

Regulatory Impact Statement: Proposals to support a transformation in waste management in New Zealand

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Regulatory Impact Statement: Proposals to support a transformation in waste management in New Zealand

Coversheet

Purpose of Document

Decision sought:	Cabinet agreement on final policy decisions for the preparation of new waste legislation
Advising agencies:	Ministry for the Environment
Proposing Ministers:	Minister for the Environment
Date finalised:	6 March 2023

Problem Definition

New Zealand is one of the highest generators of waste per person in the world, the third highest generator of municipal waste (in 2018),¹ and the second worst recycling nation² in the OECD. We have a predominantly single-use throw-away culture and the amount of waste we create is increasing. We rank 29th out of 38 countries in the OECD in terms of waste production.³

New Zealand's current waste-producing, linear, 'take-make-dispose' system approach relies heavily on extracting virgin materials/resources and promotes continuous consumption and replacement, over keeping products and materials in use.

Our current waste management system causes environmental harm, greenhouse gas emissions, and economic losses. It is not sustainable without increasing harm to the environment. Current legislation (Waste Minimisation Act 2008 (WMA) and Litter Act 1979) is dated and has limited tools to address these environmental issues.

Both Acts need modernising and lack clarity on roles and responsibilities, particularly for central government. The Litter Act is over 40 years old, while the WMA, in particular, falls short of the powers that are needed to achieve good waste data collection and effective regulation.

As a country we need to improve waste disposal and resource recovery and move towards a more circular economy. A new Act is needed to achieve these goals.

The new legislation will update the purposes and principles, governance arrangements, and roles and responsibilities for waste issues, and will facilitate improved collection of data and regulation of the sector.

The current legislative settings do not provide the requisite tools and enforcement tools to support a shift towards a more circular economy. Updated legislation, combined with release of a new Waste Strategy will be key foundational documents to support our shift to a circular economy.

Executive Summary

¹ OECD <https://www.oecd.org/environment/environment-at-a-glance/Circular-Economy-Waste-Materials-Archive-January-2020.pdf> retrieved April 2022

² Consumer NZ. Global Assessment of recyclability of product packaging, 2021. Retrieved April 2022. <https://www.consumer.org.nz/articles/how-does-new-zealand-packaging-recycling-compare-to-the-rest-of-the-world>

³ Retrieved from <https://sensoneo.com/global-waste-index/> 5 November 2022

New Zealand operates in what can be categorised as a linear economy. The dominant approach to materials and products in the economy involves collecting raw materials, then transforming them into products that are used until they are discarded as waste. This economic pattern relies on the extraction and importation of virgin materials and promotes replacement, over keeping products and materials in circular use. As our population grows, the costs of a linear system become unsustainable without major harm to the environment. This economic model not only threatens the availability of the very resources that enable it, but also generates other impacts on our environment such as climate change, caused by the emission of greenhouse gases.

Current legislative settings (Waste Minimisation Act 2008 and Litter Act 1979) do not provide sufficient policy tools and enforcement powers to enable the move to a more circular economy. There is a need for a complete reset of the purposes and principles, governance arrangements, and roles and responsibilities in waste management in New Zealand.

Public consultation to seek feedback and ideas on the content for the new waste strategy and legislation in late 2021 produced nearly 2,500 submissions from individuals, the waste sector, businesses, and local government. There was a high level of support for transforming the way we manage waste and the move towards a circular economy. A greater focus on reducing waste generation was broadly supported, or for waste to be designed-out of the system. Submitters wanted to see more regulatory tools and decisions being made that would deliver outcomes embedded in the upper part of the waste hierarchy. The consultation was high-level and designed to get general feedback to assist the development of proposals for the strategy and the legislation.

The Government is now about to publish a new waste strategy that sets out a vision for 2050. It has three broad phases between now and 2050. The first phase through to 2030 sets some key targets and priorities, including putting the basic enablers in place for improved environmental outcomes. New legislation is one of the pivotal enablers as it will create the legal frameworks, powers and obligations to drive the programme of change set out in the strategy. The proposals in this document are designed to contribute to the implementation of the waste strategy.

This regulatory impact statement (RIS) considers three outcome areas:

- a clear national direction
- better use of resources
- improved management of waste.

It analyses six proposals for inclusion in new legislation to address these outcome areas and contribute to the implementation of provisions in the new waste strategy (table 1). Two proposals relate to setting a clear national direction; one to promote better use of resources (specifically, to enable better use of products and materials, drive circularity, and minimise waste); and three to regulate how people manage waste.

There are two levels of analysis in this document. This recognises the scope of proposals covers aspects that would be specified within the new primary legislation and aspects that are enabling powers with further detail to come if, and when, they are adopted⁴. The proposals for roles and responsibilities (central and local government) and the allocation and use of waste disposal levy (waste levy) funds are to be specified in the primary legislation and are therefore subject to more detailed analysis. The other proposals are for enabling provisions, meaning it is not possible to provide a detailed assessment of the regulatory impact.

⁴ For example, the current WMA specifies responsibilities of territorial authorities in Part 4 and allows for regulation-making powers for other matters, such as the sale of specified products in Section 23.

Table 1: Outcome areas for the new waste legislation discussed in this document

Section	Outcome area	Proposals	Primary legislation
2(a)	Setting a clear national direction	<ul style="list-style-type: none"> Central and local government roles and responsibilities Use of levy funds 	Direct regulatory impact; creates obligations directly
2(b)	Measures to promote better use of products and materials, drive circularity and minimise waste	<ul style="list-style-type: none"> Powers to control specific products and materials, including extended producer responsibility 	No direct regulatory impact from primary legislation; creates system and powers for developing future obligations through secondary legislation
2(c)	Measures to regulate how people manage waste	<ul style="list-style-type: none"> Duties of care National standards for recycling and waste disposal system Tracking system for harmful wastes 	No direct regulatory impact from primary legislation; creates system and powers for developing future obligations through secondary legislation

This RIS is not comprehensive of all proposals intended to be included in the legislation. In addition to the proposals in Table 1, separate streams of work for inclusion in the new legislation have been carried out for:

- improving household and business recycling
- beverage container return scheme
- national licensing scheme for operators and facilities for waste management.

These proposals are subject to separate approval by Cabinet and have their own regulatory impact statements.

It is important to reinforce that the enabling powers in new legislation represent future possibilities and is therefore difficult to specify their eventual application. However, it is possible to conceptualise the cumulative impact of the legislative proposals and how they could work together in a future scenario.

In this scenario, there are a broader range of initiatives applied at the top of the waste hierarchy, including measures to address harmful products and materials before they enter the waste stream (for example, establishing product bans, controls on disposal, or recyclability requirements). Producers take greater responsibility for products and materials placed on the market and more activity supports circular economy principles, including improved reuse, repairability, and recyclability. Appropriate steps are taken to ensure New Zealand does not become a 'dumping ground' for products deemed non-compliant in other jurisdictions.

In addition, consumers have access to information on the environmental performance of products and materials to inform decision making and there is also greater transparency on end-of-life solutions for those items, which helps maintain confidence in the waste management system.

Within this system, specified operators and facilities are required to hold an appropriate licence, which supports the broad application of a duties of care regime where waste is collected, stored, handled and transferred along an appropriate 'chain of custody'. Duties of care also promote responsibility for waste and preventing harm to the environment.

National standards provide detailed technical specifications for operating waste management services to minimise harm to the environment and people and preserve value in materials. Where required, an electronic tracking system is employed to manage and provide oversight of specified material flows, enabling data collection and reporting.

The effective operation of the system is supported by clear roles and responsibilities for central and local government, a clear national direction, and active participation and collaboration from the sector. An expanded compliance, monitoring and enforcement regime supports system effectiveness.

Limitations and Constraints on Analysis

There are significant limitations to the analysis that can be carried out at this stage, given that much of the proposed powers for the legislation are enabling and create systems and powers to then support a long-term programme of future detailed regulation of specific products, materials and activities. The creation of the capacity to regulate in the primary legislation has little or no direct impact that can be assessed at this stage. Where proposals are already underway to use some of the new tools and powers, the impacts of these proposals have been assessed in more detail (in stand-alone RIS documents that accompany the proposals). Additionally, limited cost-benefit analysis has been undertaken in relation to proposals in this RIS due to the lack of quantitative and financial data and clearly defined scope that would emerge during the regulation-making process. The most meaningful point for assessing impact will be when developing individual proposals to introduce new regulations on a specific topic under legislation in future, which would also trigger consultation and a cost-benefit analysis.

Although normal government decision-making systems require regulatory impact assessments as a matter of course, the enabling components of the new legislation will reinforce specific requirements to consider costs, benefits and impacts before regulations are approved, with clear requirements to consult with significantly affected parties.

This impact analysis therefore concentrates on the changes that will be made directly by the primary legislation, which in itself represents an important regulatory change. It provides an early-stage interim assessment of the proposals that enable future regulatory changes on specific topics but does not attempt to pre-empt the specific impact assessment work that will accompany any individual future proposal.

The impact analysis relies on data that is incomplete – there are serious data deficiencies in the waste sector in New Zealand, a critical challenge the new reforms will help to address (alongside an existing waste data work programme). The Ministry has in some cases relied on the data and best practice and experience from countries that have already made the move towards circularity. There are risks in the use of information from other jurisdictions as it may not be fully relevant to the New Zealand context.

During the development of these proposals the Ministry contacted all iwi organisations and were advised that they did not want any specific engagement on the waste proposals at that time. Further detailed analysis of the intersection of these proposals and Te Tiriti partnership principles and obligations may be required as the change programme enabled by this new legislation is phased in over time.

Public consultation was carried out between October and December 2021 on a new waste strategy and legislation.⁵ The consultation was high-level and was designed to seek feedback and ideas on the content for the proposed new waste strategy and legislation. It did not seek feedback on the details of specific proposals in this document as these had yet to be developed. Although the Ministry has tested most aspects of the final proposals with individual stakeholders and industry

⁵ Ministry for the Environment. 2021. Te kawe i te haepapa para | Taking responsibility for our waste: Proposals for a new waste strategy; Issues and options for new waste legislation. Wellington: Ministry for the Environment.

groups, the Waste Advisory Board⁶ and relevant government agencies, there has not been an opportunity for full engagement on the overall proposals. There will be opportunity for public and stakeholder input during the Select Committee process.

Work is ongoing on aspects of the supporting 'machinery' for the substantive policy proposals, such as data gathering powers, institutional arrangements, enforcement powers, and offences and penalties. In particular, the overall compliance, monitoring and enforcement (CME) framework has been developed, but the detailed work to link individual components with the different areas of regulation will be completed once Cabinet has made decisions confirming which regulatory powers are to be included. Cabinet decisions on these and other remaining policy matters are expected during 2023.

Responsible Manager(s) (completed by relevant manager)

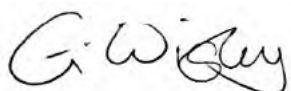
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Policy and Regulatory

Waste and Resource Efficiency

Ministry for the Environment



08/03/22

Quality Assurance (completed by QA panel)

Reviewing Agency:	Ministry for the Environment with The Treasury
Panel Assessment & Comment:	<i>"The Ministry for the Environment and The Treasury's Regulatory Impact Assessment Panel (Panel) considers that the Regulatory Impact Statement (RIS) document on the proposals to support a transformation in waste management in New Zealand meets the quality assurance criteria for regulatory impact analysis. The problem definition, valuation criteria against which options were assessed, and the context are well set out. Having reached that assessment, the Panel notes that the RIS acknowledges that parts of the analysis are constrained by the limited ability to quantify some data at this stage in the project."</i>

⁶ The Waste Advisory Board provides advice the Minister for the Environment on matters relating to the WMA and waste minimisation. Members, typically 6-8 at any one time, comprise waste sector representatives and experts and are appointed through the Cabinet appointment process.

Abbreviations

AIP	Action and Investment Plan
CME	Compliance, Monitoring and Enforcement
CRS	Container Return Scheme
EPA	Environmental Protection Authority
EPR	Extended producer responsibility
ERP	Emissions Reduction Plan
EU	European Union
FTA	Fair Trading Act 1986
GHG	Greenhouse gases
MBIE	Ministry for Business, Innovation and Employment
MfE / Ministry	Ministry for the Environment
OECD	Organisation for Economic Cooperation and Development
RIA	Regulatory Impact Assessment
RIS	Regulatory Impact Statement
RMA	Resource Management Act 1991
TA	Territorial authority(ies)
UNEP	United Nations Environment Programme
UK	United Kingdom
WMA	Waste Minimisation Act 2008
WMMP	Waste Minimisation and Management Plan

Definitions

Term	Definition
Waste sector	Every entity involved in waste management of any kind. Includes non-governmental organisations (NGOs), local and central government, businesses, lobby organisations.
Waste	A by-product of economic activity, by businesses, government and households. Waste is also an input to economic activity (e.g. through material recovery). Waste includes material sent for recycling depending on the context.
Waste management	Management of all aspects of the waste hierarchy.

Section 1: Diagnosing the policy problem

What is the context behind the policy problem and how is the status quo expected to develop?

1. The Government committed itself to improving waste management in New Zealand as part of its 2020 election commitments, to prevent, reduce, and recycle waste. In the Cooperation Agreement between the New Zealand Labour Party and the Green Party of Aotearoa New Zealand, the Government made a commitment to take action to minimise waste and problem plastics.
2. The Government is also committed to a low-emissions and climate-resilient future for New Zealand⁷ where we use our resources more efficiently. It has agreed to an international target for climate change known as a Nationally Determined Contribution to reduce net emissions by 50 per cent below gross 2005 levels by 2030.⁸ It intends to implement a circular economy, as detailed in the new waste strategy and the Emissions Reduction Plan (ERP). In the ERP, the Government committed to:
 - reduce biogenic methane waste emissions to at least 40 per cent below 2017 levels by 2035
 - ensure, by 31 December 2026, that all landfills (except farm fills) that accept organic waste have effective gas capture systems
 - prioritise and fund ongoing data collection across the waste sector and publish annual waste statistics
 - develop a clear plan for how to move Aotearoa New Zealand towards a more circular economy.
3. The first objective in the Waste Reduction Work Programme approved by Cabinet and published in 2021 [ENV-21-MIN-0019 refers] is to build the foundations for a transformed waste system. The main workstreams are:
 - new legislation to replace the Waste Minimisation Act 2008 (WMA) and the Litter Act 1979 (this set of papers)
 - the new long-term waste strategy, presented to Cabinet in November 2022
 - the ERP policies for waste and hydrofluorocarbons (published in May 2022) [CAB-22-MIN-0152 refers]
 - improved data systems (ongoing).
4. The proposals in this document are a component of a group of proposals designed to form much of but not all of the proposed provisions for the new legislation (tentatively entitled 'Responsibility for Reducing Waste Act'). Figure 1 shows the proposed future waste framework and illustrates how these and the other workstreams fit together.
5. Green items indicate separate work streams, and these proposals are not included in the analysis in this document but are the subject of separate analysis.

⁷ <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/about-new-zealands-climate-change-programme/>

⁸ <https://www.beehive.govt.nz/release/govt-increases-contribution-global-climate-target>

Figure 1: Proposed future waste management framework



New Zealand is due to have a new waste strategy

- 6. The Government is soon to release the new waste strategy, *Getting Rid of Waste for a Circular Aotearoa*, (the waste strategy, or the strategy). The strategy sets out an overall vision for 2050 and comprehensive guiding principles. It has three broad phases between now and 2050. The first phase through to 2030 sets some high-level targets and key priorities and areas of work that will be required to achieve the 2030 goals and targets.
- 7. The strategy sets ambitious, overarching, national targets for 2030 on three key changes:
 - waste generation: the amount of material entering the waste management system for recycling or final disposal has reduced by 10 per cent per person
 - waste disposal: the amount of material going to final disposal has reduced by 30 per cent per person
 - waste emissions: biogenic methane emissions from waste have reduced by at least 30 per cent.
- 8. The strategy has eight goals as shown in Table 2.

Table 2: The eight goals of the waste strategy

Goals	Cumulative goals
1. The strategic planning, regulatory, investment and engagement systems are in place and operating to drive and support change	The basic enablers are in place
2. We have a comprehensive national network of facilities supporting the collection and circular management of products and materials	
3. We all take responsibility for how we produce, manage and dispose of things, and are accountable for our actions and their consequences	
4. We are using fewer products and materials, for longer, through increased durability, repair, reuse, sharing and repurposing	More activity is circular and waste is reducing
5. Resource recovery systems are operating effectively for core materials and across all regions	
6. We look for ways to recover any remaining value from residual waste, sustainably and without increasing emissions, before final disposal	
7. Emissions from waste are reducing in line with domestic and international commitments	Emissions and other environmental impacts are improving
8. Contaminated land is sustainably managed and remediated to reduce waste, emissions and enhance the environment	

9. The proposals in this paper have been designed to contribute to the implementation of the strategy and the achievement of these goals and targets.

What are the problems the proposals aim to address?

10. New Zealand operates in what can be categorised as a linear economy. The dominant approach to materials and products in the economy involves collecting raw materials, then transforming them into products that are used until they are finally discarded as waste. This economic pattern relies on the extraction and importation of virgin materials and promotes replacement, over keeping products and materials in circular use. As New Zealand's population grows, the costs of a linear system are likely to become unsustainable without major harm to the environment. This economic model not only threatens the availability of the very resources that enable it, but also generates other impacts on our environment such as climate change, caused by the emission of greenhouse gases.

11. New Zealand is one of the highest generators of waste per person in the world, the third highest generator of municipal waste (in 2018),⁹ and the second worst recycling nation¹⁰ in the OECD. We have a predominantly single-use throw-away culture and the amount of waste we create is increasing. We currently rank 29th out of 38 countries in the OECD in terms of being among the worst waste-producing nations.¹¹
12. Most waste material in New Zealand is disposed of to landfill, with only 28 per cent being recycled and recovered.¹² New Zealanders generate an estimated 17.49 million tonnes of waste per year, of which an estimated 12.59 million tonnes are sent to landfill.¹³ This estimate includes waste disposed of in Classes 1, 2, 3 and 4 landfills, clean fills, and farm dumps. It also includes the materials recycled here in New Zealand and those sent offshore for recycling.¹⁴
13. Landfilling resources creates an economic loss and causes environmental harms from greenhouse gas emissions both from landfills and from the impacts of extracting new raw materials to replace those we have just thrown away. Other harms include deforestation, soil erosion, pollution, and biodiversity loss.
14. Many of these harms – essentially negative externalities – are not reflected in the cost of new products and materials meaning markets do not receive appropriate price signals to minimise these environmental costs.

New Zealand is generating more and more waste

15. Long-term trends show that the rate of disposal to landfill increased over the last 10 years, with a total increase of approximately 48 per cent between 2010 and 2019. Recent data indicates that volumes to these landfills has reduced although this is likely largely due to COVID-19 (see figure 2).¹⁵ Longer term trends suggest the rate of waste disposal is increasing for many sites around the country.
16. For waste where the levy is charged - class 1 (municipal landfills) and now class 2 (construction and demolition fills), just over 3.5 million tonnes were deposited in landfills in 2021/22.
17. Figure 2 shows trends in disposal of waste at class 1 since 2009 and more recently class 2 landfills in New Zealand.

⁹ OECD <https://www.oecd.org/environment/environment-at-a-glance/Circular-Economy-Waste-Materials-Archive-January-2020.pdf> retrieved April 2022

¹⁰ Consumer NZ. Global Assessment of recyclability of product packaging, 2021. Retrieved April 2022. <https://www.consumer.org.nz/articles/how-does-new-zealand-packaging-recycling-compare-to-the-rest-of-the-world>

¹¹ Retrieved from <https://sensoneo.com/global-waste-index/> 5 November 2022

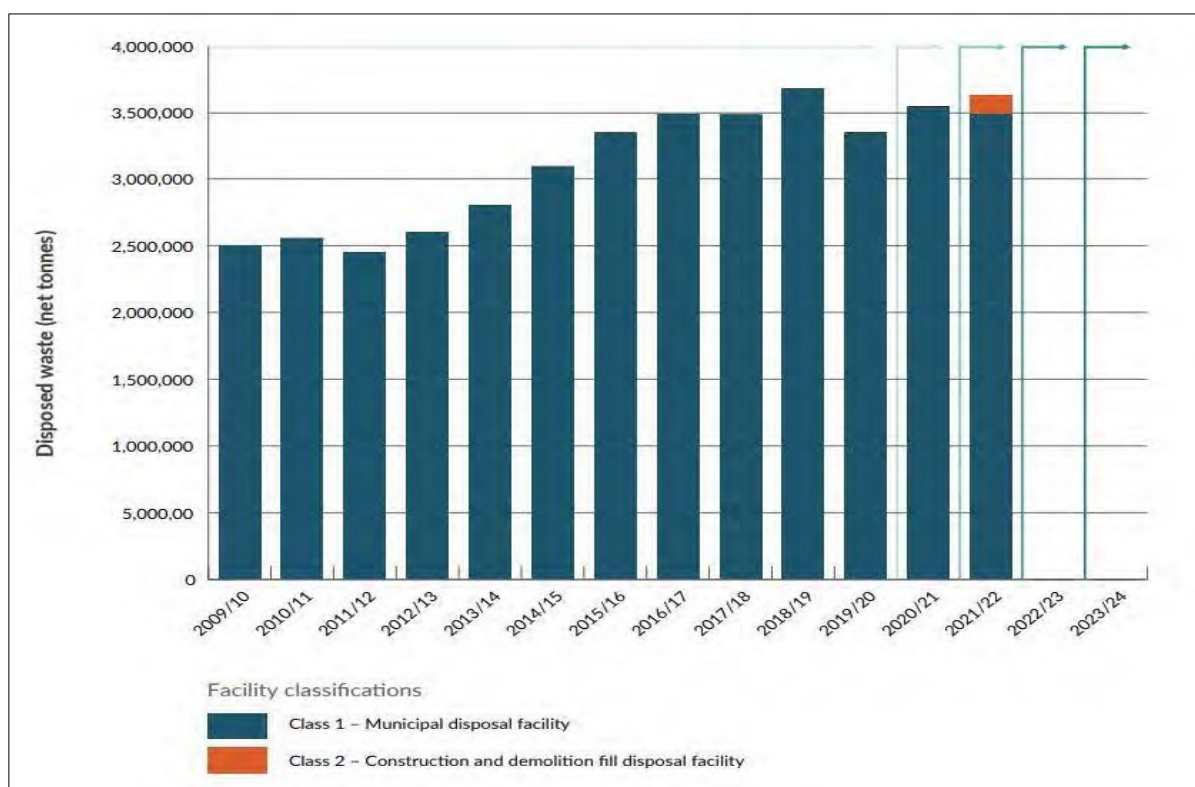
¹² <https://www.recycle.co.nz/problemsize.php>

¹³ Retrieved from <https://environment.govt.nz/facts-and-science/waste/estimates-of-waste-generated/> September 2022

¹⁴ Source: Online Waste Levy System

¹⁵ <https://environment.govt.nz/facts-and-science/waste/estimates-of-waste-generated/#amount-of-waste-generated> retrieved on 1 November 2022

Figure 2: Trends in disposal of waste at class 1 (municipal landfills) and recently at class 2 landfills in New Zealand since 2009¹⁶



Why is there so much waste sent to landfills?

18. There are multiple dimensions of our current economic system that promote continuous consumption and replacement rather than keeping products and materials in use. The products we use are mostly not designed for reuse, repair, or recycling. There is little incentive for producers to change this as the costs of harms are not reflected in the cost of new materials, and the more products they sell, the greater their profit. As mentioned earlier, the markets do not receive appropriate price signals to minimise these environmental costs.
19. In the past, most of the recycling generated in New Zealand was sent to China for reprocessing. This was because New Zealand has limited infrastructure for recycling. However, since 2018, China set up its 'National Sword Policy' banning the importation of most recycling from overseas, therefore creating an issue for all the countries that used China to reprocess their recycling. New Zealand's onshore recycling systems, infrastructure and practices are currently insufficient for our current levels of waste production.¹⁷
20. Our recycling rate is low. On average it is estimated that each New Zealander sent nearly 700 kg of waste to municipal landfills in 2021, up from 580 kg in 2009.¹⁸ We recycle and compost about one third of household waste and the rest goes to landfill.

¹⁶ Ministry for the Environment. 2022. *Annual Report Pūrongo ā-Tau 2021/22*. Wellington: Ministry for the Environment

¹⁷ China launched its National Sword programme, which imposed strict contamination limits on recyclable materials. In 2018, China introduced a 0.5% contamination limit along with a ban on many recyclables, including plastics.

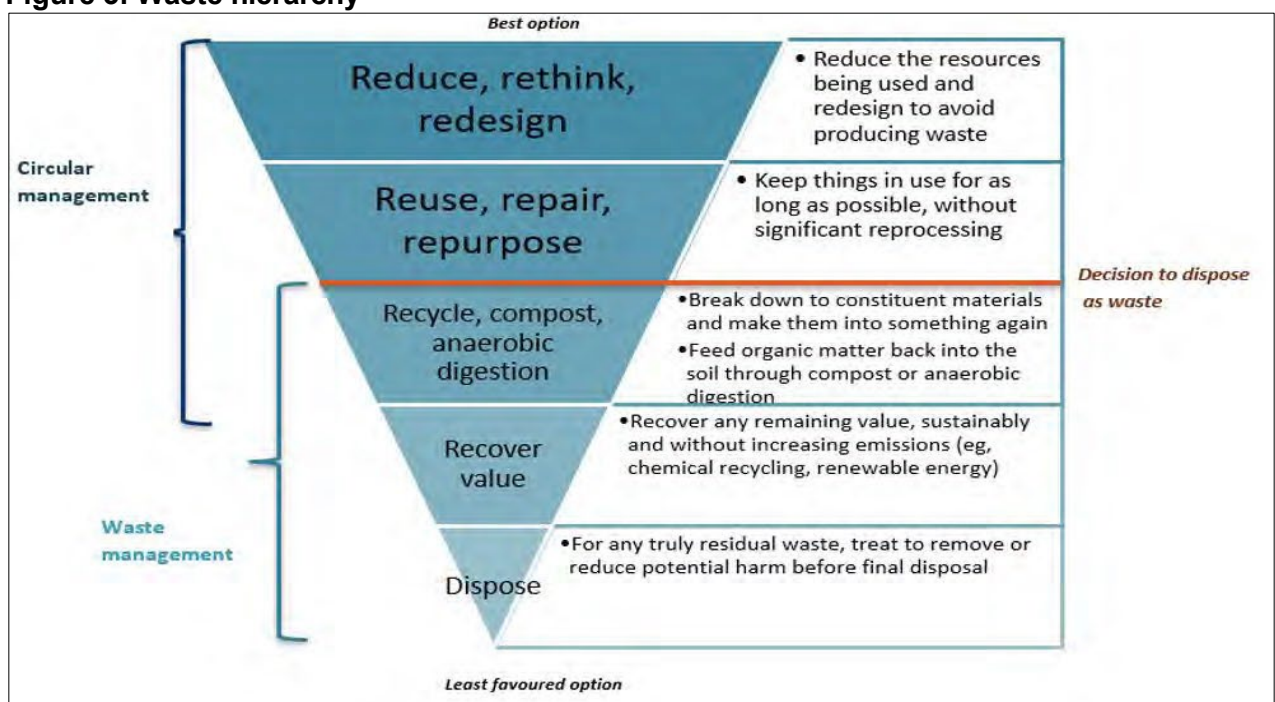
¹⁸ It has dropped in recent years, but this may be due to the impact of Covid-19

21. One of the issues with waste going to landfills is that there are increasing types of waste, such as e-waste where New Zealand lacks sufficient mechanisms to deal with other than by disposal. The Ministry estimates that each New Zealander creates an average of 19 kg of e-waste a year and this is expected to rise to 26.9kg per person by 2030. This waste is often toxic and risks causing harm to the environment.

The waste hierarchy

22. The waste hierarchy is a core organising framework for Government policy on waste, resource efficiency and the circular economy. The waste hierarchy is a key tool to explain the different steps to reduce and manage waste in the journey towards a circular economy (Figure 3). The waste hierarchy requires anyone managing waste to consider first prevention, preparing for reuse and recycling followed by other methods of recovery, for example recovery and, lastly, disposal. The most desirable steps are those at the top of the hierarchy, which avoid generating waste in the first place. In the middle are techniques for keeping materials circulating in the economy, in line with the second circular economy principle. At the bottom are the techniques that are least desirable – destruction and disposal to landfill. The waste hierarchy will be included in the new waste legislation as a principle with an attached definition.
23. All the proposals in this document are built on the concept of the waste hierarchy and therefore towards a more circular economy. There are proposals for the top and middle of the hierarchy. Where waste is inevitable, proposals focus on its better management at the bottom of the hierarchy.

Figure 3: Waste hierarchy



We need to move to a more circular economy

24. A circular economy limits waste and pollution, keeps products in use and regenerates natural systems to protect rather than deplete natural resources. According to the OECD, “with benefits in environmental, economic and social domains, there is a clear rationale for G20 countries to further advance the transition to a more resource efficient

and circular economy”.^{19 20} A circular economy can significantly reduce waste and reuse resources and can contribute to reducing greenhouse gas emissions embedded in the production of everyday products by 45 per cent.²¹

25. While our focus here is on waste, a circular economy goes beyond how we manage waste. It is a whole-of-economy shift in the way we value and use resources. Progressing towards a circular economy therefore requires change across all aspects of the economy. Transforming the waste and resource recovery sectors is one step on this journey and complements the work being carried out by the Ministry for Business, Innovation and Employment (MBIE) on the circular economy. Almost everything we do as a society generates waste; aligning how we manage waste materials with circular economy principles is therefore a powerful way to change the way we collectively think about resource use in New Zealand.
26. Globally, a shift towards a circular economy is gaining momentum through multi-lateral initiatives such as the European Union’s Circular Economy Action Plan, the Global Alliance for Circular Economy and Resource Efficiency, and the G7 Alliance on Resource Efficiency, as well as the growing number of countries with circular economy strategies and legislation.
27. Keeping materials in our economy keeps value in our economy. Achieving a circular economy within 30 years will require transformational change and require people to think differently about waste. The waste strategy has targets for waste generation (reduce volumes by 10 per cent per person by 2030) and waste disposal (reduce volumes by 30 per cent per person by 2030). The proposals in this RIS are designed to contribute to meeting those targets.

We need to reduce emissions

28. More than 1 million tonnes of plant matter and food scraps are sent to landfills, representing about 320 kg of organic matter for each person in New Zealand. This is accompanied by 600,000 tonnes of paper and cardboard (about 170 kg/person) and 220,000 tonnes of plastic (about 60 kg/person).²²
29. Waste produces greenhouse gases. In 2019, the volume of greenhouse gas emissions for the waste sector in New Zealand amounted to 3.3 million metric tons of carbon dioxide equivalent.²³ Food waste and other organic waste deposited in landfills create 4 per cent of NZ’s total greenhouse gas emissions.²⁴
30. In the ERP, the Government committed to measures related to waste:
 - reduce biogenic methane waste emissions to at least 40 per cent below 2017 levels by 2035
 - ensure, by 31 December 2026, that all landfills (except farm fills) that accept organic waste have effective gas capture systems

¹⁹ OECD, 2021 Towards a more resource-efficient and circular economy. The role of the G20. Paris. OECD

²⁰ The G20 is composed of most of the world’s largest economies, including both industrialized and developing nations, and accounts for around 80% of gross world product (GWP), 59–77% of international trade, two-thirds of the global population, and roughly half the world’s land area.

²¹ OECD. 2021. 3rd OECD Roundtable on the Circular Economy in Cities and Regions. Paris: OECD

²² Retrieved from <https://environment.govt.nz/facts-and-science/waste/estimates-of-waste-generated/> September 2022

²³ Carbon dioxide (CO₂) equivalent is a measure of how much a gas contributes to global warming, relative to carbon dioxide.

²⁴ Retrieved from <https://environment.govt.nz/what-government-is-doing/areas-of-work/waste/reducing-food-waste/> September 2022.

- prioritise and fund ongoing data collection across the waste sector and publish annual waste statistics
 - develop a clear plan for how to move Aotearoa New Zealand towards a more circular economy.
31. There are a range of initiatives to deliver on these commitments including those that can be enabled in legislation: the licensing system (the subject of separate analysis) and the business food waste separation (see duty of care). The legislation will also support increasing data collection. The waste strategy sets out how to move the country towards a more circular economy.

Everyone is affected

32. Moving to a low-emissions circular economy, must serve all members of New Zealand society from industries, businesses and central and local government to households and individuals. Combined, the proposals are designed to provide clarity to each of these parties, confidence in the entirety of the waste management system and create equal access to services across New Zealand.
33. Currently, the environmental harms caused by wasteful resource use are largely public harms. They are shared amongst us as a society with little direct impact on individual decisions. This weakens packaging, household, and disposal choices. Internationally it is becoming more common to address negative externalities by shifting costs from individuals / ratepayers to producers of the products and packaging to encourage greater responsibility for the impacts of product design and consumption choices. By shifting the burden of costs, producers are incentivised to move to more recyclable and sustainable packaging and products and to a more circular economy. Consumers are also incentivised to make more sustainable purchase choices. The proposals in the section on 'Measures to promote better use of resources, drive circularity of products and materials and minimise waste' are designed to take action in this space.
34. All New Zealanders are affected by waste management issues although remote areas are disproportionately affected as the costs of disposing of waste are higher and waste management businesses are less likely to want to operate there because of the economies of scale, and there are far fewer opportunities for waste diversion such as recycling. The outcomes for Māori from waste and resource recovery activities have often been very harmful, for example when waste facilities have been built on sacred or significant land or resulted in contamination of significant waterways.
35. Increasing consistency in access to and nature of waste management services will reduce the likelihood of confusion and allow for consistent national messaging and in education campaigns. Creating standards for waste management services will ensure equity in services across the country, provide clarity and promote confidence in waste management. National licensing of operators and facilities will increase professionalism in waste management and contribute to confidence in the waste management system. Tracking of harmful waste will allow regulators to ensure appropriate behaviour is maintained, as well as to close some vital data gaps. The proposals in the section on 'Measures to regulate how people manage waste' are designed to take action in this space.

What will happen if no action is taken?

36. If no changes are made to the current linear model of production, consumption, and waste management in New Zealand:
- **Waste to landfill will continue to increase** in line with the trends identified in paragraphs 9 - 21 that waste disposal is increasing for many sites around the country

- **GHG emissions from waste in landfills will increase** – as waste to landfill increases the emissions from food waste and other organic waste will also continue to increase
- **New Zealand's rate of recycling is likely to remain low** – without changes to services and infrastructure, and intervention at the design stage of products, the ability to recycle will remain hampered
- **Councils will run out of space for landfills** – landfills in some of our larger urban areas are reaching capacity and the availability of new space is limited by local opposition (the 'not in my back yard' syndrome) and higher environmental standards (such as avoiding sites that could contaminate groundwater or streams).²⁵ In 2021, an informal poll found 17 councils indicated that they would run out of space in existing landfills within 10 years²⁶
- **Harm to human and environmental health** from poorly managed waste will increase as waste management remains the same and levels of waste increase with population increase. Poorly managed waste can result in:
 - chemicals and pathogens contaminating drinking water
 - contamination of soil by heavy metals from industrial processes and surface runoff
 - creating favourable environments for disease-causing bacteria and viruses including bioaerosols
 - unpleasant or harmful odour problems and
 - unfavourable effects on Māori cultural values since they place high value on their land and water.
- **Inequities will increase** between the waste management services available in larger urban centres and more remote areas of the country – without viable services and infrastructure available to them, eg, South Island towns, more remote communities will experience more harms from inadequate waste management and the costs of waste management will be disproportionately high compared to main centres
- **We risk becoming a dumping ground for cheap/inferior products** – as the world improves its management of waste, New Zealand will continue its 'single-use' culture and will risk becoming a dumping ground for cheap products that are not designed for reuse, repair, and recycling.

Existing legislation is not fit for purpose

37. While some initiatives such as banning single use plastic shopping bags in retail have been undertaken under the WMA, the range of activities to move to a circular economy cannot be accommodated under existing legislative provisions. In summary, with no action there is likely to be insufficient change to meet the waste strategy 2030 targets or the longer-term goals by 2050 or provide a meaningful contribution to emissions reductions. Without change New Zealand's pathway to transform our economy into a low-emissions, circular economy would be drastically curtailed.

²⁵ Retrieved from <https://environment.govt.nz/publications/the-state-of-new-zealands-environment-1997/chapter-three-production-and-consumption-patterns/waste-generation-and-disposal-in-new-zealand/> 4 November 2022

²⁶ Stuff stocktake, August 2021. <https://www.stuff.co.nz/environment/125829093/we-are-extremely-wasteful-is-it-time-to-dump-the-dumps>

What are the key features of the regulatory system(s) already in place and the current state within which action is proposed?

The Waste Minimisation Act 2008

38. The WMA New Zealand's main legislative framework for waste minimisation. It encourages a reduction in the amount of waste we generate and dispose of. The aim is to protect the environment from harm and provide New Zealand with economic, social and cultural benefits. Settings in the WMA are focused mostly on the end of the waste 'supply' chain – disposal and recycling – rather than including a focus on the production end. Consequently, the WMA has limited mechanisms to enable the goals set out in the waste strategy.
39. New legislation will enable a complete reset of the purposes and principles, governance arrangements, and roles and responsibilities in waste legislation. It will also strengthen and clarify regulatory and enforcement powers, for greater regulation of the waste sector, and allow for regulation of the products and materials we currently dispose of through our waste and recycling systems.

The Litter Act 1979

40. The Litter Act is over 40 years old and needs modernising to meet the requirements of current society, the Government's commitments to climate change mitigation, and the move towards a more circular economy. Although some of the existing content will be carried over into the new legislation (for example, its purpose and some tools), significant revision will make it fit for purpose in today's economic, environmental and social context, and it will reframe how litter is thought of and managed.

The Basel Convention

41. The Basel Convention is an international agreement that controls the movement between countries of hazardous and other wastes. In addition to existing requirements for hazardous waste export permits, in 2021, amendments to the Basel Convention placed restrictions on how some mixed plastic waste could be exported. This was in recognition of the harm caused by developed countries dumping mixed plastic waste in developing countries, often under the label of 'recycling'. Bales with mixed plastics containing plastics #3, #4, #6, and #7 now require an export permit to be shipped overseas.

The new national waste strategy – *Getting Rid of Waste for a Circular Aotearoa New Zealand*

42. The national waste strategy presents the proposed vision and aspirations for a low-waste New Zealand, and how we plan to get there. It is designed to guide and direct the country's journey toward a circular economy. The strategy was presented to Cabinet in November 2022 and proposes goals to be achieved by 2050 and includes targets for waste reduction and diversion from landfill for households and businesses to be achieved by 2030 (refer to paras 6-9 above), as well as a target for a reduction in biogenic methane.

Related Government decisions, legislation, or Regulatory Impact Statements in this area that are relevant to this problem

43. There are several related work streams currently underway, which are outlined below.

Increase and expansion of the waste disposal levy

44. The proportion of waste that is sent to landfill in New Zealand is steadily increasing. The waste disposal levy aims to create an incentive to divert waste from landfill. This work stream identified that the levy is set too low and too narrowly applied to be

effective. Cabinet decided in 2020 to improve the effectiveness of the levy by progressively increasing the rate of the levy and expanding its application to more types of landfill (prior to these decisions the levy was set at \$10 per tonne and only applied to class 1 municipal landfills). Progressive changes to the levy rate and its application to different classes of landfills take effect in stages from 2021 through to 2024.

45. In addition to disincentivising disposal to landfill, the levy increase and expansion also generates significantly increased revenue, which is available to support investment in waste minimisation activities. Cabinet decisions to increase and expand the waste levy [CAB-20-MIN-0264.1 refers] also prompted a broader consideration of the legislative and regulatory framework for waste and consequently driving the need for this present scope of system change.

Emissions Reduction Plan

46. The Government released its first ERP in May 2022 which sets out how New Zealand will meet its first emissions budget (for the period 2022-2025) and establishes the path towards meeting our long-term climate targets. The ERP is one mechanism the Government has introduced to transition to a more resilient, low-emissions economy. The waste components of the ERP will be supported through the new waste legislation. The Government has committed to:

- enable households and businesses to reduce organic waste
- increase the amount of organic waste diverted from landfill
- reduce and divert construction and demolition waste to beneficial uses
- explore bans or limits to divert more organic waste from landfill
- increase the capture of gas from municipal landfills
- improve waste data and prioritise a national waste licensing scheme.

National licensing scheme

47. Cabinet recently agreed in principle to the national licensing scheme for the waste and resource recovery sector [CAB-22-MIN-0080 refers] as an action for the first ERP and the new waste legislation is the vehicle for implementing that high-level decision.

Household kerbside and business recycling systems

48. Cabinet has also agreed to a suite of proposals to improve household kerbside collection services and separate business food waste [CAB-22-MIN-0539 refers]. The intention is to make it easier for households and businesses to recycle and move New Zealand to a low waste, low emissions future. Provisions to support improved kerbside collection will be included in the new waste legislation. The government consulted the public on improvements to household kerbside recycling and two other proposals as part of the Transforming Recycling consultation in 2022.

Waste investment work programme

49. The Ministry supports a range of waste minimisation projects through Te Pūtea Whakamauru Para - the Waste Minimisation Fund (the WMF).
50. The WMF invests in a wide-range of projects from multi-million dollar infrastructure investments to smaller hapū/community-centred projects. The WMF funding comes from the waste levy (central government portion) and as the levy increases, the amount available for allocation through the WMF increases.

Container Return Scheme

51. In November 2022, Cabinet agreed to establishing a beverage Container Return Scheme (CRS) that incentivises people to return their empty containers for recycling in exchange for a small refundable deposit [CAB-22-MIN-0539.01 refers]. The new waste legislation is expected to be the vehicle for implementing this decision.

Additional RIS documentation

52. Regarding these related work streams, separate RISs have been prepared on the following:
- waste disposal levy: 'Increase and expansion of waste disposal levy', June 2020
 - licensing of operators: 'National licensing system in waste and resource recovery', March 2022, as part of the waste components of the Emissions Reduction Plan (Interim RIS)
 - kerbside collection: 'Improving household and business recycling', October 2022 (Interim RIS)
 - container return scheme: 'A beverage container return scheme for Aotearoa New Zealand', November 2022 (Interim RIS).

Ongoing Government work to address waste

53. The Government has already taken steps to support a move to a low-emissions circular economy and to begin lifting New Zealand's waste performance. In recent years it has:
- increased and expanded the scope of the waste disposal levy – provides significantly increased incentives to avoid sending waste to landfill; and increases funds available for investment back into waste reduction initiatives
 - committed to introducing mandatory product stewardship schemes for six products (including tyres and plastic packaging)
 - banned single-use plastic shopping bags
 - introduced mandatory phase-out of certain single-use and hard-to-recycle plastic items in three tranches from October 2022 to mid-2025
 - implemented amendments to the Basel Convention that place restrictions on the export of low-grade plastics
 - launched the \$50 million Plastic Innovation Fund in 2021
 - approved \$86.8 million in funding for resource recovery infrastructure as part of the response to the economic impact of COVID-19
 - continued to invest in waste minimisation via the Waste Minimisation Fund (\$8.76 million invested in projects in 2020 and \$14.1 million in 2021)
 - committed to invest \$120 million over two years through the Waste Minimisation Fund to support and accelerate solutions that will improve New Zealand's ability to reduce emissions from organic waste

- responded to recommendations made by the Climate Change Commission²⁷ and included actions in the Circular Economy and Bioeconomy chapter of the ERP to be contained in the Circular and Bioeconomy Strategy led by MBIE
 - improved waste data reporting by developing regulations for additional mandatory reporting of waste data to improve understanding of waste creation and disposal in New Zealand by facility operators and territorial authorities.
54. Further information may be found in the Ministry for the Environment's 2021/22 Annual Report²⁸ and in the Waste Reduction Work Programme.²⁹

Public consultation on the proposed waste strategy and the new legislation

55. The consultation document, *Te kawē i te haepapa para Taking responsibility for our waste*, was released for public consultation in October 2021. The document sought feedback on high-level proposals for a new waste strategy and for more comprehensive legislation on waste. This feedback was used to inform the development of proposals for the waste legislation and for the strategy. It did not seek feedback on specific proposals and/or options in this document as they had not been developed. Almost 2,500 submissions were received.
56. The consultation to date has indicated general support for the direction that was proposed in the strategy. There was strong support for moving towards a circular economy and for actions that would move New Zealand to the top of the waste hierarchy. Some called for a faster timeframe than by the proposed 2050.
57. A greater focus on reducing waste generation was broadly supported as a way to smooth the transition to a circular economy, or for waste to be designed-out of the broader system. Submitters wanted to see more regulatory tools and decisions being made that would deliver outcomes embedded in the upper part of the waste hierarchy.
58. Examples provided by submitters included more system-level focus on product-stewardship schemes, more reuse and refill systems, and waste being designed-out of products. Submitters were also keen on measures suggested in the document to regulate disposal and recycling of waste through a national licensing system and duties of care.
59. There was a desire to see local and central government funding align with the direction that would be set in a waste strategy.
60. Industry bodies and businesses emphasised that they wanted Government to work closely with industry to get sector-based insights into system barriers and solutions, and to set clear signals about where industry investment and development should be directed.
61. Another common theme was the importance of a genuine partnership approach between the Crown and iwi. Many submitters emphasised the need for the Government to consider and support a kaupapa Māori approach and to integrate mātauranga Māori concepts.

²⁷ Climate Change Commission (2021) *Ināia tonu nei: a low emissions future for Aotearoa*. Wellington: Climate Change Commission

²⁸ Ministry for the Environment, (2022) *Annual Report Pūrongo ā-Tau 2021/22*. Wellington: Ministry for the Environment

²⁹ <https://environment.govt.nz/assets/publications/Waste-reduction-work-programme-final.pdf>

62. Concerns were expressed about the quality of existing data and the implications this might have for the setting of targets. Other issues of concern raised included:
- local government costs and resourcing are insufficient
 - a new entity should be established to manage waste issues
 - when developing the concept of a duty of care it would be important to ensure that businesses were not made responsible for the behaviour of consumers
 - it would be important to clearly define which types of waste would be involved in the tracking of waste; that it might be expensive, too complicated, bureaucratic, and a compliance burden especially for small businesses
 - that New Zealand still exported waste to developing countries; but some noted that if this were curtailed, it could lead to perverse outcomes, given our limited onshore processing options or capacity
 - a lack of cohesive Māori perspectives on solutions to current waste and resource recovery problems, and an absence of te ao Māori.
63. Before public consultation, the Ministry contacted all post settlement iwi governance entities and were advised that they did not want any specific engagement on the waste proposals at that time. Further detailed analysis of the intersection of these proposals and Te Tiriti partnership may be required as the transition enabled by the new legislation is phased in over time.

The policy problem summarised – New Zealand’s waste management system is causing harm to the environment and is an economic loss

64. New Zealand’s current waste-producing, linear, ‘take-make-dispose’ system approach relies heavily on extracting virgin materials/resources and promotes continuous consumption and replacement, over keeping products and materials in use.
65. New Zealand is one of the most wasteful countries per capita in the OECD – it ranks 29th out of 38 countries in the OECD in terms of biggest waste producers. We produce more waste than high performing countries – in 2019 we were in the top three biggest waste producing nations in the world. In 2022 our place improved but is still in the top ten of waste producers per capita.³⁰
66. Our current waste management system causes environmental harm, greenhouse gas emissions, and economic losses. New Zealand’s waste management system is not sustainable without increasing harm to the environment.
67. Poor waste management contributes to climate change and pollution and directly affects many ecosystems and species. Landfills, considered the last resort in the waste hierarchy, release methane, a very powerful greenhouse gas linked to climate change.
68. Waste is not only a problem for the environment, but it is also an economic loss. Waste is a by-product of production and consumption and once produced it may need management as waste or it can provide resources as inputs to other activities through recycling.
69. Our recycling rates are low compared to other countries – a lack of access to services, predominantly food scraps collections but also in some areas dry recycling collections, means many of these materials end up in landfill instead of being circulated through our economy.

³⁰ Global Waste Index 2019 Retrieved from <https://sensoneo.com/global-waste-index/> 5 November 2022

70. All New Zealanders are affected although remote areas are disproportionately affected as the costs of disposing of waste are higher and waste management businesses are less likely to want to operate there because of the economies of scale, and there are far fewer opportunities for waste diversion such as recycling.
71. Higher performance is necessary to:
- reduce our waste to landfill and contribute to proposed diversion and emissions targets in the waste strategy
 - reduce our climate emissions and contribute to proposed emissions targets in the emissions reduction plan
 - improve public confidence and increase engagement in the circular economy.

What objectives are sought in relation to the policy problem?

72. The proposals have four overarching objectives that are linked to the achieving goals of the strategy as follows in Table 3:

Table 3: Objectives of the proposals and how they support the strategy

Objectives of the proposals	Supports goals in Strategy
Provide a clear national direction by setting clear roles and responsibilities	Goal 1: The strategic planning, regulatory, investment and engagement systems are in place and operating to drive and support change.
Provide tools and powers to move New Zealand towards a low waste, low-emissions, circular economy (reducing the production of waste, managing specific products and materials, promoting better use of resources and encouraging producer responsibility)	Goal 3: We all take responsibility for how we produce, manage and dispose of things, and are accountable for our actions and their consequences. Goal 4: We use fewer products and materials, for longer, through increased durability, repair, reuse, sharing and repurposing.
Minimise environmental harm by reducing harmful emissions from waste and changing attitudes (towards, and awareness of waste issues)	Goal 3: We all take responsibility for how we produce, manage and dispose of things, and are accountable for our actions and their consequences.
Minimise and manage waste with better end-of-life disposal and recycling	Goal 5: Resource recovery systems are operating effectively for core materials and across all regions. Goal 7: Emissions from waste are reducing.

Section 2: Proposals and options considered

Background and context

73. The basis for reviewing the overall legislative framework for waste dates to Cabinet's decision³¹ to increase and expand the waste disposal levy [CAB-20-MIN-0264.1 refers]. Public consultation on the waste strategy and legislation proposals in 2021 confirmed this intent and resulted in general support for legislative change.
74. Subsequent policy decisions have also affirmed the pathway for legislative change. For example, Cabinet decisions on the beverage container return scheme and improved recycling for households and businesses rely on new legislative and regulatory provisions to be fully implemented.
75. The proposals and options in this RIS reflect this starting point for the content of a single comprehensive Act to repeal and replace the WMA and the Litter Act, which is aimed at supporting the shift to a new approach to waste management in New Zealand and the transformation to a more circular economy.

Regulatory and non-regulatory actions

76. As part of the move to a more circular economy, regulatory provisions will be supported by some non-regulatory processes which are provided for in the strategy. Regulatory options are required to complement non-regulatory actions – such as behaviour change programmes or economic instruments – as the strategy indicates non-regulatory options alone will not be sufficient. In particular, a proposal to expand the use of waste levy funds (as defined in legislation) will enable a greater investment in behaviour change programmes.
77. Non-regulatory action will be part of actions at both central government and local government levels and can be included in action and investment plans (AIPs) that are provided for in the strategy. AIPs will be developed with territorial authorities, the waste sector and others, and will set out what must be done over the next five-year period. When an AIP is produced, it will operate as the link between local issues and national direction. The AIP will not be required by legislation but to ensure that this link is effectively captured, the new legislation will require local planning in waste minimisation and management to align with any such plans along with the waste strategy. When the Ministry consulted on this, over 70 per cent of submitters who responded strongly agreed that the strategy and supporting AIPs should influence local authority plans and actions in a meaningful way.
78. Within the AIP there is provision for non-regulatory actions such as wide-ranging behaviour-change programmes and information and publicity activities with each phase of the work.

Proposals to support a transformation in waste management in New Zealand

79. This section is divided into three outcome areas with proposals for inclusion in new legislation under each area:
 - 2(a) Setting a clear national direction
 - Central and local government roles and responsibilities

³¹ The expected substantial increase in levy revenue (resulting from decisions on levy increase and expansion) made it timely to review provisions for how levy revenue was distributed and spent, along with supporting compliance monitoring and enforcement tools to support waste minimisation activities.

- Use of levy funds
- 2(b) Measures to promote better use of products and materials
 - Enabling controls to be set on certain products and materials on a case-by-case basis
- 2(c) Measures to regulate how people manage waste
 - Duties of care
 - National standards for recycling and waste disposal
 - Tracking harmful waste.

Explanation of analysis

80. There are two levels of analysis in this RIS, reflecting whether the proposals have direct impact in the primary legislation or are enabled through secondary legislation:
- detailed analysis is required for the proposals in A (Setting a clear national direction), as they create obligations and will have a direct regulatory impact
 - interim analysis is required for the proposals in B (Measures to promote better use of products and materials), and C (Measures to regulate how people manage waste), as they are for creating the system and powers for developing future obligations through regulations.
81. Table 5 summarises these two levels of analysis for proposals.

Table 5: Two levels of analysis for proposals

Section	Outcome area	Proposals	Primary legislation
2(a)	Setting a clear national direction	(i) Central and local government roles and responsibilities (ii) Use of levy funds	Direct regulatory impact; creates obligations directly
2(b)	Measures to promote better use of products and materials, drive circularity and minimise waste	A suite of controls to be set on certain products and materials on a case-by-case basis	No direct regulatory impact from primary legislation; creates system and powers for developing future obligations through secondary legislation
2(c)	Measures to regulate how people manage waste	(i) Duties of care (ii) National standards for recycling and waste disposal (iii) Tracking system for harmful wastes	No direct regulatory impact from primary legislation; creates system and powers for developing future obligations through secondary legislation

82. Each proposal has options for how it could be implemented. The options for each proposal are assessed against the status quo/counterfactual scenario – how we expect things would turn out if we carried on as we are now – using selected criteria.

How the proposals link to the policy objectives

83. In Table 6 the blue highlighted boxes show which objectives are expected to be affected by each proposal for improving waste management. Not every proposal achieves every objective. The proposals work together as a package, but they are also distinct and can be considered on their merits separately. The objectives are defined in Section 1.

Table 6: Objectives achieved by the proposals

Section	Proposals	Objectives			
		Provide a clear national direction	Provide tools and powers to move New Zealand towards a low waste, low-emissions, circular economy	Minimise environmental harm by reducing harmful emissions from waste, and changing attitudes	Minimise and manage waste with better end-of-life disposal and recycling
2(a)(i)	Central and local government roles and responsibilities				
2(a)(ii)	Use of waste levy funds				
2(b)	Controls to be set on certain products and materials on a case-by-case basis				
2(c)(i)	Duties of care				
2(c)(ii)	National standards for recycling and waste disposal				
2(c)(iii)	Tracking system for harmful waste				

How the options for each proposal are evaluated

Evaluation criteria

84. The RIS contains proposals for a wide range of interventions – from the role of government to addressing market failure to the tracking of waste – that will be included in the new legislation so choosing criteria to evaluate proposals is more complex than for a single issue or small set. Therefore, the evaluation criteria reflects whether the proposals have direct impact in primary legislation or are enabling powers only, to be developed through secondary legislation (ie, regulations).
85. For proposals within primary legislation (Section 2A), each proposal includes options exploring different ways to contribute to the goals of the waste strategy that:
 - **contribute to putting the basic enablers in place** – support strategic direction; we all take responsibility for how we produce, manage and dispose of things; there is national consistency and flexibility
 - **support the move towards a circular economy** - reflects expertise, functions and capacity of organisations needed for administering and supporting the new waste strategy and the move towards a more circular economy; regulates how

New Zealand manages waste, including regulating the resource recovery and waste industry

- **support waste reduction** – encourages use of fewer products and materials, for longer, through increased durability, repair, reuse, sharing and repurposing; supports resource recovery systems; supports recovery of any remaining value from residual waste
- **support reduction of emissions from waste.**

86. For proposals based on enabling powers on (Sections 2B and 2C), the Ministry has selected high-level criteria – effectiveness and efficiency – to evaluate options against the status quo that will contribute to the achievement of the strategy's goals, (noting that the regulation-making process will require a full RIS with specific options and evaluation criteria applied). Because of the range of proposals, criteria have been selected with sub criteria that will be applied as appropriate to the different proposals. The criteria and sub-criteria include:

- **Effectiveness in addressing waste issues** – To what extent will the option achieve one or more of the following:
 - increases the availability of information and data about waste
 - encourages appropriate waste management and/or reduction when waste becomes inevitable
 - reduces emissions from waste
 - encourages and/or ensures that everyone takes responsibility for their waste and appropriate disposal
 - encourages circularity (e.g., through design or through use of materials that can be reused or repurposed)
 - fulfils the value of kaitiakitanga – guardianship and protection based on te ao Māori
 - improves equity of services
- **Efficiency of system operation** – To what extent will the option achieve one or more of the following:
 - contributes to addressing market failure so that the negative impacts (costs) associated with products and materials across their life cycle are shifted from communities, nature and future generations to producers and consumers (ie, costs are borne where they are created)
 - provides the greatest impact for least cost
 - provides consistency of approach and/or service provision; sets clear signals to stakeholders
 - provides clarity, certainty and flexibility and encourages trust and transparency
 - provides strong, enforceable incentives, so that avoiding and reducing waste are incentivised and embedded in the operation of households and businesses.

87. The sub-criteria will be indicated for each proposal. In some cases, additional criteria are used that are specific to a particular proposal.

88. Using the Treasury guidelines, the following key was used to assess the proposed options:

Key for qualitative judgements	
++	much better than doing nothing/the status quo/counterfactual
+	better than doing nothing/the status quo/counterfactual
0	about the same as doing nothing/the status quo/counterfactual
-	worse than doing nothing/the status quo/counterfactual
--	much worse than doing nothing/the status quo/counterfactual

Costs and benefits

89. For each option within a proposal the likely impacts are considered. This considers how people, processes, or infrastructure will be affected by the options and the option's overall impact on the objectives of the strategy.
90. We have not carried out cost benefit analysis as this can only be done once the regulations are developed. It will be carried out at the regulation-making stage when the scope of the regulations will be detailed. The preferred option in each case reflects a judgement about which option is likely to best achieve the selected criteria and in turn the overall objectives of the proposals. When details are prescribed in secondary legislation, detailed regulatory analyses including cost implications will be undertaken for the specific proposals, including costs for the likely affected stakeholders.
91. We have however, completed a high-level analysis on the anticipated costs of the proposals, based on comparable examples and situations, to provide order-of-magnitude indications of the financial implications. This analysis also informs where waste levy revenue (and/or cost recovery approaches) will be sufficient to fund the areas it is proposed to support in future, pending decisions. Other cost impacts, particularly in the development and establishment of a given proposal will need to be managed through normal funding processes, considering future decisions on priorities, scope and pace of change.

2(a) Setting a clear national direction

(i) Roles and responsibilities

Background and context

92. Historically, waste has largely been left to individual local authorities and the private sector to manage. Specific aspects have been regulated through local government and public health legislation, the RMA, and the Litter Act. The WMA introduced a specific role for central government with the introduction of regulatory powers to:
- set, collect administer and distribute the waste levy
 - introduce product stewardship schemes
 - control individual products and materials to manage their waste consequences.
93. Under current legislative settings (the WMA and Local Government Act 2002), territorial authorities are largely free to decide what waste-related activities they carry out and how they fund them. Section 42 of the WMA simply states that a “territorial authority must promote effective and efficient waste management and minimisation within its district”. Section 43 requires territorial authorities to prepare waste management and minimisation plans (WMMP) every six years, which set out its plans and priorities. The result over time has been wide variation in the type and extent of council activity across the country which, coupled with the variation in size and capability across local government, has contributed to inconsistent outcomes.

Status quo

94. Under the WMA, public sector waste responsibilities primarily sit with the Ministry for the Environment and territorial authorities. Waste reforms underway³² are likely to significantly increase central government’s role, with the continued expansion of many existing responsibilities and the creation of some new responsibilities. These responsibilities are split as follows:

Table 7: Current split of public sector waste responsibilities

Ministry for the Environment	Territorial Authorities
<ul style="list-style-type: none">• National waste sector oversight and policy development, including international agreements and links• Ongoing development of regulations under the WMA (regulated product stewardship, product bans)• Waste levy administration (implementation, collection, distribution)• Waste levy CME• Waste Minimisation Fund management and allocation	<ul style="list-style-type: none">• General responsibility to promote effective and efficient waste management and minimisation within district• Local waste planning and policy – waste management and minimisation plans, waste assessments, bylaws• CME for bylaws, litter, and illegal dumping• Local behaviour change and education• Waste and recycling service provision (most councils, mainly domestic/household collections)

³² Reforms broadly covers foundational elements (waste strategy, waste levy, increasing investment, CME activities) through to specific waste policies (product stewardship, banning products, etc).

	<ul style="list-style-type: none"> Some waste and resource recovery asset ownership (transfer stations, landfills, etc)
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Problem definition

95. The sector suffers from patchwork administrative arrangements across the country, which are increasingly being recognised as inadequate to address the waste challenges facing the country. Problems include:
- lack of a clear direction and specification of roles and responsibilities to guide sector
 - territorial authorities have interpreted their statutory responsibility to “promote effective and efficient waste management and minimisation” in different ways
 - public funding through rates and the waste levy funds is constrained (ie, often insufficient)
 - market imperatives limit the private provision of services (eg, commercial interests are less likely to operate in small towns because of the limitations of scale)
 - the high cost of investing in new infrastructure, and a lack of coordination between different areas and/or material streams
 - the lack of coordination between public and private sector investment
 - rural or complex waste management services and associated infrastructure are usually inadequate or non-existent.
96. There have been longstanding and increasingly strong calls from the waste sector for central government to lead change by setting a clear, long-term, strategic direction. The responses to the recent consultation strongly support this shift too, as well as clear and comprehensive division of responsibilities spanning central and local government.
97. The amount of related reform (for example, the resource management system) affecting local government and potential organisational change over the next few years is another relevant consideration for roles and responsibilities. The roles of both the Ministry and the Environmental Protection Authority (EPA) are evolving and both are developing functions that align well with some of the new waste-related activities. At the time this RIA was completed, the Ministry was considering whether the proposed legislation should have enough flexibility for delivering some regulatory functions to any agency that the Minister and Cabinet considers can effectively and appropriately deliver the functions required. For the purposes of this analysis, the consideration of options refers to EPA.

Objectives

98. The objectives of these proposals are to clearly set out a division of roles between central and local government, which will support setting that national direction (and related strategic planning activities), regulation of products and materials as well as waste management activity, and ongoing investment in waste minimisation activities.
99. Proposals that relate to central and local government are discussed separately in the following sub-sections.

(i)(a) Central government roles and responsibilities

100. The broad functions are outlined in Table 7 above. Consideration of central government roles and responsibilities, relates to how these functions could best be arranged to achieve the desired outcomes.

Option considered and discarded – a separate independent Crown entity

101. In deciding on options, we initially considered the possibility of a separate agency to manage waste issues. The waste sector, particularly local government, has advocated since the early 2000's for an independent Crown entity to manage waste minimisation efforts, similar to those that have operated reasonably successfully in other jurisdictions such as the United Kingdom. The Waste Advisory Board has also regularly advised that it considers that a separate body is required to achieve waste goals, most recently in its submission for the consultation process.
102. Analysis of the advantages and disadvantages was carried out (as shown in Table 8) but while we agree that such an entity might be useful, the Ministry considers that it would be premature to create a separate entity at this point. The reforms proposed for waste, along with related current or potential reforms in resource management and local government, create a considerable amount of substantive change. Much of that change is urgent from an environmental perspective and requiring a new entity to be created risks additional delay and cost. It was therefore decided that the question of a new dedicated waste entity is deferred for now and that the legislation allocates functions to existing organisations. There is a possibility of revisiting the option once the initial phase of implementing the waste reforms has been completed, other environmental reforms are in place, and the outcomes of the circular economy strategy and local government review are known and bedded in – perhaps in 5 years' time.

Table 8: Advantages and disadvantages of a separate Crown entity for waste

Advantages	Disadvantages
<ul style="list-style-type: none">• An agency dedicated to delivering on the purpose and principles of the waste strategy would enable a sustained focus on achieving these outcomes and avoid resources being diverted to competing priorities.• A single agency responsible for all major functions enables good coordination across them and the development of significant expertise.• A Crown agent can have more scope to innovate when establishing partnering and advisory relationships with key stakeholders and the local government sector.• It provides a measure of separation from political control for decisions that can be highly technical and complex.• It more easily enables the development of a trusted 'brand' or 'voice' for long term behaviour change work.	<ul style="list-style-type: none">• The risk of creating complexity by creating numerous single purpose entities• The creation of a new institution can be time-consuming and costly and may slow substantive progress while it gets established.

Options considered

103. Therefore, the Ministry decided to consider just the following four options for central government's roles and responsibilities:
- **Option 1 – Status quo:** Ministry for the Environment retains existing central government waste functions
 - **Option 2:** Ministry for the Environment expands to take on increased central government waste functions (either by expanding the current division or setting up a new business unit)
 - **Option 3:** Separate departmental agency, hosted by Ministry for the Environment, but with operational autonomy

- **Option 4:** Policy functions remain with Ministry for the Environment; most operational activity is carried out by EPA.

104. Table 9 shows the options in more detail, with examples to illustrate, and provides an overview of their potential positive and negative characteristics.

Table 9: Central government roles and responsibilities – options

Option	Overview	Positive	Negative
Option 1: Status quo.	Ministry for the Environment retains existing central government waste functions.	Continues with current arrangements and does not involve change.	Will place considerable added pressure on territorial authorities with the new provisions; will lead to increased lack of consistency and increased inequity of service provision between regions; will greatly hamper a strong central vision needed to make the step change at both a sector and individual level –we need universal approaches to maximise compliance and make the changes we want to see.
Option 2: Ministry for the Environment expands to take on increased central government waste functions (either by expanding the current division or setting up a new business unit).	<p>All waste functions would be housed within the Ministry for the Environment. Involves significant expansion of current functions, and creation of new operational and enforcement functions.</p> <p>Comparable example: Business units within Ministry for Primary Industries (Te Uru Rākau – NZ Forest Service; Fisheries NZ; Biosecurity NZ).</p>	All operational and policy roles are kept in the same organisation. This would enable good coordination and the development of significant institutional expertise.	<p>Significant change for the Ministry to take responsibility for substantial operational and enforcement functions. It may face challenges in building credibility as a regulator.</p> <p>The close links to the strategy and policy functions, and direct accountability to Ministers, may also undermine perceptions of independence for those (operational and enforcement) functions. Conflicts of interests between the different roles would also need to be carefully managed.</p>
Option 3: Separate departmental agency, hosted by Ministry for the Environment, but with operational autonomy.	All waste functions stay together. The new departmental agency would have its own chief executive, reporting directly to a Minister, as well as ring-fenced funding and activities.	<p>All operational and policy roles are kept in the same organisation. This would enable good coordination and the development of significant institutional expertise.</p> <p>Hosting these roles in a departmental agency may help to increase credibility as a regulator.</p> <p>Ring-fenced responsibility and funding through a separate Vote and reporting lines.</p>	<p>Significant change for the Ministry to take responsibility for substantial operational and enforcement functions.</p> <p>The risk of creating complexity by creating numerous single purpose entities.</p> <p>The creation of a new institution can be time-consuming and costly and may slow substantive progress while it gets established.</p>

Option	Overview	Positive	Negative
	<p>It relies on the host Ministry for corporate support.</p> <p>Comparable example: National Emergency Management Agency (NEMA) and Department of Prime Minister and Cabinet.</p>	<p>An agency dedicated to delivering on the purpose and principles of the waste strategy would enable a sustained focus on achieving these outcomes and avoid resources being diverted to competing priorities.</p> <p>A single agency responsible for all major functions enables good coordination across them and the development of significant expertise.</p> <p>A Crown agent is likely to find it easier to establish partnering and advisory relationships with key stakeholders and the local government sector.</p> <p>It provides a measure of separation from political control for decisions that can be highly technical and complex.</p> <p>It more easily enables the development of a trusted 'brand' or 'voice' for long term behaviour change work.</p>	
Option 4: Policy functions remain with the Ministry; most operational activity carried out by EPA	Functions would be split with all stewardship, regulatory policy, investment and behaviour change functions remaining at the Ministry and most operational functions moving to an expanded EPA.	<p>This option is most aligned with the existing (and developing) functions and capabilities of the Ministry and the EPA</p> <p>Including waste operational and enforcement work helps to build EPA's role further towards a central general environmental regulator. Outcomes from the resource management reform may compliment these responsibilities.</p> <p>This option leaves The Ministry to concentrate on the more traditional departmental roles of sector stewardship, policy development, investment, and relationship/partnering functions.</p> <p>Separating the functions in this way is also consistent with good regulatory practice, as it minimises structural conflicts of interest.</p>	<p>Requires both organisations to expand further and develop new roles.</p> <p>This division would require the two agencies to develop stronger connections and regular communication.</p>

Decision-making criteria

105. The following criteria were applied to the options analysis for roles and responsibilities for central government:

- **contributes to putting the basic enablers in place** - defines and clarifies the strategic direction; ensures there is a nationally consistent approach to waste management in New Zealand
- **supports the move towards a circular economy** - reflects expertise, functions and capacity of organisations needed for administering and supporting the new waste strategy and the move towards a more circular economy.

Options analysis

106. All options give the Minister the same direct responsibilities for waste and from a Treaty of Waitangi and effectiveness for Māori perspective, the options are likely to be broadly similar.
107. Costs will not differ significantly between Options 1 and 2 but Options 3 and 4 will involve considerable additional input with operational requirements significantly expanding for EPA.
108. Options 2 to 4 involve a significantly increased enforcement role for central government, which will require the development of a regional presence. This limitation has been informally discussed with EPA, which recognises that the organisation needs to develop a regional capacity.

Table 10: Options compared to the status quo

Criteria	Option1 - Status quo	Option 2 – The Ministry expands	Option 3 – Separate departmental agency, hosted by the Ministry	Option 4 – Policy with the Ministry; most operational activity with EPA
Contributes to putting the basic enablers in place - defines and clarifies the strategic direction, statutory responsibility and ensures there is a nationally consistent approach to waste management in New Zealand	0	+	+	++
Supports the move to a circular economy – reflects expertise, functions and capacity of organisations needed for administering and supporting the new waste strategy and the move towards a more circular economy.	0	+	+	++

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

109. Option 4 is most aligned with the existing (and developing) functions and capabilities of the Ministry and the EPA. It provides a good balance, enabling the Ministry to concentrate on sector stewardship, policy, and partnering work (including investment and behaviour change) and EPA to continue to develop as a general environmental regulator. The amount of related reform and potential organisational change over the next few years is another relevant consideration. The roles of both the Ministry and EPA are already expanding because of these reforms, and both are developing functions that align well with some of the new waste-related activities. The Ministry has

consulted with the EPA regarding their potential role and they welcome this role in option 4 and look forward to working with the Ministry to develop the detail. Table 10 compares the option to the status quo.

(i)(b) Local government roles and responsibilities

Background and context

110. Local government has and will continue to have a vital role in waste management and minimisation and the move to a circular economy. For now, we consider that, given the amount of reform affecting local government at present, new waste legislation should not make significant changes to existing local government waste roles and responsibilities. There may be benefit in considering changes to the balance of territorial and regional responsibilities in the future, after other key reforms have been implemented and the local government review has concluded.
111. Nonetheless, the wider waste work programme, alongside the waste legislation proposals, will require a more consistent approach and clearly defined responsibilities with some territorial authorities required to expand their current role and service provisions. For example, the kerbside standardisation proposals will require territorial authorities to improve and invest in new services (organic waste collections). Therefore, there is a need to adjust, clarify and strengthen some local waste functions in this reform, to fit with the new central government responsibilities and to make clear any activities that territorial authorities must undertake. These changes should consider the reality of local capabilities and the challenges to creating consistent, equitable, effective and affordable services across the country.
112. Resourcing and capability are key reasons why some territorial authorities are unable to effectively deliver on their waste functions. This variation across territorial authorities leads to inconsistent outcomes and inequity for residents of smaller districts. Changes have been proposed to the waste levy to make distribution of funding more equitable (refer to Issue 3 where changes to the levy are proposed).

Option considered and discarded

113. The introduction of the proposed Natural and Built Environments Act, Strategic Planning Act, and Regional Spatial Strategies in the resource management reform proposals is expected to have some influence on regional government. However, the full extent is not yet certain.
114. Given this uncertainty, and the potential overlap between waste legislation and resource management reform proposals (particularly in relation to CME and coordination), we consider that any changes to the role of regional councils from a waste perspective would be unwise at present. Officials will collaborate across the resource management reform process and align regional government roles and responsibilities where possible.

Options considered

115. While the proposed new waste legislation will not change the basic power that enables territorial authorities to determine the extent of their waste activities, it allows clarifying their core roles that will help implementation of the new waste system being created. There are three options considered for the distribution and allocation of territorial authorities' waste functions, as set out in the proposed new legislation (and explained further in Table 11):
 - **Option 1 – Status quo:** Broad, non-specific responsibility
 - **Option 2:** Focused responsibility
 - **Option 3:** Reduced responsibility.

Table 11: Local government roles and responsibilities – options

Option	Overview
Option 1: Broad, non-specific responsibility (status quo)	<p>Territorial authorities continue to be responsible for the promotion of waste management and minimisation of all waste within their district.</p> <p>How this is delivered* and the focus of delivery (whether domestic (residential) waste or more than domestic and commercial waste) would be an individual territorial authority decision.</p>
Option 2: Focused responsibility	<p>Territorial authorities become specifically responsible for delivering* domestic waste services, related service outcomes, local waste planning, local aspects of CME (including litter, illegal dumping and bylaws) and behaviour change in the local context.</p> <p>They would not be responsible for regulating the waste industry (e.g., national waste licensing), or issues that have a national impact and implication. Legislative provisions would specify the scope of responsibilities to avoid ambiguity.</p> <p>NB: commercial waste services would be carried out by private providers.</p>
Option 3: Reduced responsibility	<p>Territorial authorities responsible for delivering* local waste services and related outcomes only. The broader range of responsibilities are not included.</p>

**Delivery of service can be directly by council or indirectly via contractual arrangements*

Decision-making criteria

116. The following criteria were applied to the options analysis for roles and responsibilities for local government, specifically territorial authorities:

- **Contributes to putting the basic enablers in place** – defines and clarifies what territorial authorities must do for their statutory responsibility; there is national consistency
- **Supports the move towards a more circular economy** – Reflects expertise, functions and capacity of organisations needed for administering and supporting the new waste strategy and the move towards a more circular economy.

Options analysis

117. Option 1 lacks clarity of responsibility and risks continued service inconsistency, perpetuating the issues outlined in the earlier problem definition. Option 3 limits flexibility and risks affecting territorial authorities' ability to effectively deliver on their overall Local Government Act roles.
118. Option 2 enables increased accountability between both local and central government as it provides clarity for roles and responsibilities. This option would allow smaller territorial authorities to concentrate on delivering core waste functions without the burden of delivering on wider waste outcomes.
119. Option 3 has some merit but overall it is not viable as it is unclear, would leave gaps in the system, and does not support the move towards a circular economy.
120. Table 12 compares the option to the status quo.

Table 12: Options compared to the status quo

Criteria	Option 1 - Status Quo	Option 2 – focused responsibility	Option 3 – reduced responsibility
Puts the basic enablers in place – Defines and clarifies what territorial authorities must do for their statutory responsibility and ensures there is a nationally consistent approach to waste management in New Zealand	0	++	+
Supports the move towards a more circular economy – Reflects expertise, functions and capacity of	0	++	+

organisations needed for administering and supporting the new waste strategy and the move towards a more circular economy.			
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What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

121. We recommend Option 2 as it will mean that territorial authorities will be responsible for the specified core waste responsibilities. The list of responsibilities would be the minimum that territorial authorities must do. They are of course able to do much more if they have capacity. Having greater clarity about these core roles will help implementation of the new waste system and will support territorial authorities in delivering better and more consistent local waste outcomes.

(ii) Waste disposal levy

Background and context

122. The WMA introduced the waste disposal levy (waste levy) – all waste sent to municipal disposal facilities (landfills) incurs a levy. The purpose of the levy is to provide a financial incentive to reduce waste going to landfill and stimulate the market to find mechanisms for recycling, repurposing, and reusing, as well as to raise funds for waste minimisation activity. Under the WMA, the levy can be applied to disposal facilities that either dispose to land or incinerate waste.³³
123. There are four key issues to be addressed, which are each discussed in detail in the following sections:
- hypothecation (ring-fencing) of the levy funds for waste minimisation purposes
 - controls on use of the levy funds
 - split and allocation of the increased levy funds
 - removal of the current exclusion of all waste to energy facilities from the levy.

(ii)(a) Hypothecation (ring-fencing) of the levy funds for waste minimisation purposes

Status quo

124. Following Cabinet decisions in 2020 [CAB-20-MIN-0264.1 refers], the scope of disposal facilities covered by the waste levy was extended to cover additional facility types, from class 1 (municipal) landfills to four classes of landfills by 2025 (municipal, construction and demolition, managed, and controlled fills). Some facilities such as cleanfills and industrial monofills are not levied but will have data reporting requirements.
125. Cabinet also agreed that the waste levy for landfills that take household (municipal) waste will increase progressively each year from the current \$10 per tonne – set in 2009 – to \$60 per tonne in July 2024 [CAB-20-MIN-0264.1 refers]. This programme to expand the coverage and increase the rates will result in a substantial increase in levy revenue and the number of levied facilities is expected to increase from 36, at the time the decision to expand the waste levy was made in 2020, to more than 300.

³³ But not for the purposes of generating energy through incineration of waste.

126. Current modelling predicts total waste levy revenue to increase from \$66 million in 2021/22 to reach approximately \$260 million by 2025/26 when the levy expansion and increase is fully operational.
127. Levy funds are hypothecated (ring fenced) under the WMA and invested in waste minimisation initiatives. Hypothecation is the dedication of revenue raised from a specific tax for a particular programme or service. As set out in the Tax Working Group Secretariat's paper on 'Tax and the Environment' (2018):
- "Hypothecated taxes can be strong or weak (LeGrand, 2013). They are strong when the revenues from the tax concerned are only used to fund a particular programme or service, and there is no other source of tax funding for that programme. Hypothecation is weak when either or both of the above conditions are not fulfilled."*
128. Tax revenues are generally not hypothecated as it can result in either under or over funding of an expenditure item compared to what funding may be judged as appropriate in the budget process. The Tax Working Group has set out scenarios³⁴ when hypothecation may be preferred as a means of achieving other objectives than the objective of directing revenue towards its highest value, these include:
- compensation for harm
 - public trust and acceptability
 - beneficiary pays principle
 - reliability of funding.
129. The general position against continued hypothecation of waste levy funds relates to justifying the need for continued investment in the waste-related activities and over what timeframes this should occur – using hypothecation of levy funds as a core method as opposed to other means of funding (eg, the annual budget process, private sector investment, rates funding). Subsequent considerations can relate to the types of controls and accountability that help manage the use of levy funds (discussed in following sub-sections).
130. It is useful to note that levy funds comprise one source of potential investment. While the WMA limits use of funds, investment in general may be directed at a range of activities from different tiers of waste hierarchy (eg, research and development to support 'designing out' waste; systems to support re-use, repair or recycling; improved collection services; new reprocessing infrastructure; disposal facilities)³⁵.

Problem definition

131. The expected significant increase in available levy funding has given cause for some within central government, the Treasury and Inland Revenue in particular, to seek a revisit of whether the levy funds should be hypothecated to waste minimisation purposes. The Tax Working Group also recommended a review of hypothecation settings for the waste levy. Similarly, Cabinet decisions for the increase and expansion of the levy also referenced the need for a future assessment of waste levy hypothecation.
132. However, the overall waste system in New Zealand is still relatively underdeveloped. The New Zealand Infrastructure Commission, Te Waihanga, cites the estimated the cost of recycling and organic waste infrastructure investment to be between \$2.1 billion and \$2.6 billion, along with an additional \$0.9 billion in operational funding over the

³⁴ These scenarios (ie, public trust, compensation from harm, beneficiary pays) broadly mirror the decision making criteria applied to hypothecation on the waste disposal levy.

³⁵ Currently under the WMA, the Minister may approve funding for "any project to promote or achieve waste minimisation" (Section 38(1)).

next 10 years. Despite the expected increase in waste levy funding, depending on the level of waste minimisation ambition and the scope of the potential use of levy funds, it will still be significantly less than required to achieve the goals of the Waste Strategy and the Emissions Reduction Plan.

Options considered

- **Option 1 – Status quo:** all levy funding is hypothecated for waste purposes
- **Option 2:** some levy funding is hypothecation for waste purposes, the remainder returned to the general budget
- **Option 3:** no levy funding is hypothecated, with all levy funding directed to the general budget. Funding for waste purposes would need to be appropriated through the budget process or included in baseline funding within the relevant appropriation.

Decision-making criteria

133. The following criteria were applied to the options analysis:

- **Enables transparency of levy spend and promotes trust** as those who pay the levy can also benefit from its investment
- **Supports the move towards a circular economy** – use of the waste levy provides a level of expected investment back in the sector to enable effective reduction and management of waste
- **Contributes to putting the basic enablers in place** - encourages recognition of environmental significance and responsibility to protect this.

Options Analysis

Option 1: Status quo

134. Hypothecation provides transparency for levy payers to understand where the money is being allocated and how it is spent. It communicates that the levy is being introduced for environmental reasons, and not raise money for general government expenditure.
135. Hypothecation of the levy promotes public trust and acceptability of the application of the levy (and potential increases in the future) as there is a direct link between paying the levy and attempting to reduce waste. Although hypothecation is sometimes considered a blunt tool to achieve waste outcomes and/or reduces flexibility, the approach is not a long-term solution; as waste disposal is reduced, levy revenues are also reduced.
136. To shift behaviours and practices so that waste disposal is reduced in the longer term will require significant investment in the short to medium term; the levy is an obvious and reliable funding source. However, its availability may not encourage others, beyond the immediate waste sector, to recognise their own responsibilities and also invest in waste-related activities.
137. Hypothecation also enables a mechanism for providing ring-fenced funding to local authorities, which have traditionally carried most of the public sector responsibility for managing waste.

Option 2: Some hypothecation of waste levy

138. Hypothecating some of the waste levy funding will promote some public and industry trust, however this approach risks sending mixed messages in regard to the purpose of the waste levy and may undermine the support for it.
139. This option reduces transparency of how waste levy funding is used and invested as some of the revenue will be allocated to other priorities through the annual budget process.

140. This option may promote wider recognition and acceptance of responsibility to reduce environmental harm from waste as it will need a broader set of stakeholders (not just those who are considered part of the waste sector) to step up, financially, to their responsibilities to better manage their waste.
141. Given the level of investment needed to address waste challenges exceeds the projected waste levy revenue, this option would be likely to reduce the contribution that central and local government can make to addressing waste challenges without drawing on general funds. Consideration of roles and responsibilities and minimum obligations would have to be scaled to accommodate reduced funding availability.

Option 3: No hypothecation of waste levy

142. This option is the least transparent in terms of the use of levy funding in line with the intended purpose of the levy. Returning the levy funding for use in general government expenditure risks creating a lack of confidence from those paying the levy on how the funding is being used to improve waste outcomes.
143. The waste work programme is ambitious and comprehensive, it has been developed on the existing practice of levy funds being hypothecated for waste minimisation outcomes. If the waste levy is not hypothecated this may risk the future of the waste work programme as it will need to be re-scaled and timelines adjusted to reflect budget restrictions. This applies for both central and local government initiatives.
144. However, removing a source of 'expected' waste funding (based on historical precedence) may encourage a broader set of stakeholders to invest in waste in order to meet their environmental responsibilities to a greater degree than is occurring currently, which often leverages levy 'co-funding' opportunities.

Table 13: Options compared to the status quo

Criteria	Option 1 – Status Quo	Option 2 – Some hypothecation of waste levy	Option 3 – No hypothecation of waste levy
Enables transparency and promotes trust	0	-	--
Supports the move towards a circular economy – use of the waste levy enables reduction and management of waste	0	-	--
Contributes to putting the basic enablers in place – encourages recognition of environmental significance and responsibility to protect this	0	-	-

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

145. We recommend Option 1, which ensures all levy funding is hypothecated for waste purposes. There is strong justification for hypothecation of levy funds to remain, given the important public policy role it plays through using the revenue from undesirable waste hierarchy outcomes to directly contribute to initiatives that reduce waste. This design promotes public trust and acceptance of the price placed on disposal, as well as providing benefits through the increased availability of waste minimisation services and reduced environmental impacts. Across the sector, there is little debate about the merits of the levy itself and hypothecation. The focus is on how to ensure levy funds

are used to best effect, including to stimulate the overall level of investment to achieve change³⁶.

(ii)(b) Controls on use of the levy funds

Status quo

146. As outlined in the discussion of the hypothecation issue above, waste levy funds are expected to increase considerably following Cabinet's decision to increase and expand the waste levy in 2020. The use of levy funds is currently limited to promoting or achieving waste minimisation, defined as reducing waste (including by redesign and increased efficiency), reuse, recycling, and recovery. For territorial authorities, the use must also be covered by their WMMP. Central government is restricted to funding "projects" promoting waste minimisation, which limits the ability to fund ongoing or operational activities as well as research.

Problem definition

147. The WMA currently limits the use of levy funds to promoting or achieving waste minimisation, defined as reducing waste (including by redesign and increased efficiency), reuse, recycling and recovery. This means that other activities such as research and compliance are excluded. It also means that many of the activities outlined in the waste strategy relating to moving towards the circular economy are excluded.
148. The WMA limitations on the use of levy funds mean that other activities that would assist in moving towards a circular economy are excluded, for example:
- inadequate coverage of the wider aspects of a circular economy, including changing choices about types of resources used, consumption patterns and regeneration
 - no explicit link to low carbon goals alongside waste minimisation
 - in requiring a tight connection between the funded activity and a waste reduction outcome, research and data collection, litter projects, and enforcement activity are excluded
 - for central government, investment is restricted to funding a "project to promote or achieve waste minimisation" (section 38 of WMA), rather than longer term programmes of work (whether by the Ministry or another party). This is further constrained by the relevant appropriation, which adds in a requirement for a contestable fund.
149. Changes are needed so that the use and investment of the waste levy supports the more ambitious and broader purpose of the new legislation generally, with better alignment to the waste hierarchy. Strategic spending of the waste levy will be vital to achieving the outcomes articulated in the new waste strategy.

Options considered

- **Option 1 – status quo:** waste levy to be used to promoting or achieving waste minimisation, but cannot be used for compliance management and enforcement (CME) or anything that isn't considered a project
- **Option 2:** waste levy to continue to be used to promote or achieve waste minimisation, but allow waste levy to also be spent on research and aspects of CME

³⁶ Note that while increased diversion from landfill does correspond to reduced levy revenue over the long term, this would have to counter the trend of increasing volumes of waste being disposed of.

- **Option 3:** broaden how waste levy funds can be used in alignment with the Waste Strategy and the new legislation.

Decision-making criteria

150. The following criteria were applied to the options analysis:

- **Supports the move towards a circular economy** – use of the waste levy enables reduction and management of waste; reflects expertise, functions and capacity needed for administering and supporting the new waste strategy and the move towards a more circular economy
- **Contributes to putting the basic enablers in place** – supports strategic direction
- **Supports waste reduction** – encourages use of fewer products and materials.

Options Analysis

Option 1: Status quo

151. While the intention to promote and achieve waste minimisation reflects the WMA, the new legislation is promoting a more holistic approach to waste and resource recovery. The current setting of how the waste levy can be used is therefore too restrictive to deliver on the realities of the investment and prioritisation that is currently required to move towards a more circular economy.

Option 2: Allow research and CME functions

152. Allowing the waste levy to be spent on research will allow the Government to better support innovation within the sector and encourages a longer-term shift towards more circular processes.

153. Allowing the waste levy to be spent on CME for all agencies across all aspects of the legislation will help to improve the regulatory delivery of the new legislation. The ability to spend the levy in this way will allow central government to better support the transition and implementation of the CME functions of the new legislation in line with the proposed division of the relevant roles and responsibilities. When consulted on it, the Ministry found 30 per cent of those who answered the question preferred CME functions to be levy funded.

154. Although this option will support the development of a stronger foundation for improved waste disposal and management practices, this approach does not necessarily enable investment to encourage an increase in the reduction of waste beyond the current status quo.

Option 3: Broaden to reflect the new legislation

155. Broadening the scope of what the waste levy can be spent on supports effective implementation of the new legislation and aligns its use with the purpose and principles of both the new legislation and the waste strategy, thereby enabling a shift towards more circular practices.

156. While there is expected to be a significant increase in the waste levy funds available, it remains well short of the forecast costs of the investment that is required to meet our waste strategy goals and targets, particularly for resource recovery infrastructure. The waste levy alone is not expected to be enough to cover all these costs early enough (with needed investment estimated to be around \$3 billion over the next decade). The investment approach signalled in the strategy involves leveraging the levy funds to stimulate investment from other parties.

157. Broadening the application of the levy risks the levy being oversubscribed. However, broadening the legislated use of the waste levy so that it can be used on aspects such as the proposed Ministry-led long-term behaviour change programme, start-up costs associated with individual product related regulated schemes or to develop a national

waste licencing system, will support the development of a stronger foundation for improved waste disposal and management practices.

Table 14: Options compare to the status quo

Criteria	Option 1 – Status Quo	Option 2 – Include research and CME	Option 3 – Broaden to reflect the new legislation
Supports the move towards a circular economy – use of the waste levy enables reduction and management of waste	0	-	+
Contributes to putting the basic enablers in place	0	+	++
Supports waste reduction	0	+	++

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

158. We recommend Option 3 as it continues to stay true to the initial purpose of the waste levy while recognising that the management of waste has moved beyond minimisation to better implementation and delivery of the waste hierarchy. Permitting waste levy funds to be used to support the overall purpose of the new waste legislation and goals of the waste strategy will support improved environmental outcomes with a wider range of activities funded from the levy (eg, compliance, monitoring and enforcement activities, behaviour change programme, start-up costs for specific schemes and systems such as licensing).
159. The following controls are proposed for each of central and local governments' use of the waste levy, which are broadly similar to the current provisions with some amendments:

Controls on central government:

- The responsible Minister can notify investment priorities from time to time, within the scope of any current strategy and supporting AIP
- There will be a new requirement to ensure value for money
- Proposals above \$10 million must be independently assessed before approval
- The responsible Minister must consult with the Minister of Finance for proposals over \$25 million.

Controls on local government:

- Modify the current ability to hold territorial authorities accountable to poor compliance by retaining waste levy funding to enable increased regulator discretion in how and when this tool is applied.
- Clearly outline in what circumstances the waste levy can be retained, including the ability to retain the waste levy in part, and for the waste levy funding to be back paid on achieving compliance where appropriate.
- Strengthen requirements for alignment to waste strategy (ie, national direction) in conjunction with formal reporting requirements on use of levy funds.

(ii)(c) Split and allocation of the increased levy funds

Status quo

160. Waste levy funds are currently split equally between central and local government and are distributed between territorial authorities on a population basis – ie, the most money goes to where the largest populations can be impacted from a waste minimisation perspective. Central government uses its 50 per cent allocation for waste minimisation activities through the Waste Minimisation Fund. Local government (ie, individual territorial authorities) must spend its 50 per cent allocation to promote or achieve waste minimisation and in accordance with their respective waste management and minimisation plans (WMMPs).
161. Analysis of levy contribution to local government waste spending on a selection of territorial authorities showed that in 2020/21 the levy contributed in the range of 0.47 per cent to 3.7 per cent of total territorial authority operating expenditure on waste. This suggests that levy funds have a small but useful top-up to council funding for waste activities, but not a major source of funding for investment in infrastructure for most territorial authorities.
162. While the current population-based approach to levy distribution does allocate the most money to where the largest populations can be impacted from a waste minimisation perspective, it does raise concerns around equity and the ability of the country to minimise waste. There are increasing inequity issues with regards to waste between main centres and more remote areas.
163. Some territorial authorities have taken the initiative to combine resources and deliver collective responses to the inequity issues. For example:
- Porirua City Council has recently collaborated with two neighbouring councils to co-fund the development of construction and demolition (C&D) waste recovery hubs
 - territorial authorities across New Plymouth, South Taranaki and Stratford are collectively working on a feasibility study for organics and C&D waste recovery
 - Tauranga's Te Maunga C&D facility is being designed and built to service the entire Western Bay of Plenty region.
164. Some regions have struggled to effectively collaborate and co-fund waste solutions, particularly when it comes to operational rather than capital spending. Some councils that once had shared service contracts (such as Southland District Council, Invercargill City Council and Gore District Council) recently tendered for services separately, despite the material being processed regionally.

Problem definition

165. There are two main parts to the problem:
- **Split of the waste levy:** A considerable shortfall has been identified in the availability and distribution of waste and resource recovery infrastructure that is needed nationally to achieve the outcomes that will deliver on the waste strategy and the ERP. The increase and expansion of the waste disposal levy will create significant opportunity to invest in priority areas such as resource recovery infrastructure and systems. However, the equal split of the waste levy between central and local government constrains its use.
 - **Allocation of the local government portion:** The current approach to distribution of the waste levy between territorial authorities is contributing to increasing inequity issues around waste between main urban centres and more remote areas. Generally, smaller remote areas have higher per capita costs for waste and often have a small population base, spread over greater distances with

a low rating base and small levy income. Further to the funding limitations there also tends to be less interest from commercial waste enterprises to invest in more remote areas of the country due to the investment costs and limited economies of scale. Remote or rural territorial authorities therefore face higher transport costs and carbon emissions to reach processing centres, leaving less funding available to invest or support other, more local waste minimisation or resource recovery initiatives. This situation has resulted in national inconsistency and general under-investment in infrastructure and equipment that would support more circular management of materials.

166. The distribution (split and allocation) of the levy can be used to address inequalities in the waste system and address cost pressures that local government, Māori, local communities, small businesses, and industry face. Strategic spending of the waste levy is vital to achieving the outcomes articulated in the new waste strategy. We need to consider how best to use the funding available to maximise efficiencies and economies of scale.
167. There have been calls from industry at different times to change the current equal split between central and local government and to distribute some to industry on the basis that territorial authorities generally focus solely on domestic (residential) waste. As the amount of money available increases, it will be important that the use and investment of the waste levy supports the more ambitious and broader purpose of the new legislation generally.
168. The options analysis considered the split of the waste levy between central and local government and how any local government portion might be allocated to allow territorial authorities to better meet the requirements under the proposed legislation.

Split of the waste levy between central and local government

Options considered

- **Option 1 - Status quo:** Waste levy funds are evenly split between central and local government
- **Option 2:** Waste levy funds are entirely managed centrally and distributed to territorial authorities based on need
- **Option 3:** Reduced allocation of waste levy funds available to territorial authorities; remaining levy funds managed centrally
- **Option 4:** Waste levy funds are split evenly between three pools:
 - central government (its costs and general funding activity)
 - local government (its costs, community funding)
 - contestable investment fund focused on infrastructure.

Decision-making criteria

169. The following criteria were applied to the options analysis:
 - **Supports waste reduction** – enables use of waste levy to deliver reduction and management of waste
 - **Contributes to putting the basic enablers in place** - promotes equitable infrastructure investment
 - **Reflects proposed legislated roles** and the ability to deliver on these responsibilities
 - **Aligns with the principles of local government autonomy.**

Options Analysis

Option 1: Status quo

170. This option limits the use of levy funding at a national level and may continue to create friction with industry over use of waste levy funding by territorial authorities. However, this option acknowledges the proposed roles of central and local government by facilitating implementation of the waste legislation at both a national and a local level. It also aligns well with the principles of local government autonomy.
171. Given that the levy funds have historically covered only a limited portion of a territorial authority's expenditure on waste activities, the increasing levy contribution (enabled via earlier levy increase and expansion decisions) for territorial authority activities broadens what they can deliver on waste services, local infrastructure and community support. This will enable increased investment in much needed local infrastructure which will work to support the investment in local infrastructure (ie, local collection and sorting facilities to feed into national resource recovery infrastructure).
172. In the future, local investment by territorial authorities would be guided by the new waste strategy and the proposed AIPs as local WMMPs will have to align with this strategic planning framework. While this is unlikely to fully satisfy the industry's concerns regarding territorial authority spend of the waste levy, it will significantly improve the transparency of spend at the local level and provide a mechanism for ensuring use of the waste levy to deliver reduction and management of waste.
173. There may be some concerns with the ability of small territorial authorities to spend this money, however, it is not expected that the levy funding will cover the total waste spend. This option also promotes improved collaboration between industry and smaller, more rural territorial authorities as there will be more funding available locally to invest (aided by the AIP process). Local government will continue to have a vital role in the future of waste and resource recovery, and it is important that the waste levy funding is used to effectively supporting smaller territorial authorities to be more active in this role. Implementation of current initiatives (most notably, improvements to household recycling services and increased diversion of organics) can be realised in this option as clear responsibilities (ie, minimum obligations) are aligned with supporting funding.

Option 2: Funding entirely centrally managed

174. Increasing the central government portion would enable the levy to be more directly used to support major infrastructure development from a national perspective, thereby influencing more purposeful and coordinated regional investment. This would make it easier to drive and improve collaboration. There is also scope under this option to be more systematic around the prioritisation of investment, including how this might influence some of the wider managed retreat work that is underway. However, this approach does present some risks to central government:
 - a significant increase in funding to be managed and distributed through central government system may compromise the ability for timely delivery
 - may inadvertently place undue responsibility on central government for the more costly aspects of infrastructure or remediation
 - is not well aligned to the principles of local government autonomy
 - may be met with resistance as it suggests a reduction in funding to local government despite there being a change to their legislated role and responsibilities.

Option 3: Reduced funding to local government, remainder centrally managed

175. As in Option 2, this option would enable the levy to be more directly used to support major infrastructure development from a national perspective, thereby influencing more purposeful and coordinated regional investment.

176. This option goes some way to addressing sector concerns regarding allocation of funding to territorial authorities however it may not effectively reflect the legislated role and responsibility being proposed for local government. There is a risk that this option will be viewed as a reduction in funding despite a proposed increase or expansion of local governments waste role and responsibilities. It does, however, allow for some local government autonomy.
177. Like Option 2, there will also be a significant increase in funding to be managed and distributed through the central government system which may compromise the ability for timely delivery and may inadvertently place undue responsibility on central government for the more costly aspects of infrastructure or remediation.
178. This option may also restrict the ability to effectively address equity, particularly in terms of access to regional and local infrastructure, as the limitation in waste levy funding at a local level will not promote increased local infrastructure investment by territorial authorities.

Option 4: Funding split evenly between central government, local government and the waste sector

179. Distributing the levy revenue evenly between central government, local government and waste sector (via a contestable fund) would result in approximately \$86.52million (based on forecast 2025/26 revenue) distributed to each.
180. This option would enable some increase to central government influence on levy spending and works to address sector concerns regarding allocation of funding by recognising a balance between government (central and local), and the sector. However, this does not necessarily reflect the legislated role and responsibility delegated to each part. It does allow for some local government autonomy.
181. This option may also limit the full potential of the levy funding as it restricts flexibility in use due to the legislated allocation. It may also limit the future flexibility of the waste levy if this setting remains in place in the legislation – while infrastructure is a current problem for the sector, this is likely to change (possibly to more behaviour and regulatory challenges) after key infrastructure is in place. This would therefore impact the funds' ability to be used in a way that delivers on waste reduction and minimisation in the longer term.
182. This option does not promote collaboration as each area would have their own pool of funding to use. This may restrict the ability to effectively address equity, particularly in terms of access to regional infrastructure. To mitigate this, some parameters could be placed on the funding requirements (ie, collaboration in line with AIP priorities) however this is unlikely to have widespread impact and may end up restricting the use of the funding.

Table 15: Options compared to the status quo

Criteria	Option 1 – Status Quo	Option 2 – Funding entirely centrally managed	Option 3 – Reduced funding to local government, remainder centrally managed	Option 4 – Funding split evenly between central government, local government and the waste industry
Supports waste reduction – enables use and investment of waste levy to deliver reduction and management of waste	0	+	+	+
Contribute to putting the basic enablers in place – promotes equitable infrastructure investment	0	+	0	+

Reflects proposed legislated role and the ability to deliver on these responsibilities	0	--	-	-
Aligns with principles of local government autonomy	0	--	-	-

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

183. The proposals in the new legislation have financial implications for central and local government. We recommend Option 1 as it acknowledges the proposed roles of central and local government by facilitating implementation of the waste legislation by investing in both a national, top down, approach and a local, bottom up, approach. There will be sufficient controls on use of levy funds for both central and local government and formal reporting requirements (in addition to a broader review – refer to Section 3 ‘Implementing an option’).

Allocation of the local government portion

Options considered

- **Option 1 - Status quo:** A distribution based solely on population
- **Option 2:** Allocate the local government portion with a combination of a percentage (20 per cent) distributed equally between all territorial authorities, and the remainder (80 per cent) distributed using a population-based calculation
- **Option 3:** Allocate the local government portion with a combination of a percentage distributed (33 per cent) based on a flat rate for all, a percentage (33 per cent) available through a contestable territorial authority only fund, and the remainder (33 per cent) distributed using a population-based calculation.

Decision-making criteria

184. The following criteria were applied to the options analysis:

- **Contributes to putting the basic enablers in place** - mitigates regional waste inequity issues, promotes cross-boundary collaboration
- **Supports waste reduction** - Supports a nationally consistent approach to waste management and minimisation in New Zealand
- **Promotes flexibility** - recognises the different waste challenges of larger and smaller populations.

Options Analysis

Option 1: Status quo

185. The current way the levy is distributed means that larger centres receive a significantly larger proportion of levy funding than smaller centres. Smaller centres therefore can only deliver on the minimum of waste management services which has created inequities in waste service provision across the country. Using this allocation methodology, the largest territorial authority, Auckland Council (which received \$5.7 million in 2021/22), is expected to receive approximately \$43 million in 2025/26, while a small territorial authority, such as Waimate District Council (which received around \$27,700 in 2021/22), is expected to receive approximately \$210,000. While the population-based approach to levy distribution does allocate the most money to where

the largest populations can be impacted from a waste minimisation perspective, over the longer term it will exacerbate the waste equity issues by further increasing the waste service level gap between larger centres and smaller rural townships. This was a common concern that emerged through the consultation process in 2021.

186. Continuing a population-based approach will mean that the allocation for smaller territorial authorities is unlikely to be sufficient to address these existing issues or the service requirements as per their proposed core responsibilities. Smaller territorial authorities also face higher transportation and delivery costs due to remoteness and reduced economies of scale and are less likely to experience private sector investment due to these aspects.
187. Meanwhile, given the significant increase in levy revenue expected for larger territorial authorities, this is likely to encourage those authorities to expand their focus significantly beyond their core responsibilities. More funding will be available to support projects and initiatives which is likely to increase wider private waste sector investment in the major centres and further increase the service and infrastructure gap between urban and rural communities.
188. The population-based approach does not adequately address concerns around equity and economies of scale and is not well aligned to the proposed principles of the new waste legislation.

Option 2: Allocate the local government portion with a percentage (20 per cent) distributed equally between all territorial authorities, and the remainder (80 per cent) distributed using a population-based calculation

189. Modelling has shown that introducing a flat rate of levy funding allocated to each territorial authority allows for a more equitable approach to levy distribution and enables better opportunities for delivery of waste outcomes to be achieved across the country.
190. Table 16 provides examples of the forecast funding for a range of territorial authorities, from the largest to very small, with a range of flat rate and population-based allocation combinations. The table also includes the current and potential future population-based only allocation for comparison.

Table 16: Options for flat rate and population-based combinations (based on forecast 2025/26 funding)

	Actual	Forecast					
Council	2020/21 population based allocation (status quo)	2025/26 population based allocation (status quo)	2025/26 10% flat rate and 90% population- based allocation	2025/26 20% flat rate and 80% population- based allocation	2025/26 30% flat rate and 70% population- based allocation	2025/26 50% flat rate and 50% population- based allocation	2025/26 80% flat rate and 20% population- based allocation
Auckland Council	\$5.73m	\$43.50m	\$39.34m	\$35.18m	\$31.02m	\$22.71m	\$10.25m
Christchurch City Council	\$1.35m	\$9.94m	\$9.14m	\$8.34m	\$7.54m	\$5.94m	\$3.54m
Wellington City Council	\$0.74m	\$5.50m	\$5.14m	\$4.79m	\$4.43m	\$3.72m	\$2.65m

Queenstown Lakes District Council	\$0.14m	\$1.22m	\$1.30m	\$1.37m	\$1.51m	\$1.58m	\$1.80m
Horowhenua District Council	\$0.12m	\$0.93m	\$1.03m	\$1.13m	\$1.23m	\$1.53m	\$1.74m
Buller District Council	\$0.03m	\$0.24m	\$0.41m	\$0.58m	\$0.75m	\$1.09m	\$1.60m
Waimate District Council	\$0.03m	\$0.21m	\$0.38m	\$0.56m	\$0.73m	\$1.07m	\$1.60m
Chatham Island Council	\$0.0026m	\$0.019m	\$0.21m	\$0.40m	\$0.60m	\$0.98m	\$1.55m

191. With a lower flat rate percentage the extremity of funding allocation between very small and very large territorial authorities remains substantial. For smaller territorial authorities, while a 10 per cent flat rate does increase the amount of funding received, it does not result in significant funding and these territorial authorities may find it difficult to adequately prioritise their legislated responsibilities.
192. The modelling indicates that increasing the percentage allocated under a flat rate works to reduce the extremity of funding between smaller and larger territorial authorities. However, this does result in a significant increase in funding for some smaller authorities and raises concerns around their ability to effectively spend this money in line with the overarching principles of the waste legislation.
193. Modelling suggests that a flat rate allocation calculated on a 20 to 50 per cent portion, with the remaining percentage calculated on a population-basis will be the best range to enable better delivery of waste outcomes to be achieved across the country through a more equitable approach to funding.
194. A flat rate at 20 per cent (table 16) reduces the extremity of waste levy allocation that currently occurs between very large and very small territorial authorities whilst also recognising the need to allocate funding to support the authority's scale.

Option 3: Allocate the local government portion with a percentage distributed (33 per cent) based on a flat rate, a percentage available (33 per cent) through a contestable fund, and the remainder distributed using a population-based calculation

195. This option significantly improves central government's ability to oversee and influence use and investment of the waste levy.
196. Including a contestable fund as part of the methodology to distributing territorial authority funding goes some way to addressing the transparency concerns raised by some in the waste industry regarding territorial authority waste levy spend. It would also allow central government to encourage an increased collaboration across local government boundaries as well as between industry and local government.
197. However, this approach may restrict and delay investment at a local level as it creates complexity for long term financial planning for territorial authorities. Having to apply to a contestable fund, where funding is not guaranteed, may impact some territorial authority's ability to set longer term budgets from other funding sources, particularly in relation to operational funding. At a central level, a significant increase in funding to be managed and distributed through central government system may further compromise the ability for timely delivery.

198. The split of local government funding using this option can be arranged in a number of ways and modelling has suggested that increasing the percentage allocated using a flat rate reduces the inequity between larger and smaller authorities (table 17). For each of the options modelled, a significant proportion of the available funding remains in a contestable fund.

Table 17: Options for flat rate, contestable fund and population-based calculation combinations (based on forecast 2025/26 funding)

Council	2020/21 population based allocation (status quo)	2025/26 population based allocation (status quo)	2025/26		
			10% flat rate	30% flat rate	50% flat rate
			70% population based	30% population based	20% population based
			20% contestable fund (\$25.97m)	40% contestable fund (\$51.94m)	30% contestable fund (\$38.96m)
Auckland Council	\$5.73m	\$43.50m	\$30.64m	\$13.63m	\$9.67m
Christchurch City Council	\$1.35m	\$9.94m	\$7.15m	\$3.56m	\$2.96m
Wellington City Council	\$0.74m	\$5.50m	\$4.04m	\$2.23m	\$2.07m
Queenstown Lakes District Council	\$0.14m	\$1.22m	\$1.05m	\$0.95m	\$1.21m
Horowhenua District Council	\$0.12m	\$0.93m	\$0.84m	\$0.86m	\$1.15m
Buller District Council	\$0.03m	\$0.24m	\$0.37m	\$0.65m	\$1.02m
Waimate District Council	\$0.03m	\$0.21m	\$0.34m	\$0.97m	\$1.01m
Chatham Island Council	\$0.0026m	\$0.019m	\$0.20m	\$0.59m	\$0.97m

Table 18: Options compared to the status quo

Criteria	Option 1 – Status Quo	Option 2 – Allocate local government portion with a percentage (20 per cent) distributed equally between TAs and the remainder (80 per cent) distributed using a population-based calculation	Option 3 – Allocate the local government portion with combination of a flat rate, a contestable fund, and a population-based calculation
Contributes to putting the basic enablers in place – mitigates regional waste inequity issues,	0	+	++

promotes cross-boundary collaboration			
Supports waste reduction – supports a nationally consistent approach to waste management and minimisation in New Zealand	0	+	+
Promotes flexibility – recognises the different waste challenges of larger and smaller populations	0	++	-

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

199. We recommend Option 2 as it reduces the funding inequity between larger and smaller territorial authorities whilst recognising the waste complexities that come with large populations. It also honours local government autonomy and promotes faster local investment.

(ii)(d) Removal of the exclusion of waste-to-energy facilities from the waste levy (enabling provision)

Background and context

200. The waste levy is used to:

- raise revenue for promoting and achieving waste minimisation
- increase the cost of waste disposal to recognise that disposal imposes costs on the environment, society, and the economy (section 25, WMA).

201. The levy acts as a disincentive to the disposal of waste to landfill or incineration and thereby incentivises other activities such as recycling and reuse. The WMA currently enables the levy to be applied to facilities for the final disposal of waste – the least desirable, lowest level of the waste hierarchy. At present it explicitly includes landfills and incineration as being subject to the levy and excludes all types of waste-to-energy.

Types of waste-to-energy

202. The Ministry's published document, *A waste to energy guide for New Zealand*³⁷, describes two main types of waste-to-energy: thermal and non-thermal. These technologies involve different processes, which create different risks and by-products. Thermal conversion is the most common globally – it usually involves some form of combustion, ranging from incineration to more advanced methods such as pyrolysis and gasification. Non-thermal technologies include anaerobic digestion, landfill gas capture and hydrolysis. Some of the residues produced in the process can be a useful by-product, such as biochar (a by-product of the biogenic pyrolysis process) which can be used as a soil additive. Other residues have to be disposed of.

203. Arguments against waste-to-energy, particularly thermal technologies, include that it can produce toxic waste, air pollution; that it relies on continued waste generation, can

³⁷ Available at <https://environment.govt.nz/assets/Publications/Files/waste-to-energy-guide-for-new-zealand.pdf>

destroy useful materials, contribute to climate change, undermine efforts to increase recycling and other more sustainable waste management, and work against the circular economy.

204. Arguments in favour of waste-to-energy technologies include that it is better than incinerating waste and that it can significantly reduce waste going to landfill.

Problem definition

205. The blanket exclusion of waste-to-energy from incurring the levy means that there is an inequitable application of the levy to different forms of final disposal. It makes it difficult to distinguish between desirable and undesirable forms of waste-to-energy technology and facilities. It may be creating an unintentional incentive for harmful waste practices or may be disincentivising the reduction of waste by leaving open lower-cost alternatives to landfill with a range of associated negative impacts.

Options considered

206. This proposal is to remove the current blanket exclusion of waste-to-energy from the levy. It is for an enabling provision in the legislation and is intended to allow decision-makers to distinguish between desirable and undesirable forms of waste-to-energy through regulations. It does not necessarily preclude the removal of the levy in cases where the technology presents no risk to the environment.
207. For this reason, only two options were selected:
- **Option 1 – Status quo:** All forms of waste-to-energy remains excluded from the waste levy
 - **Option 2:** Remove the blanket exclusion of waste-to-energy from the waste levy, with application to specific types of facilities and technologies to be implemented through regulations.

Decision-making criteria

208. The Ministry applied the following criteria to evaluate options against the status quo:
- Effectiveness in addressing waste issues
 - encourages appropriate waste management and waste reduction when waste becomes inevitable
 - encourages circularity – eg, through design or through use of materials that can be reused or repurposed
 - reduces emissions.
 - Efficiency of system operation
 - provides consistency of approach/ service provision
 - provides clarity, certainty and flexibility; encourages trust and transparency.

Options analysis

Option 1: Status quo

209. All forms of waste-to-energy remain excluded. This would prevent decision makers being able to distinguish between desirable and undesirable forms of waste to energy now and in the future. This option would not contribute to moving New Zealand's waste practices up the waste hierarchy, nor would it minimise the amount of material that ends up needing to be dealt with at the bottom of the hierarchy. It gives waste-to-energy facilities a financial advantage compared to other methods of final disposal (ie, landfills) that would be subject the waste levy.

Option 2: Remove the blanket exclusion of waste-to-energy from the waste levy

210. This option would allow future governments to distinguish between desirable and undesirable forms of waste-to-energy technology and facilities, based on the approach set out in the new waste strategy.
211. The approach would be developed further through work on bioeconomy and energy policy, but broadly would differentiate between:
- proposals with clean renewable biomass as a feedstock, which are more likely to align with circular economy goals and have emissions reduction potential and fewer harmful by-products
 - proposals based on single waste streams like tyres, treated timber or plastics, which need to be considered on a case-by-case basis
 - pyrolysis and gasification of municipal solid waste, which is unlikely to align with circular economy goals due to its climate impacts, dependency on continued waste generation and likelihood of hazardous by-products.

Table 19: Options compared to the status quo

Criteria	Option 1 – Status quo	Option 2 – Remove the exclusion of waste-to-energy from the waste levy
Encourages appropriate waste management when waste becomes inevitable	0	+
Reduces emissions	0	+
Encourages circularity	0	++
Provides clarity, certainty, flexibility	0	+

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

212. We recommend Option 2 as it enables consideration of desirable and undesirable forms of waste-to-energy technology and removes the current distinction between disposal methods for application of the levy and is therefore more flexible.

What are the marginal costs and benefits of the changes to the levy?

	Comment <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence Certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
Additional costs of the preferred option compared to taking no action			
Regulated groups	Will incur the levy if the waste-to-energy project does not help the move up the waste hierarchy – the purpose is to disincentivise this activity until technology improves	Low	High
Regulator	No net cost issues associated with this option as it is aimed at incentivising alternatives to waste; to help achieve the broad	Low	High

	goal of disincentivising disposal and encouraging movement up the waste hierarchy towards a more circular economy		
Others (eg, wider government, consumers, etc)	No cost to consumers; regulator will collect the levy from any facilities and operators engaged in waste-to-energy	Low- medium	High
Total monetised costs	Not available		
Non-monetised costs		Low- medium	High
Additional benefits of the preferred option compared to taking no action			
Regulated groups	Regulated groups expected to benefit from increased clarity and certainty	Medium	
Regulator	Allows regulator to examine new technology without having to change primary legislation if the technology proves to be a viable option that contributes to the move up the waste hierarchy	Medium	
Others (eg, wider government, consumers, etc)	Will encourage development / use of best technologies that provide low risk to the environment. Removes any possible incentive for harmful waste practices or possibility for disincentivising the reduction of waste	-	
Total monetised benefits	Not available		
Non-monetised benefits		Medium	

2(b) Measures to promote better use of products and materials, drive circularity and minimise waste

Introduction

213. Products and materials can have a range of environmental impacts. While other outcome areas in this paper are largely focused on the middle to bottom end of the waste hierarchy, Outcome area 2B is about managing products and materials across their life-cycle, covering interventions that to initial use through to recycling and disposal. This provides opportunities to design waste out of products, incorporate circularity into business models and apply appropriate end-of-life solutions.
214. The focus for this set of proposals is the flow of products and materials in the economy (including at the design stage, and in relation to improved proposals for end-of-life management of products in a circular way). Intervention at the start of the product supply chain (for example to influence what kinds of products are getting made and the materials they are made of), can in turn influence the nature and amount of waste that eventuates at the end-of-life stage.

Problem definition

215. Currently New Zealanders manage waste primarily by disposing of it and to a lesser extent, by recycling (estimated at 28 per cent³⁸). To transition to a low-waste, low-emissions economy, there is a strong rationale to take action to encourage products and materials that promote more circular outcomes. This would drive activity up the waste hierarchy, and by doing so significantly reduce waste.
216. On a global scale we face increasing demand for a finite supply of minerals and metals, some of which are essential to enable low-emissions economies. As an example, a recent Finnish study concluded that there are not enough minerals in the currently reported global reserves to build even one generation of batteries for all electric vehicles and stationary power storage.³⁹ This underlines the importance of sustainable material sourcing for the ongoing security of supply chains, including through better circularity of materials and manufacture of easily recyclable products.
217. There are few, if any, drivers to make this change in New Zealand at present. The environmental costs of production, use and disposal of products and materials, fall on individuals, communities, nature, and future generations, rather than those who manufacturers and/or consumers of those products and materials.
218. Consumers, even if they wish to, are often unable to make informed decisions about the environmental costs of their purchases. Businesses may also lack the information required to make informed decisions about the materials they use.
219. This represents market failure in several ways:
- environmental impacts (costs), associated with products and materials across their life cycle, comprise negative externalities
 - there is no incentive provided by the market to design products that stay in circulation for as long as possible
 - producers have advantages over consumers in holding back information about those environmental costs (asymmetric information).

³⁸ Ministry for the Environment. 2021. Te panoni i te hangarua | Transforming recycling. Wellington: Ministry for the Environment

³⁹ <https://www.gtk.fi/en/current/gtk-research-the-currently-known-global-mineral-reserves-will-not-be-sufficient-to-supply-enough-metals-to-manufacture-the-planned-non-fossil-fuel-industrial-systems/> Retrieved 12 November 2022

220. These market failures contribute to unsustainable consumption and production patterns well recognised as being the root cause of the triple planetary crises of climate change, biodiversity loss and pollution.⁴⁰

Extent of the problem in New Zealand

221. The way in which we use and dispose of products at present creates a range of problems, including:

- Greenhouse gas emissions during production, use and disposal: New Zealand's household carbon footprints are not trending downwards and have remained flat over 2007-2019. The emissions associated with imports of low-value goods purchased directly by households increased by about 50 per cent over the same period. These emissions should be trending downwards if we are to meet our climate change obligations.

We currently send most food and other organic waste to landfill. In 2019, landfill waste was responsible for 4 per cent of our total gross emissions and around 9.1 per cent of biogenic methane emissions. Of this, 94 per cent of the biogenic methane emissions were generated by the decomposition of organic materials at landfill.

- Leakage of plastics into the environment: Plastics lost to the environment pose a threat to ecosystems and human health and this threat will continue, and worsen, if the input of plastic into the environment continues to increase.⁴¹ In a recent study, scientists found microplastics in three quarters of wild commercial fish caught off the coast of southern New Zealand.⁴² Māori may experience a disproportionate burden of risk from plastic waste, as for Māori, plastic waste and debris can affect the mauri, or life force, of the environment.⁴³

An industry-led report on New Zealand's clothing and textile industry confirmed that New Zealand is following global trends of increasing textile purchases, overconsumption and increased waste.⁴⁴ An estimated 220,800 tonnes of textiles are landfilled in New Zealand every year, which equates to 44kg per person (compared to 28kg per person in Europe)⁴⁵. Synthetic fibres are linked to microplastic water pollution, with one study estimating up to 87 per cent of microplastic pollution in Auckland's marine environment comes from clothing fibres.⁴⁶ Other environmental impacts of the industry include water pollution, hazardous chemical use, unsustainable use of virgin resources, and carbon emissions.

- Future shortages of key materials: New Zealand produces almost three times the global average of e-waste per person. At a global scale, recycling is not keeping pace with the growth of e-waste, driven largely by higher consumption, short life cycles, and few repair options. The Government has identified e-waste as a priority product

⁴⁰ Goal 12 of the United Nations' Sustainable Development Goals, for example, is for "Responsible Consumption and Production" noting the need for consideration of the entire life cycle of economic activities. Available at <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>

⁴¹ Royal Society Te Apārangi (2019), *Plastics in the Environment*. www.royalsociety.org.nz.

⁴² Clere, I. et al. (2022), *Quantification and characterization of microplastics in commercial fish from southern New Zealand*, Marine Pollution Bulletin.

⁴³ As one example, customary harvesting practices that involve higher levels of consumption of raw fish, shellfish, and whole fish, give greater exposure to potential health risks.

⁴⁴ Casey, B. and Johnston, B (2020), *Looking in the Mirror. A review of circularity in the clothing and textiles industry in Aotearoa*. Available at www.textilereuse.com

⁴⁵ Casey, B. and Johnston, B (2021), *Recommendations to the New Zealand Government from the Clothing and Textile Industry*. Available at www.textilereuse.com

⁴⁶ Scion (2019) *Fibres dominant in microparticle contamination on Auckland beaches*. Available at www.scionresearch.com

for product stewardship [ENV-20-MIN-0024 refers]. While there are provisions in existing legislation (ie, the establishment of regulated product stewardship schemes to manage the environmental impact of specified products), they are not sufficient to deal with it – they are not adequate to deal with the complexity of the social, economic, distributional and treatment issues with e-waste.

Can consumers drive change?

222. While New Zealanders are concerned about waste and recycling,⁴⁷ consumers do not always have sufficient information about products to promote change through their purchases. Existing policies are not addressing the advantage industry holds over consumers in not disclosing products' environmental costs. Inadequate and misleading claims on a product's environmental performance or characteristics can provide consumers with the false impression they are making sustainable decisions when they are not.
223. There are several existing voluntary measures in place or under development such as the Australasian Recycling Label, the Environment Choice New Zealand label, and the work underway on voluntary eco-labelling as part of the Agreement on Climate Change, Trade and Sustainability. Any action on this issue in the new waste legislation will be able to build on existing measures.

Status quo

224. Part 2 of the WMA currently provides limited regulatory tools, which to date have enabled:
- product bans, including microbeads, single-use plastic bags, and a range of single-use and hard-to-recycle plastics (being phased out in three tranches from October 2022 to mid-2025)
 - the accreditation of a number of voluntary product stewardship schemes
 - the development of regulated product stewardship schemes for six declared priority products⁴⁸.
225. The practical application of these provisions in the WMA in recent years has highlighted their limitations. For example, the availability of a “reasonably practicable alternative” (section 23 of WMA) is a prerequisite (as opposed a factor to consider) to banning a product containing the specified materials. There are also limited parameters to define a particular product or material (for example, it might be useful to define the particular context or application rather than the material content).
226. The provisions supporting regulated product stewardship schemes do not make adequate provision for the breadth and complexity of the arrangements to establish these schemes across different product types and markets. For example, the cost recovery provisions are too narrow, the monitoring and oversight arrangements need more depth than the WMA allows, and the enforcement provisions are incomplete.
227. The process for regulated product stewardship is cumbersome and requires three consultation steps: whether to declare priority products; to co-design an appropriate scheme; and on the regulations to support effective operation of the scheme.
228. Other provisions in the WMA which haven't been used to date include regulation-making powers for the following purposes:
- take-back services for products/materials

⁴⁷ Colmar Brunton (2018) *Environmental Attitudes Baseline*. Ministry for the Environment

⁴⁸ ENV-20-MIN-0024 refers. Priority product list: farm plastics, e-waste, agrichemicals and their containers, plastic packaging, tyres, and refrigerants.

- controls or prohibition on disposal
 - labelling of products
 - quality standards for waste products/materials (in relation to recovery, recycling, reuse).
229. Development of proposals for a Container Return Scheme (which Cabinet agreed to in November 2022 - CAB-22-MIN-0539.01 refers) have pointed to the need for much more detailed provisions than the very limited power to establish take-back services, fees, and refundable deposits in order to effectively establish roles, responsibilities, obligations and associated compliance monitoring and enforcement provisions for a range of parties (including beverage container importers/producers, retailers, and others). A separate RIS has been prepared for the specific proposals for a beverage Container Return Scheme, but the more general point raised is that the provisions in the WMA for establishing this type of scheme are inadequate.
230. The WMA also has safeguards in place to ensure – where applicable – reasonably practicable alternatives are available (for product/material bans) and there is adequate infrastructure in place (in relation to controls on disposal), in addition to general consideration of consultation processes, international obligations, and expected costs and benefits.

Government intervention is warranted

231. Voluntary action has not been sufficient to solve these market failures both in New Zealand and in other jurisdictions. Evidence suggests that where a significant shift in public behaviour is needed, voluntary measures are not enough.⁴⁹
232. Government intervention can influence all stages of the lifecycle of products and materials, making sustainable products the norm, and empowering businesses and consumers to make better decisions. If we rethink how we produce and consume, circularity can become the norm. An estimated 80 per cent of product-related environmental impacts are ‘determined’ at the design stage of a product⁵⁰ so action should focus on this stage –producers can be encouraged to rethink and redesign production processes, taking action at the higher end of the waste hierarchy. While there are some provisions in the WMA relating to management of products and materials these currently are inadequate to support the move towards a circular economy.
233. Government intervention can ensure producers:
- transition away from consumption of virgin and non-renewable resources (eg, from mining) and where possible use secondary raw materials from the same or other production cycles
 - design products and materials to maintain their value and functionality for as long as possible (for example, by extending the lifetime of parts and products)
 - reuse, repair, refurbish, remanufacture or repurpose products
 - ensure that when products are no longer useful in their existing form, they can be disassembled to become raw materials for new products (recycled) or, as relevant, composted to add nourishment to organic systems.
234. A further issue is that New Zealand could become a dumping ground for products that are non-compliant in other jurisdictions if appropriate legislative interventions are not

⁴⁹ Parliamentary Commissioner for the Environment, (2006) *Changing behaviour: Economic instruments in the management of waste*. Parliamentary Commissioner for the Environment

⁵⁰ This is a widely claimed estimate. See for example: EU Commission, Sustainable Product Policy. <https://joint-research-centre.ec.europa.eu>

adopted. This relates primarily to the proposal for environmental design standards (discussed further below). Other jurisdictions are also recognising that voluntary action is not sufficient for the scale and pace of economic transition that is needed and are introducing or strengthening regulatory measures that will drive circularity of products and materials and place greater responsibility for waste on producers and consumers, rather than communities and future generations.

235. While actions such as import controls, trade and other international agreements will contribute to mitigating this concern, regulatory action will create a clear signal to producers.

Objective

236. The objective of this enabling provision is to allow regulations to be made when indicated on a case-by-case basis, such as when a product or material is found to be harmful to the environment. The use of empowering provisions for secondary legislation and a flexible approach to consider the appropriate powers in a given context will ensure legislation remains fit for purpose in anticipation of evolving market conditions over the next few decades.
237. The provisions would follow the *Government Expectations for Good Regulatory Practice*⁵¹ to ensure intervention is appropriate and unintended consequences are well considered, with appropriate safeguards to ensure their judicious use.
238. A flexible choice of powers will enable New Zealand to align with regulatory controls increasingly being used in other jurisdictions, so we do not become a dumping ground for problematic products and materials on the international market. This approach will require a legislative framework that can respond to changing technologies and shifts in consumer expectations and regulatory action in other jurisdictions.
239. A suite of regulation-making powers – which expand upon similar provisions in the WMA and, in some cases, provide new ones – could be used to:
- control or prohibit the import, supply, sale and manufacture of products and materials – expands and revises current WMA provisions
 - prohibit and/or prescribe actions for disposal and recycling of products and materials (including waste) – expands current WMA provision
 - prescribe environmental performance requirements across the full life-cycle of certain products and materials – new power as this is a substantive expansion of current WMA provision
 - prescribe information that is to be made available to consumers and businesses on the environmental performance of products and materials (including through labelling) – revises current WMA provision
 - prescribe extended producer responsibility (EPR) requirements – replaces current WMA provisions for establishing voluntary and regulated product stewardship schemes.
240. In deciding to put controls on a particular product or material, there will be detailed analysis, including costs and benefits, of the different possible mechanisms that could be used for those controls. A full regulatory impact will be undertaken for each product or material as it arises.
241. Consultation showed widespread support for putting more emphasis on product controls and ‘designing out’ waste to support circular economy goals and enable more waste activities at the top of the waste hierarchy. A key theme concerned the role of different groups in the economy, with many submitters noting greater responsibility

⁵¹ <https://www.treasury.govt.nz/sites/default/files/2015-09/good-reg-practice.pdf>

needs to fall on industry in the production stage. In particular, industry and business submitters were looking for a level playing field with imported goods and greater clarity on the intent and scope of potential powers. We therefore propose actions to revise, improve on and add to those provisions to drive behaviour up the waste hierarchy towards circularity of products and materials so that disposal to landfill is a last resort.

Options considered

- **Option 1 – status quo:** maintain the existing limited provisions that are in the WMA
- **Option 2 – Non-legislative:** rely on the new waste strategy; leave issues to the market and voluntary action to resolve; invest in education and behaviour change campaigns to influence producers and consumers to move up the waste hierarchy
- **Option 3 – Enable an expanded suite of regulation-making provisions:** incorporate a suite of regulation-making powers in new waste legislation to provide government with a choice of interventions for improving the environmental performance of products and materials
- **Option 4 – Specific, prescriptive legislative provisions:** that only apply to specific products, actions or requirements.

Decision-making criteria

242. The Ministry applied the following criteria to evaluate options against the status quo:

- **Effectiveness in addressing waste issues**
 - reduces emissions from waste
 - encourages appropriate waste management and/or reduction when waste becomes inevitable
 - encourages circularity – supports the move towards a circular economy
- **Efficiency of system operation**
 - contributes to addressing market failure so that the negative impacts (costs) associated with products and materials across their life cycle are shifted from communities, nature and future generations to producers and consumers; supports the move towards a circular economy – eg, through design or through use of materials that can be reused or repurposed
 - provides clarity, certainty and flexibility and encourages trust and transparency

Options Analysis

243. Option 1 provides no gains in the current situation and would not facilitate movement towards achievement of the Government's goals as set out in the strategy; would make it difficult to meet existing obligations in the Emissions Reduction Plan and in recent Cabinet decisions on kerbside recycling and a Container Return Scheme; nor would it advance the move to a circular economy. The existing provisions in the WMA only allow for a limited range of regulation-making powers to be applied to products and materials.
244. Option 2 has merit. If well-designed, behaviour change campaigns at national and local level could influence producers and consumers and encourage voluntary action. Leaving matters to the market and voluntary action does not facilitate an even playing field and fosters inefficiencies (eg, in collection systems and resource recovery processes). This option would also permit products that are non-compliant in other jurisdictions (due to environmental attributes) to enter the New Zealand market.

245. Option 3 would provide Government with a choice of interventions for improving the environmental performance of products and materials. Each regulation-making power would have its own place in ensuring products and materials are regulated appropriately and therefore all of these powers would be considered to address the issue at hand. It would not exclude voluntary action and the benefits of behaviour change and education but would allow the application of a CME system to ensure compliance. It also allows for application of interventions for products and materials that we do not yet know about those that research may show to be harmful in the future.
246. In contrast to the status quo, EPR provisions in Option 3 would establish a consistent regulatory framework for multiple different product groups, which would help overcome issues and limitations of RPS schemes in the WMA. Option 3 is also compatible with comparable jurisdictions, which would help prevent problematic products and materials banned elsewhere being exported to New Zealand.
247. Option 4 has merit and would be as effective as option 3 in some regards. It would not, however, allow the flexibility to address changes in current knowledge or in the availability of different products and materials that we anticipate over time. For example, an item damaging to the environment now could be a useful resource in the future, nor would it allow for advances in waste recovery or treatment technology or new products and materials. The lack of flexibility would reduce efficiency and effectiveness over time.

Table 20: Options compared to the status quo

Criteria	Option 1 – Status quo	Option 2 – Non legislative options	Option 3 – Enable an expanded suite of regulatory powers	Option 4 - Specific, prescriptive legislative provisions
Effectiveness in addressing waste issues				
Reduces emissions from waste	0	+	++	++
Supports waste reduction	0	+	++	++
Supports the move towards a circular economy	0	+	++	++
Efficiency of system operation				
Addresses market failure	0	+	++	++
Provides clarity, certainty and flexibility and encourages trust and transparency	0	0	++	+

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

248. The preferred option is Option 3, enabling a set of regulatory powers that will allow action to be taken on specific products and materials as the issues arise. This will drive action up the waste hierarchy to design waste out where possible and maintain products for as long as possible at their highest value; place greater responsibility on industry for stewardship of products across a product's life cycle; and improve

information to empower consumers and businesses and support better decision-making.

What are the marginal costs and benefits of the option?

	Comment <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence Certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
Additional costs of the preferred option compared to taking no action			
Regulated groups	There will be cost implications where a product or material is regulated as a producer will have to find alternatives. There are likely to be long lead-in times and producers and relevant businesses will be consulted with during the making of regulations for any specific item and they will therefore be given appropriate time for implementation, helping to minimise impact and additional costs.	Medium – high	High
Regulators	Will incur costs for setting up regulations, CME, education campaigns etc. There would be scope to cost-recover monitoring costs for some regulatory tools (eg EPR)	Medium	High
Others (eg, wider government, consumers, etc.)	Costs will be put back into the supply chain, so it is likely that consumers will bear some additional costs, depending on the specific intervention adopted. May cost additional time as consumers have additional material to recycle and/or processes to follow (eg, EPR).	Low – medium	Medium
Total monetised costs	Not available	Not available	Not available
Non-monetised costs		Medium - high	High
Additional benefits of the preferred option compared to taking no action			
Regulated groups	Will help change attitudes about waste and the move towards a circular economy, focus attention on problematic products and materials, normalise the separation of waste, and encourage personal responsibility. Will influence key choices made by businesses about their sources of products and materials.	Medium	

	Comment <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence Certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
Regulators	As product/material requirements are established via regulations there will be improved data and information allowing better management of waste	Medium	
Others (eg, wider government, consumers, etc.)	<p>Will support the proposed Circular Economy and Bioeconomy Strategy being led by MBIE.</p> <p>Will (once regulations passed) provide consumers with more access to repair for their products.</p> <p>Will (once regulations passed) provide consumers with better information with which to make choices about products.</p> <p>Once regulations have been made consumers will have greater confidence in the durability and lifespan of the products they buy.</p> <p>Will influence key consumer choices made by individuals, households, and businesses about their sources of products and materials.</p>	Medium	
Total monetised benefits	Not available		
Non-monetised benefits		Medium – high	

2(c) Measures to regulate how people manage waste

249. There are three proposals in this section. They relate to actions at the bottom of the waste hierarchy – to ensure waste is managed well when waste becomes inevitable. The proposals comprise enabling provisions and cover:

- duties of care – a legal obligation on everyone to manage waste under their control
- national standards for management of waste
- tracking system for high risk / harmful waste.

250. These proposals link to the licensing provisions⁵² for the new waste legislation, which proposes all entities that collect and manage waste must be licensed. In conjunction, the proposals enable a possible scenario where duties of care are applied to ensure responsibility for waste management, licensed entities are required to manage waste to a set of national standards and must maintain records of transactions, to enable accountability and tracking of waste (where applicable for specified waste types). An appropriate CME regime would support the effective and operation of the system.

251. While the duties of care proposal can stand alone, the combination of the three proposals together with the licensing proposal would be far more effective at ensuring waste is appropriately managed where it cannot be avoided.

(i) Duties of care (enabling provisions)

Background

252. The Government wants to change how people behave towards waste and underline each person's responsibility to manage it in line with the waste strategy. With the development of the proposed new waste legislation, there is an opportunity to change behaviours within a legal context. Other countries – most notably the UK and similar approaches in Australian states – use the concept of a duty of care to put obligations on all those involved in producing or creating waste, as well as its collection, storage, transport, processing, treatment, and disposal. This proposal is limited to placing a duty to manage waste under a person's control.

253. A duty of care refers to legal obligations placed on people to take reasonable steps to not cause foreseeable harm to another person or their property. It recognises the social contract: the implicit responsibilities held by individuals towards others within society. In this context it puts obligations on everyone to take reasonable and practicable measures to prevent or minimise harm to the environment or human health and manage the transport and disposal of waste.

254. New Zealand already has other legislation that makes use of duty of care provisions (eg, Water Services Act 2021) and some council waste bylaws have duty of care-type provisions.

Status quo

255. Some territorial authorities already use duty of care approaches. While the phrase "duty of care" is not used in council bylaws, there are similar concepts used, such as "responsibility" of different groups to undertake particular actions. These requirements are not consistent among those councils that use them.

⁵² Refer "In principle agreement to a national licensing system in waste and resource recovery" March 2022, as part of the waste components of the Emissions Reduction Plan (Interim RIS)

256. There are varying requirements on householders to sort and separate their household waste for kerbside collection depending on their council bylaws. Councils have limited powers to prosecute or fine an individual or body corporate.
257. Requirements to not litter are currently specified in the Litter Act. Some territorial authorities have bylaws that include inadvertent littering.
258. Relatedly, some territorial authorities such as Auckland Council require waste collectors to be licensed, which imposes requirements on those entities.

Problem definition

259. One of the guiding principles in the new waste strategy is about encouraging individual and collective responsibility for how we manage and dispose of waste. The problem is how to drive behaviour change and encourage individual and collective responsibility for waste. Apart from a few products there is no standard approach to who is responsible for what in terms of handling, storage, transport, processing, and disposal. There is a need for more clearly defined responsibilities and obligations on anyone to take reasonable and practicable measures to prevent or minimise harm to the environment or human health from waste.
260. The Litter Act, which has not been substantively amended since its enactment, prohibits littering and dumping (or 'fly tipping') in public places or on private land without the owner's consent. However, there are some clear issues and constraints in the Litter Act (in particular the ability to hold offenders appropriately accountable). In recent years we have increased our understanding of the harms done by litter in the environment and acknowledge that litter and dumping is an ongoing problem requiring government intervention.

Objectives

261. The objectives of this enabling provision are to create a national consistent system, with duties of care encouraging individual and collective responsibility for waste management and disposal. Enforceable duties will set clear responsibilities and drive action – essentially, positive requirements – in different contexts.

Decision-making criteria

262. The following criteria were applied to the options analysis:

- **Effectiveness in addressing waste issues**
 - encourages appropriate waste management when waste becomes inevitable
 - encourages / ensures that everyone take responsibility for their waste and appropriate disposal
 - fulfils the value of kaitiakitanga – guardianship and protection based on te ao Māori.
- **Efficiency of system operation**
 - Provides consistency of approach / service provision
 - Provides clarity and certainty and encourages trust and transparency
 - Provides strong, enforceable incentives, so that avoiding and reducing waste are incentivised and embedded in the operation of households and businesses.

Options considered

- **Option 1 – Status quo:** Some requirements are in place for waste associated with specific products. Some territorial authorities place 'responsibility' of different

groups to undertake particular actions. These vary depending on the territorial authority

- **Option 2 – Everyone has a mandatory duty of care:** Put legally binding obligations on everyone to share responsibility to protect the environment from the effects of waste and to take reasonable and practicable measures to prevent or minimise harm to the environment or human health
- **Option 3 – Duty of care applied to some only:** Put legally binding obligations on a segment of the economy only (eg, businesses only or households only) to protect the environment from the effects of waste
- **Option 4 – Voluntary uptake of a set of duties:** rely on the new waste strategy; invest in education and behaviour change campaigns; non-legislative option.

Options Analysis

Option 1: Status quo

263. Requirements on households for kerbside recycling vary across the country depending on the local authority. Expectations on New Zealanders on how they behave in relation to waste are unclear and there is no widely understood sense of obligation to dispose of waste appropriately. There is little incentive to change towards a more circular economy (eg, to use packaging that can be re-used, recycled or repurposed). The Litter Act currently requires council officers to either observe a person littering or have "reasonable cause" to suspect such an offence was in the act of being carried out or had just been committed, making littering offences difficult to enforce.

Option 2: Everyone has a mandatory duty of care

264. A mandated duty of care in this setting will put obligations on everyone in New Zealand to protect the environment from the negative effects of waste. It will give responsibility to everyone and will become part of the national consciousness (supported by behaviour change and publicity programmes). It will help change attitudes about waste, normalise the separation of waste, and encourage personal responsibility. It will influence key choices made by individuals, households, and businesses about correctly disposing of waste, so the problem is not just passed to those collecting, transporting, or disposing of the waste.
265. It will provide a clear understanding of who is responsible for what and will facilitate CME. Mandatory duties of care, enabled through appropriate regulation would support kerbside standardisation and proposals in the ERP to diverting organics from landfill.
266. A mandatory approach for all, acknowledging different duties may apply in different contexts, will facilitate an interconnected and nationally consistent system, to provide greater protection to the environment and increase New Zealanders' confidence in the waste and recovery sector. It will involve a set of legislated duties to provide for appropriate disposal of waste and use of the recycling system. It will establish clear expectations and shared responsibility for disposing and handling of waste and recycling, with the proposed approach set out in Table 21. The details of these duties would be expanded on in the proposed regulations.

Table 21: Proposed waste duties of care

Party subject to duty	Proposed duty of care	Examples of requirements
All waste holders (ie, all persons and entities including individuals, households, businesses, organisations)	General duty to manage and dispose of waste appropriately	Do not dispose of or discard waste into the environment (ie littering or illegal dumping) No waste holder may allow any accumulation of waste on any premises they own, occupy or manage to become offensive, a nuisance or likely to be injurious to health
	A duty to pass waste to an authorised operator or facility	Do not pass waste to an unlicensed waste operator Waste material must only be disposed of or discarded at a waste facility if that material is of a type accepted by that facility

		No waste operator shall, unless licensed to do so, engage in the collection, transportation or disposal of waste
	A duty to recycle properly	Users of a waste collection service must ensure that recycling from the premises is separated into recycling types as determined by the collection provider and deposited for collection in the appropriate approved container Recycling is clean and dry
Disposers other than householders	A duty to separate specified organic waste for collection	To separate and recycle specified types of organic waste Place all food waste into the appropriate approved container
Recycling operators	A duty to maintain separation and quality of materials for recycling	Recycling operators to take reasonable steps to maintain the quality of recycling under their control Recycling collectors to pass recycling material on to an appropriate licensed operator
Landlords (residential and commercial)	A duty to facilitate tenants' access to collection services	Provide tenants with suitable space for storage and collection of waste and recycling bins and other receptacles (where practicable) Facilitate a tenant's access to collection services, where the service provision is tied to the property (ie rated waste collection services)

Option 3: Duty of care for some only

267. This option would apply the duty of care to part of the economy, such as to businesses or to households, or to households and landlords.
268. It gives some responsibility to some New Zealanders only and may add to the confusion of who is responsible for components of waste or the management of it. There is potential for increased confusion of who is responsible for what and risks people passing responsibility to others.
269. If applied to businesses only, this would not tackle the issue of household waste – as indicated earlier, New Zealand is one of the highest generators of waste per person in the world, the third highest generator of municipal waste (in 2018)⁵³, and the second worst recycling nation⁵⁴ in the OECD. Much household waste is compostable food waste, which would likely continue to go to landfill, and recyclable items, if not correctly separated and cleaned will also continue to end up in landfill (assuming other mechanisms for promoting diversion are not employed). There is a risk that businesses might dispose of their waste via kerbside household collection in order to avoid the legal requirements imposed on them through a duty of care.
270. If it applied to households only, it would exclude construction and demolition waste which is the largest source of waste to Class 1 landfills and would have little impact, if any, on illegal dumping by businesses.
271. It will contribute to the move to a circular economy to some extent. However, as an option with limited scope and application it will hinder effectiveness (eg, ensuring everyone takes responsibility) and efficiency (eg, ensuring consistency of approach and service).
272. A major concern about restricting the duties of care to one segment of the waste sector would be that it would not fulfil the value of kaitiakitanga – guardianship and protection – which is a way of managing the environment based on te ao Māori to which the

⁵³ OECD – a number of references. Eg, <https://www.oecd.org/environment/environment-at-a-glance/Circular-Economy-Waste-Materials-Archive-January-2020.pdf> retrieved April 2022

⁵⁴ Consumer NZ. Global Assessment of recyclability of product packaging, 2021. Retrieved April 2022. <https://www.consumer.org.nz/articles/how-does-new-zealand-packaging-recycling-compare-to-the-rest-of-the-world>

Government is committed. It would not create a shared responsibility towards how we manage waste and would reinforce the idea that it is someone else's problem.

273. This option may create difficulties for CME as there are risks that people will pass responsibility to a party without the duty of care.

Option 4: Voluntary uptake of a set of duties

274. This option would provide a set of duties that would support protection of the environment from the negative effects of waste that could be adopted voluntarily and applied in conjunction with investing in education and behaviour change campaigns. Voluntary uptake would encourage some New Zealanders to take responsibility for their waste. However, evidence suggests that where a significant shift in public behaviour is needed, voluntary measures are not enough.⁵⁵
275. There would be some contribution to the move to a circular economy as those who voluntarily took up the responsibility for managing their waste would contribute to better waste management.

Table 22: Options compared to the status quo

Criteria	Option 1 – Status quo	Option 2 – Everyone has a mandatory duty of care	Option 3 – Duty of care for some only	Option 4 – Voluntary uptake of a set of duties
Effectiveness in addressing waste issues				
Encourages appropriate waste management	0	++	+	+
Everyone takes responsibility for their waste and appropriate disposal	0	++	+	0
Fulfils the value of kaitiakitanga - guardianship and protection	0	+	0	+
Efficiency of system operation				
Provides consistency	0	++	0	0
Provides clarity and certainty and encourages trust and transparency	0	++	0	+
Provides strong, enforceable incentives	0	++	+	0

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

⁵⁵ Parliamentary Commissioner for the Environment, (2006) *Changing behaviour: Economic instruments in the management of waste*. Parliamentary Commissioner for the Environment

276. We recommend Option 2, where everyone has a mandatory duty of care. It embeds the value of kaitiakitanga into management of the environment as we move towards a circular economy, recognising our shared responsibility to protect the environment as a nation. It will help to embed a culture of responsibility at the individual level, will strengthen the foundation of the waste management system and become a part of the way of life.
277. The duties will be specified for different industries and for individuals and households and will give clarity to individuals, businesses and organisations about their responsibilities and obligations.
278. The Ministry has consulted on this proposal and there was general support for adopting a duty of care approach to waste, with 65 per cent of respondents agreeing it would be beneficial to introduce a duty of care model and 75 per cent supporting an individual duty of care model. Some suggested it should go further and include a duty of care on the production of waste, with less focus on individuals and a greater focus on the responsibilities of manufacturers and producers. Some considered that it should include a duty to separate recycling and a duty on food businesses to separate food waste and use a composting service. Others considered that duties of care should extend to farm dumps and other practices of burying or burning waste on private land.
279. We believe other legislative provisions on measures to promote better use of resources and reduce waste (such as product stewardship and product durability) are better placed to address these concerns. It would also be challenging to enforce a duty aimed at the generation of waste.
280. Further discussion with iwi/Māori and stakeholders will be held as we develop the detail of the scope and phasing in of these obligations, which will largely be managed through secondary legislation and related instruments.

What are the marginal costs and benefits of the option?

	Comment <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence Certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
Additional costs of the preferred option compared to taking no action			
Regulated groups	There may be costs associated with duties of care as they will require groups to ensure they appropriately dispose of waste that they have control over. Specific costs will be analysed as the regulations and details are developed. Operators who require licences which will have duties of care as a condition of those licences. Small costs are associated with the licence.	Low	High
Regulators	Will incur costs for CME, education campaigns etc	Low – medium	High
Others (eg, wider government, consumers, etc.)	Some costs may be passed on to households and other consumers. Costs may decrease over time as adherence to duties of care increases and attitudes to waste change – for example recycling	Low – medium	High

	Comment <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence Certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
	of containers when CRSs become commonplace. May be some costs to landlords in enabling tenants to meet their obligations.		
Total monetised costs	Not available	Not available	Not available
Non-monetised costs		Low - medium	High
Additional benefits of the preferred option compared to taking no action			
Regulated groups	Will help change attitudes about waste, normalise the separation of waste, and encourage personal responsibility. Will influence key choices made by individuals, households, and businesses about correctly disposing of waste, so the problem is not just passed on to those collecting, transporting, or disposing of the waste. Supports kerbside standardisation and proposals in the ERP to ban organics from landfill.	Medium	
Regulators	Once the system is established there will be certainty in data and information allowing better management of waste.	Medium	
Others (eg, wider government, consumers, etc.)	Should improve rate of recycling eg, as contamination is reduced.	Medium	
Total monetised benefits	Not available		
Non-monetised benefits		Medium	

281. With this regulatory change, increased costs may be inevitable at the initial stages. However, as behaviour change to support the waste strategy develops, the increased costs are likely to reduce as people make better, informed choices on purchases and use of materials for their products and recycle appropriately. Cost impacts can be managed through phased introduction of new obligations, and by directing levy funds to help establish new systems and facilities. Similarly, as duties of care entail a commensurate CME approach, the cost implications will be informed by the CME aspects yet to be considered as well as integration with other aspects of regulating the management of waste (eg, licensing scheme and/or national standards).

(ii) National standards for recycling and waste disposal (enabling provisions)

Status quo

282. Currently, standards for the waste and resource recovery sector are inconsistently set through bylaws by territorial authorities, self-imposed by parts of the sector, or defined on a case-by-case basis through resource consenting conditions. The waste levy process also sets standards in terms of specifying materials accepted by classes of landfills. Collectively, these approaches have led to variation in how waste and resource recovery services are carried out across the country.

283. There is a wide variance in how waste services are carried out across the country. Under current legislation, there are limited tools that can set the standards or other requirements at a national level for those operating waste services. Bylaw powers have been used by 42 out of 61 territorial authorities to varying degrees. There are limited powers available to enforce standards and there is currently no certainty for the general public, industry, and government that services are operating appropriately. The local schemes vary considerably in terms of the obligations imposed on participants, adding complexity and cost for operators working across territorial boundaries.

Problem definition

284. There are no required minimum performance standards in our waste and resource recovery services nor is there consistency across the country over what facilities such as landfills take or how operations are carried out. If we want to fulfil the goals of the strategy and work towards a circular and low-emissions economy, performance must improve at least to a minimum level to minimise harm to the environment and people and preserve value in materials. An example would be ensuring consistent nationwide requirements for kerbside collection. A more consistent approach will make it easier for individuals and businesses to comply as it will be the same nationwide.

Objectives

285. The objectives of this enabling provision are to raise the standards of waste and resource recovery in New Zealand and provide certainty around definitions, conduct, and reporting. It is intended that detailed technical requirements for operating waste management services be set at a national level that can be enforced by EPA as the regulator (see under Section 2A) and that will provide direction to other regulatory systems, such as resource consents.

286. Public consultation in 2021 showed support for the concept of introducing standards.

Decision-making criteria

287. The following criteria were applied to the options analysis:

- **Effectiveness in addressing waste issues**
 - encourages appropriate waste management when waste becomes inevitable
 - encourages / ensures that everyone take responsibility for their waste and appropriate disposal
 - fulfils the value of kaitiakitanga - guardianship and protection based on te ao Māori.
- **Efficiency of system operation**
 - Provides national consistency of approach / service provision
 - Provides clarity and certainty for operators in terms of compliance requirements and allows regulators to ensure a minimum level of performance and certainty in our waste and resource recovery services; and encourages trust and transparency
 - Provides strong, enforceable incentives, so that avoiding and reducing waste are incentivised and embedded in the operation of households and businesses.

Options considered

- **Option 1 – Status quo:** continue with standards being set by territorial authorities using bylaw powers, or through conditions of resource consents

- **Option 2:** introduce, through regulation-making powers, **binding** standards or technical requirements for those operating waste services, where the national waste standards should cover technical matters relating to the management of waste and resource recovery, strengthen CME provisions and review existing bylaw-making provisions
- **Option 3:** introduce **voluntary** standards or technical requirements for those operating waste services, where national waste standards should cover technical matters relating to the management of waste and resource recovery.

Options analysis

Option 1: Status quo

288. There would continue to be no universal standards for how waste is managed across the country. While some standards are required through the waste levy process, such as some broad requirements for what some landfill types can receive, there remains wide variance in how waste services are carried out across the country. Some territorial authorities use bylaw powers to create standards or require them as part of resource consents, but there is no consistency across the country and in some jurisdictions, there are no standards required at all.
289. Some parts of the sector have standards which they maintain and monitor themselves (eg, materials acceptance standards), but these do not cover the vast range of management processes and are not enforceable.

Option 2: Introduce, through regulation-making powers, binding national standards or technical requirements for those operating waste services

290. This option would enable technical requirements for waste activities to be set at a national level that can be enforced. It would provide clear requirements for performance in waste and resource recovery across the country and would remove confusion from having different requirements in different jurisdictions.
291. It would provide a clear understanding of the minimum requirements in each situation (eg, at a landfill) and would enable regulators (proposed to be the EPA) to ensure these minimum standards are met.
292. The national waste standards would cover technical matters relating to the management of waste and resource recovery for the key waste activities in New Zealand, including:
- waste disposal and landfills
 - waste incineration (for energy or otherwise)
 - collection, transport, stockpiling and export of waste (including tracking waste)
 - resource recovery and recycling operations
 - collection, record-keeping and reporting of waste data
 - giving effect to international environmental agreements.
293. The standards that would apply to these would go hand in hand with the licensing system approved in principle by Cabinet for inclusion in the new legislation (as part of the waste components of the Emissions Reduction Plan) as well as with the tracking system if it is approved. If a licensing regime is implemented, a national standard could be introduced alongside the licensing requirements to provide certainty around definitions, conduct, and reporting. Licence holders could then be held to account to that standard under the conditions of their licence.
294. It is important that the local approach to regulating waste services is not lost in the new legislation. Local authorities currently have the best knowledge of waste issues in their area and can react more quickly to local concerns before a national approach may be

formed. It is suggested that the ability to make bylaws is carried through to the new legislation, with increased compliance and enforcement provisions, but that we review the scope of bylaws to ensure there is no duplication with national measures or if there are additional areas that bylaws should cover. The legislation will make clear, if this option is approved, that where bylaws are inconsistent with national standards, national standards should prevail.

Option 3: Introduce, through regulation-making powers, voluntary standards or technical requirements for those operating waste services

295. Some parts of the sector already have standards for their members which are a form of voluntary compliance. This option proposes encouraging further voluntary maintenance of standards. This option has some merit as it would be a non-regulatory option and could be developed and promoted using behaviour change and publicity programmes. However, a voluntary approach would not create an even playing field or promote consistent service levels across the sector. The major concern is that, as mentioned earlier, voluntary action in waste management has not proven sufficient to address the issues we face and that where behaviour change is required for crucial and urgent issues that impact on the environment and the climate, stronger measures are required.
296. Voluntary action also means that there is no ability to enforce standards and may create an incentive to not adhere to particular standards and undercut those operators that do.

Table 23: Options compared with the status quo

Criteria	Option 1 – Status quo	Option 2 – Introduce binding standards	Option 3 – Introduce voluntary standards
Effectiveness in addressing waste issues			
Encourages appropriate waste management	0	++	+
Everyone takes responsibility for their waste and appropriate disposal	0	++	+
Fulfils the value of kaitiakitanga - guardianship and protection	0	++	+
Efficiency of system operation			
Provides national consistency	0	++	0
Provides clarity and certainty for operators and allows regulators to ensure a minimum standard of performance	0	++	0
Encourages trust and transparency	0	+	+
Provides strong, enforceable requirements	0	++	0

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

297. We recommend Option 2, introducing binding national standards or technical requirements for those operating waste services. Details of requirements will be prescribed in regulations. This option could be risk based with an implementation schedule that would begin with waste that is harmful to the environment. It will provide producers and handlers with clarity regarding their obligations and will also provide useful information to local authorities on what is happening with waste in their jurisdictions. It also assists New Zealand's move towards a circular economy. Public consultation in 2021 showed widespread support for national standards across all submitter groups, including the need for standards for both resource recovery processes (eg, source separation).
298. As this proposal relates to enabling provisions in the legislation, a full regulatory impact assessment (including a detailed cost-benefit analysis) will be undertaken during the regulation-making process.

What are the marginal costs and benefits of the option?

	Comment <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence Certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
Additional costs of the preferred option compared to taking no action			
Regulated groups	There may be additional costs for businesses involved in waste management. CBA will be carried out at the regulation-making stage and decisions made to ensure there are no barriers to implementation.	Medium	High
EPA as the regulator	There will be CME costs. Will require additional FTEs for CME	Medium	High
Others (eg, wider government, consumers, etc.)	Some costs may be passed on to consumers.	Low- medium	Medium
Total monetised costs	Not available		
Non-monetised costs		Low	High
Additional benefits of the preferred option compared to taking no action			
Regulated groups	Regulated groups expected to benefit from increased clarity and certainty in requirements	Medium	
Regulators	Once the processes are established there will be certainty in requirements allowing better management of waste	Medium	
Others (eg, wider government, consumers, etc.)	Consumers will gain confidence and trust in the quality of waste management	Medium	

Total monetised benefits	Not available		
Non-monetised benefits		Medium	

(iii) Tracking high-risk / harmful waste (enabling provisions)

Status quo

299. While some data is being collected by the Ministry (enabled by waste levy reporting and through ad hoc reports and projects), there are still data deficiencies in the waste sector in New Zealand. For example, we have incomplete information and data about high-risk / harmful waste – about what is being produced, how much there is and where it is at any point in time.
300. There is added complexity in some cases where several different agencies have a specific (but restricted) interest in a particular type of waste, which can hinder an overall system view and effective decision making. For example, hazardous waste is managed across a fragmented legal landscape, with no single agency responsible for regulation and enforcement. It is regulated by many agencies, including local authorities, WorkSafe and the EPA, all of whom have different interests and administer their mandates under different pieces of legislation. Waste operators may keep their own records or provide information to their local authority where bylaws require it, the form of which differs depending on the requirements of that local authority. There is no central location where data and information are kept.
301. Other waste that can cause harm to the environment but is not classed as hazardous, such as plastics, is not tracked and has limited data reporting (formal or informal) such that at any point in time, it is not known what, and how much, is where.

Problem definition

302. Lack of high-quality data has been a persistent issue for the waste sector and is particularly of concern for waste that carries a high risk of causing harm to the environment and people. This limited ability to track high-risk waste⁵⁶ as it flows through the economy is a barrier to the transition to a circular economy. As New Zealand moves towards a more circular economy, robust data and information about high-risk waste will be crucial. We want to know more about the riskier types of waste, where it is, and how is being managed, treated, recycled or disposed of. If data and information is available in a time frame that allows the regulator to pick up transgressions at the earliest possible time it will allow mitigation measures to be put in place before major harm can occur.
303. More data and information would allow us to better develop and evaluate effective policies and actions, understand where the gaps and opportunities are, and support effective monitoring and compliance. Better data will assist us to track our progress toward a circular economy, giving us better insight into the flow of materials across systems, and opportunities for sharing resources across sectors and with different agencies with a regulatory interest in a specified type of waste.
304. More robust data and information would assist in CME work. The lack of robust data and information currently hampers the ability to secure a conviction in the event of transgression. Public consultation in 2021 showed support for the concept of tracking waste.

⁵⁶ Broadly categorised as waste that has a high-risk of environmental harm, such as hazardous waste.

Objectives

305. The objectives of this provision are to enable the development of a tracking system for waste, particularly waste that has a high-risk of causing harm to the environment and people. Regulations would prescribe the details of the tracking system, the type of waste to be tracked, which operators are required to use it, and the format and timing of reporting.

Decision-making criteria

306. The following criteria were applied to the options analysis:

- **Effectiveness in addressing waste issues**
 - Increases the availability of information and data about waste
 - Encourages appropriate waste management when waste becomes inevitable
 - Encourages / ensures that everyone take responsibility for their waste and appropriate disposal - ensures that everyone involved in the disposal of waste takes responsibility for its management and appropriate disposal
 - Fulfils the value of kaitiakitanga - guardianship and protection based on te ao Māori to which the Government is committed.
- **Efficiency of system operation**
 - Provides consistency of approach / service provision
 - Provides clarity and certainty and encourages trust and transparency - operators and regulators know what their roles are in relation to the collection, submission, holding, analysis and reporting of data
 - Supports CME – enables the regulator to monitor and manage compliance.

Options considered

- **Option 1 – Status quo:** Lack of high-quality data persists for waste that carries a risk of causing harm to the environment and people. Handlers of waste may or may not keep and manage their own records and any records are usually not available in real or near real time causing delays to mitigation interventions. Data and information that does exist is held in different places and there is no simple way to collate it.
- **Option 2:** Enable the introduction of a nationally consistent and centralised tracking and reporting system for high-risk / harmful waste in New Zealand that can be used to record real time (or near) movement of specified waste at each point in the life cycle from production of the specified waste to end fate (re-use, recycle, disposal/treatment etc).

307. No other options were considered because this is a case of either tracking the specific waste as it moves through the economy or not.

Options Analysis

Option 1: Status quo

308. Large gaps persist in our knowledge of what makes up our waste, especially the riskier types, where it goes and how we dispose of it. Under the status quo scenario, we have limited enough information to form a comprehensive national picture of the amount, nature, and end fate of waste in New Zealand and cannot effectively monitor the system or identify opportunities and gaps, and ensure, for example, that waste is not inappropriately disposed of.

309. Changes as part of expanding the waste disposal levy (waste levy) to additional sites improve the information available, but our data, research and evidence base for waste and resource efficiency is still far from adequate. The fragmented approach to having visibility of high-risk waste continues.

Option 2: Enable a nationally consistent and centralised tracking and reporting system for specified waste in New Zealand

310. Legislating to enable the development of a system that will allow the tracking of specified waste as it moves through the economy will provide the information and data that will allow more effective management of this waste. It will provide a clear understanding of what waste is where and enable decision making on its management. It will help to safeguard both people and the environment and allow regulators to detect inappropriate handling that enables timely remedial action. At this stage, it is not to track all waste, and the types of waste to be tracked will be based on risk of harm and specified at the regulation-making stage.
311. It will provide clarity for operators and regulators and what their roles are in relation to the collection, submission, holding, analysis and reporting of data.
312. It will enable government to prioritise regulatory activities and tackle waste crime with the future potential for sharing the information with different regulatory agencies.

Table 23: Options compared to the status quo

Criteria	Option 1 – Status quo	Option 2 – Enable a nationally consistent and centralised reporting system for waste in New Zealand
Effectiveness in addressing waste issues		
Increases the availability of information and data	0	++
Encourages appropriate waste management when waste becomes inevitable	0	+
Everyone takes responsibility for their waste and appropriate disposal	0	++
Fulfils the value of kaitiakitanga	0	+
Efficiency of system operation		
Provides consistency of approach / service provision	0	++
Provides clarity and certainty and encourages trust and transparency - operators and regulators know what their roles are	0	++
Supports CME	0	+

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Which of these options is the proposed approach?

313. We recommend Option 2, making express provision in legislation to allow the development of a tracking system waste, particularly high-risk / harmful waste for producers and handlers of waste, in accordance with requirements to be prescribed in regulations. This will be able to build on any existing reporting requirements and standardise reporting across the country. It will provide producers and handlers with

clarity regarding their obligations and will also provide useful data and information to the regulator. When consulted on it, 85% of submitters who answered the question agreed with a track and trace option.

314. As an indication of potential costs, 9(2)(ba)(i)

of costs would be undertaken during the regulation-making process, which would also consider how a tracking system might integrate with any other related mechanisms and processes (eg, reporting platforms, licensing scheme).

What are the marginal costs and benefits of the option?

	Comment <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks.</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts.</i>	Evidence Certainty <i>High, medium, or low, and explain reasoning in comment column.</i>
Additional costs of the preferred option compared to taking no action			
Regulated groups	<p>The use of the tracking system will be free of charge. Compliance costs would depend on reporting obligations and whether the tracking system introduces reporting of information that is not currently collected.</p> <p>Based on the experience of other jurisdictions, and in particular Victoria EPA, the costs will be minimal and more likely to reduce compliance costs for regulated groups, where the reporting simplifies existing reporting mechanisms. In the Victoria EPA example, it removed the need for complex reporting systems that existed before the tracking system by using the electronic tracking system developed in cooperation with the sector. As the system was simple to use there was less opportunity to get things wrong and infringements were more easily avoided.</p> <p>Regulated groups will have to take time to learn the new system which involves a cost.</p>	Medium	High
Regulator	<p>Costs will be for developing the appropriate electronic system (eg, online platform or app) for tracking, publicity, communications, and training for users.</p> <p>Will require additional FTEs for agency managing the app.</p> <p>9(2)(ba)(i)</p> <p>It is low cost because it is essentially a simple data base that allows access by licensed operators who simply record the transactions of waste</p>	Low- medium	High

	as it changes. It replaces all other reporting requirements (apart from tax reporting) and reduces compliance costs.		
Others (eg, wider government, consumers, etc.)	There may be a cost passed on to consumers although this is not the experience in other jurisdictions. Reduced costs are likely for other government agencies with an interest in the data. Greater availability and accuracy of data. Will allow easier monitoring and enforcement.	Low- medium	High
Total monetised costs	Not available but the estimates based on the experience of Victoria with suggest that the costs are low.		
Non-monetised costs		Low-medium	High
Additional benefits of the preferred option compared to taking no action			
Regulated groups	Regulated groups expected to benefit from increased clarity and certainty in reporting requirements with reduced compliance costs as experienced in Victoria.	Medium	
EPA as regulator	Once the system is established there will be certainty in data and information allowing better management of waste. It will allow the regulator to have evidence in the case of transgressions as it will enable tracking of who did what with waste as it moved through the economy.	Medium	
Others (eg, wider government, consumers, etc.)	There is potential in the future for other agencies with an interest in waste to be able to access data and information relevant to their mandates at lower cost. This is not currently being considered but the ease of collection of the data would enable this if needed.	Medium	
Total monetised benefits	Not available		
Non-monetised benefits		Medium	

Section 3: Delivering an option

How will the new arrangements be implemented?

315. Implementation of the new arrangements comprises two broad categories. Firstly, the roles and responsibilities as well as the waste levy provisions that have been developed as part of the proposals for the new waste legislation, which take effect in primary legislation. Secondly, all of the other preferred options that involve regulation and will have enabling provisions included in the new waste legislation. If Cabinet agrees to the proposed policies, regulations for each proposal will be developed under the new waste legislation and the Ministry will work with the Parliamentary Counsel Office (PCO) to draft regulations.
316. Before recommending regulations, the Minister will consider:
- advice from the Waste Advisory Board
 - consultation with those likely to be significantly affected
 - assessment of the costs and benefits.

Transitional arrangements

317. In terms of central government roles and responsibilities, the Ministry will have overall system stewardship and policy development responsibilities and the EPA will be the primary regulator for the new waste legislation. The EPA will undertake CME to:
- determine the extent of compliance with the regulations
 - investigate and determine the nature and extent of any non-compliance
 - take appropriate enforcement action.
318. A comprehensive transition plan is required to support the shift of responsibilities to EPA. This would involve Ministry officials will work with the EPA to define and design the expanded role for the EPA, including working through any necessary or consequential amendments to the Environmental Protection Authority Act 2011.
319. At the local government level, while the new waste legislation will not change the basic power that enables local authorities to determine the extent of their waste activities, it will clarify the core roles that will help implementation of the new waste system being created. Territorial authorities become specifically responsible for delivering domestic waste services, related service outcomes, local waste planning, local aspects of CME (including litter, illegal dumping, and bylaws) and behaviour change. They would not be responsible for regulating the waste industry (such as licensing schemes), or issues that have a national impact and implication.
320. As noted, there may be benefit in considering changes to the balance of territorial and regional responsibilities in future, after other key reforms have been implemented and the local government review has concluded.
321. Implementation across the system will be enhanced strategic planning and reporting mechanisms, thereby enabling the national direction for waste and resource recovery. This includes:
- supporting delivery of the waste strategy's goals and priorities (eg, through AIP, local WMMPs, investment processes)
 - alignment of local government waste planning with the nation strategic planning
 - set reporting requirements for central and local government.

Phasing over time

322. Some aspects of the proposed new law will come into effect straight away (eg, reorganised central government roles, waste levy matters, strategic planning and

reporting framework). Others will come into effect in a staged manner and will involve local authorities and the sector when developed in regulations. The powers to regulate products and materials will be available following enactment to support a long-term pipeline of work, governed by the waste strategy and supporting plans. The national regulation of the waste and resource recovery sector will be phased in over several years, which will include transitioning local licensing systems over to the new national system. Additionally, given the range of enabling provisions outlined in this RIS, this will require careful planning, sequencing and integration to ensure careful design and implementation.

323. Implementation of the new waste legislation will reflect the first phase of the strategy. This phase is focused on putting the basic enablers in place, supporting more circular activity to reduce waste, and improving emissions and environmental impacts.. Activities in the phase broadly cover strategic planning;; systems, equipment and infrastructure; and getting people and organisations motivated. The strategy includes behaviour change goals linked to targets for reduction in final disposal volumes, and reduction in emissions from waste. Implementing the new waste legislation will be key to achieving and tracking progress against these goals.
324. The development of AIPs will help to prioritise long-term behaviour and system change programmes, implementation of these priorities will work to shift business models and behaviour up the levels of the waste hierarchy and into more circular ways of operating. The AIPs also provide a means to drive cooperation and collaboration within the sector and identification of future priorities (for example, products considered for EPR schemes).
325. In general, the consultation showed overall support from the public, local government and industry for the proposals being made for the new waste legislation. However, as a suite of enabling provisions with further detail to come via regulation-making process, there may be opposition from some individual companies or councils opposed in principle to government regulation or who may face higher costs to implement the proposals. Highlighting the role that diverting waste from landfill and improving the circularity of products and packaging can play to prevent further climate change will help mitigate this risk, alongside outlining the advantages for communities of improved access to waste management services. The proposals to broaden the scope of what waste levy funding can be applied to will also assist in mitigating some of these risks.
326. The specifics of implementation will be defined and analysed and a risk management process developed during the regulation making phases of the relevant policy proposal.

How will the new arrangements be monitored, evaluated, and reviewed?

327. The new arrangements will be supported by continued data obligations that is helping build a better picture of waste material flows. Alongside the expansion of the coverage of the waste disposal levy, the Government has expanded the data reporting requirements for waste management facilities and operators. As the waste disposal levy, and associated reporting, is rolled out (staged from 2021 to 2024) data is collected from a wider range of facilities. The Ministry has an overall data programme that is utilising this core information and other data sources to gradually generate an overall picture of material flows into and throughout the waste management system. Additionally, any new regulatory initiative on waste is likely to include a data component where applicable. For example, the proposals for national waste licensing would include mandatory reporting from operators directly to central government, with aggregate data becoming available online.

Evaluation and review

328. The new legislation be reviewed within five years of its enactment. Although a three-year review is standard for reviewing new Acts, it is expected that once enacted it will take some time to use and implement some of the regulatory powers that are proposed

(in addition to managing any transition processes) and a longer review period would allow for flexibility in responding to implementation timeframes.

- 329. This review would also afford the opportunity to review settings for the waste levy (ie, hypothecation, split between central and local government, allocation methodology). By this point, there should evidence of effectiveness of greater investment over a sustained period (notwithstanding the inherent lag between investment and impact).
- 330. There will also be statutory requirements for the Ministry to report regularly on progress against the waste strategy (and any supporting AIPs). With a growing base of publicly available data, these progress reports will provide an opportunity to evaluate, reflect and learn, and will inform next steps. We expect that it will be useful to complete a progress report before each new AIP is prepared, and before each revision of the strategy.
- 331. Formal reporting on progress will build responsibility and accountability into the new system. Territorial authorities will be required to report to the Ministry and publicly on progress against their WMMPs and contribution towards the waste strategy goals (and AIP if applicable) every five years.
- 332. Drawing on the approach in the Environmental Reporting Act 2015, the Ministry will be required to prepare an independent public report on overall national progress against the strategy (and any supporting AIP), every five years. These reports should include information on how waste levy funds have been used and an assessment of effectiveness, at a local, central government and combined level.
- 333. While the shape and form of these reports is to be determined, current reporting and/or analysis (for example, the three-yearly report on effectiveness of the waste disposal levy as required under the WMA) will help inform a baseline to assist benchmarking and measuring change over time.

How will the new arrangements be funded?

- 334. The proposals in this RIS cover aspects that will have direct and immediate impact – once the new legislation is passed – and those that are for enabling provisions only and may be initiated at a later date (and subject to further impact analysis). Future potential regulations will be shaped by scope choices, cost-benefit analysis, consultation with affected parties, and consideration of other mechanisms/instruments that may be applicable.
- 335. As such, the financial implications will depend on future government decisions on the scope and pace of change and cannot be accurately assessed now. However, it may be useful to signal expected funding mechanisms for all central government functions once the new legislation is implemented (Table 24 below).

Table 24: Expected funding mechanisms for functions in new legislation

Agency	Function	Activity	Timing	Funding
MfE	Strategic planning	Strategy and planning Data and evaluation Reporting	Current activity, size increasing from 2025	Departmental funding
	Policy development	Sector stewardship Products and materials regulation Waste management system regulation	Current activity, size increasing from 2025	Departmental funding
	Operations	Behaviour change	Significantly expanded activity, building on initial ERP-related programmes for organic waste	Waste levy
		Implementation of new regulations	Ongoing from 2025	Departmental funding
		Extended producer responsibility schemes: set-up and monitoring	First product stewardship schemes currently being established; strategy signals ongoing pipeline	Waste levy to support set-up costs if needed Cost recovery / scheme charges to cover operation
		Deposit return schemes: set-up and monitoring	Beverage CRS is only scheme currently proposed, for implementation 2025-2027	Waste levy to support set-up costs if needed Cost recovery / scheme charges to cover operation
	Investment, funding	Circular economy, waste minimisation	Ongoing	Waste levy Climate Emergency Response Fund (CERF)
		Addressing climate-related waste vulnerabilities and contaminates sites remediation	Ongoing	Contaminated Sites Remediation Fund (CSRF) Climate Emergency Response Fund (CERF)
EPA	Regulatory operations	Licensing Tracking system Register management (EPR, CRS schemes)	From 2025	Departmental funding for set up costs Licensing fees for most operating costs
		Waste levy collection	Ongoing	Waste levy
	Compliance and enforcement	Products and materials regulations	Steadily building set of regulations, 2025-2040	Waste levy, departmental baseline, cost recovery (depending on the intervention)
		Waste management regulation	Phasing in, 2025-2030+	Waste levy, departmental baseline, cost recovery (depending on the intervention)
TBC	Environmental design /	Development of new standards	From 2025	Departmental funding

	performance standards	Implementation Enforcement		
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