

Te kawe i te haepapa para Taking responsibility for our waste

Proposals for a new waste strategy Issues and options for new waste legislation



Environment Manatū Mō Te Taiao

New Zealand Government

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Message from the Minister

We can and must do better

Aotearoa New Zealand is one of the highest generators of waste per person in the world, and the amount of waste we create is increasing. We are sending more waste to landfill each year, when much of this could be recycled, reprocessed or reused.

In 2019, the waste sector contributed around 4 per cent of Aotearoa New Zealand's total greenhouse gas emissions and around 9 per cent of its biogenic methane emissions. Put bluntly, we need to catch up with those countries showing the way, and then move forward.

Some of the waste we used to send overseas is now rejected, as it should be. There is a global push for countries to take more responsibility for the waste they generate, which impels us to reassess how we manage our waste domestically. Other challenges we face are a legacy of past actions. The mess caused by the erosion of the Fox River landfill in 2019 was a case in point.

New Zealanders care about this and are rightly demanding change. In Colmar Brunton's *Better Futures 2021* survey, issues relating to waste and recycling made up three of the top ten concerns for New Zealanders.¹

Moving to a low-carbon circular economy, starting with waste

We need to change the way we think and live when it comes to the way we use materials. This means shifting from our current 'take–make–dispose' system and moving towards a low-waste, more circular economy.

Everyone has a part to play. Many individuals, communities, businesses, iwi, and the waste sector, are already taking action to reduce waste and use resources more efficiently. Some are seeking ways to avoid creating waste altogether. Others are leading the way by transforming waste into innovative, value-added products. There are real opportunities here, and the Government has launched the \$50 million Plastics Innovation Fund to help support projects that reimagine how we make, use and dispose of plastics.

The Government is committed to building a low-carbon, circular economy that protects the environment for future generations. We need to take clear and decisive action. Focusing on waste is a good place to start.

We have already taken some important steps. These include taking action on single-use and hard-to-recycle plastics, expanding the waste disposal levy, investing in new infrastructure to support resource recovery efforts, and working with industry to develop end-of-life product stewardship schemes for six priority products.

¹¹ Colmar Brunton. 2021. *Better Futures 2021*. Retrieved from https://www.colmarbrunton.co.nz/better-futures-reports-2021/ (10 September 2021).

We need to take a coordinated approach and get the systems right

We want to tap into the energy and ingenuity of New Zealanders. I encourage you to have your say on the proposed strategy and legislation to help us solve our waste problems and protect our environment for generations to come. Together we can turn our record around and create a low-waste future we can all be proud of.

Hon David Parker Minister for the Environment

What are we consulting on?

We're seeking feedback on:

- proposals for a new national waste strategy
- issues and options for developing new, more comprehensive waste legislation.

A NEW AOTEAROA NEW ZEALAND WASTE STRATEGY

The proposals for a new national waste strategy present our proposed vision and aspirations for a low-waste Aotearoa, and how we intend to get there. It's intended to guide and direct our collective journey toward a circular economy, starting with how we think about and manage the products and materials that currently go into our waste disposal systems.

This first strategy looks out to 2050 and sets an overall course for change with three broad stages. For the first stage, to 2030, it includes proposed priority areas with supporting headline actions. It also includes specific targets to help assess our overall progress in reducing waste and making better use of resources. The intention is that the strategy is periodically refreshed.

While the strategy will outline where we want to go and how we envisage getting there in broad terms, the more specific actions we need to take will be articulated in a series of supporting action and investment plans. These plans will be produced every three years, with the first plan to be finalised after the final strategy and long-term waste infrastructure plan in 2022.

NEW, MORE COMPREHENSIVE WASTE LEGISLATION

The Government is also proposing new and more comprehensive legislation on waste to replace the Waste Minimisation Act 2008 and the Litter Act 1979. New legislation is needed to put in place the tools and arrangements that will deliver the new waste strategy and ensure we make good use of funds generated by the expanded waste disposal levy.

New legislation will enable a complete reset of the purposes and principles, governance arrangements, and roles and responsibilities in waste legislation. It also offers the opportunity to strengthen and clarify regulatory and enforcement powers. This paper outlines options for both regulation of the waste sector and those working in it, and regulation of the products and materials we currently dispose of through our waste and recycling systems.

How to have your say

The Government welcomes your feedback on this consultation document. The questions posed throughout this document are summarised in the Full list of questions section. They are a guide only and all comments are welcome. You do not have to answer all the questions.

To ensure your point of view is clearly understood, you should explain your rationale and provide supporting evidence where appropriate.

Timeframes and next steps

This consultation starts on Friday 15 October and ends on Friday 26 November 2021.

When the consultation period has ended, we will take the following steps.

NEXT STEPS

- Please provide your written submissions by 11.59pm on Friday 26 November. See the How to provide feedback section for more details.
- The Ministry will use the information in submissions to refine and fully develop the proposals, working with others in the sector as needed. The Minister for the Environment will then decide on the final form of the strategy and legislative changes to recommend to Cabinet.
- We anticipate releasing the final version of the waste strategy in mid-2022. The next layer of analysis and planning, leading to implementation, will be set out in the first action and investment plan. This will be produced as soon as the new strategy and accompanying long-term waste infrastructure plan are complete in 2022.
- If the Government decides to go ahead with new waste legislation, a Bill will be introduced to Parliament later in 2022. The public will have an opportunity to provide feedback on the detailed proposals when the Bill is considered at Select Committee.

How to provide feedback

There are two ways you can make a submission:

- via Citizen Space, our consultation hub
- by writing your own submission.

If you want to write your own submission, you can provide this as an uploaded file in Citizen Space.

We request that you don't email or post submissions as this makes analysis more difficult. However, if you need to, please send written submissions to Waste Strategy and Legislation, Ministry for the Environment, PO Box 10362, Wellington 6143 and include:

- your name or organisation
- your postal address

- your telephone number
- your email address.

If you are emailing your feedback, send it to wastelegislation@mfe.govt.nz as a:

- PDF, or
- Microsoft Word document (2003 or later version).

Submissions close at 11.59pm Friday 26 November 2021.

More information

Please direct any queries to:

- Email: wastelegislation@mfe.govt.nz
- Postal: Waste Strategy and Legislation, Ministry for the Environment, PO Box 10362, Wellington 6143

Publishing and releasing submissions

All or part of any written comments (including names of submitters) may be published on environment.govt.nz. Unless you clearly specify otherwise in your submission, the Ministry will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this document under the Official Information Act.

The Privacy Act 2020 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this document. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

Part 1: Why we need to transform our approach to waste

Our waste challenge

The way we're creating and managing waste in Aotearoa isn't sustainable. Resources are often not valued enough nor used as efficiently as possible, and who is responsible for managing negative environmental impacts related to waste is often unclear. Our linear, 'take–make– dispose' system, which relies heavily on extracting virgin materials, promotes continuous consumption and replacement over keeping products and materials in use (figure 1).

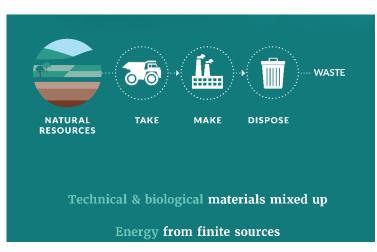


Figure 1: Linear economy

In particular, our linear approach to creating products and managing waste presents two high-level challenges.

1. Our production and consumption systems have negative impacts on the environment

This includes greenhouse gas emissions from our production processes, consumption patterns and transport, as well as from decomposition of organic waste in landfills. Disposal of organic waste makes up 9 per cent of Aotearoa New Zealand's biogenic methane emissions and 4 per cent of total emissions.² The recent Intergovernmental Panel on Climate Change report makes clear the urgency of reducing methane emissions as part of our response to the global climate crisis.³ The waste system has a vital part to play.

Lack of a whole-of-life view for resources, materials and products, including consideration of end-of-life options and poor management of waste, also has direct impacts on the health of our soils, waterways and marine environment, with toxic substances and marine litter damaging ecosystems and threatening human health.

2. Our 'take-make-dispose' system does not use valuable resources well or sustainably

The increasing global population and growing levels of consumption are placing greater stress on diminishing resources. Our economic systems and infrastructure are not designed to keep materials in use, and the long-term value of resources is often not

² For more information, see https://environment.govt.nz/publications/new-zealands-greenhouse-gasinventory-1990-2019-snapshot/emissions-trends-by-sector.

³ Intergovernmental Panel on Climate Change. 2021. *Climate Change 2021: The Physical Science Basis*. Cambridge: Cambridge University Press. Retrieved from www.ipcc.ch (10 September 2021).

realised. Consumption and replacement of short-lived products are normalised over reuse and repair, while our ability to recycle and reuse resources is limited. Our current reliance on virgin materials will lead to future generations having less access to, and paying higher prices for, the resources we take for granted today.

Global context

Moving toward a circular economy

The challenges outlined above are not unique to Aotearoa. Globally, a shift towards a circular economy (figure 2) is gaining momentum. International awareness of the long-term consequences of how we produce and consume has sparked collaboration to adopt more resource-efficient and sustainable systems. This includes 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. A growing number of countries have also implemented strategies, policies and legislation to support their transition toward a circular economy.

Efforts to move to more sustainable systems are also strongly aligned with global initiatives to achieve the Sustainable Development Goals, in particular the goals on sustainable consumption and production, climate change, economic growth, energy and ecosystem health.

There have been growing calls domestically for Aotearoa to move towards a circular economy. Most recently, advice from the Climate Change Commission on meeting our emissions reductions targets under the Climate Change Response Act 2002 highlighted the need to develop a long-term strategy for such a move.⁴

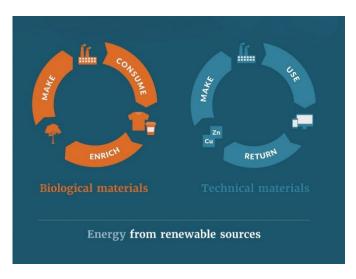
WHAT IS A CIRCULAR ECONOMY?

A circular economy is a set of organising principles promoting economic activity that restores and regenerates natural systems. It's designed to replace our current 'take–make–dispose' system with a 'make–use–return' system. The circular economy has three global principles.

- **Design out waste and pollution** View waste as a design flaw. Loss of materials and energy through the production process is minimised.
- Keep products and materials in use Think in systems. Products are designed to be reused, repaired and recycled, and waste materials for one process become an input for another.
- **Regenerate natural systems** Shift perspectives from minimising environmental harm to doing good. Valuable nutrients are returned to the soil and ecosystems are enhanced.

⁴ Climate Change Commission. 2021. *Ināia Tonu Nei: A Low Emissions Future for Aotearoa*. Wellington: New Zealand Government. Retrieved from www.climatecommission.govt.nz/our-work/advice-togovernment-topic/inaia-tonu-nei-a-low-emissions-future-for-aotearoa/ (10 September 2021).

Figure 2: Circular economy



The waste hierarchy

The waste hierarchy (figure 3) is a tool used globally for explaining the different steps to reduce and manage waste. The most desirable steps are those at the top of the hierarchy, which avoid generating waste in the first place. They support the first circular economy principle. 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.

We use this tool throughout the strategy and legislation proposals, to explain the type of progress and action needed.

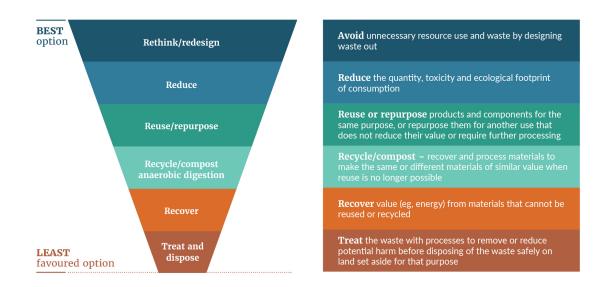


Figure 3: Waste hierarchy

Addressing waste is one step toward a circular economy

A circular economy is about more than how we manage waste. It's 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.

The ideas in this consultation document represent one step on this journey, beginning with transforming the waste and resource recovery sectors. 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 Aotearoa.

How are we doing?

We're behind the curve

Climate change

Emissions from waste currently make up 9 per cent of Aotearoa New Zealand's biogenic methane emissions and 4 per cent of the country's total greenhouse gas emissions.⁵ Under the Climate Change Response Act 2002, Aotearoa is committed to reducing biogenic methane emissions by 10 per cent by 2030, and 24–47 per cent by 2050, relative to 2017 levels. Greenhouse gases (excluding biogenic methane) are to be zero by 2050.

In June 2021, the Climate Change Commission released a report outlining how Aotearoa could meet its international emissions reduction commitments and its obligations under the Climate Change Response Act 2002. The report's advice was clear that our current policy settings will not achieve the targets set out in the Act.

The report advised that achieving even the lower end of the 2050 biogenic methane target would require comprehensive action to:

- reduce waste
- divert organic waste from landfill to recycling and composting
- improve and extend landfill gas capture systems.

In response, the Government is preparing and consulting on an emissions reduction plan. The plan includes a significant section on emissions from waste, which has been developed alongside these strategy proposals. It also includes separate proposals for moving towards a circular economy, which will build on the steps proposed here.

New Zealanders create more waste than our counterparts

Aotearoa is among the highest generators of waste per capita in the developed world. In 2018, we sent 3.7 million tonnes of waste to municipal landfills (approximately 750 kilograms per person); this is 49 per cent higher than the Organisation for Economic Co-operation and Development (OECD) average of 538 kilograms per capita.⁶

Despite slight improvements in 2019 and 2020, our long-term trend suggests the amount of waste we're sending to landfill is increasing; between 2010 and 2019, total waste to municipal landfills increased by approximately 48 per cent. Much of what we send to landfills would be relatively easy to reuse or recycle – it still has value.

Inequitable access to waste and recycling services is a contributing factor. Smaller and rural communities do not usually have the range of services available in urban centres. And more specialised collection services, like green waste, are often only available from private sector providers, at a cost.

⁵ For more information, see https://environment.govt.nz/publications/new-zealands-greenhouse-gasinventory-1990-2019-snapshot/emissions-trends-by-sector.

⁶ https://data.oecd.org/waste/municipal-waste.htm

Infrastructure and international markets

Infrastructure of all kinds is a key enabler for a circular economy. Currently our domestic resource recovery and waste infrastructure system is limited in the types of materials we can recover, as well as the volume of materials we are able to process onshore. The recent *Report on Waste Disposal Levy Investment Options* estimated Aotearoa has a current waste infrastructure deficit of \$2.1–2.6 billion.⁷ In the context of the infrastructure needed to support a circular economy, this deficit is likely to be significantly larger.

Our geographic isolation and relatively low population density present challenges to the economic viability of onshore resource recovery infrastructure, which often relies on economies of scale and low logistical costs. On the demand side, our ability to export our waste to key markets is becoming increasingly constrained. This is partly due to the implementation of policies restricting the international movement of waste materials (such as China's 'National Sword' policy, which banned the import of most recycled plastics into China), as well as a decrease in demand for imported feedstock. Export markets are accepting fewer materials and focusing on higher-quality products. This has highlighted our need to find viable onshore solutions for our waste.

Lost opportunities

Reducing the volume of waste we produce and then either send to landfill or ship offshore as recycling is only half the issue. There is often economic opportunity in what we throw away. We put insufficient effort into finding opportunities to add value by turning one producer's unwanted by-product into the raw material for another. Some good initiatives are already operating, such as the Bioresource Processing Alliance – a research and development programme funded by the Ministry of Business, Innovation and Employment, which brings together research organisations and the primary sector to find and commercialise opportunities. There is scope for much more.

Case study: Ecogas – Anaerobic digestion plan

Ecogas is developing Aotearoa New Zealand's first commercial-scale anaerobic digestion facility in Reporoa, which will process 75,000 tonnes of food waste from households and businesses in the North Island to produce biogas and an organic-rich biofertiliser. Biogas from the plant will be used to heat T&G Global's neighbouring tomato-growing greenhouses, reducing fossil fuel use, while carbon dioxide produced will be used to enhance plant growth. The biofertiliser that is produced will be applied onto more than 1500 hectares of productive farmland, reducing reliance on imported synthetic fertilisers.

This circular system will reduce climate change emissions by diverting food waste from landfill, create local clean energy and valuable biofertiliser, and support food production. It also showcases what is possible in other parts of Aotearoa.

⁷ Grant Thornton. 2021. *Report on Waste Disposal Levy Investment Options*. Wellington: Ministry for the Environment.

Lack of data

Lack of high-quality data is a persistent issue for the waste sector. There are currently large gaps in our knowledge of what makes up our waste, where it goes and how we dispose of it. While we have a good understanding of the volume of waste that goes to municipal landfills and have estimates of what that waste is, we have less data on the quantity and types of waste going to other landfills, cleanfills and waste disposed on farms.⁸

Changes as part of expanding the waste disposal levy (waste levy) to additional sites will improve the information available, but it's clear our data, research and evidence base for waste and resource efficiency still need to improve. We need to improve the availability, accessibility and quality of our waste data so we can better develop and evaluate effective policies and actions, understand where the gaps and opportunities are, and support effective monitoring and compliance. Importantly, better data will let us 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.

Legacy waste sites

Historically, poor land and waste management practices in dealing with chemicals and hazardous waste have led to a large number of contaminated land sites across Aotearoa, which has negatively impacted the health of our soils, waterways and groundwater systems, and posed risks to human health.

We know of at least 20,000 sites that have been used for hazardous activities or industries with potential to cause contamination. Site remediations are continuing, but increasingly extreme weather events related to climate change add to the risk of further redistributing contaminated soil and wastes. There are also a number of legacy landfill sites near waterways, in flood plains or on coastal margins, and due to the effects of climate change these are increasingly at risk of being eroded or washed out, discharging waste materials and contaminants to our freshwater and marine environments and to surrounding areas.

However, we're starting to catch up

The move toward a circular economy in Aotearoa has been championed by a number of community organisations, iwi and Māori, businesses, sector groups, local government and individuals over the last decade or more. This includes efforts by businesses across many sectors to reduce waste and rethink the way they produce goods and services.

Initiatives like the Sustainable Business Network's Circular Economy Accelerator Programme, the work by Para Kore with iwi and hapū to drive zero waste on marae, and the leadership of the Zero Waste Network in driving community-led circular economy and resource recovery action across the country have all been important in reducing waste and raising awareness of the opportunities. A growing number of territorial authorities are also including circular economy principles in their waste management and minimisation plans.

⁸ Landfills are classified into classes. We currently have data for class 1 landfills (which take municipal waste) but not for classes 2–4.

To support these efforts, the Government has taken early steps to lift the performance of our resource recovery and waste system, and move toward a low-waste, more circular economy. Some of the key initiatives include:

- **investing in resource recovery infrastructure** including \$124 million of funding through the COVID-19 Response and Recovery Fund and approximately \$10–12 million in annual funding through the Waste Minimisation Fund
- **expanding the waste levy** from \$10 to \$60 per tonne by 2024 for municipal landfills, and applying it to a wider range of sites (including those that take construction and demolition materials), to incentivise people and businesses to produce less waste and support investment in the sector
- **rethinking plastics** publishing a National Plastics Action Plan, including setting up a new \$50 million Plastics Innovation Fund and phasing-out a number of single-use and hard-to-recycle plastic products (such as produce bags and labels) over the next four years
- regulating product stewardship working with industry to develop end-of-life schemes for six priority products, including tyres, plastic packaging, electrical and electronic products, agrichemicals and their containers, refrigerants and farm plastics
- supporting industry and key sectors for example, funding projects in Auckland and the upper North Island to reduce construction and demolition waste and divert material from landfill.⁹

Full details of the Government's current work programme on waste are set out in the Ministry for the Environment's recently published *Waste reduction work programme*.

The work programme is clear that we need to do much more to catch up with how other countries use resources and manage waste, and join the global movement towards a circular economy. We've taken some early steps, but we need to continue to build momentum as we put in place the foundations for long-term transformational change.

Questions

- 1 Do you think changes are needed in how Aotearoa New Zealand manages its waste?
- 2 Do you support tackling our waste problems by moving towards a circular economy?

⁹ For more information, see https://www.beehive.govt.nz/release/funding-projects-reduce-wasteconstruction-and-demolition.

Part 2: Proposed new waste strategy for Aotearoa New Zealand

Introduction

Why do we need a long-term strategy?

Part 1 has outlined Aotearoa New Zealand's problems with seeing value in resources and with waste generation, management and disposal. The world has become increasingly concerned about waste in recent years and we have more reason to worry than most, given our record as one of the highest generators of waste per capita in the OECD. Fortunately, awareness and concern are growing in Aotearoa and more people want change.

Recent Government initiatives are important first steps. As explained in Part 1 though, truly tackling the challenge of waste involves deep-seated change to how we live and consume. It'll require sustained commitment from all parts of society over decades, and choices about what to prioritise at different points along the way.

A long-term strategy helps us bring that thinking together and communicate it. In particular, the proposed waste strategy needs to achieve all of the following.

- Increase our ambition as a country: A compelling vision and challenging targets will focus us on what needs to be done and help drive behaviour change across all parts of the economy.
- Signal direction and priorities: Success will depend heavily on clear government leadership and collective action by everyone from supply chains through to end users and consumers, waste and recycling companies, local government, hapū/iwi/Māori, central government, community groups, non-government organisations and individuals. That requires a clear shared direction.
- **Inspire action across different groups:** Waste is not only the product of supply chains and commercial activity. It's also the product of community and individual decisions and behaviours. We need an approach that is inclusive and inspiring.

The strategy is also important as the first part of the strategic investment approach that will guide the use of increased funds generated by the expanded waste levy. Together with the proposed long-term waste infrastructure plan and the supporting action and investment plans, it will shape how central and local government use those funds to create meaningful change.

A strategy alone is not enough. It needs to be supported by:

- good information and analysis
- shorter-term implementation plans
- an effective set of regulatory, financial and other tools to help drive change
- systematic evaluation and reporting on progress.

Work on all of these elements is under way, as set out in the current *Waste reduction work programme*. The first objective of "Building the foundations for a transformed waste system" covers:

- this proposed long-term strategy for waste
- new waste legislation
- a long-term waste infrastructure plan
- emissions reduction plan policies for waste and hydrofluorocarbons
- improved data systems.

The ideas at the heart of the draft strategy

There's a great deal of expertise on these topics across Aotearoa. The Ministry for the Environment has developed these draft strategy proposals with help from waste experts from a cross-section of community, local government and commercial organisations.

We would like to acknowledge all who have contributed their hearts and wisdom to the development of this draft strategy.

In working with these experts discussion quickly centred on the related concepts of connection and responsibility. Between them, they capture that across family, community, society and the economy, we have:

- a constantly changing network of connections with each other, the resources and materials we use, and the environment that surrounds and supports us
- a matching network of responsibilities to care for all that we connect with, whether people, materials or places.

These core concepts of connection and responsibility now underpin this work. They are brought out in the vision and principles proposed to sit across the strategy as a whole.

Another key point from these discussions was the need to be bold and set an ambitious path. All those we worked with, regardless of background, were clear that the time for incremental steps has passed. They told us the strategy and related work need to be long term and to set a clear and strong direction towards a different way of thinking and living.

Connecting vision to action

Strategy structure

The proposed strategy has four main elements:

- vision | ngā whāinga how we want Aotearoa to be in 2050
- **principles** | **ngā mātāpono** a set of underlying principles and values to guide all future work and inform the choices we make along the way
- proposed course | te taka mahere a high-level outline of the three stages of activity needed to take us to our vision for 2050, with a more detailed mapping of the first stage through to 2030
- markers of progress | ngā tūtohu tutukitanga a set of strategic, system-level targets to help drive urgency and track our progress.

This document presents these elements and seeks feedback on them.

After this period of public consultation, the Ministry will revise the proposals in light of the comments we receive, working with our two advisory groups and engaging with others as needed. We aim to present a final strategy to Cabinet in the first half of 2022.

Part of a bigger picture

Alongside the strategy, we're working on a long-term waste infrastructure plan to guide investment in resource recovery infrastructure for Aotearoa. That plan is due to be finalised at the same time as the strategy.

These two documents will then inform our first action and investment plan (AIP) – essentially an implementation plan that will set out the priorities and key actions needed in the short term. An AIP will be developed every two to three years.

Between them, these documents will provide a comprehensive picture of the long-term direction being set for waste in Aotearoa, and the first steps in our transformation to a circular economy. That will enable all those with an interest and potential role – including central and local government agencies, the waste management industry, businesses in various supply chains and sectors, local authorities, community groups and individuals – to plan with confidence as they plot their own course for change.

The draft emissions reduction plan that we're consulting on separately also includes proposals for a separate and broader circular economy strategy, with development to be led by the Ministry of Business, Innovation and Employment. That work will be closely connected and build on the steps in this waste strategy.

Vision | ngā whāinga

A vision provides a unifying sense of purpose and aspiration. In this case, it speaks to what we are striving for as a country.

We propose the following vision for the new waste strategy.

A CIRCULAR ECONOMY FOR AOTEAROA NEW ZEALAND IN 2050

We look after the planet's resources with care and responsibility.

We respect and understand our inseparable connection with the environment.

A land where nothing is wasted.

A circular economy for Aotearoa New Zealand in 2050 | He ōhanga āmiomio mō Aotearoa hei te tau 2050

This headline statement is deliberately ambitious. Achieving genuinely circular economy within 30 years will require transformational change. It will require us to shake out of deeply entrenched habits and behaviours, and to think differently – to design out waste, keep materials in circulation and build regenerative systems – all centred around taking responsibility for our actions and their implications.

We look after the planet's resources with care and responsibility | Kei te tiaki tātou i ngā rauemi ā te ao tūroa mā te manaakitanga me te kaitiakitanga

We respect and understand our inseparable connection with the environment | Kei te whakaaro nui, kei te mārama hoki tātou i tā tātou hononga mauroa ki te taiao

These two statements emphasise values and mindset, the most important enablers of transformational change. They link to the strategy's most important underlying concepts of connection and responsibility.

A land where nothing is wasted | He whenua parakore

This element speaks to the most fundamental essence of our ambition – to prevent waste. It combines with a desire to make the most of what Earth provides to us, and to use it carefully.

Between them, these elements add up to a powerful vision of a different way of living and being in Aotearoa that is unique to our land.

We welcome your thoughts.

Principles | ngā mātāpono

The proposed principles underpin and guide the development of the strategy content, and all the work that follows to achieve its vision. The underlying themes of connection, responsibility, ambition, innovation and fairness are woven through these principles.

The first three principles draw on the internationally recognised circular economy principles, which have been widely adopted around the world. The final three have emerged from discussions with our advisory groups. In each case we've included supporting points to explain what the principle entails. The result is a set of principles that has universal application yet is tailored for Aotearoa.

1 Design out waste, pollution and emissions, and unnecessary use of materials | Whakatahangia ngā para, ngā parahanga me ngā tukuwaro me te whakamahi noa i ngā matū

- Operate as far up the waste hierarchy as possible. Cut out waste, pollution, emissions and unnecessary use at the source, as products are designed and produced.
- Products and materials that are low value, single use or non-recyclable should be either replaced or made reusable through innovation and new technologies.
- Confront entrenched behaviours, assumptions and attitudes to move from a linear to a circular mindset.

2 Keep products and materials in use at their highest value | Whakamahia noatia ngā taputapu me ngā matū i te wā e kaha rawa ana te wāriu

- Entrench a new mindset in which materials are valued as finite resources, to be circulated over and over in the economy, for as long as possible.
- Use market-based, regulatory, investment and behavioural tools to drive change towards the top of the waste hierarchy and circular activity.
- Always design with durability, reuse, repair and remanufacturing in mind.

3 Regenerate natural systems, so the environment is healthy for future generations | Whakarauoratia ngā pūnaha taiao, kia ora toitū ai te taiao mō ngā uri whakatipu

- Avoid using depletable resources and use renewable energy, so our actions and production systems are environmentally sustainable.
- Support activity that replenishes natural resources and reduces climate change impact wherever possible.
- Clean up and repair the environmental damage left behind by historical activities, so the environment is healthy for the future.

4 Take responsibility for the past, present and future condition of our natural environment | Hāpaingia ake te haepapa mō te oranga o mua, o nāianei me te anamata o te taiao

- Think long term and intergenerationally, and be guided by the legacy we leave behind.
- Take responsibility as a business, government, community or individual for our own actions, for valuing materials, for reducing waste and for managing it properly.
- Don't rely on others to clean up after us and deal with what we have discarded or ignored.

5 Think in systems, where everything is interconnected | Whakaarohia ngā pūnaha e whātuitui ai ngā mea katoa

- Recognise the fundamental connections between extraction, production, resource consumption, waste generation and other environmental challenges, particularly climate change and biodiversity loss.
- Remember that waste, like climate change, can't be tackled in isolation from wider social and economic activity.
- Work in partnerships of all kinds, with neighbours, communities, hapū and iwi, business links, and our Pacific neighbours.
- Consider everyone in the supply chain, from the manufacturer to the consumer and back again.
- Support educational programmes that enable intergenerational change.

6 Deliver equitable and inclusive outcomes | Kia taurite, kia tapatahi ngā hua

- Make changes in a way that recognises the unique perspectives and approaches facing different local communities, business, hapū/iwi and whānau.
- Consider carefully who bears the cost of change in the short and long term, and address inequity.
- Develop and invest in a way that creates opportunities and jobs at all levels for local and regional communities to build resilience.
- Identify and remedy problems now, so future generations aren't harmed by the cost of our inaction.

Questions

- 3 Do you support the proposed vision?
- 4 Do you support the six core principles or would you make changes?

Proposed course | te taka mahere

A strategy needs more than a vision and principles. It needs to set out how to get there, providing an overall map so all involved know the stages and directions for the journey, and can plan, prepare and help.

The journey ahead is long and we can't see all of it clearly at the outset. But we can describe the overall task ahead of us and plan how to tackle it in broad terms. We'll encounter challenges and surprises along the way and will need to adjust to them. Creating regular supporting AIPs and periodically refreshing the strategy will help us do that with discussion and transparency.

The task ahead

Historically, Aotearoa has focused on waste as an issue only at the bottom of the waste hierarchy; something that needs to be collected and disposed of as simply as possible.

It's important we begin to think, invest and operate with much more emphasis on the top of the waste hierarchy – in innovation, technology and behaviour change that prevent waste from being created in the first instance. This is where we'll find the greatest rewards. The Government's recent announcement of a \$50 million Plastics Innovation Fund is a significant step in this direction, setting up a five-year investment programme for research and innovation dedicated to finding ways to remove problem plastics.

Changing deeply entrenched linear production, consumer, sector and supply chain behaviours will be challenging and take time. Aotearoa can expect to be confronted by a substantial ongoing flow of waste materials for many years yet, so it's also critical we catch up with other countries by strengthening our capacity in the middle of the hierarchy, to better manage this flow.

We need to change our thinking about material streams in manufacturing and production, so that most things are made in ways that make reuse, repair, repurposing and recycling easy. We need to strengthen the incentives and requirements on end users and consumers to reuse, repair and recycle, and remove barriers so it's easy for them to do. And we need to invest in support and infrastructure for more and more innovative resource recovery and recycling facilities at both community and commercial levels – we currently have a significant lack of infrastructure across the country in most respects.¹⁰

For all these changes, we need to deploy a mix of support (through investment, incentives, facilitation and encouragement) and pressure (for example, through regulatory changes and financial penalties).

¹⁰ In this context, infrastructure is not limited to large commercial industrial plants, although some of those will be needed for resource recovery for different materials. We use the term comprehensively to also cover smaller community facilities for resource recovery of all kinds and collection equipment including trucks and bins – all the equipment and facilities needed to support circular reuse and recycling activities.

Better managing the waste we generate has been a major focus for the Government's waste work programme over the past few years. Initiatives aimed at strengthening our capacity to operate at the middle of the waste hierarchy have included:

- phasing out hard-to-recycle plastics
- standardising kerbside systems
- investigating a container return scheme
- investing in optical sorting technologies and other equipment through the COVID-19 Response and Recovery Fund.

These work programmes need to be carried through, alongside steps to raise our aspirations.

In addition, the need to make improvements at the bottom of the waste hierarchy should not be forgotten. We have legacy landfills and hazardous sites that remain an environmental hazard, especially with climate change; there's work to be done to remediate these sites and manage ongoing risks. Residual waste that we can't find value for in other ways will be with us for some time to come. We also need to continually assess the viability of emerging end-of-life technologies, including waste to energy, that may offer better economic and environmental outcomes than landfills in some situations.

We need to work at all these levels to move towards a circular economy in Aotearoa by 2050.

There are a number of strategic issues to tackle along the way.

STRATEGIC ISSUE – DOMESTIC RESOURCE RECOVERY AND RECYCLING

It will be a priority for Aotearoa to invest in our onshore reprocessing and recycling capacity, at both community and commercial levels.

Over the last few years, increasing volatility of international markets for waste and recyclable materials has highlighted the vulnerability of our reliance on offshore markets. Globally, concerns about the export of waste materials, particularly to developing countries, are also growing. Aotearoa needs to both reduce the waste it generates and take greater responsibility for recovering materials in this country wherever possible. These are both core obligations under the Basel Convention.

In the medium term, we recognise that international markets will continue to be a destination for some materials, for reasons of scale and specialisation. We'll consider partnering with other countries if they are reliably recycling materials in a way that protects the environment. We need to explore opportunities to partner with Australia, and support our Pacific neighbours by being a destination for materials they don't have the scale or resources to manage.

STRATEGIC ISSUE – THE ROLE OF WASTE TO ENERGY

Waste to energy is a term that captures a wide range of technologies that convert waste materials into a form of energy source. These technologies range from large-scale incineration through to small-scale anaerobic digestion or fermentation. In Aotearoa, examples of waste-to-energy operations include Golden Bay Cement's tyre-fuelled cement production plant in Northland, and methane gas capture at many major landfills.

Waste-to-energy technology is constantly evolving. It's important we have an eye to those technologies that may provide a better alternative to landfill or provide opportunities to process waste materials to support wider environmental outcomes (for example, biofuels).

There are also risks with waste to energy that we need to carefully consider. It's important to understand technology-specific issues, such as:

- potential environmental impacts (for example, by-products such as ash or pollution)
- the type of energy it may displace (renewable or non-renewable)
- the sustainability of feedstock supply.

The most strategic consideration is whether deploying waste-to-energy technologies will support or undermine the waste hierarchy and circular economy principles. The best use of waste to energy involves converting genuinely residual waste – waste that's unavoidable and for which there's no potential for reuse or recycling. We need to carefully consider the forms of waste to energy that feed off useful materials or that could entrench a level of demand for waste materials.

The Ministry for the Environment has published guidance on the matters that need to be considered.

STRATEGIC ISSUE – NET ZERO EMISSIONS BY 2050

Tackling climate change is one of the Government's top priorities, with targets set in legislation to achieve net zero emissions for Aotearoa by 2050. The waste system has a significant part to play in reaching these targets. In 2019, Aotearoa's waste disposal and treatment produced approximately 4 per cent of our gross national emissions; 92 per cent of this was from landfill methane. The Climate Change Commission has set a target for reducing waste-related biogenic methane emissions by 40 per cent by 2035.

The Government is due to adopt our first emissions reduction plan in May 2022, which will finalise the level of ambition for reductions in waste emissions. The final target will inevitably drive significant change in how we manage organic waste materials. Options to cut waste emissions fall into three broad categories:

- reduce the amount of organic waste generated
- reduce the amount that goes to landfill
- reduce emissions from the organic waste that ends up in landfill.

The draft strategy proposals have been developed alongside the work to develop the emissions reduction plan, and the emissions reduction plan consultation document sets out some specific proposals for reducing waste emissions that are also reflected in this draft strategy. The Government will prioritise initiatives that support reducing both waste and emissions, with final decisions in both areas due to be made following public consultation.

The three stages of the journey

We propose managing the overall journey in three stages (figure 4). As explained, at each stage we need to give some focus to the top, middle and bottom of the waste hierarchy, as well as the full range of principles.



Figure 4: Three stages of the strategy journey

Stage 1: 2022–30: Catching up

Get the basics in place and working to:

- sow the seeds for transformational change
- bring our resource recovery systems up to global standards
- reduce emissions from waste.

Aotearoa is in catch-up mode on all fronts when it comes to waste. We don't have adequate planning, regulatory tools, infrastructure and equipment, investment, research or community awareness. The Government's current work programme, with its five objectives and range of supporting projects, has started tackling the gap by:

- building the foundations for a transformed waste system
- expanding investment in the sector
- introducing system-level change
- addressing individual material streams and products
- strengthening operational and compliance activity.

In this first stage, we need to build on that initial work, start using the full range of tools being created and generate momentum for all parts of society to engage in ongoing change.

The following are the main priorities we propose through to 2030.

1. Complete the work to put in place the foundations for transformational change – building the underlying systems, tools, data and reporting we'll rely on to carry the task through.

- Stimulate innovation and redesign to encourage long-term change towards circular supply models and reduce waste being generated, especially in the sectors that generate most waste.
- 3. Establish long-term information and education programmes, grounded in connection and responsibility, as the platform for long-term social and cultural change and new behaviours.
- 4. Get the resource recovery and recycling systems working well by:
 - (a) simplifying the material streams flowing through the system
 - (b) investing in the equipment and infrastructure needed to support consistent and widespread collection, sorting and processing at the community and commercial levels
 - (c) developing markets for end products.
- 5. Reduce emissions from organic waste by reducing the amount generated, diverting more from landfill and improving capture of any methane that landfills do produce.
- 6. Build understanding of the scale and best approaches for remediating the damage from past disposal practices.

The next section explains how we propose pursuing those priorities across this decade. The final section in this part explains the targets we propose to use to assess progress.

Stage 2: 2030–40: Pushing ahead

Increase support and pressure for:

- widespread changes in mindset, systems and behaviour
- optimising the resource recovery system for growing circular systems
- major efforts to remediate and regenerate.

By 2030, we should have:

- fully operating and well-understood supporting systems, planning frameworks, regulatory and investment tools, as well as a building body of evidence and knowledge
- a reasonable number of circular supply models coming on stream and finding acceptance, as well as growing individual and community understanding of the need to transform our behaviour and economy
- a modern resource recovery system that operates well and is steadily reducing the materials in circulation that can't be reused, repaired or recycled
- greatly reduced emissions from waste.

That will provide a solid platform from which to push harder for truly transformational change. Most of our effort should now be directed to moving as much activity as possible into circular models. Therefore, we propose the following as the main priorities between 2030 and 2040.

1. Change social and cultural attitudes to embed individual and collective responsibility for how we use and treat resources.

- 2. Shift the bulk of our economic activity into circular models, using the full range of available tools (from support and investment through to regulation and enforcement).
- 3. Optimise and scale our resource recovery system so it meets our needs and is adapting to integrate with emerging circular systems.
- 4. Break the back of the remediation task for legacy sites.
- 5. Support and invest in production systems that incorporate regeneration from the start.

Stage 3: 2040–50: Embedding a new normal

Embed and integrate:

- circular systems and behaviours across society
- resource recovery systems into closed circular loops
- regeneration into systems of production and use.

All going well, by 2040 we should have:

- a society where most people understand and support a different way of thinking about resources and how we use and manage them
- an economy that is adapting fast, with consumer demand for more
- a resource recovery system that's integrating with circular systems as they develop
- a steady focus on regeneration as a necessary partner to resource use.

At this point, the task becomes to embed and integrate the change, so society is truly transformed, and to address the last vestiges of the old linear models of consumption.

We propose the following priorities between 2040 and 2050.

- 1. Embed circular ways of operating and living so they are the new normal, built on deep personal and social regard for the environmental consequences of poor use of resources.
- 2. Fully integrate resource recovery into 'closed-loop' circular supply chain models, so that materials circulate and are reused endlessly.
- 3. Integrate regeneration fully into resource use and production, so that depleting the planet's resources is not an acceptable option.

Once those priorities are achieved, Aotearoa will be able to call itself a true circular economy, where we do more with less.

Questions

5 Do you support the proposed approach of three broad stages between now and 2050, and the suggested timing and priorities for what to focus on at each stage?

A closer look at stage 1

It's important to set out this first stage of the journey in more detail, so everyone can see what's involved and determine what part they'll play in it.

The priorities identified here will guide where the Government concentrates its energy and focus, across all the levers available to it, including:

- regulatory tools under the new legislation
- investment in national and local infrastructure
- support for community initiatives
- data collection
- information and education campaigns.

Different priority areas will involve different levers and approaches, and in this section we'll set out the headline actions that would support each priority area. The next layer of analysis and planning, leading to implementation, will be set out in the first AIP, which will be produced as soon as the new strategy and accompanying long-term waste infrastructure plan are completed in 2022.

Priority 1: Complete the foundations for transformational change

As we begin a large and long-term programme of change, it's important to get the supporting systems in place so that we manage the change well.

We propose the following as headline actions.

- Get the strategic planning framework of the strategy, infrastructure plan, AIPs and public reporting up and running. Finding new ways to work effectively and in partnership with iwi/Māori, local government and others will be important in making this process work. By 2030 we should have worked through a full cycle of the strategy, along with two rounds of AIPs and reporting on progress, and should be preparing an updated strategy, so that we end the decade with a refreshed strategy ready to take us into stage 2.
- Build a practice of systematically collecting good data, evaluating it and publicly reporting on progress. That will build knowledge for all parties to use, and accountability for those working to achieve change.
- Enact and implement new waste legislation, which will include embedding the strategic planning framework and reporting into law, bringing new obligations and systems into operation (starting with licensing systems for the waste sector and duty-of-care obligations for households, businesses and others), and support and resource newly configured enforcement responsibilities.
- Put in place new and strengthened investment systems and programmes, so we make best use of the waste levy funds to support the strategy's goals.
- Develop strong collaborative relationships and ways of working with iwi/Māori, local government and others whose input will be critical to success.

Priority 2: Stimulate innovation and redesign for long-term change

Research and innovation are critical catalysts for change. But they have a long lead time before they will deliver real change, so it's important to start as early as possible.

We propose the following as headline actions.

- Directly invest in projects and programmes, using funds from the waste levy and potentially other central and local government funders and funding programmes.
- Build the network and community of innovators working towards circular economy solutions.
- Create market opportunities by signalling expectations and likely future changes through the strategy and AIP processes, and ongoing canvassing of future regulatory actions such as the phase-outs of products and materials, or potential bans to landfill.
- Encourage and sponsor change, for example by seeking proposals for new regulated product stewardship schemes.
- Increase consumer demand for circular solutions through ongoing information and education campaigns to raise awareness and understanding.
- Work with industry to change attitudes and behaviours at the sector level, especially in sectors that generate the most waste.

Priority 3: Establish long-term information and education programmes

As with innovation and research, changing public understanding and attitudes takes a long time to deliver results. We need to start now if we're going to change how we think about and manage materials and resources by 2050. Also, every regulatory or system change needs to be supported by clear public information and education materials, so there's a current and ongoing need for a trusted voice and platform.

We propose the following as headline actions.

- Create a consistent brand, style and voice, grounded in the core values of connection and responsibility, building from both the strategy and the duty-of-care obligations in the new legislation.
- Collaborate with others doing related work, especially established non-government organisations, to support consistent messaging and voice, and mutual reinforcement.
- Use the same brand, style and voice to provide information and education to support every new regulatory or system change being implemented, from product bans to product stewardship schemes and recycling changes.

Priority 4: Get resource recovery and recycling systems working well

As explained, there's a lot to do for our resource recovery and recycling systems to catch up to international standards.

We propose the following as headline actions.

- Simplify material streams for reprocessing:
 - continue phasing out hard-to-recycle and low-value materials, with an initial focus on plastics
 - consider incentives to manufacture in ways that make recycling easier, for example through less mixing of materials and easy dismantling.
- Introduce consistent labelling standards to make it easy for people to know what to do.
- Use regulatory tools like duties of care, product bans and disposal controls to channel material flows into the recycling system.
- Improve collection systems across the country, including:
 - standardised residential kerbside collections
 - facilities and services for multi-unit housing like apartment buildings
 - commercial collections
 - better rural systems.
- Support investment in equipment and infrastructure for efficient and widespread collection, sorting and processing of recyclable materials, in line with the long-term waste infrastructure plan.
- Expand investment to also include community enterprises, iwi joint ventures and hapū resource recovery services at regional and local levels.
- Encourage the development of uses and markets for recycled material, so resource recovery and recycling become financially sustainable.

Priority 5: Reduce emissions from organic waste

Reducing emissions remains a critical and urgent issue for the waste sector. The main source of methane emissions is organic waste, including food, green waste (vegetation), paper and cardboard, and construction and demolition waste (for example, timber). Actions under this heading will need to be coordinated with related work under the emissions reduction plan.

We propose the following as headline actions.

- Reduce the amount of organic waste being generated:
 - expand information and education programmes on minimising food waste
 - refine the food production system to minimise waste at every point in the supply chain
 - extend the availability of food rescue programmes
 - stimulate research and investment in new construction methods to minimise organic waste
 - require waste minimisation plans as part of the consenting process for building and development projects
 - support investment in sharing and recovery infrastructure for the construction sector.

- Divert more organic material from landfill:
 - through the recycling and collection systems, increase the amount of organic material separated at source, and collect and process it separately
 - support investment in infrastructure that collects and processes organic material
 - support research into and investment in new techniques and processes for hard-torecycle materials (like treated timber)
 - consider bans on disposal of organic material in landfills.
- Improve landfill gas capture:
 - support ongoing research and investment to improve technology and systems
 - expand gas capture requirements to more classes of landfills.

Priority 6: Understand the scale of past damage and the best approaches for remediating it

This is almost certainly a large and daunting task, but we know it must be tackled. We cannot keep burying our problems, especially for sites at risk of erosion.

We propose the following as headline actions.

- Engage with communities and industries and conduct research with them to assess the scope and scale of the problem, identify closed landfills and informal dump sites including farm dumps, and assess disposal sites for hazardous activities.
- Work with all parties to tackle the urgent sites those that are clearly unstable or unsafe, and risk causing harm to human health or the environment.
- Invest in research and infrastructure to develop new technologies and systems for better and faster remediation.

Questions

- 6 Looking at the priorities and suggested headline actions for stage one, which do you think are the most important?
- 7 What else should we be doing in stage one?
- 8 What are the barriers or roadblocks to achieving the stage one actions, and how can we address them?

Markers of progress | ngā tūtohu tutukitanga

Targets give us both a way to measure progress and a sharper focus on what we're trying to achieve. The challenge is always to select targets that are the most meaningful for the current state and stage.

For this first strategy, we're proposing a small number of broad, strategic-level targets to reduce waste, litter and emissions from waste. These will help us assess overall progress across the many different streams of work that will be under way.

We're proposing targets only for stage 1 of the journey for now – to 2030. That's as far as we can see clearly enough to set measurable and tangible markers. The targets aim to be challenging, but should be achievable if central and local government drive change through initiatives like those in the current work programme and as envisaged in these strategy proposals and enabled through the new legislation.

These targets will be supported by the more detailed work to come in the AIPs, which will map out plans and targets for individual material streams (for example, food waste) and particular areas of work.

One of the challenges with setting targets at the moment is the lack of reliable data on most aspects of our waste system and material streams. Data reliability will improve over the next few years, given the new data regulations and the changes proposed in this consultation paper. As it improves, we should be able to refine and extend the targets we're working with. Any changes to targets or any new targets can be developed through the series of AIPs and the refresh of the strategy due by 2030.

Data limitations are the reason for the different forms of waste reduction targets proposed. Where possible, our preference is to look at waste generation rather than disposal. Waste generation covers what the relevant organisation is getting rid of and includes materials being diverted through recycling as well as those going to landfill or an equivalent disposal method. It therefore represents true 'reduction' in overall waste. We don't have the ability currently to track this for all parts of society however, so in some cases we're proposing targets based on what's sent for landfill disposal only.

Reaching our 2030 targets (table 1) will mark the end of the first stage of our course. They will indicate that the "catching up" stage is complete as we shift our focus to "pushing ahead".

Area	Responsibility	Strategic target (by 2030)
Waste	Whole country Reduce waste generation by 5–10% per person	
	Public sector	Reduce waste generation by 30–50%
	Businesses	Reduce waste disposal by 30–50%
	Households	Reduce waste disposal by 60–70%
Emissions	Whole country	Reduce biogenic waste methane emissions by at least 30%
Litter	Whole country	Reduce litter by 60%

Table 1: Markers of progress for stage 1 – 2030 targets

Targets for reducing waste

The first set of targets measure reductions in the waste we all generate, as well as progress by households, businesses and the public sector specifically. This recognises the fundamental importance of everyone taking greater responsibility for our waste minimisation action and of government leading through its own action.

Overall national target

For the overall national waste generation target, we'll need to establish a baseline and measurement systems. This overall measure is commonly used internationally, and establishing systems to track it will allow us to compare our progress with others more easily.

Measuring the total amount of waste generated includes the waste we recycle, so this target pushes higher up the waste hierarchy towards more circular behaviour.

Households and businesses

Due to the current data limitations, the target for households and businesses is based on disposal data rather than generation.

Right now, we can only track and measure how much overall waste is going to class 1 landfills, which receive waste from both households and businesses. We don't yet have a clear understanding of the overall waste we produce as a nation. From 2024 however, with an improved national data collection system, we will begin to have a much better understanding of our waste and resources flows. This will include the amount of waste being disposed of at almost all landfill types, its composition and where it came from.

Having 2030 reduction targets for households and businesses will provide a clear marker for everyone who generates waste to work towards. It'll build on the initiatives many businesses and communities are already taking to reduce their waste – and will start to bring along those not yet engaged, as we begin our transition to a circular economy.

We have proposed a higher target for households because collection and recycling systems are generally more advanced for this sector, and our current work programme already includes several initiatives that will help households divert and recycle more.

Public sector

The public sector will join businesses and communities who are already leading the way. Government needs to show leadership and be accountable in reducing the amount of waste that its organisations generate.

Through the Carbon Neutral Government Programme, most agencies in the public sector are starting to collect data on how much waste they are sending to landfills. They're also encouraged to collect data on materials going to recycling and composting, and this information will be critical for our reporting on this target. The sector also has a range of strategic mechanisms for reducing waste and emissions, such as all-of-government procurement rules and guidelines.

To accelerate the public sector towards its 2030 target and the overall 2030 waste generation reduction target, we propose a 2026 mid-point target of reducing waste generated by 15–30 per cent. This would better track public sector performance and, importantly, stimulate wide-reaching behaviour change across all other sectors.

Target for reducing methane emissions from waste

The fifth target relates to the reduction of waste-related greenhouse gas emissions, reflecting the important role waste minimisation will play in our efforts to tackle climate change, and the urgency of the task. This strategy's 2030 target is directly linked to recommendations by the Climate Change Commission.¹¹

Again, the data is critical. We have good data now for class 1 (municipal) landfills, but this is just one measure that informs our understanding of emissions from waste disposal. At present there is high data uncertainty for class 2–4 landfills.

Funding and implementing a national licensing regime for all types of disposal and resource recovery facilities would help unlock our ability to measure and report on waste emissions in the future. This is being considered as part of the proposals for new waste legislation. Improved data could also see a significant shift (up or down) in baseline emissions, as we learn more.

Reducing biogenic methane emissions from waste by 30 per cent in 2030 (towards a 40 per cent reduction by 2035) means acting on all fronts, quickly. That is why this issue is a top priority for the first stage of this strategy, as well as for the emissions reduction plan being developed.

Target for reducing litter

The final target relates to litter. Litter is a product of a throw-away society and demonstrates our collective failure to minimise waste. It's a highly visible blight on the environment that causes concern for many people. We don't want litter or any illegal dumping to undermine efforts to move to a circular economy and regenerating environment. Measuring the amount we litter is also useful for assessing changes in attitude and the sense of personal responsibility for waste.

We can currently track and measure our performance on litter, with baseline information from recent litter audits carried out by the non-government organisations working in this field. We need to continue to support these groups.

Government will need to work alongside others to achieve this target. Pathways to achieving this target include:

- broad-reaching national behaviour change campaigns
- strengthened legislation and compliance monitoring and enforcement tools
- building on local and central government policies that support reducing inappropriate disposal, for example:
 - phase-outs of hard-to-recycle and single-use plastics
 - regulated product stewardship schemes
 - potential container return scheme.

¹¹ Climate Change Commission. 2021. Aronga Kaupapa – Ngā Tukupara Policy direction for waste and fluorinated gases. In: *Ināia Tonu Nei: A Low Emissions Future for Aotearoa*. Wellington: New Zealand Government. pp 296–302.

Questions

- 9 Do the strategic targets listed in Table 1 focus on the right areas?
- 10 Where in the suggested ranges do you think each target should sit, to strike a good balance between ambition and achievability?

Part 3: Developing more comprehensive legislation on waste: issues and options

Introduction

Aspects of Aotearoa New Zealand's waste system have traditionally been regulated through provisions in local government and public health legislation, the Resource Management Act 1991 (RMA) and the Litter Act 1979 (Litter Act). The system has been largely left to individual local authorities and the private sector.

This started to change with the Waste Minimisation Act 2008 (WMA), although the underlying unregulated model did not change. The WMA brought local government and public health provisions into the same Act, and created a specific role for central government with the introduction of:

- the waste levy and the processes for distributing the funds it generates
- a regulatory framework for introducing voluntary and mandatory product stewardship schemes
- a range of regulatory powers relating to individual products and materials to drive change
- a Waste Advisory Board.

Most central government powers in the WMA have been little used, but a recent increase in activity has shown improvements are needed.

Rethinking how we consume materials and generate waste is now recognised internationally as vitally important, and closely tied to achieving climate change goals, improving environmental outcomes and living within the boundaries of the planet's resources.

In June 2020, as part of its decision to increase the waste levy, the Government decided to review and replace the WMA and the Litter Act to ensure we have the necessary tools and arrangements to support the delivery of a new waste strategy and the transformation of the waste sector.

New legislation will enable a reset of the purposes and principles, governance arrangements, and roles and responsibilities in the waste sector, and offer the opportunity to strengthen and clarify regulatory and enforcement powers.

New and improved legislation will also help establish the foundations for transforming how we think about and manage waste, alongside the development of a new long-term waste strategy, expanded investment and other parts of the Government's waste reduction work programme.

A new Act will aim to:

- embed a long-term strategic approach across central and local government for achieving change, supported by consistent data collection, evaluation and reporting
- create the governance and administrative framework needed to support effective investment and use of waste levy funds
- put individual and collective responsibility for how we deal with unwanted material at the heart of a new regulatory framework of obligations on organisations, households and individuals, building on the duty-of-care model used in other jurisdictions
- provide new and enhanced regulatory tools and levers to support the waste strategy and emissions reductions

- create stronger accountability and reporting provisions
- update and broaden compliance, monitoring and enforcement powers
- fix miscellaneous aspects of the existing legislation.

New legislation will also update and incorporate the Litter Act, which prohibits littering and dumping in public places, and reframe how litter is thought of and managed. As we develop proposals and draft legislation, we will take care to align the new legislation with RMA reforms.

The scope of the reform proposed here is ambitious, involving significant change to how we regulate waste and the waste sector, as well as the circulation of products and materials in our economy. This consultation paper sets out the potential scope and content for initial feedback. The detail of the proposals in any particular area will be developed in light of the comments we receive, working as needed with interested parties.

The overall legislative approach is likely to be one of signalling and enabling changes to be phased in over time through regulatory powers, rather than immediate implementation of all parts of the proposals. This will enable central and local government, industry and society to work together to prepare and adapt.

We welcome comment on the relative priorities of the different initiatives raised in this paper and on which areas should be tackled first.

Alongside making suggestions for the new waste strategy, we invite you to consider the issues we've raised about the current legislation and possibilities for the new legislation. Your feedback will help shape our final proposals for reform.

Embedding a long-term, strategic approach to reducing waste

New and more ambitious purpose, principles and Te Tiriti o Waitangi references

The WMA's purpose provision guides the use of all the powers in the Act as well as allocation of levy funds. It currently states:

The purpose of this Act is to encourage waste minimisation and a decrease in waste disposal in order to-

- (a) protect the environment from harm; and
- (b) provide environmental, social, economic, and cultural benefits.

Although these are worthy ideas, a broader and more ambitious approach is now needed. Reducing harmful emissions from waste is now another important priority. Newer Acts in other countries focus on the need to move towards a circular economy, rather than simply to minimise and manage waste. A broader approach of this kind fits better with our current understanding of the scale of the problem, the transformative change needed and the likely scope of the new legislation.

The WMA does not currently contain any principles to support its purpose or guide actions under it, nor does it refer to Te Tiriti o Waitangi (Te Tiriti) or te ao Māori. These are notable gaps in modern environmental legislation for Aotearoa.

We propose that the opening part of the new legislation includes a broad and ambitious purpose statement based on the need to move to a circular economy and minimise waste as part of that shift, supported as needed by guiding principles and references to Te Tiriti.

The detailed content of these provisions will be informed by several related pieces of work. Once finalised, the vision and principles of the new waste strategy will provide a strong conceptual foundation for these provisions. It will also be important for the new provisions to align with the work under way on the Natural and Built Environments Bill, particularly in relation to Te Oranga o te Taiao.¹²

Requiring all tiers of government to take a long-term, coordinated view

A statutory requirement for a long-term strategy

Central government isn't currently required to produce or maintain a strategy on waste, and whether one is produced depends on the priorities and interests of the government of the day.

¹² Te Oranga o te Taiao is a new concept included in the purpose provision of the Natural and Built Environments Bill. It incorporates the health of the natural environment and its capacity to sustain life, the relationship between iwi and hapū and te taiao (environment), and the interconnectedness of all parts of the natural environment.

If a strategy or equivalent document does exist, however, territorial authorities must have regard to it when developing the individual waste management and minimisation plans the WMA requires them to have.¹³

In recent years there have been many calls for central government to lead change by setting a clear, long-term strategic direction for waste. That is needed so that the many individual actors (local authorities, businesses, community groups) have some certainty about the nature and pace of change and can invest and adapt accordingly.

This paper has outlined the proposals for a new strategy to meet this need alongside these proposals for legislation. To ensure this approach continues, we propose that new legislation includes provisions to require the government to produce a long-term national strategy for tackling waste in line with moving Aotearoa towards a circular economy and to refresh that strategy periodically. The strategy would need to be supported by a series of shorter-term AIPs, setting out the immediate priorities and more detailed intentions for action and investment over a two- or three-year period. We welcome comment on how regularly the strategy and AIPs should be refreshed and how much of this system should be a legal requirement under the legislation.

The new and future strategies and AIPs will influence behaviour and planning across all sectors. They'll help businesses, community groups and individuals to set their own strategies and to invest and prepare for change.

For central government, the strategy and supporting AIPs will inform the development and use of regulatory levers in the new Act, as well as how various non-regulatory tools are used by government to achieve change. These include public information and education campaigns, and investment in infrastructure, research, innovation, industry and community initiatives, and more.

Linking the strategy to local government planning

To be effective in driving change, the strategy and AIPs also need to connect strongly with local government planning and reporting. Given their greater breadth and scope, and potential changes in local government responsibilities, the strategy and AIPs are likely to be relevant to both regional and territorial authorities, and to more planning than the waste management and minimisation plans currently required by the WMA.

The strategy and AIPs should influence local authority planning wherever relevant, whether in a long-term or annual plan, local infrastructure strategy or elsewhere. If the strategy and AIPs are to be effective in driving change, they need to have strong influence. The current requirement for territorial authorities to simply "have regard" to the strategy as they prepare their own plans may need to be strengthened.

We're interested in feedback on how this sequence of strategy, AIPs and supporting central and local plans might best fit together, including:

- how often each should be refreshed
- how to mesh that refresh with existing planning cycles under the Local Government Act

¹³ Part 4 of the WMA requires territorial authorities to have a plan setting out objectives, policies, methods and funding for achieving effective and efficient waste management and minimisation within the district.

- how tight the link between them should be
- how much should be set out and required through the legislation
- how much should be left to develop in practice.

For example, one way to streamline requirements would be to remove the requirement for a separate, dedicated waste management and minimisation plan, and instead include it as a specific component in long-term plans, where it can sit alongside other planning for service delivery, community building, infrastructure, financial sustainability and so on. Although there's considerable benefit in a separate single-purpose document, it does create an extra burden for local authorities.

Reporting on progress

We propose that new legislation should also require regular public reporting on progress. This creates transparency and accountability, which in turn helps drive action and change from everyone who plays a part. Central government should be required to report:

- at an overall level on progress, including against the specific targets it has set for the country
- generally on waste data
- on the use of levy revenue.

This should be supported by local authority reporting on progress against the same measures and on their use of levy funds, as well as reporting from relevant parts of the waste management industry.

Roles and responsibilities across government

New waste legislation should clearly set out which parts of central and local government are responsible for each function under a new regulatory framework for reducing waste.

Central government

Central government (Ministers and Cabinet) would likely be responsible for:

- national strategic direction (including approving the new and updated national waste strategy and more regular AIPs)
- regulatory changes (such as changing levy rates, approving regulated product stewardship schemes, and product controls and bans)
- determining spending priorities for the levy revenue available to central government
- approving significant spending, such as major infrastructure investments.

Central government agencies would likely be responsible for:

- system oversight, policy and regulatory functions, and strategy and reporting functions:
 - national policy and legislative development
 - advising on use of regulatory powers (such as product controls, levy changes and regulated product stewardship schemes)
 - developing and updating the national waste strategy and AIPs

- liaising with local government and other key partners
- collecting and analysing national data and monitoring progress
- reporting against the waste strategy and action plans
- operational and regulatory support:
 - collecting and distributing levy funds
 - administering nationwide licensing and tracking systems (proposed in the Licensing of operators section)
 - administering and/or overseeing regulated product stewardship schemes and any deposit return schemes that may exist in the future
- allocation and investment of central government levy revenue
- public information, awareness and education campaigns
- at least some compliance, monitoring and enforcement (particularly for product controls and regulated product stewardship schemes).

The Ministry for the Environment would not necessarily be responsible for all the roles and functions at the central government agency level. There are various models around the world for carrying out these functions. High-level policy and sector stewardship should sit with a core government department, but some or all of the other functions could be carried out by either a government department or some other entity. There have also been suggestions that a separate stand-alone Crown entity could be created, given the likely scale and breadth of future activity and the need for sustained long-term focus.

Machinery of government questions like this always need to be considered carefully. Organisational change takes significant time, money and energy, so the case for any change needs to be strong. Keeping all functions together can help ensure strategic coordination, whether in the Ministry or elsewhere. But there are also advantages in specialisation and building on expertise where it already exists. Stand-alone agencies can provide focus and depth of expertise, but they also risk being disconnected from related government work and increasing the amount of coordination and monitoring needed.

Independent bodies

Independent expert advice is also important to support a fast pace of change in how we manage the ongoing waste work programme. The WMA provides for the Waste Advisory Board, which has a limited role, capacity, and level of funding. The Board provides independent advice to the Minister for the Environment on waste minimisation, including advice about product stewardship, the waste levy and making regulations under the WMA.

We seek your input on which parts of the waste minimisation system, and which decisions, would benefit from independent expertise and advice. For example, this might include developing future waste strategy and AIPs, individual regulatory decisions such as product bans, and assessing significant investment and funding proposals.

There are a number of ways we could provide for an independent, expert advice function, including:

• an advisory body that makes recommendations to the Minister or the Ministry (similar to the existing Waste Advisory Board)

• separate bodies for different functions (for example, regulatory functions could be separated from investment functions or research and reporting functions).

Role and participation of Māori

A new legislative framework, along with growth of the waste reduction work programme and expansion of the waste levy, creates an opportunity to significantly increase the participation of Māori in decision-making processes for the waste sector.

We would like to seek input from Māori on how we best ensure we have Māori advice and expertise as part of any new independent, expert advisory bodies.

As well as expertise, we need to consider how Māori will participate in decision-making at different levels of the new system, particularly in relation to investment.

Roles and responsibilities for local authorities

The roles and responsibilities of territorial authorities under the WMA are far from comprehensive and often ambiguous. Territorial authorities must promote effective and efficient waste management and minimisation within the district (section 42). They must also have a waste management and minimisation plan (section 43), which must govern any waste service, facility or action, whether carried out by the authority itself or contracted out. Any waste collection services provided must be prompt, efficient and regular (section 54). However, territorial authorities have considerable discretion about the extent of their involvement. How these statutory responsibilities are carried out varies around the country.

Territorial authorities usually limit their involvement in collection and disposal of waste to residential collection. The private sector typically provides waste services to businesses, often with minimal regulation. Territorial authorities are responsible for issuing consents for waste and recycling facilities and can use bylaws to regulate further, such as through local licensing systems.

Regional councils have an enforcement role where there have been unacceptable levels or types of emissions or pollution. They're also responsible for regulating disposal of waste to land (for example, setting how landfills should be managed to avoid or mitigate environmental effects such as discharges to water or air). Territorial authorities also regulate aspects of land use, for example controls to limit noise and odour.

The RMA reform proposals have started a discussion about the balance between territorial and regional responsibilities, which is also relevant for waste management activity. We're interested in views on where responsibilities are best located for planning, service delivery, regulatory activities such as licensing, and enforcement. We know the answer may be different for different topics and sometimes might involve a combination of responsibilities. For example, licensing systems could be established nationally but monitored and enforced regionally or locally.

There might be advantages to planning waste minimisation needs at a regional level instead of (or as well as) at a local level; local government could be encouraged (or required) to develop and deliver regional plans, or this could be a new role for regional councils.

Greater standardisation and transparency have the potential to enhance competition and service to consumers. We also seek views on:

- whether there should be a stronger or clearer statement requiring local authorities to
 provide collection and recycling services and disposal facilities (either directly or through
 contracted providers)
- what scope there is for more guidance (or standards) from central government about how services should be delivered (for example, to standardise kerbside collections).

Questions

- 11 Do you think the new legislation should require the government to have a waste strategy and periodically update it?
- 12 How often should a strategy be reviewed?
- 13 How strongly should the strategy (and supporting action and investment plans) influence local authority plans and actions?
- 14 What public reporting on waste by central and local government would you like to see?
- 15 Do you agree with the suggested functions for central government agencies?
- 16 What central agencies would you like to see carry out these functions?
- 17 How should independent, expert advice on waste be provided to the government?
- 18 How could the legislation provide for Māori participation in the new advice and decisionmaking systems for waste?
- 19 What are your views on local government roles in the waste system, in particular the balance between local and regional? Who should be responsible for planning, service delivery, regulatory activities like licensing, and enforcement of the different obligations created?

Putting responsibility at the heart of the new system

The concepts of responsibility and connection are at the heart of the new waste strategy proposals. They could also provide a strong foundation for a new and more comprehensive regulatory system for the waste sector, following the example of countries that have framed their laws on waste in terms of duties of care.

Duties of care

These systems use the concept of a duty of care to put obligations on all those involved in producing or creating waste, as well as in its collection, storage, transport, processing, treatment and disposal. The obligations link together by requiring those who collect and manage waste to be authorised or licensed, and to maintain records of what's transferred between them, to enable tracing and accountability. The overall system aims to:

- minimise the production of waste
- maximise the volume and quality of recycling
- avoid environmental harm.

These duties of care on people and organisations complement those created by product stewardship schemes, which essentially create duties of care relating to a product.

In the United Kingdom, the Environmental Protection Act 1990 and associated regulations set out a range of duties or obligations on different people and groups across the full waste management supply chain. The coverage and detail of the obligations vary across England, Wales, Scotland and Northern Ireland, as each jurisdiction gradually extends and strengthens the duties. Table 2 summarises the types of obligations that currently exist.

Group	Duty	
General (all persons)	Must dispose of waste appropriately, and must not dispose of waste to land without authorisation.	
Household (all occupiers)	Ensure waste is:stored safely without harm to the environmentonly removed by an authorised collector.	
All waste holders (excluding households)	Anyone who produces, imports, keeps, stores, collects, transports, treats or disposes of waste must take all reasonable steps to ensure waste is managed properly. These steps include:	
	 take all reasonable steps to apply the waste hierarchy to managing waste, to promote high-quality recycling 	
	store waste safely and securely	
	 prevent it from escaping from control, causing pollution or harming human health 	
	ensure the person it's being transferred to is authorised to take it	
	 complete waste transfer notes, including a full, accurate description of the waste, and keep them for at least two years. 	

 Table 2:
 Examples of duty-of-care obligations in the United Kingdom

Group	Duty	
Business	 Meet general waste holder obligations, plus: present glass, metal, plastic, paper and card (including cardboard) for separate collection take steps to maintain the quality of dry recyclables presented for recycling, such as by avoiding contamination from non-target materials. 	
Food business	Meet general waste holder obligations, plus:ensure the separate collection of food waste over a specified amount.	
Waste collectors	 Meet general waste holder obligations, plus: be authorised under the law to collect and receive waste get a description of the collected waste in writing collect and carry separated dry recyclable and food waste ensure recyclable materials are not mixed with other wastes in a way that hampers recycling. 	
Waste manager (transfer stations, sorting facilities, treatment sites, landfills)	 Meet general waste holder obligations, plus: be authorised under the law to receive and manage waste have appropriate environmental permits for waste management activities of the site ensure waste being transferred into and out of the site is covered by a wast transfer note describing the contents ensure recyclable materials are not mixed with other wastes in a way that hampers recycling. 	

These duty-of-care obligations covering the "supply chain" for waste management sit alongside other regulatory measures to control how waste is managed. For example, in relation to food waste, Scotland:

- requires food businesses to separate it through the duty of care
- requires separate collection and management through the duties of care along the supply chain
- prohibits businesses from using macerators to dispose of food waste into the sewer system
- is due to ban organic material from landfills by 2025.

Between them, measures like this can significantly reduce the methane emissions caused by organic material in landfills, alongside the waste reduction outcomes.

The duties of care in the United Kingdom are supported by:

- more detailed codes of practice to explain how they apply to different groups (for example, farmers)
- a substantial body of guidance material for all those affected.

Administrative systems have been developed to make the process of transfer notes and authorisations function smoothly in the background. The duties are also backed up by offence provisions carrying a range of penalties.

We propose introducing duty-of-care obligations as the foundation of a new regulatory regime for waste. Statutory provisions like these could provide a strong platform for changing attitudes to waste in Aotearoa by reframing the issue for long-term public information and education campaigns and creating the legal architecture for more comprehensive and interconnecting regulation of the sector.

Licensing of operators

The United Kingdom system depends on a licensing or authorising system for all operators in the waste management system. Some territorial authorities in Aotearoa already operate local licensing systems through bylaws. These are useful but contribute to the proliferation of slightly different systems and processes around the country. If there's no local licensing system, anyone can operate a waste service or disposal facility, as long as they obtain the appropriate resource consents for the site – there's no application or approval process under the WMA to control who can collect, process or dispose of waste and no obligation to minimise waste.

The Ministry for the Environment does not have a comprehensive record of the type and number of disposal facilities around the country, let alone collectors and other operators. The Ministry only interacts regularly with the 34 class 1 landfills currently subject to the waste levy. Disposal facilities can change the types of waste they receive without reference to the Ministry, and in this way they can change classes (as long as they have the appropriate consents). There's also significant regional disparity in the waste each type of landfill can receive.

The number and range of waste disposal facilities subject to the levy and/or reporting requirements will grow considerably over the next two years – from 34 to at least 500, over six different facility types. A change of this scale means the supporting administrative and oversight systems also need to change significantly. Introducing a licensing system for operators is a possible solution.

What is licensing?

Licensing controls who can undertake an activity by requiring licence holders to meet certain criteria. Key features of a licensing system include:

- requiring someone to have a licence before undertaking an activity (such as operating a landfill). There may be a specified threshold before a licence is required
- a framework that sets out:
 - when a licence is and isn't required
 - who may hold a licence and on what terms
 - what activities the licence would cover (for example, the types and volume of waste that a facility can receive, store and dispose of)
 - the application, change and renewal process
 - the process for revoking and removing a licence
 - licence conditions (including management standards)
 - data and reporting requirements
- robust compliance, monitoring and enforcement.

Benefits of licensing systems

Licensing systems are used internationally to improve the identification, quality, oversight and accountability of those working in the waste management sector from collectors through to exporters, as well as to support tighter regulation of how waste is dealt with through duty-of-care systems. Introducing a licensing system would also help Aotearoa meet its international law obligations under the Basel Convention. This Convention includes an obligation to prohibit people transporting or disposing of hazardous and other waste (including household waste and some plastics) unless they're authorised to do so.

Requiring operators to apply for a licence provides an opportunity to assess the suitability and quality of the operator. As part of this assessment, many countries use a 'fit and proper person' test, which helps identify operator risk and increases the likelihood that services and facilities will be appropriately managed. Checking compliance with other legal requirements could also be part of the process and reinforce requirements for resource consents, emissions responsibilities, and health and safety obligations.

Licences can differentiate between the different services and types of facilities across the system. They can include conditions to keep the system's information up to date, and to notify and update the licence when an operator wants to change the service or facility (for example, by changing the type or amount of waste they receive and so changing the landfill class). This would help build and maintain a much stronger information base on the sector.

Other licence conditions might include requirements to:

- maintain the equipment and information needed to calculate the amount of levy payments
- pay the levy promptly
- provide specified data and information, which would help build evidence on the current state of the sector and track improvements
- provide annual reports on performance
- undergo periodic audits to check compliance with relevant standards and conditions of operation.

The ability to remove a licence from an operator is another powerful tool for encouraging high-quality operators and compliance with requirements. This could be a stronger driver of behaviour than prosecution.

Any licensing system would need to be supported by appropriate offence provisions, for operating without the appropriate licence, failing to pay the levy properly and other offences. It would also need to be supported by good administrative systems and processes, including clear supporting guidelines and information.

In a country of our size, it would be better to have a single, consistent nationwide licensing system than to continue with individual territorial authorities introducing their own systems – particularly as many larger waste management companies operate in many local government jurisdictions. It would also result in higher-quality data and lower transaction costs for everyone. It would be important to manage the transition to a national system carefully.

We propose introducing a nationwide licensing system for landfill operators and potentially for all operators in the waste management system working across different sectors. The package of duty-of-care provisions, licensing and potentially a tracing system amounts to a significant new regulation of the sector, with costs for both the sector and the agencies responsible for administration and enforcement. However, international waste management companies will be familiar with similar requirements in other jurisdictions. Careful assessment of the costs and benefits will be needed as we develop more detailed proposals.

Reframing how we think about litter

This duty-of-care approach, with a focus on personal responsibility, also provides an opportunity to reset our attitudes and regulatory approach to litter. At present, littering risks being seen as a trivial issue by many, but has potentially serious consequences in terms of the pollution and environmental harm it can cause.

As part of duty-of-care provisions, we propose a basic obligation on all people to dispose of waste appropriately. This would include the full spectrum of disposal activity, from littering cigarette butts through to fly-tipping, unlawful dump sites, and more. The duties of care can also require people to secure the waste or material they're responsible for, to prevent it becoming litter by accident.

Within that overall duty, individual obligations and offences will need to be specified to enable appropriate levels of enforcement mechanisms and penalties. However, they would clearly be in the same family of offences and fall under the umbrella of environmental crimes. See the Improving compliance and enforcement section for options for mechanisms in this area.

Although it's important to have an effective enforcement system, international research shows the most effective way to reduce litter is to change attitudes, awareness and behaviour through education, incentives, building community engagement and ownership of the problem. Reframing the issue through the duty-of-care framework to be a matter of personal responsibility for the health of the environment can be a powerful starting point for long-term information, education and community engagement campaigns.

Hazardous waste

Most hazardous waste is generated by industrial processes, such as sludge from timber treatment facilities, residues from pesticide formulation, and solvents from sources such as dry cleaners, painters and the printing industry. There are also 'waste hazardous substances' in private dwellings and businesses that are often not recognised or handled as such. The collection, transport, storage, treatment and disposal of hazardous waste need to be carefully handled to reduce risks to human health and the environment.

Hazardous waste is regulated by many agencies, including local authorities, WorkSafe and the EPA. The main relevant laws are the RMA, the Hazardous Substances and New Organisms Act 1996 (HSNO Act), Imports and Exports (Restrictions) Act 1988 and Health and Safety at Work Act 2015. The EPA issues import and export permits for hazardous waste, which gives effect to international obligations under the Waigani and Basel Conventions.

In 2019, a working group led by the EPA reviewed the compliance system for hazardous substances, including hazardous waste. One of its findings was that hazardous waste treatment is the least-developed aspect of the regulation of hazardous substances in Aotearoa.¹⁴ It confirmed that the current regulatory situation is incomplete and complex.

¹⁴ Ministry for the Environment. 2019. Hazardous Substances Compliance System Findings Report. Prepared by the Hazardous Substance Compliance System Technical Working Group for the Ministry for the Environment and the Environmental Protection Authority. Wellington: Ministry for the Environment. Retrieved from www.epa.govt.nz/assets/Uploads/Documents/EPA-Publications/Hazardous_Substances_ Compliance_System_Findings_Report_2019.pdf (12 September 2021).

Better regulation of hazardous waste could be pursued through reform of the RMA, HSNO Act or Imports and Exports (Restrictions) Act 1988 or through new waste legislation – or through some combination of these measures. In particular, it would be possible to extend the following potential regulatory tools to cover hazardous waste, as well as other parts of the waste sector:

- duty-of-care obligations
- licensing requirements for operators involved in collection, transportation, storage, export and disposal of hazardous waste
- mandatory track-and-trace systems for hazardous waste and other wastes of concern being collected and managed, including after they have been exported
- improved compliance, monitoring and enforcement tools, along with clear allocation of responsibility to particular agencies.

Questions

- 20 Do you see benefit in adapting the United Kingdom's duty-of-care model for Aotearoa New Zealand's waste legislation, supported by appropriate offences and penalties?
- 21 Do you support strengthening obligations around litter by creating an individual 'duty of care' to dispose of waste appropriately?
- 22 What else could we do so that litter is taken more seriously as a form of pollution?
- 23 Do you support a nationwide licensing regime for the waste sector?
- 24 Should the new legislation include a power to require a tracing system to be developed for some or all types of waste?
- 25 What aspects of the proposals for regulating the waste sector could be extended to apply to hazardous waste?

Improving legislative support for product stewardship schemes

Product stewardship schemes mean responsibility and cost for a product's lifecycle and waste management stay with manufacturers, importers, retailers and users, rather than falling on communities, councils and nature. Internationally, product stewardship schemes are important tools for transitioning to a circular economy.

The schemes typically work by requiring a fee to be paid when the product first enters the market. The fees are held in a fund and used to ensure products are recycled or safely treated as part of disposal. Some schemes require retailers and others to take back products or packaging.

There are four possible layers to the current product stewardship system in Aotearoa.

- Voluntary and private: A business or sector sets up a product stewardship scheme without any government involvement.
- Voluntary and accredited: If a business or sector wants a scheme to be formally recognised, it can apply to the Minister for the Environment for accreditation under the WMA. The Minister must accredit the scheme if it meets the statutory criteria. The Ministry for the Environment has statutory power to monitor accredited schemes and can regulate to recover its costs from the scheme.
- Mandatory and accredited: The WMA gives the Minister power to declare something to be a "priority product", which triggers a requirement for a scheme to be developed and accredited.
- Regulated, mandatory and accredited: Once a scheme for a priority product has been accredited, the government can prohibit the priority product from being sold other than in accordance with the scheme. The prohibition is backed up by offence provisions.

Twelve voluntary product stewardship schemes have been accredited and are active. There are no regulated product stewardship schemes yet in Aotearoa, but seven are being developed.¹⁵

Recent work with these provisions has shown there's scope to improve them, through a mix of:

- broadening the purpose and objectives of product stewardship schemes
- streamlining processes
- clarifying and strengthening requirements
- supporting them with better enforcement powers and arrangements.

¹⁵ In 2020 the Government announced seven "priority products" under the WMA, signalling the start of developing regulated product stewardship schemes for tyres, e-waste, large batteries, refrigerants, farm plastics, agrichemicals and their containers, and plastic packaging. For more information on how the current system works, see: Ministry for the Environment. 2019. *Proposed Priority Products and Priority Product Stewardship Scheme Guidelines: Consultation Document*. Wellington: Ministry for the Environment. Retrieved from https://environment.govt.nz/publications/proposed-priority-products-andpriority-product-stewardship-scheme-guidelines-consultation-document/ (12 September 2021).

Accreditation of voluntary schemes

Voluntary schemes could play an important part in the move to a circular economy, by allowing businesses and sectors to experiment with how best to reduce and manage their waste. As a form of government endorsement, accreditation gives credibility to a scheme, which may provide a marketing advantage for businesses and reassurance to customers.

However, the accreditation process can be time-consuming and costly for the businesses involved, the organisation managing the scheme, and the Ministry. Schemes can also suffer from limited participation and coverage, which affects what they can achieve. For instance, despite there being four accredited voluntary schemes for types of e-waste, and collection days organised by local councils, the total estimated recycling rate for e-waste in Aotearoa is less than 2 per cent.

The current requirements can also be quite inflexible in how schemes are initially reviewed and approved, and how they can be changed or improved over time.

We're interested in views on whether voluntary accreditation is a useful part of the system or whether it would be better to focus public and private sector effort on mandatory schemes.

The government could still support voluntary schemes even without accreditation, for example with funding and publicity. It might also be possible to include participation in product stewardship schemes in future eco-labelling initiatives.

Accreditation process

There's scope to improve the accreditation process, whether for voluntary or mandatory schemes. For example:

- the required objectives are currently limited to "measurable waste minimisation, treatment or disposal", which now seems both too narrow (in its focus on the lower end of the waste hierarchy rather than broader circular economy goals) and too limited in its ambition (in that it doesn't require the scheme to try to achieve significant change)
- there's no requirement for independent third-party assessment of proposed schemes to test and validate what's proposed
- there's little if any discretion for the Minister to request or require improvements to a scheme once it meets the statutory criteria and guidelines, whether during the initial approval and accreditation process or once it's operating
- any significant variation to a scheme requires it to reapply for accreditation
- if there are concerns about a scheme, the Minister's only formal power is to revoke the scheme rather than any more nuanced response.

We propose addressing all these points in the new legislation. We welcome views on these and other ways to imHprove and strengthen the criteria and process for developing and accrediting product stewardship schemes.

Putting mandatory and regulated schemes in place

The process to establish a regulated product stewardship scheme can be used to create government-led, industry-led or collaborative ('co-designed') schemes. The schemes may or may not be regulated to require participation. The process has three key elements.

- The Minister for the Environment consults on and makes a priority product declaration (section 9), which means a product stewardship scheme must be developed (section 10). The Minister may also consult on and issue ministerial guidelines (section 12), setting out the government's waste minimisation expectations for the scheme.
- Industry (or the government, or both together) designs a scheme and, if it meets the accreditation requirements and any ministerial guidelines, the scheme is accredited.
- The government may consult on and develop regulations to underpin the scheme, primarily through section 22(1)(a), through which it can ban the sale of the priority product unless it's covered by the scheme essentially making the scheme compulsory.

The process is intended to provide direction and assurance to industry stakeholders so they can develop a scheme knowing what the government's expectations are. It also allows competition between different schemes for the same products (although competing schemes are not well suited to Aotearoa given our small size and constraints in published guidelines).

The seven schemes going through this process are co-designed to be implemented under the current Act, with section 22 regulations underpinning them. It seems unlikely that a mandatory scheme would not be accompanied by regulations, so we'll consider how to simplify and clarify the relationship between development, accreditation and the making of regulations to ensure the process is seamless. It would also be useful to have clear capacity to intervene or change approach part way through a development process, if needed.

The legal provisions currently needed to support a product stewardship scheme are likely to require a mix of the regulation-making powers in sections 22 and 23 of the WMA. This seems unnecessarily complex, in law and practice. We propose creating stand-alone powers specifically designed to support product stewardship schemes.

For example, a product stewardship scheme is likely to involve a fee. This fee moves the end-of-life costs of a product into the price when it is purchased new. Fees are collected by a government agency, directed to the relevant product stewardship organisation and used to ensure an environmentally sound use for the product when it becomes waste. At present, that fee would need to be authorised under the general power in section 23 rather than under the product stewardship regulation-making power in section 22. The fee-setting power may also prove too limited and need to be broadened into a power to set and charge a levy, so that schemes can be fully self-funding.¹⁶

A new levy power could also enable 'eco-modulation'. This is where charges are structured to penalise the use of less environmentally friendly materials and reward the use of better ones. Products that are harder to recycle could be charged more, or there could be levy fee reductions for materials that can be easily recycled.

The legislation could also specify that the government can contract or appoint an independent third-party organisation to manage schemes.

We're interested in all feedback on how to improve the process and powers for developing regulated product stewardship schemes, especially given the likely increase in the number of schemes in future. There are many systems operating around the world and we can learn from

¹⁶ Controller and Auditor-General. 2021. Setting and Administering Fees and Levies for Cost Recovery: Good Practice Guide. Wellington: Office of the Auditor-General. Retrieved from https://oag.parliament.nz/ 2021/fees-and-levies (12 September 2021). The Treasury. 2017. Guidelines for Setting Charges in the Public Sector. Wellington: The Treasury.

overseas experiences. There's no one model that can be copied between countries, but there are design principles common to successful schemes, such as clearly articulated intentions and roles, transparency and fairness for stakeholders (current and future), resourcing, and a monitoring and enforcement framework.¹⁷

Monitoring, reporting and enforcement

Once a product stewardship scheme has been accredited, the Ministry for the Environment can monitor its performance and recover the costs of doing so from the scheme (if regulations allow that). However, the WMA contains few formal tools for responding if a scheme is performing poorly. The main formal power is to revoke accreditation for the scheme as a whole. We propose a more productive approach, with new legislation specifying intermediate steps, such as public reporting of results and creating a process for putting a scheme on notice to improve its results.

Mandatory and regulated schemes also raise detailed questions about compliance and enforcement at the level of individual businesses and participants. Participation in these schemes is compulsory, so operating outside one becomes an offence.

As with all areas of legal regulation, the aim is to achieve high levels of voluntary compliance. That means the legal obligations must be well designed and practical, and supported by effective education and implementation guidance so people understand the obligations and how to comply with them.

The obligations also need to be supported by more effective investigation powers (including broader powers to obtain information from other government agencies) and a wider range of enforcement options to better reflect the different levels of severity of offending. This is a problem common to most aspects of the WMA. We discuss it specifically in the Improving compliance, monitoring and enforcement section.

Questions

- 26 Should the new legislation keep an option for accreditation of voluntary product stewardship schemes?
- 27 How could the accreditation process for new product stewardship schemes be strengthened?
- 28 How else could we improve the regulatory framework for product stewardship?

¹⁷ Peterson D. 2014. Effective product stewardship models: a look at overseas evidence. Presented at WasteMINZ Annual Conference, Wellington, October.

Enhancing regulatory tools to encourage change

Section 23(1) of the WMA empowers the government to make various regulations in relation to products, materials and waste. These may be used with a product stewardship scheme or as stand-alone regulations. The powers are:

- controlling or prohibiting disposal of products or waste (paragraph (a))
- controlling or prohibiting manufacture or sale of products that contain specified materials (if there's an available alternative) (paragraph (b))
- requiring a take-back service for a product (paragraph (c))
- setting fees payable for managing a product (paragraph (d))
- requiring a deposit to be charged on the sale of a product, and refunding of the deposit (paragraph (e))
- prescribing requirements for the labelling of a product (paragraph (f))
- prescribing quality standards for reuse, recycling or recovery (paragraph (g))
- requiring information to be collected and provided to the Ministry for the Environment (in relation to paragraphs (a) to (e)) (paragraph (i)).

Only one of these powers has been used to date. The Government has banned two products using the powers in section 23(1)(b) (microbeads in 2018 and single-use plastic bags in 2019). It's also recently announced plans to phase out several other single-use or hard-to-recycle plastic items.

Continuing to rely on voluntary action is unlikely to see transformation to a circular economy (as proposed in the waste strategy) or meet our emissions reduction targets. The government is likely to need to use the available regulatory tools more frequently. Increasing international obligations on climate change and waste may also require stronger domestic regulatory tools. It's timely to review and enhance these powers.

Some of the powers are potentially significant economic interventions, and legislation should include greater detail on:

- their purpose
- their scope
- the process supporting their use
- the systems needed to ensure effective implementation, monitoring and enforcement.

There's also potential to add new powers, drawing on legislation elsewhere. In particular, it would be useful to include more powers that encourage circular economy behaviours towards the top of the waste hierarchy, such as redesign and rethinking of systems of production and use.

Improving existing powers

As an overall comment, the description of many of the individual powers in section 23 could be expanded to make the intent, purpose and scope of the powers clearer. At present it's not obvious what the powers might enable.

For example, the power in paragraph (a) to control or prohibit the disposal of products or waste could potentially be used to ban particular products or materials from landfills. Internationally, powers like this are increasingly being used to compel people to reduce and find better solutions for certain types of waste. In particular, many countries are using this power to address the problem of food waste and other organic material going to landfills, where it generates methane.¹⁸ We propose that new legislation sets out this power and others more clearly and with greater detail, so it's clear what types of regulatory controls could be considered.

Section 23 currently sets out some general requirements before the powers can be used. Before making any of these regulations, the government must consult with affected people, obtain advice from the Waste Advisory Board and be satisfied that the benefits are likely to exceed the costs. For regulations controlling or prohibiting disposal or sale of products and materials, there must also be reasonably practicable alternatives available.

These requirements could be expanded and tailored more closely to the individual regulatory powers, to ensure potentially significant interventions are well thought through and the costs and benefits have been carefully assessed. For example, in some cases it might be appropriate to require specific engagement with local authorities, Māori or other parts of government. Expanded requirements for environmental justification before using the powers could also be considered.

On the other hand, it might also be possible to streamline some powers. For example, if the power to ban certain products and materials, like harmful plastics, starts to be used regularly, the supporting process could be streamlined and standardised. Requiring an alternative to be available may not be appropriate in all cases, for example if the product itself is harmful and does not perform a vital function.

We welcome comment on the type of information and process that could support the regulatory powers that exist or might be created in a new Act.

The following are other changes being considered.

- The quality standards provisions in paragraphs (g) and (h) could be expanded to allow
 a wider range of mandatory standards across the supply chain: collection, transport,
 storage, treatment and disposal. These could be used to implement national standards
 for recycling (source separation, containers, colours, labelling, materials, contamination).
 Mandating the source separation of fibre or food waste (that is, separating materials for
 recycling or composting by households and businesses) is another option in the proposed
 emissions reduction plan.
- There's scope to expand and clarify the labelling power in paragraph (f) to support other initiatives like recycling and product stewardship. Current efforts to standardise labelling are voluntary. If Aotearoa required nationally consistent labelling of products for recycling,

¹⁸ In its advice to the Government on its first three emissions budgets and direction for its emissions reduction plan 2022–25, the Climate Change Commission recommended Aotearoa take similar steps (see note 4).

consumers could quickly and confidently see whether the product or its packaging can be recycled locally. Currently, 181.5 million plastic containers each year cannot be recycled, partly because there's no recycling information on them. Labels could indicate the correct disposal method, the percentage of recycled content, whether products are part of a stewardship scheme, the amount of recycled content in the product, and durability ratings (similar to the existing energy efficiency labelling scheme).

• The provision for information requirements in paragraph (i) could be extended to support future data collection and reporting, for example by setting mandatory standardised forms or methods for information collection.

Data collection powers

A long-standing concern is that we don't have good or comprehensive data on the state of waste management or material flows in Aotearoa. This new legislation and the more comprehensive regulation it proposes provide an opportunity to ensure we have enhanced tools to start gathering data and building the evidence base we need to understand and improve our performance.

The current Act includes several provisions for information collection, but they're tied to individual powers and purposes. They're not adequate for collecting the type of data needed in future as we track progress towards the strategy's goals and a circular economy.

We propose that new legislation should include clearer and more comprehensive powers for the government to obtain information from all those involved in the sector, including local authorities, licensed collectors and operators, and those administering product stewardship or other schemes. We need to be able to gather data to help us better understand:

- how products enter and circulate on the market (for example, imports and exports)
- reuse and resource recovery patterns and rates
- waste generation rather than just disposal
- use and efficiency of landfill gas capture systems.

We also propose that the new legislation formalises requirements for the government to produce and disseminate waste data and statistics. This could follow the example of the Australian government, which publishes a National Waste Report every two years and maintains a National Waste Database that's updated annually.

Information powers always require detailed scrutiny as they are developed, to ensure:

- they'll be used appropriately
- privacy or commercial interests are appropriately protected
- the information collected is stored and used appropriately.

The costs involved also need to be understood and set against the benefits for any individual use of the power.

Developing a better legislative framework for deposit return schemes

Three powers in section 23 – for take-back services, fees and refundable deposits – are specifically identified as supporting potential return schemes. A deposit return scheme is a specific type of product stewardship that incentivises consumers and businesses to return items for recycling or refilling by adding an extra deposit on the price of the product. The consumer gets back the deposit when they return the product. The most common schemes around the world currently are for drink containers. In principle though, schemes could operate for a wide variety of products. As we move towards a circular economy, with reuse and refilling becoming more common, deposit return schemes could become an important tool in many parts of our lives.

While existing legislation supports return schemes (through the product stewardship provisions already discussed and the powers in section 23), these powers are potentially complex and not necessarily adequate for the range and scale of schemes that might be established in the future. More detailed provisions could be developed to establish, monitor and enforce return schemes, in the same way as the WMA includes provisions tailored to product stewardship schemes.

Drawing on experience elsewhere, expanded provisions might include:

- greater flexibility to set and update the appropriate scheme fees and/or levies (either through a gazette notice or by being devolved to the delivery body)
- ability for the government to maintain stronger oversight and accountability, including when it would be desirable to have a single scheme rather than competing schemes (such as ability to contract and appoint a delivery body)
- a broader range of tools to respond to scheme under-performance (such as target recovery rates not being met).

The Government is currently investigating a first regulated return scheme, for beverage containers, but no decisions have yet been made. The Minister for the Environment and Cabinet will consider advice from officials in the second half of 2021. If the decision is to proceed with developing a scheme, public consultation would follow, before a final decision by Cabinet on whether to introduce such a scheme. It's possible this process could identify a need for further legislative changes.

Possible new powers

We're also considering adding new regulatory levers to the legislation based on what other countries have in place and what might be necessary for future projects.

National standards

More consistent services and practices across the country are key to improving our recycling and resource recovery performance. The WMA does not support this well, with the main tool being a ministerial power to set performance standards for implementing waste management and minimisation plans by territorial authorities (section 49). Problems with the outdoor storage of tyres had to be addressed using the national standards provisions of the RMA. We propose designing a power for central government to make national standards on matters relating to waste, recycling and resource recovery, which could be useful in many areas. The most obvious example is the kerbside collection of household recycling, given the current work to develop a standard national system. Other parts of recycling collection and processing might also benefit from national standards.

The classification system for disposing of waste to land is another, more technical topic that is governed only by guidelines. What's permitted in different landfills and farm fills has varied over time and across different local authorities, which makes the compliance and monitoring of obligations complex.

We welcome comment on how a system of national standards might operate:

- topics that might be amenable to such standards
- how they should be developed
- how they could be enforced.

Powers to support improved recycling

At the moment, recycling services are largely managed through territorial authorities and private sector providers. Some authorities have made bylaws establishing basic legal rules for their own area; in other places, the system is simply governed by contracts and practical guidelines. The challenges to improving recycling rates and quality in Aotearoa have been covered extensively elsewhere, and one of the key problems is the lack of standardisation across the country.

Some of the regulatory powers in the WMA could be used to require greater consistency, but it's not straightforward.

We propose creating a clear set of powers to improve recycling. These would support other parts of the new Act, including the duty-of-care provisions that might apply to recycling, improved provisions on quality standards for recycling, and any national standards that might be made.

Those powers might include the ability to:

- require a proportion of recycled content in specified products; this is being introduced in some countries to encourage the development of a market for recycled material
- require local authorities and waste collectors to provide recycling services for specified materials, along with a system for establishing and maintaining a list of specified materials
- set rules for standardised collection, separation, condition and handling of recyclable materials and food waste.

We're interested in comments on the type of powers that might be needed to create and maintain effective recycling systems in Aotearoa.

Right to return packaging

Packaging plays an important role in protecting products (and can reduce food waste and damaged goods). The way we currently consume products leads to large quantities of waste packaging (for example, online shopping, convenience products, multi-layered packaging,

takeaway items and high levels of consumption of consumer goods). Businesses are likely to consider a range of factors when making packaging choices, including costs, weight, market requirements or preferences and brand, as well as environmental factors such as recyclability.

The law could be used to make manufacturers and retailers confront the financial and environmental cost of disposal and encourage them to minimise packaging, increase reuse and recycled content, and ensure recyclability. Product stewardship schemes are one option. Another is requiring manufacturers and retailers to take their packaging back when a customer wishes to return it, and to make it easy for consumers to do so.

Section 23(1)(c) currently provides for a "take-back service for products", either as a standalone measure or in connection with a regulated product stewardship or deposit return scheme. However, it's not clear whether this power could be used separately for packaging. In any event, we've already suggested that these deposit return scheme provisions need to be better developed and tailored for that purpose.

We could consider introducing a separate power to require manufacturers and retailers to take back packaging. This could be used for different types and sizes of packaging material over time. For example, the power might initially be used for the large amounts of packaging associated with household appliances. For small pieces of packaging for everyday items, other policy responses are likely to be more suitable.

Right to repair

Right to repair is a growing movement, particularly in the European Union and United States. The aim is to improve consumers' rights to get goods repaired and make informed purchasing decisions. A number of jurisdictions have proposed legislation requiring manufacturers to provide spare parts or product manuals to consumers or independent repairers. The European Union has started implementing rules requiring manufacturers to make spare parts available and improve design of major appliances, and has implemented eco-design requirements. France has passed legislation setting requirements for labelling product durability. Australia's Productivity Commission has also released a report recommending legislative right to repair changes.

In Aotearoa, the Consumer Guarantees Act 1993 regulates this topic at present by creating obligations between the retailer and the consumer. These can be enforced through civil proceedings, including in the Disputes Tribunal.

We're interested in expanding the legal requirements for the right to repair, potentially through new waste legislation. A set of regulation-making powers could enable government to target right to repair provisions at certain product types (such as whiteware). For example, a new Act could enable regulations requiring manufacturers of certain products to:

- provide product information such as manuals
- provide spare parts for a certain amount of time
- label those products for repairability and durability (similar to the energy efficiency and water usage labels).

A regulation-making power could also provide the ability to define the length of time a particular product should remain fault free and what its reasonable period for repair is.

We may also investigate the feasibility of requiring retailers and manufacturers to attempt to repair a product before a replacement is made, along with prohibiting manufacturer warranties from being voided if consumers do not use the repairers and spare parts specified by the manufacturer.

Better links with relevant powers in other legislation

Import and export controls

The Imports and Exports (Restrictions) Act 1988 could be an important tool in moving Aotearoa towards a circular economy. It contains two main powers – to prohibit or control:

- the import of specified goods or classes of goods, if that is in the public interest
- the export of specified goods or classes of goods, if that is necessary to give effect to an international obligation.

For waste, these powers have so far been used mainly to give effect to international obligations on movement of hazardous and other waste. These obligations derive from:

- the Basel Convention (reduction in the movements of hazardous waste, household waste and some plastic waste between nations)
- the Rotterdam Convention (importation of hazardous chemicals)
- the Stockholm Convention (elimination and restriction of persistent organic pollutants).

The Imports and Exports (Restrictions) Act 1988 and relevant regulations completely ban the movement of some substances. For other substances, they establish a permit system.

The power to control exports is explicitly limited to giving effect to international obligations, but the import control power is not. It can be used for a range of purposes, including managing environmental problems. This power could be linked more closely to the other WMA powers and expanded to other goods that create problems for waste minimisation and management, such as hard-to-recycle or single-use plastics. For example, at present we ban the sale of such items under the WMA, but have not gone further and banned their import.

On the export side, it may be worth strengthening the constraints on what can be exported through permits or otherwise, to support the basic obligation under the Basel Convention to reduce transboundary movement of waste that it covers to a minimum. Under the Convention, the two main situations in which export is considered appropriate are if either:

- we do not have the technical capacity and facilities to manage a particular type of waste, or
- another country needs it as a raw material for recycling.

We could look at ways to give greater legal and practical force to these limitations through the permitting system. This could be combined with other interventions and support to encourage more domestic recycling facilities for our main waste material streams.

We could also consider expanding the export control power to enable controls beyond those required by international obligations, such as by creating controls on or prohibiting export of other types of waste like low-value plastics.

Any changes to import and export controls will need to be carefully developed to ensure they're used only for legitimate environmental protection objectives in accordance with Aotearoa New Zealand's obligations under the World Trade Organization rules and our free trade agreements.

Questions

- 29 What improvements could be made to the existing regulatory powers under section 23 of the Waste Management Act 2008?
- 30 What new regulatory powers for products and materials would be useful to help Aotearoa move towards a circular economy?
- 31 Would you like to see a right to return packaging to the relevant business?
- 32 Would you like to see more legal requirements to support products lasting longer and being able to be repaired?
- 33 Is there a need to strengthen or make better use of import and export controls to support waste minimisation and circular economy goals? For example, should we look at ways to prohibit exports of materials like low-value plastics?

Ensuring the waste levy is used to best effect

Many countries use waste levies. Some apply a levy only on landfills, while others include a wider range of disposal activities such as incineration or liquid waste disposal.¹⁹ A well-designed waste levy:

- provides financial incentives for those generating waste (including businesses and households) to reduce what they send to landfill
- makes alternatives like recycling more commercially viable by increasing the cost of disposal
- raises revenue that can be invested back into waste minimisation and other environmental initiatives.

Imposing, setting and reviewing the waste levy

At the moment in Aotearoa, the waste levy is imposed on waste going to disposal facilities. The disposal facilities covered have recently been extended from class 1 (municipal) landfills to four classes of landfills by 2025 (municipal, construction and demolition, managed, and controlled fills).

If set at a meaningful level, the levy encourages people to move to activities above the bottom layer of the waste hierarchy (disposal to landfill); but it doesn't go further. Nor does it capture the full range of low-ranking disposal activities. New legislation could increase the range of activities that could potentially be made subject to a levy in future to include not just disposal to landfill, but other 'non-circular' activities such as certain types of waste-to-energy operation, or even 'downcycling' (that is, recycling materials into new products that can't themselves be recycled).

When the Minister for the Environment is setting the levy rate, the WMA currently requires the Minister to consider the costs and benefits and the advice of the Waste Advisory Board, and to be satisfied there's been adequate consultation with those who may be significantly affected. New legislation could provide further guidance, for example by requiring consideration of:

- the effect of the levy on encouraging circulation of materials within the economy through reuse and recycling
- the potential for negative behaviour change (such as an increase in illegal dumping).

We welcome comment on which disposal activities should be subject to the levy in future and what factors should guide the rate of the levy.

Section 39 requires the effectiveness of the levy to be formally reviewed every three years. However, there's no requirement to consider the overall effectiveness of waste minimisation measures, let alone progress towards a circular economy. In future, the levy will be one of a

¹⁹ For example, South Australia operates a wider-ranging levy. For more information, see www.epa.sa.gov.au/business_and_industry/waste-levy.

range of regulatory and other interventions working towards achieving the waste strategy. We see little benefit in requiring a separate review of the levy that's disconnected from the overall system of reporting and revision of plans and strategies proposed for the future. We propose including the effectiveness of the levy as one of the matters to be considered when reviewing AIPs and the strategy.

Improving how the waste levy is collected

Requirements for how disposal facilities must measure, record and report waste, and how the levy is calculated, are set out in the Waste Minimisation (Calculation and Payment of Waste Disposal Levy) Regulations 2009. The regulations prescribe:

- that disposal facilities must provide returns on a monthly or annual basis
- how an operator must measure waste and diverted material it receives, using either a weighbridge, converting volume to weight, or an average tonnage system
- how the Ministry for the Environment or levy collector calculates the amount of levy payable by disposal facilities
- how disposal facilities must pay the levy
- how disposal facilities may apply to the Ministry to change their obligations around the waste levy (such as seeking approval to file an annual return or seeking an extension of time to store materials)
- the records that disposal facilities must keep.

New legislation could improve how a number of these detailed matters are managed.

- Stockpiling materials: Disposal facilities may stockpile materials for up to six months (unless the Ministry agrees in writing to a longer period). It's difficult in practice to verify how long materials have been in a stockpile. It would be more effective to introduce an approval system with limits and conditions for stockpiling materials, require more stringent record keeping so that stockpiled materials are recorded separately to other waste and/or reduce the time period for which facilities may stockpile materials. Tightening up the rules around stockpiling needs to be balanced against giving facilities, particularly in rural regions, flexibility to stockpile recycling material until they have enough to recycle it economically.
- Reuse of materials on site at disposal facilities: At present, sites do not have to pay the levy on materials that they reuse or recycle on site for landfill construction and management purposes. It's not clear in practice though which materials can be reused or recycled in this way, and different sites may have differing interpretations of which materials fit into this category and how much "diverted material" is reasonable for landfill operations. Again, an approvals system might be more effective. Alternatively, new legislation could remove the ability for waste to be exempt from the levy when used on site (with some exemptions).
- Waivers: A disposal facility may apply for a waiver of the levy in "exceptional circumstances". This is a high threshold. There are other circumstances that are not necessarily exceptional where it would be appropriate to waive the levy, such as vulnerable landfills that may need to have their waste relocated due to natural disasters or the effects of climate change.
- **Exemptions:** At present, any exemptions have to be made through regulations, which makes it a difficult and slow tool to use in practice. There are situations where exemptions are warranted, and that process can be made easier.

Ensuring the legislation deals effectively with situations like these helps provide a level playing field and gives more certainty for disposal facility operators attempting to comply with the legislation.

Broadening how the waste levy can be used

Revenue from general taxes, such as income tax and goods and services tax, can be used to fund any area of government spending. Levies can be different; although not automatic, the funds they raise are generally ring-fenced for purposes relating to the activity that generates the levy funds. Well-known examples include accident compensation levies and road transport or fuel levies. Part 3 of the WMA sets out how revenue from the waste levy must be distributed and what it can be spent on.

At present, 50 per cent of the levy funds are automatically allocated to territorial authorities and distributed according to a population-based formula. Local authorities can use those funds for waste minimisation activities that are included in their waste management and minimisation plan.

Central government retains the other 50 per cent and uses it for:

- the costs associated with collecting, enforcing and administering the levy
- waste minimisation projects approved by the Minister (mostly through the Waste Minimisation Fund application process)
- the costs of administering the funding system for those projects.

The new legislation will maintain the levy, ring-fenced for waste minimisation purposes. The funds raised by the waste levy are expected to increase substantially in coming years, following the expansion of the levy to other classes of landfills and the rise in rates. To ensure those funds are used effectively and the risks of ring-fencing are well managed, we need to review the rules governing them.

Our starting point is that the current rules and processes will no longer be fit for purpose. Ensuring levy funds are used effectively is a key driver for the new strategy and legislation, along with the long-term waste infrastructure plan and shorter-term AIPs. Together, they're designed to create a strategic framework for investing and using levy funds to guide both central and local government.

We anticipate broadening how levy funds can be used by central and local government, in keeping with the broader purposes of new waste legislation and the more ambitious circular economy goals of the proposed waste strategy. For example, a broader scope could ensure the levy can be used for:

- early-stage research, development and innovation work, where it's not clear whether the investment will generate waste minimisation outcomes
- measures that minimise harm from waste, as opposed to just minimising the waste itself (for example, measures to manage agrichemicals or refrigerants safely at end of life or to prevent plastics entering marine environments)
- new infrastructure and equipment, through a wider range of investment and co-funding models

- ongoing partnerships with relevant organisations²⁰
- long-term behaviour change and education activities
- ongoing litter clean-up and enforcement activities
- cleaning up former landfill sites or other contaminated sites
- data collection and management
- a wider range of compliance, monitoring and enforcement activities by central and local government.

A risk of this broader scope is that spending may be spread across a wider range of activity types, leading to funding being spread too thinly, even with expanded levy revenue. To address this, both the strategy and the AIPs, with legislative recognition, are intended to set clear priorities for action and investment for both central and local government, including use of levy funds. It will be important for central and local government to coordinate closely in this new system.

Options for managing levy funds in future

There are a number of problems with the current system established by the WMA.

- The automatic allocation of prescribed proportions is blunt and takes little account of relative roles and responsibilities of the different levels of government.
- Breaking up the funds among 68 different decision-makers²¹ limits collaboration, coordinated planning and the capacity to benefit from economies of scale.
- Central government is limited to funding 'projects' rather than longer-term services or relationships.
- The population-based formula for distribution among territorial authorities based on census data on who is "usually resident" – leads to significant variation in levy revenue between councils (table 3). Auckland Council receives by far the largest share of funding, consistent with its large share of the resident population; some councils with low resident populations receive very little funding. Yet those smaller councils often have high visitor populations, higher costs because of their size and distance, and greater need for support.

Funding range	Number of councils
>\$5 million	1
\$1–5 million	1
\$0.5–1 million	2
\$250,000-500,000	9
\$100,000-250,000	25
\$10,000-100,000	27
<\$10,000	2

Table 3: Annual levy funding allocated to territorial authorities

²⁰ Examples include Para Kore (delivering education and training on marae to create behaviour change that aligns with circular economy principles); the Sustainable Business Network (helping businesses incorporate a circular approach into their business models); and product stewardship organisations.

²¹ Central government and 67 territorial authorities.

Territorial authorities are typically responsible for providing waste and recycling services for households (whether by the council directly or by the private sector), with some limited provision to businesses (such as waste/recycling collection for some commercial premises). Household waste makes up about 20 per cent of total waste disposed of in Aotearoa.

At an aggregate level, territorial authorities use around half of their funding from the waste levy to support local kerbside recycling services (although specific funding splits vary from council to council). Some also operate their own funds similar to the Waste Minimisation Fund. For many territorial authorities, levy revenue represents a relatively small portion of their overall spending on waste management and minimisation, with most of their work being funded through rates and charges.

We propose that new waste legislation should distribute levy funds on a more equitable basis, taking better account of the roles, responsibilities and needs of the different councils. That could mean, for example, that the proportion of funds automatically directed to local government may need to adjust to reflect any changed responsibilities in the new legislation for such things as planning and reporting, service delivery and enforcement activity.

It may also require adjusting the population-based formula. Options include allocating the levy funds:

- in proportion to each territorial authority's percentage share of the resident plus visitor population of Aotearoa
- according to area, size and distance to high-population centres, to reflect the higher waste-related costs incurred by some territorial authorities
- with a fixed base amount, combined with a 'top up' proportional amount using one of the
 options above. For example, 5 per cent of each territorial authority's total share of
 revenue could be allocated equally, with the remaining 95 per cent allocated on a
 population basis.

It will also be important to ensure levy funds are managed in a way that enables coordinated decision-making and investment as we build a fit-for-purpose resource recovery system for Aotearoa. The final strategy and long-term waste infrastructure plan will set out what's needed, with implementation to be managed through the AIPs that will follow. The investment in infrastructure and equipment to support that goal may be better managed through a single central process that brings together central and local government decision-makers. The processes for considering proposals and making decisions on large infrastructure projects would obviously also be quite different from the type of contestable funding rounds for relatively small grants operated by the current Waste Minimisation Fund.

We do not have firm views yet on precisely how the levy funds should be managed and allocated in future. As noted, final proposals will need to take account of decisions made on where responsibilities for different parts of the future system sit. The final waste strategy and long-term waste infrastructure plan will also be relevant, along with the knowledge and experience the Ministry is gaining through the current programme of waste infrastructure investments.

We should be clear, however, that there is no intention to lower the amount of funding local authorities currently receive. Given that the total revenue is forecast to increase significantly over the coming years, the actual amount of individual allocations is still likely to be higher, even if the percentage allocations change.

Questions

- 34 What types of activities should potentially be subject to a levy? Should the levy be able to be imposed on final disposal activities other than landfills (such as waste to energy facilities)?
- 35 What factors should be considered when setting levy rates?
- 36 How could the rules on collection and payment of the waste levy be improved?
- 37 What should waste levy revenue be able to be spent on?
- 38 How should waste levy revenue be allocated to best reflect the roles and responsibilities of the different layers of government in relation to waste, and to maximise effectiveness?
- 39 How should waste levy revenue be allocated between territorial authorities?

Improving compliance, monitoring and enforcement

Any regulatory system needs to be supported by effective compliance, monitoring and enforcement arrangements. Most people will comply willingly with their legal obligations, especially if they're supported by good information, guidance and administrative arrangements that make it easy. But there's also a need to be able to check on compliance, investigate breaches, take enforcement action where necessary and impose meaningful sanctions.

The options outlined in this paper could create more legal obligations and add to those over time through regulations. Each obligation needs to be backed by relevant enforcement tools, including offences and penalties, agencies with clear responsibility for enforcement, and investigation and enforcement powers. Those enforcement tools will need to cover the obligations and sectors set out in table 4.

Obligation	Potentially applies to
Strategy, planning, monitoring and reporting	Central and local government
Duties of care for proper disposal of unwanted material, including litter and unlawful dumping	All people; households; businesses; waste sector operators
Regulated product stewardship schemes	Scheme operators and participants; businesses in relevant supply chains and materials cycles
General regulatory tools, including product bans	Operators and participants in any regulated schemes; businesses; waste sector operators
Licensing of the waste sector	Waste sector operators
Waste levy payment	Landfill operators

Table 4: Potential obligations requiring enforcement provisions

Experience with both the WMA and the Litter Act has shown that their enforcement provisions are inadequate. Not all obligations in the WMA are supported by matching offence provisions, and the investigation powers are limited. The Litter Act enforcement provisions are also dated and weak. There's a strong case for a thorough rewrite of this part of the law.

Roles and responsibilities for compliance and enforcement

Central government

The Ministry for the Environment currently carries out most compliance, monitoring and enforcement work related to obligations under the WMA. This is the Ministry's only regulatory enforcement role. Until recently it was a reasonably confined task, involving monitoring payment of the waste levy by class 1 disposal facilities, and use of levy funds and waste planning by territorial authorities.

In 2018, the EPA was given delegated responsibility for enforcing the ban on microbeads under the WMA. In 2019, the Ministry became responsible for enforcing the ban on plastic bags. This was a significant change, requiring the Ministry to create a nationwide compliance, monitoring and enforcement system, as the ban affects almost all retail activities around the country. The Ministry was greatly assisted in this role by the high level of voluntary compliance and consumer support for the change.

The Ministry's compliance responsibilities will increase significantly over the next few years to cover:

- the expanded group of landfills to be covered by the waste levy (moving from 36 to over 500 sites)
- the product bans being introduced for a range of plastic products
- the six regulated product stewardship schemes being developed.

These will all involve nationwide activity across a wide range of sectors and businesses. The scale of compliance activity will require another step-change once the new legislation is passed. Central government, whether in the form of the Ministry or another organisation, could expand its capacity and capability to carry out detailed compliance and enforcement work across the country, but there may be better options.

Local government

Local authorities have well-developed and wide-reaching compliance roles under the RMA, the Building Act 2004 and other legislation. They also carry the main responsibility for enforcing the Litter Act. Under the WMA, territorial authorities only have a compliance role for local bylaws regulating waste collection, disposal and other related waste issues. Bylaws have been widely used by territorial authorities, but their use and content are inconsistent nationwide.

Local government may be best placed to take responsibility for enforcing at least some of the obligations from the new waste legislation proposals. They already have a compliance relationship with most of those who would be regulated under other laws, including disposal facilities that must be consented under the RMA. Locally based enforcement staff are more able to:

- maintain constructive working relationships with those being regulated
- carry out spot checks
- gather and act on information received from the public.

Staff could also carry out compliance checks and enforcement activity under several Acts at the same time.

We seek your views on where the roles and responsibilities for compliance, monitoring and enforcement should lie in new waste legislation. These decisions may be influenced by the approach taken to the equivalent questions in the resource management reforms.

Funding the work

Wherever the functions sit, they need to be adequately resourced. At present in central government, waste levy funds can only be used for collecting and administering the levy, including compliance, monitoring and enforcement work. All other enforcement activity is funded through general government funding for the Ministry for the Environment and the EPA.

In local government, waste levy funds can be used for any activities promoting or achieving waste minimisation that are signalled in the relevant waste management and minimisation plan. However, the amount of funds that individual local authorities receive varies greatly (as discussed in the Options for managing levy funds in future section) and is usually only a small contribution to the overall amount spent on waste management activities. The rest is funded through rates and any other sources of income.

Waste-related enforcement, such as addressing illegal dumping, fly-tipping and litter, is often seen as a low priority in the competition for scarce resources. We could consider providing dedicated funding for addressing illegal dumping and fly-tipping, potentially from levy revenue. Wherever responsibility ultimately lies for responding to illegal dumping and fly-tipping, it needs to be accompanied by adequate resources.

Further, given the expected increase in the amount of both waste levy funds and enforcement work that will need to be carried out, should more of that work be funded by the levy? Some dedicated and increasing funding could help create a step-change in how waste laws are administered and enforced, requiring the responsible organisations to focus and report on how the funding is being used. If substantially more enforcement functions are devolved to local government under the new legislation, it will need to be clear how those new responsibilities would be funded.

Investigation powers, offences and sanctions

Investigation and detection powers

There's considerable scope to improve the investigation powers for enforcing environmental crime under the waste management system. These powers need to be carefully drafted, to ensure they're proportionate to the issue, properly controlled and consistent with human rights. We intend to work closely with the Ministry of Justice, Privacy Commissioner and other relevant agencies to develop a set of powers to support these regulatory proposals.

We propose that new legislation includes:

- information-sharing arrangements between relevant enforcement agencies (for example, border agencies regarding product and material flows, local authorities for offence activity crossing several regions, central and local government)
- powers to require information to be provided (for example, records from landfill operators or waste collectors, businesses with obligations under product stewardship regulations or product bans)
- powers to stop and search vehicles (for example, unauthorised waste collection and transport, and unlawful dumping)
- access to premises (for example, to assess what type of disposal facility is operating and how the levy should apply to it).

Ensuring the full range of potential evidentiary sources can be used will also be important. For example, CCTV footage could be helpful for offences like littering and unlawful dumping, along with duty-of-care obligations for storing waste securely to prevent litter and more.

In practice, other countries have had good results from encouraging members of the public to report waste offences they witness, and from setting up hotlines and websites for that purpose.

Offences

The tools in the WMA addressing non-compliance are relatively blunt and limited; the main tools relating to paying the levy are prosecution and recovering unpaid levies as debt. They're also unhelpfully generic; the offences in the WMA provide only for prosecution, with a maximum fine of \$100,000. This means the process and maximum penalty are the same for someone providing a banned plastic shopping bag and a landfill facility deliberately misreporting its tonnages to evade its waste levy obligations. The range of offences and penalties needs to be wider.

We propose new waste legislation expands the tools to manage non-compliant behaviour, including statutory warning letters, enforceable undertakings,²² infringement processes, restorative justice approaches and a variety of low- and high-level offences.

The potential penalties also need to be broad, ranging from instant fines to significant financial penalties, community service penalties, and obligations to repair or make good environmental damage.

The particular problem of litter

The Litter Act was established to prevent, control and reduce litter. It bans littering and dumping in public places and on private land without the owner's consent. The Act defines litter as "any refuse, rubbish, animal remains, glass, metal, garbage, debris, dirt, filth, rubble, ballast, stones, earth, or waste matter, or any other thing of a like nature". In practice, littering can range from dropping a cigarette butt on the street, to putting your household rubbish out too early for collection, to large-scale dumping or storing of waste on public or private land (known as illegal dumping or fly-tipping).

Litter is pollution and harms our environment, soil, waterways and wildlife. Aotearoa has relatively high levels of litter in public places. Many territorial authorities report challenges with enforcing the existing law, partly because the main offence is narrowly framed and requires someone to be caught in the act of littering. The high costs of clean-up activities are another concern.

Because litter occurs in many public places, a number of public authorities are able to take enforcement action. Territorial authorities have the primary role, but others include Waka Kotahi NZ Transport Authority, airport authorities and several other classes of bodies. Those agencies can appoint enforcement officers and litter wardens, who may issue fines and abatement notices for litter offences. The range of agencies potentially involved can cause confusion and fragment responsibility. For example, management of larger-scale dumping often falls to regional councils.

We are proposing a number of improvements to help address littering and dumping.

²² Enforceable undertakings – common in health and safety legislation – are an alternative to prosecution, where the party agrees to do certain things to fix the breach or prevent a similar one in the future, in exchange for avoiding legal charges. They are legally binding agreements that allow organisations to avoid the cost, time and negative publicity that can come with prosecution.

Reducing the likelihood of litter

Many of the changes proposed in our work programme will reduce packaging and single-use items, which are commonly littered. Relevant initiatives include return schemes, product stewardship and other systems encouraging redesign, and better recycling systems to support more responsible disposal behaviour.

The duty-of-care obligations for business premises could also provide a foundation for stronger obligations to ensure waste is stored securely and unable to escape. Some other jurisdictions have gone further and started to control likely sources of litter. The Australian state of Victoria, for example, has banned placing flyers on cars in most circumstances. Some councils have bylaws to similar effect. There may be scope to consider more widespread controls of this kind here.

In support of duty-of-care obligations, we could also consider holding companies to account when packaging from their products has been littered, potentially through a fine. Alternatively, given behaviour change campaigns and providing public rubbish and recycling bins are key to reducing litter, we could take a non-statutory approach. For example, we could hold companies accountable for their littered packaging through a combination of research, publicity and engagement, by undertaking and publishing the results of litter audits and working with relevant companies on how to encourage more responsible behaviour from their consumers.

Reframing how we think about litter

Litter is often an unthinking act, regarded as a minor issue – if it attracts any thought at all. It's generally considered to be about untidiness rather than environmental harm but it covers a spectrum through to major dumping, and even small acts of littering like cigarette butts can cause major environmental harm as they release toxins and microplastics.

Framing the strategy and legislation in terms of individual and collective responsibilities – through duty-of-care proposals – could help change that. This will provide a strong foundation for ongoing education and behaviour change campaigns, supported by clear and consistent legal obligations to dispose of unwanted material appropriately.

Better detection, enforcement arrangements and penalties

The various changes discussed above will also provide much stronger support for detection and enforcement of littering. We propose allocating clear responsibility for enforcement as an important first step, along with enabling greater use of citizen reporting and CCTV footage to help with detection, and revising how offences are framed so that subsequent detection and identification can be used.

Other countries have created a separate offence of littering from a vehicle, with responsibility resting with the registered owner. This means enforcement action can be taken if the number plate is known, even if the individual involved cannot be identified.

We welcome views on these and any other possible legislative changes to improve our performance in relation to litter, by building a greater sense of social responsibility and engagement, clearer and stronger duties and obligations, and more effective enforcement.

Questions

- 40 Which elements of compliance, monitoring and enforcement should be the responsibility of which parts of government (central government, regional councils, territorial authorities) under new waste legislation?
- 41 The need for enforcement work will increase under the new legislation. How should it be funded?
- 42 What expanded investigation powers, offences and penalties do you think should be included in new waste legislation?
- 43 What regulatory or other changes do you think would help better manage inappropriate disposal of materials (that is, littering and fly-tipping)?

Full list of questions

Part 1: Why we need to transform our approach to waste

- 1 Do you think changes are needed in how Aotearoa New Zealand manages its waste?
- 2 Do you support tackling our waste problems by moving towards a circular economy?

Part 2: Proposed new waste strategy for Aotearoa New Zealand

- 3 Do you support the proposed vision?
- 4 Do you support the six core principles or would you make changes?
- 5 Do you support the proposed approach of three broad stages between now and 2050, and the suggested timing and priorities for what to focus on at each stage?
- 6 Looking at the priorities and suggested headline actions for stage one, which do you think are the most important?
- 7 What else should we be doing in stage one?
- 8 What are the barriers or roadblocks to achieving the stage one actions, and how can we address them?
- 9 Do the strategic targets listed in Table 1 focus on the right areas?
- 10 Where in the suggested ranges do you think each target should sit, to strike a good balance between ambition and achievability?

Part 3: Developing more comprehensive legislation on waste: issues and options

Embedding a long-term, strategic approach to reducing waste

- 11 Do you think new legislation should require the government to have a waste strategy and periodically update it?
- 12 How often should a strategy be reviewed?
- 13 How strongly should the strategy (and supporting action and investment plans) influence local authority plans and actions?
- 14 What public reporting on waste by central and local government would you like to see?
- 15 Do you agree with the suggested functions for central government agencies?
- 16 What central government agencies would you like to see carry out these functions?
- 17 How should independent, expert advice on waste be provided to the government?
- 18 How could the legislation provide for Māori participation in the new advice and decisionmaking systems for waste?
- 19 What are your views on local government roles in the waste system, in particular the balance between local and regional? Who should be responsible for planning, service delivery, regulatory activities like licensing, and enforcement of the different obligations created?

Putting responsibility at the heart of the new system

- 20 Do you see benefit in adapting the United Kingdom's duty-of-care model for Aotearoa New Zealand's waste legislation, supported by appropriate offences and penalties?
- 21 Do you support strengthening obligations around litter by creating an individual 'duty of care' to dispose of waste appropriately?
- 22 What else could we do so that litter is taken more seriously as a form of pollution?

- 23 Do you support a nationwide licensing regime for the waste sector?
- 24 Should the new legislation include a power to require a tracing system to be developed for some or all types of waste?
- 25 What aspects of the proposals for regulating the waste sector could be extended to apply to hazardous waste?

Improving legislative support for product stewardship schemes

- 26 Should the new legislation keep an option for accreditation of voluntary product stewardship schemes?
- 27 How could the accreditation process for new product stewardship schemes be strengthened?
- 28 How else could we improve the regulatory framework for product stewardship?

Enhancing regulatory tools to encourage change

- 29 What improvements could be made to the existing regulatory powers under section 23 of the Waste Management Act 2008?
- 30 What new regulatory powers for products and materials would be useful to help Aotearoa move towards a circular economy?
- 31 Would you like to see a right to return packaging to the relevant business?
- 32 Would you like to see more legal requirements to support products lasting longer and being able to be repaired?
- 33 Is there a need to strengthen and make better use of import and export controls to support waste minimisation and circular economy goals? For example, should we look at ways to prohibit exports of materials like low-value plastics?

Ensuring the waste levy is used to best effect

- 34 What types of activities should potentially be subject to a levy? Should the levy be able to be imposed on final disposal activities other than landfills (such as waste to energy)?
- 35 What factors should be considered when setting levy rates?
- 36 How could the rules on collection and payment of the waste levy be improved?
- 37 What should waste levy revenue be able to be spent on?
- 38 How should revenue from the waste levy be allocated to best reflect the roles and responsibilities of the different layers of government in relation to waste, and to maximise effectiveness?
- 39 How should waste levy revenue be allocated between territorial authorities?

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