Waste reduction work programme



Environment Manatu Mõ Te Taiao

New Zealand Government

Disclaimer

The information in this publication is, according to the Ministry for the Environment's best efforts, accurate at the time of publication. The Ministry will make every reasonable effort to keep it current and accurate. However, users of this publication are advised that:

- → The information does not alter the laws of New Zealand, other official guidelines, or requirements.
- → It does not constitute legal advice, and users should take specific advice from qualified professionals before taking any action based on information in this publication.
- → The Ministry does not accept any responsibility or liability whatsoever whether in contract, tort, equity, or otherwise for any action taken as a result of reading, or reliance placed on this publication because of having read any part, or all, of the information in this publication or for any error, or inadequacy, deficiency, flaw in, or omission from the information in this publication.
- → All references to websites, organisations or people not within the Ministry are for convenience only and should not be taken as endorsement of those websites or information contained in those websites nor of organisations or people referred to.

This document may be cited as: Ministry for the Environment. *Waste reduction work programme*. Wellington: Ministry for the Environment

Published in August 2021 by the Ministry for the Environment Manatū Mō Te Taiao PO Box 10362, Wellington 6143, New Zealand

ISBN: 978-1-99-003357-5

Publication number: ME 1566

© Crown copyright New Zealand 2021

This document is available on the Ministry for the Environment website: www.environment.govt.nz.

Contents

Our collective challenge	4
Where we are now	4
What we need to do next	9
Waste reduction work programme	11
Initial goal	11
Objectives and workstreams	11
Objective 1: Building the foundations for a transformed waste system	12
Key workstreams	14
Objective 2: Expanding investment in the sector	16
Key workstreams	18
Objective 3: Introducing system-level change	24
Key workstream	26
Objective 4: Addressing individual material streams and products	28
Key workstreams	30
Objective 5: Strengthening operational and compliance activity	34

References

40

Our collective challenge

Where we are now

The way we create and manage waste in Aotearoa New Zealand is not sustainable. Most of the materials we use are disposed of to landfill, and the rate of disposal is increasing. These practices have contributed to making us one of the highest generators of waste per person in the Organisation for Economic Co-operation and Development (OECD).





In 2018, municipal landfills received around 3.7 million tonnes of waste – around 750 kilograms for every New Zealander. There was a slight decrease in volumes in 2019 and 2020, with the decrease in 2020 likely largely driven by COVID-19. However, the downward trend has not continued into 2021, and longer-term trends suggest the rate of disposal to landfill is only increasing – with a total increase of approximately 48 per cent between 2010 and 2019, or slightly less on a per capita basis.

In Aotearoa New Zealand and around the world, people are waking up to the need to do better. Images of plastics polluting the ocean, and debris from an old landfill spreading down a river valley and coastline, have shocked many into questioning the sheer volume of single-use items being discarded, and wondering how to do better. Climate change is adding more impetus to this shift, given the emissions generated by current patterns of extraction, production, consumption, transport and disposal. When organic material like food scraps or plant matter is sent to a landfill, it produces the greenhouse gas methane as it breaks down. In 2019, the waste sector contributed around 4 per cent of Aotearoa New Zealand's total greenhouse gas emissions (Ministry for the Environment, 2021a) and around 9.1 per cent of its biogenic methane emissions (Ministry for the Environment, unpublished).¹ Under the Climate Change Response Act 2002. Aotearoa New Zealand is committed to reducing biogenic methane emissions by 10 per cent by 2030 and 24–47 per cent by 2050, relative to 2017 levels.

¹ For more information see https://environment.govt.nz/ publications/new-zealands-greenhouse-gas-inventory-1990-2019-snapshot/emissions-trends-by-sector

During the previous term, the Government took significant steps to begin lifting Aotearoa New Zealand's waste performance and to accelerate the transition to a low-carbon circular economy. These steps included:

- → Banning single-use plastic shopping bags
- → Phasing out other single-use plastic items and hard-to-recycle plastic packaging by mid-2025
- → Implementing the Basel Convention permitting system for the export of lowgrade plastics
- → Deciding to introduce regulated product stewardship for six waste streams (including plastic packaging and tyres)
- → Increasing and expanding the scope of the waste disposal levy
- → Dedicating \$124.3 million in investment for resource recovery infrastructure as part of the response to the economic impact of COVID-19
- → Continuing to invest in waste minimisation via the Waste Minimisation Fund (\$17.6 million invested in 2018 and \$11.4 million in 2019).



However, Aotearoa New Zealand faces significant waste challenges, and we need to do more to build on these early steps:

- → Our onshore and offshore recycling systems, infrastructure and practices do not meet our current needs. The products we use are often not designed for reuse, repair, and recycling. The effects of this are compounded by our 'single-use' culture. As a result, too many valuable resources are being disposed of to landfill rather than being reused or recycled. Our waste and resource recovery network has an estimated infrastructure deficit of \$2.1-\$2.6 billion (Grant Thornton, 2020).
- → Domestically, our remoteness, unique geography and relatively small population create challenges for supply chains and cost- effective infrastructure. In addition, international recycling commodity markets are becoming increasingly constrained. Key export markets are

accepting fewer materials, especially co-mingled and contaminated waste streams. This has accentuated the need for Aotearoa New Zealand to address its own waste challenges.

- → Current legislative settings contain only a limited set of policy tools and enforcement powers.
- → Our data, research and evidence base needs improvement. Improving data availability, accessibility and quality would provide a stronger base for developing and evaluating policy interventions, understanding changes over time and monitoring compliance. It would also support innovation and technology changes.
- → We have legacy waste problems affecting our land and water. The risks are exacerbated by extreme weather events due to climate change, for example at closed landfill sites at risk from sea-level rise.



Legacy waste disposal challenges

On 31 March 2019, New Zealand was reminded that there really is no "thrown away, never to be seen again" when it comes to waste. Thousands of tonnes of municipal solid waste spewed into the Fox River and out into the ocean. Much of it was plastic packaging like milk and water bottles, single-use plastic bags, food containers, tyres, and construction materials, which washed up on the coastline. Globally, it is predicted there will be more plastic in the ocean than fish by 2050 (World Economic Forum et al, 2016).

What we need to do next

All this is set to change. There is increasing public concern about waste and its harmful effects on our environment and health. There are calls for us to move to a more circular economy, to better live within the finite resources of the planet and to minimise greenhouse gas emissions.

We acknowledge and support the positive actions and successful initiatives that are already underway across Aotearoa New Zealand to reduce waste generation, led by community groups, businesses, Māori, industry, and local government.

We can now add significant weight to this. The Government has a clear mandate to provide the catalyst for change in our waste and resource sectors. This mandate has come from our communities, iwi/Māori, industries, business sector, research institutes, global partners – and from our environment.

The Office of the Prime Minister's Chief Science Advisor's report *Rethinking Plastics in Aotearoa New Zealand* stated "we are in a unique position where we can weave our understanding of science, society, and economics with mātauranga Māori to establish new practices that make a difference by reducing plastics pollution" (Office of the Prime Minister's Chief Science Advisor, 2019, p 19). This opportunity is not simply limited to plastics – we have the unique opportunity to weave this into all facets of our waste and resource systems.

This Waste reduction work programme sets out the work that the Ministry for the Environment (MfE) is leading for the Government to transform our waste outcomes. We know we need change, and this plan sets out what the Government is doing to make it happen.

A central initiative is preparing a new waste strategy. The strategy will provide a clear direction for everyone working on these challenges, with a long-term vision tailored to Aotearoa New Zealand.

Once the strategy is in place, we will update our work programme on a regular basis. These updates will focus on implementation and the priorities and projects to be achieved over the given timeframe.

From mid-2023, we will have the necessary foundations for strategically driven, transformational change. At the heart of this will be long-term strategic thinking and a significantly expanded capacity to invest, supported by a new legislative framework. We should also have more effective waste and recovery systems, and have addressed some of the most problematic materials and products currently in circulation.

From there, we should be well set to continue towards an economy and society characterised by low emissions, low waste, and shared responsibility.

Circular economy

We currently have a more linear economy, with a 'take-make-use-dispose' approach to resources. We need to move towards a

> Technical & biological materials mixed up Energy from finite sources

Linear economy Dur future econom MATURAL RESOURCES TAKE MAKE DISPOSE DISPOSE

more circular economy, in which we keep resources in their highest value use for as long as possible.



Waste hierarchy

Our current economy:

The waste hierarchy is one of the key tools to help us move towards a circular economy. There are many versions of the hierarchy,



but the basic message is simple: the more activity we push towards the top of the hierarchy, the better.

Avoid unnecessary resource use and waste by designing waste out

Reduce the quantity, toxicity and ecological footprint of consumption

Reuse or repurpose products and components for the same purpose, or repurpose them for another use that does not reduce their value or require further processing

Recycle/compost – recover and process materials to make the same or different materials of similar value when reuse is on longer possible

Recover value (eg, energy) from materials that cannot be reused or recycled

Treat the waste with processes to remove or reduce potential harm before disposing of the waste safely on land set aside for that purpose

Waste reduction work programme

Initial goal

To reduce waste as part of a transition to a low-carbon circular economy.

Objectives and workstreams

This work programme has five main objectives:

- 1. Building the **foundations** for a transformed waste system.
- 2. Expanding investment in the sector.
- 3. Introducing system-level change.
- 4. Addressing individual material streams and products.
- 5. Strengthening operational and compliance activity.

Underneath each objective sit individual workstreams. In each section below, we highlight the key workstreams, many of which are already under way².

Note – all dates are indicative and subject to change. Updated information will be published on MfE's website.

² For more information see https://environment.govt.nz/ what-government-is-doing/areas-of-work/waste

Objective 1: Building the foundations for a transformed waste system



The foundations needed to transform our strategic and legislative frameworks for managing waste will be in place by mid-2023.

Workstreams		Timing	
1.1	New waste strategy (key workstream)	Consultation in late 2021	
	Development of a new strategy to guide our transformation to a low-carbon circular economy. The strategy will drive priorities, investment, performance and more coordination across central and local government, industry, iwi/Māori and communities.	Publication in mid-2022	
1.2	Long-term waste infrastructure plan Development of a national infrastructure plan with 10+ year horizon, setting out the path to a fit-for-purpose resource recovery system. The plan will be supported by an infrastructure and services stocktake.	Publication in 2022	
1.3	Emissions reduction plan – policies for waste and hydrofluorocarbons (key workstream)	Consultation in mid-late 2021	
	Contribution to the development of the emissions reduction plan, which will include waste sector-specific policies to reduce greenhouse gas emissions across the economy and policies to reduce emissions from hydroflurocarbons (HFCs)	Publication in late 2021	

Wor	kstreams	Timing
1.4	New waste legislation (<i>key workstream</i>) Development of new legislation to replace the Waste Minimisation Act 2008 (WMA) and Litter Act 1979. The legislation will create new powers to support delivery of the new waste strategy, provide for a new waste disposal levy investment framework, and strengthen compliance tools.	Consultation in mid–late 2021 Introduction to Parliament in mid-2022 Select committee submissions and hearings in mid–late 2022
		Enactment in early-mid 2023
1.5	Improved data systems Expansion of data collection systems to improve baseline and performance monitoring data sets. Transparency and information sharing will be improved while maintaining commercial confidentiality. Improved systems will help	Ongoing improvement to coincide with the waste disposal levy expansion
	create a stronger evidence base for the new waste strategy, targets and monitoring of material streams, performance standards, regulated product stewardship schemes, as well as wider environmental reporting, international reporting	Additional engagement with regulated parties from mid-2021

commitments, and more.

13

Key workstreams

New waste strategy

Relevance

This is the core workstream for transforming our waste sector. The last waste strategy was published in 2010 and is no longer adequate for Aotearoa New Zealand's needs. There has been a strong call from the sector for clear leadership and direction from central government through the creation of a new strategy.

Focus

A new waste strategy will set the long-term direction for addressing our waste and resource recovery issues. It will set our vision for the future, so that all parts of the sector and society can align their efforts.

Timing

- → Work is in progress on proposals for the content of the new strategy, in working with a ropū of leading Māori technical experts and an advisory group of sector waste experts.
- → Consultation in late 2021.
- \rightarrow Publication in mid-2022.

Emissions reduction plan – policies for waste and hydrofluorocarbons

Relevance

Under the Climate Change Response Act 2002, Aotearoa New Zealand has a target to reduce biogenic methane emissions by 10 per cent by 2030 and at least 24–47 per cent by 2050, relative to 2017 levels.

He Pou a Rangi – the Climate Change Commission's (CCC) final advice on emissions budgets and the policy direction of the emissions reduction plan was provided to the Government in May 2021. The CCC recommended revising the waste strategy so that it will support delivering a reduction in waste-related biogenic methane emissions by 40 per cent by 2035. The advice also indicated a need to reduce fluorinated gases, particularly HFCs used in refrigerants, by extending import restrictions by 2025 and implementing product stewardship for refrigerants (declared a priority product under the WMA in July 2020).

These actions would speed up the phase down of HFCs already underway as part of the Government's commitments under the Montreal Protocol.

MfE's response to the CCC's advice will inform Government decisions on the emissions reduction plan, which will be consulted on in August–October this year.

Focus

The Climate Change Response Act 2002 requires the Government to publish the first emissions reduction plan by 31 December 2021. This must set out the policies and strategies to meet emissions budgets (interim targets), including actions for reducing emissions from the waste sector (with a focus on organic waste). They will be informed by the new waste strategy and related work. The emissions reduction plan will also include policies to reduce emissions from HFCs.

Timing

- → Work is in progress to develop the emissions reduction plan.
- → Consultation in mid-late 2021.
- → Publication by 31 December 2021 (along with the first three emissions budgets).

New waste legislation

Relevance

New waste legislation is needed to ensure we have the tools and powers to achieve the new waste strategy and support the wideranging waste work programme.

Focus

The new legislation will replace the WMA and Litter Act 1979 with a single comprehensive Act.

Key parts of the reform will include:

- → strengthening and clarifying requirements for a national waste strategy and local authority plans, and for reporting against them
- → improving data collection, analysis and management
- → ensuring the waste investment framework is fit for purpose for the additional revenue generated by the expanded waste disposal levy
- → expanding, strengthening, and streamlining regulatory tools to encourage a stronger focus on avoiding and reducing waste.

Timing

- → Work is in progress on proposals for the content of the new waste legislation.
- → Consultation in mid-late 2021.
- → Legislation introduced to Parliament in mid-2022.
- → Legislation enacted in early-mid 2023.

Objective 2: Expanding investment in the sector



Short-term targeted investment will enable immediate improvements in waste systems by mid-2023, in preparation for a significant increase in revenue from the waste disposal levy.

Wo	rkstreams	Timing
2.1	Waste disposal levy increase and expansion to fund investment (key workstream; for implementation see workstream 3.1) Increase in and expansion of the scope of the waste disposal levy from mid-2021 to mid-2024, generating an increase in revenue from approximately \$40 million per year to \$270 million per year, for investment in waste reduction.	Levy changes take effect on 1 July 2021, 2022, 2023 and 2024
2.2.	Waste Minimisation Fund (WMF) (key workstream) Delivery of 2021 funding round of approximately \$10-12 million using existing investment process. From 2023, we will move to a new investment system under new legislation, with interim changes potentially introduced from 2022.	Assessment of 2021 funding round applications in August 2021 and decisions in mid-late September 2021 2022 funding round or interim model in early-mid 2022
2.3	COVID-19 Response and Recovery Fund investment programme (<i>key workstream</i>) Delivery of a \$124.3 million economic stimulus package allocated to resource recovery infrastructure over three years. At present, \$80 million has been committed to eight projects through Deeds of Funding. An additional \$41 million in projects will be confirmed and announced by mid-2022.	Investment complete by late 2023

Wo	rkstreams	Timing	
2.4	Plastics Innovation Fund (for further information see workstream 4.2)	Fund open by late 2021	
	Introduction of a \$50 million fund to operate over four years, with investment criteria guided by plastics research, innovation and waste minimisation priorities.	Investment complete by mid-2025	
2.5	Contaminated Sites Remediation Fund (for further information see workstream 5.2)	Funding rounds close in March	
	Delivery of annual funding of around \$2.6 million per year, distributed mainly through regional councils.	and September	



Key workstreams

Waste disposal levy increase and expansion to fund investment

Relevance

This is the core strategic investment workstream to transform our waste sector. It responds to calls from local government, the Productivity Commission, the OECD, and others.

Waste levies are widely used internationally to help reduce waste and fund alternative disposal options such as reuse and recycling.

In Aotearoa New Zealand, the levy has historically only applied to disposal at Class 1 landfills at a rate of \$10 per tonne. This generates revenue of around \$40 million per year, most of which must be spent on waste minimisation initiatives by either central or local government.

Focus

The changes to the levy will improve its effectiveness by applying it to more disposal sites, increasing its rate, and requiring data reporting by additional sites. All new information and payment requirements will be supported by a strengthened compliance programme.

Levy increases will result in significantly increased revenue, estimated to be around \$270 million per year from the end of 2024/25. This will create a significant opportunity to invest in priority areas such as resource recovery infrastructure and systems, research and development, innovation, community projects, public information, and te ao Māori initiatives. The new waste strategy and long-term waste infrastructure plan are being developed to guide this future investment by both central and local government.



Timing

The Government agreed to significantly increase and expand the scope of the levy in June 2020. Implementation details are discussed in workstream 3.1. The regulations bringing the changes into law were gazetted in April 2021. The changes are set out in the following table.

Increase and expansion of the waste levy

Landfill class	1 July 2021	1 July 2022	1 July 2023	1 July 2024
CLASS 1: Municipal landfills	\$20	\$30	\$50	\$60
CLASS 2: Construction and demolition fills	-	\$20	\$20	\$30
CLASSES 3 AND 4: Managed and controlled fills	-	-	\$10	\$10
TOTAL Levy revenue, estimate (\$ million)	\$65	\$150	\$210	\$270

Waste Minimisation Fund (WMF)

Relevance

This is the central government fund that allocates revenue generated by the waste disposal levy to projects that promote or achieve waste minimisation.³ On average, \$12 million in funding is available per year. The WMF operates as a contestable fund and is usually heavily over-subscribed.

Focus

We are supporting 92 active projects (\$59.3 million of approved funding) that were successful in previous funding rounds.

Current estimates are that the 2021 funding round will have around \$10 to \$12 million available for investment. The strategic outcomes and investment signals for this funding round are set out below.



Current allocation of funding to WMF projects by waste stream

3 For more information see https://environment.govt.nz/ what-you-can-do/funding/waste-minimisation-fund

Strategic outcomes and investment signals for the 2021 WMF funding round

Strategic outcome 1: reduce construction and demolition waste

Investment signals	Re-design construction and demolition materials, products and services to facilitate reduction/reuse of resources.		
	Improve and enable public and private construction and demolition material resource recovery services and infrastructure.		
Strategic outcome 2: achieve beneficial outcomes for organic waste			
Investment signals	Improved tools to avoid food waste, such as data and analysis and practical resources to inform effective behaviour change.		
	Increase domestic capacity of existing food rescue organisations.		
	Support primary and processing sectors in redesign of materials, products and services to minimise waste.		

For the 2022 funding round, current estimates are that around \$20 million will be available for investment. New strategic outcomes and investment signals will be developed for that round, drawing on the new waste strategy and long-term waste infrastructure plan.

Timing

- → Assessment of 2021 funding round applications in August 2021.
- → Application decisions in mid-late September 2021.

COVID-19 Response and Recovery Fund investment programme

Relevance

In July 2020, the Government announced \$124.3 million in funding for resource recovery infrastructure as part of the COVID-19 Response and Recovery Fund (CRRF) economic stimulus package. With an investment window of 2020 to 2023, this is a first step in addressing the estimated \$2.1– 2.6 billion deficit in Aotearoa New Zealand's onshore resource recovery infrastructure. It will also stimulate business and employment opportunities across the country.

Focus

The Government has identified 15 investment-ready resource recovery infrastructure projects. This investment is through a combination of grants and loans to both private and public entities. The initiatives include a range of resource recovery infrastructure solutions to divert and process recyclable or recoverable products such as food organics, fibre, plastics and construction and demolition materials. The projects increase regional capability through investment in a spread of plant locations. They also increase capacity at existing resource recovery plants through investment in optical sorting equipment.

Collectively, the 15 projects are expected to create approximately 150 jobs during construction and a further 276 ongoing jobs.

Timing

A total of \$57 million in funding for infrastructure projects has already been announced in nine locations, with the most recent being a new resource recovery facility in Tauranga.⁴ Further investment will be announced over the course of 2021.

⁴ For more information, see https://www.beehive.govt.nz/ release/more-action-waste-%E2%80%93-governmentfunds-recycling-infrastructure-moves-standardise-kerbside and https://www.beehive.govt.nz/release/205minvestment-reduce-waste-going-landfill-bay-plenty

Location of CRRF investments in resource recovery infrastructure (as of 1 June 2021)



Objective 3:



Introducing system-level change

System-level changes will continue to be developed and implemented to enable change across the country.

Wo	orkstreams	Timing
3.1	Waste disposal levy increase and expansion – implementation (key workstream; for investment see workstream 2 1)	Implementation from mid-2021–2024
	Extension of reporting requirements to additional sites (identifying all applicable sites, engaging on implementation). There will be a focus on operational changes, including data and evidence gathering and compliance and enforcement.	Targeted engagement with regulated parties
3.2	Kerbside standardisation Consultation on a new standardised national	Consultation in late 2021 or early 2022
	kerbside collection system to improve diversion rates, reduce consumer confusion and support higher-quality recyclables.	Implementation expected over multi-year period
	Investigation of health and safety risks of kerbside recycling collection systems.	

 3.3 Container Return Scheme (CRS) – investigation Investigation of a CRS as one way of addressing New Zealand's low resource recovery rates and high litter associated with beverage containers. A CRS is a recycling scheme and a form of product stewardship that incentivises consumers and businesses to return beverage containers for recycling or refilling in exchange for a refundable deposit The Minister and Cabinet will consider advice from officials on a CRS in the second half of 2021. If a decision to proceed with a scheme is made public consultation would likely take place 	Wo	rkstreams	Timing
later in 2021.	3.3	Container Return Scheme (CRS) – investigation Investigation of a CRS as one way of addressing New Zealand's low resource recovery rates and high litter associated with beverage containers. A CRS is a recycling scheme and a form of product stewardship that incentivises consumers and businesses to return beverage containers for recycling or refilling in exchange for a refundable deposit.	The Minister and Cabinet will consider advice from officials on a CRS in the second half of 2021. If a decision to proceed with a scheme is made, public consultation would likely take place later in 2021.



Key workstream

Waste disposal levy increase and expansion – implementation

Relevance

A core workstream for system-level change is the increase in and expansion of the scope of the waste disposal levy. This will expand levy payment and data collection beyond municipal landfills (Class 1), to include sites that take construction and demolition materials and other inert/lightly contaminated materials (Classes 2–4), with data collection also from industrial monofills (Class 1), cleanfills (Class 5) and transfer stations.

Focus

The regulations bringing the changes into law were gazetted in April 2021. The focus is now on implementing the levy and information requirements. This includes investing in weighbridges, expanding data collection and management systems, strengthening compliance and monitoring activity, and mitigating unintended consequences such as inappropriate and illegal disposal.

The increase and expansion of the levy is phased to allow time for disposers and disposal sites to prepare.

Data collection at fill sites will begin six months before the levy applies. To further improve the availability of data, data collection will include sites not subject to the levy.

Timing

Disposal site/requirement	Date for new data-reporting obligations to take effect
Class 1 monofills*	1 January 2023
Construction and demolition fills (class 2)	1 January 2022
Managed fills (class 3)	1 January 2023
Controlled fills (class4)	1 January 2023
Cleanfills (class 5)*	1 January 2023
Transfer stations*	1 January 2022
Record of waste disposal sites	1 July 2022

* sites not subject to the levy



Aotearoa New Zealand's kerbside recycling

A recent report commissioned by MfE, *Recommendations for standardisation of kerbside collections in Aotearoa*, identified opportunities to standardise domestic kerbside collections to:

- → increase consistency
- → reduce confusion for householders
- → improve material quality, and
- → reduce residual rubbish to landfill (Pritchett and Yates, 2020).

The report confirmed significant variation between kerbside collection systems across Aotearoa New Zealand, with different materials collected (some councils collect a wide range of plastics, others a more limited range), and different bin systems used. The report found that "these many inconsistencies lead to confusion among the public, incentivise waste to landfill, and can increase contamination in recycling" (Pritchett and Yates, 2020, p 6). The result is an estimated 176,934 tonnes of materials being disposed of into the incorrect kerbside collection container every year (Yates, 2020).

The report made three key recommendations, which the Government is currently considering. These were to:

- → incentivise councils to implement kerbside collections of food waste
- → move to a best practice model for dry recycling, and
- → standardise the materials collected in kerbside recycling nationally.

Objective 4: Addressing individual material streams and products



We will continue to gather information and make progress in addressing problems with individual materials and products.

Wo	orkstreams	Timing
4.1	Regulated product stewardship (<i>key workstream</i>) Development of regulated product stewardship schemes for six priority products: tyres; e-waste; plastic packaging; agrichemicals and their containers; refrigerants; farm plastics.	First regulations to support scheme implementation announced in mid–late 2022
		Timing for subsequent schemes will reflect timing of co-design processes
		Consultation on regulations will be in more than two stages from late 2021–late 2022
4.2	Rethinking plastics (<i>key workstream</i>) Implementation of plastics phase-outs and Plastics Innovation Fund (PIF), outlined in a National Plastics Action Plan.	Targeted consultation on phase-outs from September 2021 PIF open by late 2021 Phase-out regulations take effect from 2022
4.3	National Environmental Standard (NES) for storing tyres outdoors	NES takes effect 20 August 2021
	Introduction of a new NES to enable regional councils to manage the environmental risks of outdoor tyre storage.	

Wo	orkstreams	Timing
4.4	Organics/food waste Identified as a priority investment signal for the 2021 WMF funding round. Work on definitions, specific targets and initiatives that will contribute towards strategic-level targets in the new waste strategy. Consideration of recommendations of and response to the CCC. Work with other agencies on sustainable food systems and food security	Ongoing Engagement opportunities as part of new waste strategy and emissions reduction plan
4.5	Construction and demolition materials Identified as a priority investment signal for the 2021 WMF funding round. Data and evidence gathering to support future initiatives that will contribute towards strategic-level targets in the new waste strategy. Liaison with other agencies working on these issues.	Ongoing Engagement opportunities as part of new waste strategy and emissions reduction plan
4.6	Hazardous substances Improvement of the assessment process for hazardous substances by regulatory amendments to the HSNO Act. Development of infringement regulations under the HSNO Act. Specific work around the Minamata, Stockholm, Rotterdam, and Vienna Conventions. This includes coordinating with other agencies, such as NZ Customs on import controls for banned Persistent Organic Compounds (POPs) under the Stockholm Convention.	Ongoing Select committee submissions and hearings on HSNO Act amendments in mid-late 2021 HSNO Act amendments take effect early 2022
4.7	Other material streams Consideration as part of development of new waste strategy	Ongoing

and response to the CCC.

Key workstreams

Regulated Product Stewardship (RPS)

Relevance

This workstream will be a key part of the transformational plan as it will incentivise end-of-life solutions for products governed by regulated schemes.

Six priority products were declared under the WMA in July 2020:

- → tyres
- → electrical/electronic products (e-waste)
- → plastic packaging
- → agrichemicals and their containers
- → refrigerants and other synthetic greenhouse gases
- → farm plastics.

Following a co-design phase with producers and other key stakeholders, schemes will be accredited and regulated under the WMA. A number of voluntary government-accredited schemes are already in place, but have typically experienced free-rider issues and low recovery rates.⁵

Focus

The focus is now on establishing regulated and accredited product stewardship schemes for priority products, driving change by moving towards circular infrastructure and incentives for priority products.

⁵ For more information see https://environment.govt.nz/ what-government-is-doing/areas-of-work/waste/productstewardship/regulated-product-stewardship

Process for establishing Regulated Product Stewardship schemes





Implementation of accredited schemes



Timing

Process to date toward regulated product stewardship for the declared priority products

	Priority products	Co-design		Accreditation	Advice on regulations		Establish new PSO		Earliest
		Started	Completed	Applied	From co-design	For consultation	Under- way	In place	in-effect date
1	Tyres	~	~	~	~	Pending Cabinet consider- ation		~	Dec 2022
2	Agrichemicals	\checkmark	~		\checkmark			~	Sep 2023
3	Refrigerants	~	~		~		~		Sep 2023
4	Large batteries	~	~		\checkmark		~		Dec 2022
	Other e-waste	~							2024
5	Farm plastics	\checkmark							2024
6	Plastic packaging								2024

PSO = Product Stewardship Organisation

"Tackling the problem of plastic waste needs a system change, a collection of adjustments – some large, some small – across all aspects of society... We envision a future of plastic use with updated systems, new products and technologies and possibly materials, that in combination enable citizens, businesses and communities to adopt more sustainable practices. Aotearoa New Zealand's journey to a circular economy for plastics needs to be based on short- and medium-term strategies, nested within a long-term vision."

Rethinking plastics in Aotearoa New Zealand (Office of the Prime Minister's Chief Science Advisor, 2019, p 2 and 13)

Rethinking plastics

Relevance

Plastic is a durable, flexible, inexpensive and lightweight material that is suitable for a wide range of applications, but there is increasing public concern over its harmful effects on our environment due to mismanagement of the plastics lifecycle. The *Rethinking plastics in Aotearoa New Zealand* report recommended a broad range of actions to tackle New Zealand's plastic waste problem. In June 2021, the Government announced the phase-out of a range of single-use plastic items and hard-to-recycle plastic packaging by mid-2025.

Focus

The Government will publish a National Plastics Action Plan to drive progress on the actions agreed in the Government's response to the *Rethinking plastics* report, including setting up a new Plastics Innovation Fund.

Timing

- → A Plastics Innovation Fund will open in late 2021.
- → Regulations to phase out a range of hardto-recycle and single-use plastic items will take effect in three stages from 2022.

Objective 5: Strengthening operational and compliance activity

Operational and compliance systems need to expand and strengthen to support the wide range of changes under way.





Wo	orkstreams	Timing		
5.1	Strategy for improved compliance, monitoring, and enforcement under the WMA (key workstream)	Ongoing		
	Enforcement of regulations for single-use plastic bags ban and microbeads ban.	Engagement opportunities as part of new waste strategy, new waste legislation, waste levy implementation and system-level changes such as Regulated Product Stewardship schemes		
	Management of the online waste levy system (OWLS 2.0), including policy and procedures for recent system upgrades.			
	Operational compliance, monitoring, and enforcement and performance management activities under the WMA, such as the waste disposal levy and WMF auditing.			
5.2	Contaminated land strategy and compliance improvements	Ongoing		
	Development of new Hazardous Activities and Industries List (HAIL) guidance to help identify, investigate and manage contaminated land in the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (under the Resource Management Act 1991).	Consultation on HAIL guidance in early–mid 2022 and on contaminated land strategy in early 2022		
	Development of a contaminated land liability regime.			
	Development of a contaminated land strategy for future management of contaminated land.			
	Other activities including ongoing support for specific compliance and remedial activities, including orphan sites.			
5.3	Planning for future growth and change	Ongoing		
	Preparation for considerable increase in activities required to support the wider waste programme, and			

from new legislation.

Strategy for improved compliance, monitoring and enforcement

Relevance

Compliance, monitoring and enforcement (CME) activities under the WMA are the responsibility of MfE. It is our only direct regulatory role.

Changes involving new or extended use of regulatory powers under the WMA (including the waste levy expansion, and introduction of regulated product stewardship) all require expansion of the supporting CME regimes if they are to be meaningful and effective.

Focus

Our focus is on monitoring and supporting compliance with all provisions and regulations under the WMA, including Class 1 disposal facility audits, online monitoring of the levy collection and data system, requirements territorial authorities must meet to receive their share of revenue from the waste disposal levy, and the auditing of RPS schemes and WMF activities.

Ongoing operational and regulatory related activities are a core focus of the Government's waste work programme, as follows:



Disposal facilities – levy payment

- → 36 Class 1 disposal facilities currently paying levies
- → annual audit programme goal to audit all 36*

Territorial authorities – waste disposal levy spend

- → 67 territorial authorities shared
 \$17.5 million in revenue in 2020/21
- → contingent on up-to-date Waste Minimisation and Management Plans
- → annual audit goal to audit all territorial authorities*

Plastic bag ban

- → illegal to sell or give away plastic bags
- → nationwide compliance project just completed

Product Stewardship schemes

- → 11 voluntary schemes in place
- → six priority products declared for regulated schemes

Waste Minimisation Fund – deed compliance

→ CME team role in auditing deed compliance is being established

Microbeads

→ currently, the CME role is delegated to the Environmental Protection Agency

* Programme goal applies to the 2020/2021 annual audit programme, after which we will transition to a risk-based approach Looking to the future, increased capacity will be needed to expand CME support regimes. The following table indicates draft indicative requirements for a future state.

CME dimension	Current state (as of March 2021)	Future state (from 2023/24)		
Levy increase and expansion	Levy revenue of \$40 million per year from around 36 disposal facilities in 2020/21	Levy revenue estimated at \$270 million per year from a much larger number of facilities		
Levy distribution to territorial authorities	\$17.5 million in 2020/21 Voluntary reporting for 67 territorial authorities	Estimated \$135 million in 2024/25 Mandatory reporting for 67 territorial authorities		
Data and analytics	Administration of levy payments via OWLS for class 1 landfills (36 facilities)	Data reporting requirements for a large number of fill sites and transfer stations		
Investment focus	MfE's role limited to funding circa \$12 million annually via WMF	A strong focus on implementation and delivery via investment across multiple funds with a requirement to audit achievement and spending		
New legislation	Limited scope and tools	Under development		
	Some tools unused			

Timing

Ongoing. The future state will be aligned with the waste disposal levy implementation, new waste legislation and other future waste-related funds and schemes requiring CME.



Plastics bags ban compliance

MfE has a direct operational role for assuring CME of the plastic bag ban, which came into effect on 1 July 2019.

Retailers are no longer allowed to distribute or sell plastic bags with handles that are new or unused, and are under 70 microns in thickness. The ban applies to all retailers in Aotearoa New Zealand, including fast food outlets, online shops, and not-for-profit organisations. Collectively, this is a regulated community of at least 35,367 entities.

MfE embarked upon an 18-month project to monitor and assess compliance to inform the long-term approach. The project focused on an education and engagement approach, and had three key aspects – following up on public complaints, doing spot checks of retailers, and surveying retailers as the ban rolled out to capture views of the regulated community. We responded to complaints about 215 retailers, and 173 have been brought into compliance at this time. Spot checks demonstrated 98 per cent compliance, and the survey showed a very high level of support for the ban and for future bans of single-use items. Overall, the regulatory programme has been highly successful, and this bodes well for future behaviour change in this space. The compliance role in respect of plastic bags continues and will be resourced in accordance with risk going forward.

References

Grant Thornton. 2020. *Report on Waste Disposal Levy Investment Options*. Prepared for the Ministry for the Environment by Grant Thornton. Wellington: Ministry for the Environment.

He Pou a Rangi – Climate Change Commission. 2021. *Draft Advice for Consultation*. Wellington: Climate Change Commission.

Ministry for the Environment. 2020a. *Reducing the impact of plastic on our environment* – *Moving away from hard-to-recycle and single-use items*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2020b. *Rethinking Plastics in Aotearoa New Zealand: Government response to Rethinking Plastics report*. Wellington: Ministry for the Environment.

Ministry for the Environment. 2021a. *New Zealand's Greenhouse Gas Inventory* 1990–2019. Wellington: Ministry for the Environment.

Ministry for the Environment. 2021b. Container return scheme: An option for reducing litter and waste to landfill. Retrieved from https://environment.govt.nz/what-government-is-doing/areas-of-work/waste/container-return-scheme-reducing-waste-landfill/ (8 June 2021).

Ministry for the Environment. Unpublished. Calculations conducted by the Climate Change Analysis Team.

New Zealand Cabinet. 2020. *Proposals for a More Effective Waste Levy: Policy Decisions*. Cabinet Environment, Energy and Climate Committee (ENV) Minute of Decision CAB-20-MIN-0264.01. Wellington: Cabinet Office, Department of the Prime Minister and Cabinet.

Office of the Prime Minister's Chief Science Advisor. 2019. *Rethinking Plastics in Aotearoa New Zealand*. Auckland: Office of the Prime Minister's Chief Science Advisor.

Pritchett S, Yates S. 2020. *Recommendations for standardisation of kerbside collections in Aotearoa*. Prepared for the Ministry for the Environment by WasteMINZ. Wellington: Ministry for the Environment.

World Economic Forum et al. 2016. *The New Plastics Economy – Rethinking the future of plastics*. Cologny/Geneva: World Economic Forum.

Yates S. 2020. *Rethinking Rubbish and Recycling*. Prepared for WasteMINZ TAO Forum. Auckland: Sunshine Yates Consulting.

