) In relation to a product, lessening waste generation in relation to the product. | WA | Waste Assessment as defined by s51 of the Waste Minimisation Act 2008. A Waste Assessment must be completed whenever a WMMP is reviewed. |
| Reuse | As defined in the Waste Minimisation Act (2008), means the further use of waste or diverted material in its existing form for the original purpose of the materials or products that constitute the waste or diverted material, or for a similar purpose. | Waste | As defined in the Waste Minimisation Act (WMA) (2008), waste means: a) anything disposed of or discarded; and b) includes a type of waste that is defined by its composition or source (for example, organic waste, electronic waste, or construction and demolition waste); and c) to avoid doubt, includes any component or element of diverted material, if the component or element is disposed or discarded. |
| RRP | Resource recovery park. | Waste assessment | A document summarising the current situation of waste management in a locality, with facts and figures, and required under the Waste Minimisation Act. |
| RTS | Refuse transfer station. | Waste hierarchy | A list of waste management options with decreasing priority – usually shown as ‘reduce, reuse, recycle, reprocess, treat, dispose’. |
| Rubbish | Waste that currently has little other management options than disposal to landfill. | WMA | Waste Minimisation Act (2008) |
| Service Delivery Review | As specified in s17A of the LGA 2002. councils are required to review the cost-effectiveness of current arrangements for meeting the needs of communities within its district or region for good-quality local infrastructure, local public services, and performance of regulatory functions. A review under subsection (1) must consider options for the governance, funding, and delivery of infrastructure, services, and regulatory functions. | WMMP | A Waste Management and Minimisation Plan as defined by s43 of the Waste Minimisation Act 2008. |
| TA | Territorial Authority (a city or district council) | WWTP | Wastewater treatment plant |
| Transfer station | Where waste can be sorted for recycling or reprocessing, or is dumped and put into larger trucks for transport to landfill. | Zero waste | A philosophy for waste management, focusing on council/ community partnerships, local economic development, and viewing waste as a resource. Zero waste may also be a target. |
| Treatment | Subjecting waste to any physical, biological, or chemical process to change its volume or character so that it may be disposed of with no or reduced adverse effect on the environment, but does not include the dilution of waste. | | |

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