



Waste & Resource Efficiency, Waste work programme

# Waste Investment Strategy- Towards a low-waste, low-emissions circular economy

A preliminary strategy to guide waste levy investment

(Internal document, last updated 26 July 2023)



Ministry for the  
**Environment**  
*Manatū Mo Te Taiao*

New Zealand Government

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# Purpose and objectives

This document provides a draft Ministry position on an approach to strategic investment of the central Government portion of the waste levy over the next 5-year period. The intention is to provide early thinking, to test its merits and inform the content of the draft, and then final, waste action and investment plan 2024-28 (AIP).

The objectives of this investment strategy are to:

- Catalyse and leverage the resources of central Government, local Government, iwi Māori and industry so that they have maximum collective impact
- Provide increased clarity to the sector on how central Government sees the investment priorities over the next 5 years
- Ensure the portfolio of investments strikes an appropriate balance across multiple dimensions: levels of the waste hierarchy, materials and regions
- Set a path for improving outcomes for Māori and for Aotearoa New Zealand through increased Māori participation in funds.

## What we discuss in this strategy

- The context for strategic investment to minimise waste
- Projected funding available
- The change we expect to see as a result of investment
- What we will invest in
- How we will invest, including specific funds, governance and administrative arrangements
- How we will know we've been successful.

## What is out of scope

This strategy focusses on investment of the waste disposal levy, and other sources of investment funding, by central Government. While the portion of the levy allocated to councils is not explicitly covered by this investment plan, it is anticipated that local government will align Waste Management and Minimisation Plans with national investment signals, which may become a future requirement once new waste legislation is in place. Also out of scope is the portion of the levy that supports levy administration, collection, compliance and enforcement.

# The context for waste investment

This section discusses the strategic, market and policy context for waste investment.

## The investment landscape is dynamic

Investment in waste infrastructure<sup>1</sup> is inherently a long-term proposition. Once a facility is built it is there for decades. These big investment choices need to be based on as much long-term certainty and stability as possible. New Zealand, particularly due to its size, scale and geography, is subject to a range of complex and changing dynamics that threaten the effectiveness of actions to minimise waste, and pose risk to the viability of recycling and resource recovery infrastructure investment.

These are acknowledged in the Waste Strategy and consistently pointed to in external reports<sup>2</sup>, and can be summarised as follows:

- There is a mix of private sector and local government ownership which has changed significantly over time and continues to do so. Industry has some concerns that councils may invest their increasing levy revenue in ways that distort the sector; some in local government are concerned that the private sector profits at the expense of ratepayers.
- There is volatility in market demand, heavily influenced not only by local demand drivers in New Zealand, but also overseas drivers outside New Zealand's ability to influence. A key example was the "China Sword" policy, the ban by China of low-quality recyclable material imports in 2018. This policy placed significant pressure on New Zealand's resource recovery systems and facilities. It required the sector to rapidly improve the quality of collection, sorting and pre-processing of materials, which required funding support from Government.
- Economic viability is heavily influenced by New Zealand's geographical shape and population distribution. For regions outside the main metropolitan areas, the lack of scale means establishing local processing solutions can be a marginal proposition at best.
- It is currently cheaper to dispose of some materials as waste to landfill, rather than recycle or process it, particularly where landfill costs are low and where an alternative solution is far away with an associated transport cost. The increase and expansion of the levy is intended to disincentivise disposal to landfill by narrowing the difference in cost between landfilling and reuse, recycling and recovery options. The levy also puts a value on the environmental and social externalities associated with waste disposal that are not captured in gate fees.

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<sup>1</sup> Waste infrastructure, as defined in the Waste Strategy, comprises four main types: collection, resource recovery, reprocessing and disposal infrastructure.

<sup>2</sup> For example: New Zealand Infrastructure Commission | Te Waihangā, *Sector State of Play: Resource Recovery and Waste*, 2021; and Eunomia Research and Consulting Ltd, *Waste and Resource Recovery Infrastructure and Services Stocktake*, prepared for Ministry for the Environment, December 2022

- Council waste collection and disposal contracts tend to be longer-term (eg 10 years), which can impact on the viability of new investment and limit the entry of new players or recovery opportunities.
- There is inadequate waste data to inform decision-making by central government, local government and industry and to measure the impact of those decisions. While this is improving, it will be several years until the expanding waste levy and new data regulations provide a clearer picture of the waste problem and system.

Combined, these factors mean investment choices are not always straightforward and we must be equipped to adapt to changing conditions. There is inherent complexity and risk around how both the central government and local government portions of the levy are invested. As Grant Thornton put it<sup>3</sup>:

**“New Zealand’s waste problem does not have a simple solution. A multi-faceted investment approach is required to address a range of potentially conflicting priorities within a rapidly changing environment.”**

## **There is strong strategic direction for investment**

The Te rautaki para | Waste strategy for Aotearoa, New Zealand (Waste Strategy), published in March 2023, and the first Emissions Reduction Plan (ERP) provide strong strategic direction for investment. The eight goals of phase 1 (2023-2030) of the Waste Strategy are set out in table 1 below.

The Climate Change Commission, in their draft advice for the second ERP noted that “Reducing waste emissions is a critical action for achieving the 2030 methane reduction targets”<sup>4</sup> set in the first Emissions Reduction Plan. The Waste Strategy is aligned to this goal by targeting a 30% reduction of biogenic methane emissions from waste by 2030. This is reflected in the current investment signals for the Waste Minimisation Fund (WMF) which are primarily focussed on reducing landfill emissions from organic waste (food waste, green waste, paper and cardboard, and timber). This priority is expected to continue until this goal is firmly on track, which will take several years and is consistent with the timeframes of the new kerbside standardisation regulations (see the following section). The scale of a project’s potential impact on emissions is a key determinant when assessing funding applications.

The Climate Change Commission also highlighted the need for a long-term waste infrastructure plan. See the [Infrastructure](#) section for our proposed approach to this.

There are also detailed policies driving and influencing investment, such as the declaration of six priority products for extended producer responsibility. Other key policy initiatives include

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<sup>3</sup> Grant Thornton, *Report on Waste Disposal Levy Investment Options*, April 2020, p4

<sup>4</sup> He Pou a Rangi | Climate Change Commission, *2023 Draft advice to inform the strategic direction of the Government’s second emissions reduction plan*, p148

the National Plastics Action Plan and plastics phase-out programme, and the standardisation and expansion of kerbside recycling and food scraps collections.

We have also drawn on several external reports produced in recent years to inform our thinking, including from Grant Thornton<sup>5</sup>, Akina Foundation<sup>6</sup>, Waste Management and Recycling Industry Forum<sup>7</sup>, Office of the Prime Minister's Chief Science Advisor<sup>8</sup>, New Zealand Infrastructure Commission-Te Waihangā<sup>9</sup> and Sustainable Business Network<sup>10</sup>.

Table 1: Waste Strategy themes and goals

Themes	Waste Strategy goals
The building blocks are in place to enable change	<ol style="list-style-type: none"> <li>1. The strategic planning, regulatory, investment and engagement systems are in place and operating to drive and support change.</li> <li>2. We have a comprehensive national network of facilities supporting the collection and circular management of products and materials.</li> <li>3. We all take responsibility for how we produce, manage and dispose of things, and are accountable for our actions and their consequences.</li> </ol>
More activity is circular and we produce less waste	<ol style="list-style-type: none"> <li>4. We use fewer products and materials, for longer, through increased durability, repair, reuse, sharing and repurposing.</li> <li>5. Resource recovery systems are operating effectively for core materials and across all regions.</li> <li>6. We look for ways to recover any remaining value from residual waste, sustainably and without increasing emissions, before final disposal.</li> </ol>
Emissions and other environmental impacts are improving	<ol style="list-style-type: none"> <li>7. Emissions from waste are reducing in line with domestic and international commitments.</li> <li>8. Contaminated land is sustainably managed and remediated to reduce waste and emissions and enhance the environment.</li> </ol>

The Investment Logic Model later in this section shows the many ways in which levy investment contributes to the achievement of waste strategy goals.

<sup>5</sup> Grant Thornton report

<sup>6</sup> A suite of reports from Akina Foundation, commissioned by Ministry for the Environment, July 2020

<sup>7</sup> Meredith Connell report

<sup>8</sup> *Rethinking Plastics in Aotearoa New Zealand*, December 2019 and a series of reports on food waste

<sup>9</sup> New Zealand Infrastructure Commission – Te Waihangā report

<sup>10</sup> Sustainable Business Network, *Going Full Circle*, September 2021



# Investment in waste minimisation is increasing

Between the first grant in 2010 until the end of 2021, the Waste Minimisation Fund (WMF) awarded grants totalling \$124m to waste minimisation projects, an average of approximately \$11 million per year. This is a low level of investment relative to the scale of New Zealand's waste problem and is well below most Australian states in per capita terms<sup>11</sup>. Long-term underinvestment has resulted in a waste infrastructure deficit estimated at between \$2.1 - \$2.6b plus \$900m in associated operating costs<sup>12</sup>.

Along with providing a disincentive to wasteful behaviour, providing more funding for waste minimisation is a key driver for the progressive increase and expansion of the waste disposal levy from July 2021. The levy is expected to generate over \$100 million per year for central Government investment by 2024/25.

In recent years the levy has been supplemented by two one-off Government funding appropriations. About \$68 million from the Covid-19 Response and Recovery Fund (CRRF) was invested in 2020 and 2021 in 'investment ready' projects across New Zealand, which included: mechanical and optical sorting technology for plastics and fibre; weighbridges for improved waste data collection; and projects to recover organics and construction and demolition materials. Subsequently another \$103 million from the Climate Emergency Response Fund (CERF) was allocated to support implementation of the Emissions Reduction Plan. This included \$75m over two years in FY23 and FY24 for investment in organic processing and resource recovery infrastructure, which is being invested through the WMF, alongside waste levy funding.

The graph below shows the estimated upcoming increases in the amount of levy available for central government investment, together with the CRRF and CERF funding referred to above. These projections are based on the current hypothecation of the levy equally between central and local Government, which is not anticipated to change under new legislation.

Levy revenue forecasting is subject to high margins of error particularly because the levy increase and expansion are still in progress. However current forecasts show the waste levy peaking by FY25-26. The levy revenue is expected to then gradually decline over subsequent years as a result of higher disposal costs and recent policy combined with investment activity leading to a reduction of waste to landfill.

As shown in figure 1 below that, levy revenue available for central Government investment could total \$600m over the next five years. Whilst this undoubtedly represents a major opportunity for the sector, it will nevertheless be challenging to fund everything that needs to be done.

There are many opportunities to minimise waste and recover value and there is a strong appetite from the sector to participate in many ways. We anticipate that available funds will be over-subscribed and investment must be prioritised.

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<sup>11</sup> Meredith Connell, *Investing for a circular economy*, prepared for the Waste Management Industry Forum, May 2022

<sup>12</sup> Grant Thornton report

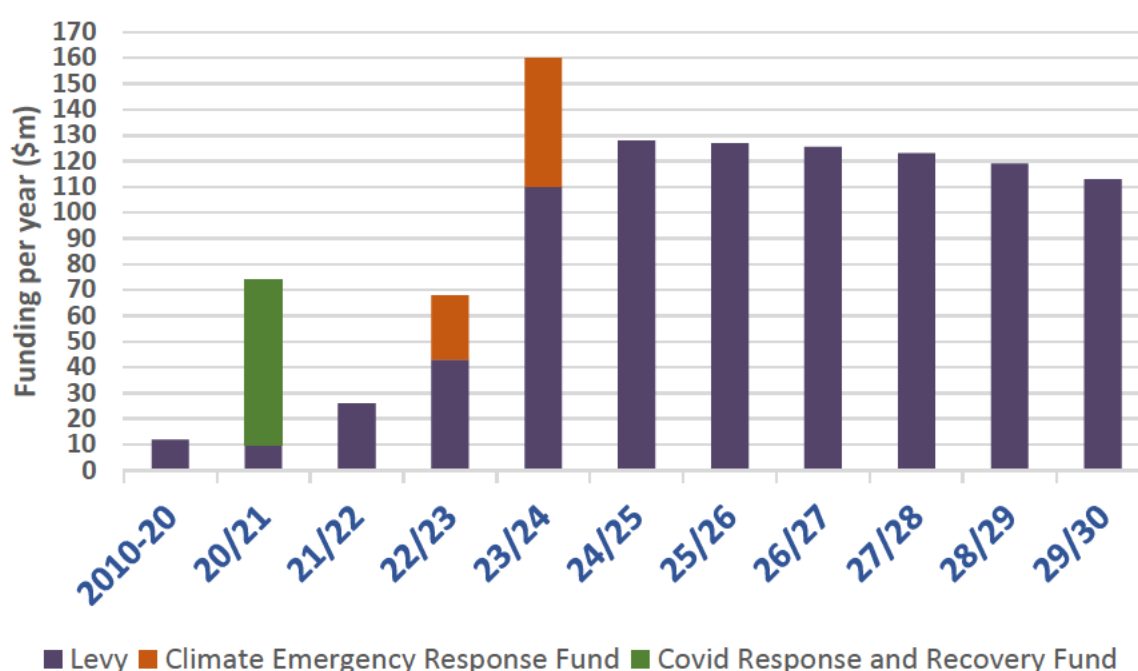


In their *Levy Investment Options* report<sup>13</sup>, Grant Thornton noted that the infrastructure deficit alone, without factoring in investment needs in other areas, is greater than projected levy revenue.

Two key elements will be required to maximise the opportunity:

1. Prioritisation - as Grant Thornton put it, “rationing between competing demands”<sup>14</sup>. This plan sets out the Ministry’s view of the key investment priorities and how they play into the investment plan.
2. Central Government funding will need to act as a catalyst to crowd-in other sources of capital. Assuming equivalent co-funding, which will include councils utilising some of their allocation of the levy, a total pool of some \$1.2b over the same period could be available.

Figure 1: Historic and projected central Government waste investment funding, 2010-2030



## Delivery of strategic goals will be underpinned by new legislation....

New waste legislation is being developed to support the delivery of these and other significant initiatives, towards the vision of a low emissions, low waste society built upon a circular economy.

From an investment perspective the proposed new legislation will provide a broader range of central Government activities that can be funded from the levy, including long-term national behaviour change programmes and start-up costs for extended product responsibility schemes for example. These functions may be administered separately to the Waste Funds

<sup>13</sup> Grant Thornton report

<sup>14</sup> Grant Thornton report

mechanism. Figure 8 in the [Enhanced governance mechanisms](#) section illustrates how groups of different functions are envisaged to be administered at the agency level.

The new legislation will also provide stronger governance controls over the investment of levy funds. See the section on [enhanced governance mechanisms](#) for more detail. Key changes include introducing a new power for the Minister to notify investment priorities from time to time in consultation with the Minister of Finance and introducing a new mandatory consideration of value for money.

## **....and a new investment framework**

In anticipation of increased levy revenue a “Waste Investment Transformation Project” was carried out from mid-2021 to early 2022. Key drivers of this project alongside the increased levy income included the need to make systemic and sustainable impact; a lack of scalability in the previous model; a desire to lift the stakeholder experience and bring more organisations to the table who can contribute impact and scale; and a lack of Māori participation.

The project considered a range of inputs, primarily the Waste Strategy (then in development), the Grant Thornton *Report on Waste Disposal Levy Investment Options*, plus a range of stakeholder feedback. The establishment of the Plastics Innovation Fund (PIF) in November 2021 was an opportunity to test new approaches and many of these have subsequently been implemented for the WMF.

Enhancements created a more deliberate approach to investment, which prioritises impact and scale, and confirmation of targeted investment categories (see section: [What We Will Invest In](#) for further detail). There were also operational changes, including moving from short annual funding rounds to an “always-open” pipeline-driven model.

The work done to establish the PIF and to reset the WMF before it reopened in October 2022 created a strong foundation for a strategic approach to waste investment. Further changes to the waste investment programmes are discussed in further detail in the section: [Our investment approach](#).

## **Addressing Māori under-representation in the funds**

Over the life of the WMF to date, Māori organisations have received a disproportionately small amount of funding relative to population. Addressing this deficit will have a wide range of benefits, and is an investment objective going forward. To support this objective, we have put in place new practices and developed a Māori engagement plan. For more detail, refer to the section: [Our investment approach](#).

## **The best possible alignment with relevant agencies will be important**

Many Government agencies have major policy initiatives and funding programmes underway that relate to the Waste Strategy and ERP. Some of the most relevant in 2023 are:

- Ministry for Business, Innovation and Employment (MBIE)’s work on the circular economy, bioeconomy and Industry Transformation Plans;

- MBIE’s regional development work through Kānoa and its Regional Strategic Partnership Fund;
- The Energy Efficiency & Conservation Authority (EECA)'s work on decarbonisation including their Government Investment in Decarbonising Industry (GIDI) Fund;
- The “Fit For a Better World” strategy led by Ministry for Primary Industries and supported by their Sustainable Food and Fibre Futures fund; and
- New Zealand Green Investment Finance (NZGIF).

It is a dynamic policy and funding landscape, which is rapidly evolving. Such is the cross-cutting nature of central Government work that overlapping outcomes are visible and can be harnessed as a means to maximise impact. In order to optimise the return on the levy it is important that our investments play in the space where we best fit, rather than crowding out others. It is equally important that opportunities for synergies with relevant programmes are taken up where there is strong strategic alignment.

## **We expect to see significant change as a result of larger scale, targeted investment**

Investment of the levy in the ways described in this plan will complement the operational use of the levy to produce the foundations for delivery of our strategic goals.

The changes we will see include greatly improved infrastructure to collect and process waste materials and underutilised resources for beneficial use, and new options to reduce and design out waste. There will be greater investment from the sector, including greater participation of Māori. We will see greater collective responsibility taken for product lifecycle management under extended producer responsibility systems, and adoption of more sustainable practices. There will be better data and effective compliance, monitoring and enforcement systems.

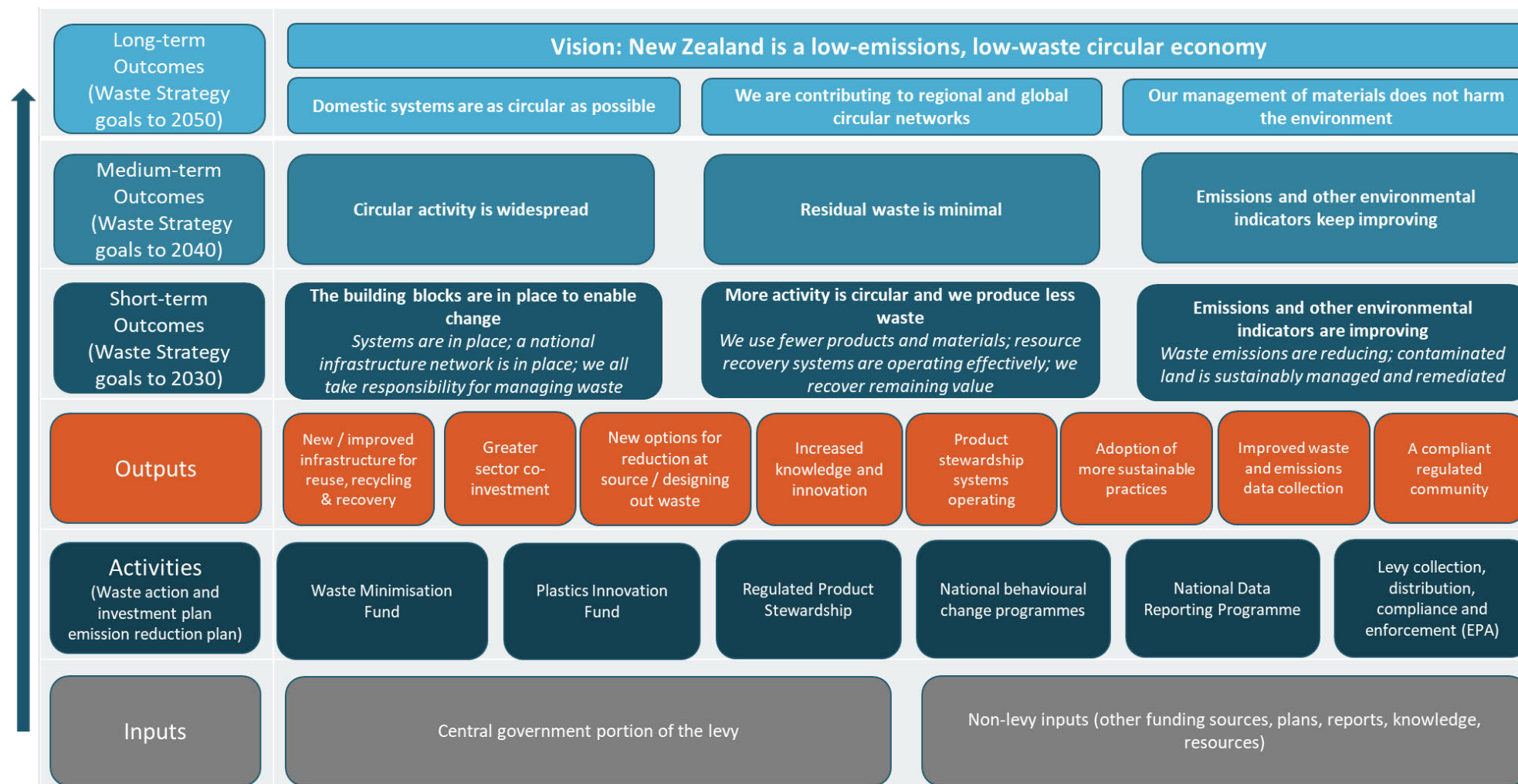
Collectively these outputs mean that by 2030 the goals of phase 1 of the Waste Strategy will have been achieved:

- The building blocks are in place to enable change
- We produce less waste and more activity is circular
- Emissions and other environmental indicators are improving

Figure 2 below provides a visual representation of the investment logic framework for the central Government investment of the waste levy, as anticipated following the passing of new waste legislation in 2025.

This logic model demonstrates the key inputs, activities, measurable outputs and short-, medium- and long-term outcomes we expect to see.

Figure 2: Investment Logic Model: central Government investment of levy



# What we will invest in

This investment plan takes the approach that investment priorities should be geared to the goals of phase one of the Waste Strategy, and determined through a number of interlinked considerations, primarily:

- The need to move up the waste hierarchy while addressing critical gaps at the middle and bottom levels;
- The main material streams we need to focus on;
- The priority types of investment we need to be making to enable the shifts we need to see.

The following sections discuss each of these considerations, then brings them together into a prioritisation framework.

## Moving up the waste hierarchy while addressing critical deficits

The Waste Strategy notes that “To achieve [the targets], we need to take action in many areas and at all levels of the waste hierarchy.”<sup>15</sup>

From an investment perspective it is important to ensure that resources are available across the hierarchy. This means investing in a combination of:

- Addressing critical deficits in recycling, processing and recovery infrastructure, in a way that minimises the risk of stranded assets as waste reduces;
- Initiatives to design out waste and encourage re-use and repurposing;
- Sustainable management and remediation of vulnerable landfills and other contaminated sites.

## Priority waste materials

With strong support from the public, the Government initiated a significant policy programme across a range of waste materials that are predominantly disposed of to landfill and/or cause environment harm in other ways.

There is a long way to go for these material streams to become truly circular, and each require enabling investment. Accordingly, with choices needing to be made about how best to utilise the levy, it makes sense for investment to be prioritised to these nationally significant materials over the duration of this first AIP.

This plan does not close the door to providing funding for initiatives that address waste materials outside that group, but these will not be prioritised.

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<sup>15</sup> Te rautaki para | Waste Strategy, p25

## Not Government Policy

Priority waste materials are:

- Organic materials from domestic and commercial sources including food, greenwaste, fibre and timber from domestic and commercial sources
- Construction and demolition materials, including (but not limited to) focus on wood waste / timber
- Plastics
- Materials accepted through standardised kerbside recycling and any potential future container return or extended producer responsibility (EPR) schemes
- Declared priority products for extended producer responsibility, which currently include:
  - tyres
  - electrical and electronic products (e-waste including large batteries)
  - plastic packaging
  - farm plastics
  - agrichemicals and their containers
  - refrigerants and other synthetic greenhouse gases.

The Waste Minimisation Fund and Plastics Innovation Fund are the vehicles through which investments into these material streams are currently being targeted.

In the tables that follow, we summarise the key issues associated with organics, construction and demolition materials, plastics and other kerbside / container return scheme materials. We outline the current strategic and policy context, provide examples of recent investments and summarise opportunities for investment across the waste hierarchy over the next five years.

In addition, actions to address the six declared 'priority products' for extended producer responsibility are also being supported by levy funds through the WMF, for example scheme design costs and supporting infrastructure. These are discussed further in the Extended Producer Responsibility section.



## Not Government Policy

Table 2: Priority waste materials<sup>16</sup>

Organics - Domestic & commercial food waste, green waste, paper, cardboard, and timber	
Situation - 2023	Opportunities for investment across the hierarchy
<ul style="list-style-type: none"> <li>Estimated 1.8m tonnes organic waste disposed annually<sup>17</sup>.</li> <li>Approximately 92% of New Zealand's waste emissions are from biogenic methane, mainly from organic waste<sup>18</sup>.</li> <li>Approximately 25% of all organic waste is from the commercial sector</li> <li>ERP sets targets for reducing emissions from waste.</li> <li>Decisions in 2023 to standardise kerbside recycling, including organics separation.</li> <li>Materials collected for household or 'domestic' recycling will be standardised, and councils must provide kerbside recycling services to households in urban areas; including food scraps collection by 2030, or by 2027 if they are within 150km of a facility.</li> <li>Policy proposals require businesses to separate food scraps from waste by 2030.</li> <li>Markets for processed organics appear to be increasing, but there are barriers to use.</li> <li>Four 3-year national behavioural change programmes announced in mid-2023</li> <li>There is scope for increasing processing infrastructure and gaps in several regions.</li> </ul>	<ul style="list-style-type: none"> <li>The WMF is the primary vehicle for delivering investment in reducing emissions from waste.</li> <li>Separation and processing of domestic and commercial organics by investing in collection and processing infrastructure and enabling assets is the key investment signal from 2022.</li> <li>Example investments through WMF include Ecogas anaerobic digestion processing facility at Reporoa, and support to local authorities for kerbside organic collection assets.</li> <li>Opportunities to invest towards the top of the waste hierarchy include: <ul style="list-style-type: none"> <li>Redesigning food systems to prevent waste (eg localised self sustained systems)</li> <li>Food rescue programmes</li> <li>Explore opportunities for surplus produce eg kiwifruit</li> <li>Investment in market development for processed organics, to remove barriers.</li> </ul> </li> <li>Consideration being given to how to increase recycling of fibre packaging.</li> </ul>

Construction & Demolition (C&D) - wide variety of materials such as concrete, bricks, wood, glass, metals, and plastic	
Situation - 2023	Opportunities for investment across the hierarchy
<ul style="list-style-type: none"> <li>Estimated at 40% of total waste to landfill.</li> <li>Some material is 'inert' but is recyclable e.g. plastic, metal and concrete.</li> </ul>	<ul style="list-style-type: none"> <li>Despite significant investment through the WMF, the PIF and the CRRF there is a major infrastructure deficit for C&amp;D.</li> </ul>

<sup>16</sup> excluding priority products for Extended Producer Responsibility, discussed on page 22

<sup>17</sup> Eunomia Research and Consulting Ltd, *Waste and Resource Recovery Infrastructure and Services Stocktake Summary Report* and *Full Project Summary Report*, prepared for Ministry for the Environment

<sup>18</sup> He Pou a Rangi | Climate Change Commission draft advice



## Not Government Policy

Construction & Demolition (C&D) - wide variety of materials such as concrete, bricks, wood, glass, metals, and plastic	
Situation - 2023	Opportunities for investment across the hierarchy
<ul style="list-style-type: none"> <li>• High amount of wood waste.</li> <li>• Treated timber has few options for recovery.</li> <li>• The waste levy was expanded to cover C&amp;D fill (Class 2) disposal facilities in 2022, and other managed or controlled fill facilities from 2023. C&amp;D waste recovery is expected to increase as regulation rolls out and resource recovery systems become more effective.</li> <li>• The Ministry works with other agencies, industry and research institutes to address C&amp;D waste. The focus is on reducing and diverting construction and demolition waste to beneficial uses.</li> <li>• Changes to the Building Act require mandatory waste minimisation plans for the construction and demolition sector.</li> <li>• Markets for recovered materials tend to be local due to weight, volume and distance to market factors.</li> </ul>	<ul style="list-style-type: none"> <li>• From 2022, the focus of the WMF in C&amp;D is on sorting facilities e.g. to recover wood and other C&amp;D materials.</li> <li>• Example investments include new resource recovery parks (WMF and CRRF), and increasing the collection of HDPE and PVC pipes and other plastics from construction sites and turning them into new pipes.</li> <li>• Opportunities to invest towards the top of the waste hierarchy include: <ul style="list-style-type: none"> <li>○ Behaviour change &amp; building sector capability</li> <li>○ Solutions to enable reuse and repurposing, such as sorting on site</li> </ul> </li> <li>• Further investment in large-scale access to recycling options across the regions.</li> <li>• Potential for value recovery if no other options.</li> </ul>

Plastics – includes a broad range of plastic polymers and grades	
Situation - 2023	Opportunities for investment across the hierarchy
<ul style="list-style-type: none"> <li>• Over half a million tonnes of imported resins manufactured into products in NZ each year.</li> <li>• NZ sends approx. 400,000 tonnes of plastic to landfill each year, with little over 10% of the volume recycled – mostly overseas.</li> <li>• Half is for single use packaging. The rest is agricultural and construction sector products.</li> <li>• Plastics pollution and microplastics are an increasing problem worldwide.</li> <li>• The plastics phase-out programme phases out a range of single-use / hard to recycle plastic items in three tranches. The last tranche comes into effect by 2024.</li> <li>• Plastics 1, 2 and 5 are amongst materials included in kerbside collection standardisation.</li> </ul>	<ul style="list-style-type: none"> <li>• Priorities identified in the PRIIP include accelerating uptake of innovative business models, behaviour change, and addressing capacity and value-recovery constraints in current recycling systems, for example washing and sorting facilities.</li> <li>• PIF projects support the PRIIP and the plastics phase out programme, as well as increasing onshore recycling capacity.</li> <li>• Example projects include: expanding onshore polystyrene recycling, turning appliance packaging into building products; &amp; expanding a reusable milk keg system, removing an estimated 10 million single use plastic milk bottles a year from circulation.</li> </ul>

## Not Government Policy

Plastics – includes a broad range of plastic polymers and grades	
Situation - 2023	Opportunities for investment across the hierarchy
<ul style="list-style-type: none"> <li>The Plastics Innovation Fund (PIF) launched in Nov 2021 with \$50 million ring-fenced from the levy, for projects that will minimise plastic waste and associated harm.</li> <li>PIF is a 'co-investment' model unlocking significant co-funding, and de-risking innovation in the sector.</li> <li><i>Rethinking Plastics</i> report, The National Plastics Action Plan, the plastics phase-outs programme, the UN Global Plastics Treaty and the Plastics Research, Innovation and Investment Priorities (PRIIP) are key policy drivers of investment.</li> </ul>	<ul style="list-style-type: none"> <li>Further opportunities exist at the top of the waste hierarchy, including innovative ideas to prevent or reduce plastic waste, including from manufacturers; as well as designing out waste through reusable products or enabling infrastructure.</li> <li>There will be continued effort to increase onshore processing capacity for kerbside recycling materials and other difficult to recycle plastics and packaging.</li> <li>The PIF will close at the end of FY2025 or if fully subscribed before then. At that point the focus on these strategic goals will be maintained through the investment signals of the WMF (see the section <a href="#">How we will prioritise</a>)</li> </ul>

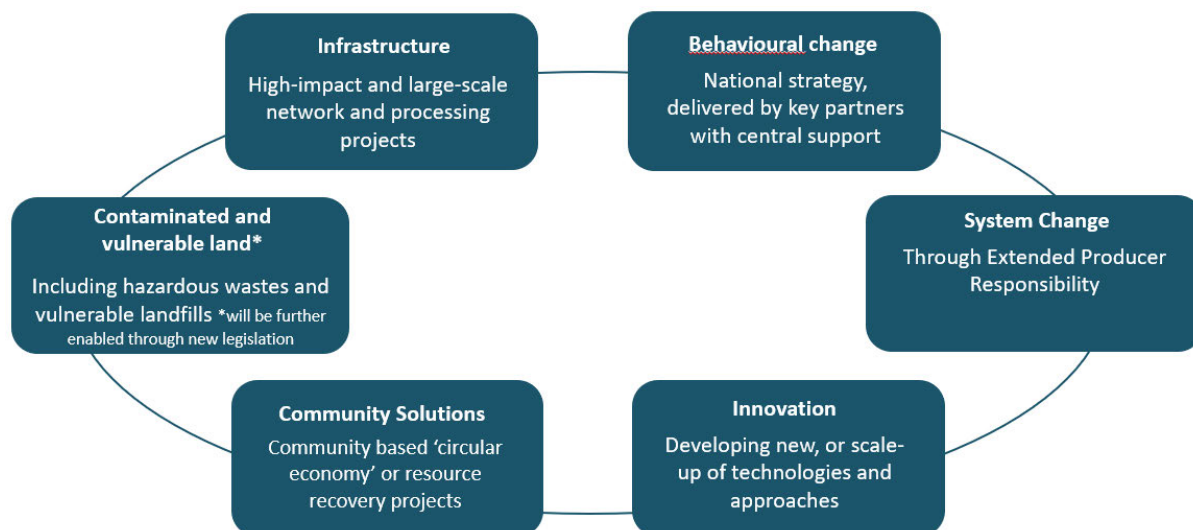
Other kerbside / container return scheme materials – such bottle glass and aluminium	
Situation - 2023	Opportunities for investment across the hierarchy
<ul style="list-style-type: none"> <li>Approximately 106,000t of glass disposed of annually</li> <li>Approximately 170,000 tonnes is recycled – 120,000 tonnes for bottle glass, the rest crushed for aggregate, filter media etc</li> <li>The new kerbside standardisation rules referred to earlier include glass bottles and jars, fibre, and aluminium and steel tins and cans. Thus it is important to consider these already fragile markets for recycled materials.</li> <li>There is only one glass beneficiation plan (removing impurities) &amp; one bottle glass plant, both in Auckland with insufficient capacity to meet national volume needs.</li> <li>Most aluminium is currently exported due to favourable international commodity prices; there is no onshore capacity for processing aluminium into new beverage containers</li> <li>Production emissions dwarf transport emissions in high embodied emissions products and onshore processing may create a local market and demand side drivers for onshore recovery and solutions.</li> </ul>	<ul style="list-style-type: none"> <li>The WMF may consider supporting proposals for additional processing capacity for these materials that meet the criteria and present a compelling case for investment.</li> </ul>

## Investment categories

The WMF has historically invested in a wide range of project types<sup>19</sup>. Going forward we are targeting our investments to a specific range of activities. This approach will help us tackle the waste problem in different ways to generate the impact we need.

The six key investment categories are shown in the figure below.

Figure 3: Investment categories



Each of these investment categories are discussed further in the sections below. We also draw alignment between these investment categories and priority materials as relevant.

## Infrastructure

Infrastructure has historically been the largest investment category for the WMF, comprising 74 per cent by value of all grants awarded since 2010. Such is the importance and nature of infrastructure to the delivery of waste and emissions goals that this category will continue to be the dominant investment category through at least the first phase of this AIP. As noted in the [Context for strategic investment](#) section, the levy has been supplemented with \$75 million from the Climate Emergency Response Fund (CERF) in 2022, ring-fenced for investment in infrastructure to support reducing emissions from waste. The CERF funding is also distributed through the WMF.

The introduction of standardised kerbside recycling collection and new policies to promote recovery, separation and processing of domestic and commercial organics and other priority materials requires major investment in resource recovery and processing infrastructure. The same is true for C&D materials, which require scale and a 'network' approach to development of infrastructure. This need is signalled as a goal of phase one of the Waste Strategy -- to have a comprehensive national network of facilities supporting the collection and circular management of products and materials.

<sup>19</sup> See the [Waste Funds Dashboard](#) for details on all projects funded by the WMF, PIF and CRRF since 2010.

## **“People can’t do the right thing with unwanted materials if the supply chain isn’t there to take them”<sup>20</sup>**

A comprehensive infrastructure stocktake, gap analysis and scenario development work was undertaken, including significant stakeholder input. A summary report was released in late 2022<sup>21</sup>, and an expanded report in May 2023<sup>22</sup>. These reports provide a resource for sector stakeholders to consider as they highlight key infrastructure gaps and priorities. They have also been a key input to the development of an approach to infrastructure planning in the AIP.

### **Waste infrastructure planning approach**

In May 2023 the Ministry released a position paper<sup>23</sup> which proposed a planning approach to deliver the goal of a national network. Key features of the proposed approach are:

- *A vision: An appropriate geographic spread of right-sized facilities connected and supported to enable the efficient collection, sorting, bulking, processing, and redistribution of material resources throughout the economy.*
- The concept of a hub and spoke model, with multi-purpose processing hubs operating at scale and drawing from smaller localised resource recovery centres and transfer stations. The paper noted that elements of this network are already in place and further emerging through the WMF pipeline.
- Bringing this to life through a regionally-led planning approach, through collaboration amongst key stakeholders across a region - local councils and regional council(s), mana whenua, industry and community groups. Stakeholders would collaborate to pool knowledge, identify opportunities and plan future investment in key waste infrastructure.
- A potential role for Central Government in facilitating this process.
- Piloting this approach in a region then adapting it as necessary to roll out more widely.

This is a guiding and enabling role in which central Government creates the conditions - through policy settings, provision of data and targeted investment of the levy and other funding - for key gaps to be addressed in a way that makes sense for all stakeholders.

This approach has been tested with the sector and has been met with broad support in principle. For the Ministry it provides a basis to make funding decisions on individual

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<sup>20</sup> Waste Strategy, p32

<sup>21</sup> Eunomia report

<sup>22</sup> Eunomia report

<sup>23</sup> Ministry for the Environment, *Position paper on a national waste infrastructure planning approach for the waste action and investment plan (2024 – 2028)*, 2023



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projects within a system view rather than solely on an individual project's merits. Infrastructure investment through the WMF and PIF will support and encourage projects that align to this approach.

Shifting the WMF from annual funding rounds to an on-demand model enables the Ministry to engage proactively with the sector and build a pipeline of strategically significant projects. This engagement with the sector and the range of resulting proposals enables the Ministry to develop a network view and deeper understanding of regional waste infrastructure gaps and opportunities. A picture of how regional proposals might work most effectively in a 'hub and spoke' collection, consolidation and processing perspective is emerging.

We are also gathering information and research on the barriers to sustainable markets for recovered materials. This research will be made available to the wider market as well as further inform our policy and investment functions.

## **Asset ownership**

There are a range of ownership models of waste infrastructure assets across Aotearoa, and they continue to evolve. Many Class 1 landfills are owned by councils, although the largest are privately owned and/or are joint ventures. Most processing facilities are owned by industry, whilst ownership of recycling plants (Material Recovery Facilities) is relatively evenly split between councils and industry. Post-sorting processing facilities are almost exclusively owned by private industry.

The Ministry is neutral on whether assets are owned by industry, councils, mana whenua or a combination. Stakeholders are encouraged to come together, under the regional approach outlined above, to work out what model(s) best suit them in the circumstances – noting that these will vary across the motu. A key test for Ministry investment, if required, will be that the ownership model is sustainable over the life of the asset. The Ministry will take a patient capital approach, and may also consider taking minority equity positions in commercial ventures if necessary to de-risk activities with high public benefit during scale-up and/or protect against unfavourable market forces.

## **Waste to Energy**

There is interest from the sector in waste to energy as a means of extracting value from materials with no other options, and some proposals have sought this outcome. In theory, waste to energy sits higher in the waste hierarchy than disposal to landfill because it can recover some value but is lower than reusing or recycling the materials themselves within a circular economy.

The Waste Strategy states that waste to energy is a developing area with competing principles and risks, for example potential negative environmental impacts, or fostering dependence upon a waste stream generation. The Waste Strategy sets out four key considerations to evaluate the proposition of waste to energy technologies<sup>24</sup>: the purpose or primary aim of the technology, the nature of the feedstock, the emissions and other by-products of the process, and whether the energy generated can be used and is a net gain over the energy used. There is also Ministry guidance that has been published to support

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<sup>24</sup> Waste Strategy, Ministry for the Environment, p45

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decision-making<sup>25</sup>. Investment through the WMF may be on a case-by-case basis, guided by these considerations. By way of example, a waste to energy initiative using renewable biomass as a feedstock, displacing a fossil fuel alternative is likely to be in scope for funding, whereas thermal technologies for processing municipal solid waste including oil-derived materials (incineration) would not.

### Infrastructure for organics, C&D and plastics

As noted in Table 2, the targeted waste streams have a significant infrastructure deficit.

For organics, significant investment is required to support food waste collection and processing. We will support both the expansion of existing facilities and the development of new infrastructure, including investing in emerging technologies initially at pilot scale. There is significant interest in a wide range of organic processing technologies including composting, anaerobic digestion, vermicomposting and bioconversion (for example black soldier fly)<sup>26</sup>. The Ministry is agnostic on organic processing technologies and will consider suitability and scale on a case-by-case basis based on organic material feedstock and geographic considerations for example.

### Support to implement kerbside standards

Two targeted funding packages were developed in 2022 for councils to support kerbside organic collection and standardisation announced in March 2023. One package provides support for planning and business case development, the other for bins and service rollout costs. Both packages incentivise collaboration between councils by providing higher funding contributions from WMF for joint applications from multiple councils. Applications are fast-tracked, with eleven projects approved as of 13 July 2023. Accelerating progress is a key priority over the next three years.

Construction and demolition materials recovery and consolidation requires large scale sorting and processing facilities. A number of such applications are currently under consideration, for medium to large-scale C&D resource recovery plants. These facilities have the potential for significant landfill diversion. The WMF has also fast-tracked several applications for new or expanded C&D facilities in areas affected by Cyclone Gabrielle.

### Investing in infrastructure to support cyclone affected areas to minimise waste

The WMF is supporting projects in Tairāwhiti and Hawke's Bay to help recovery. As at 24 July 2023, NZ\$3.08 million has already been approved through a fast-tracked application process, with funding discussions ongoing for a range of infrastructure including a resource recovery centre network, and a regional resource recovery hub.

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<sup>25</sup> Waste to Energy Guide for New Zealand, Ministry for the Environment, August 2020

<sup>26</sup> See <https://www.pmcsa.ac.nz/topics/food-rescue-food-waste/what-can-i-do-with-my-food-waste/>, produced by the Office of the Prime Minister's Chief Science Advisor

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Plastic processing infrastructure is another key area of investment, required to improve the quantity and quality of plastics recyclate and to increase local processing capacity. This was one of the key focus areas for the one-off funding received from the Covid Response and Recovery Fund (CRRF) for Waste and Resource Recovery Initiatives in 2020/21. For example, significant investment was made in equipment at Material Recovery Facilities to improve the separation of plastics and fibre from other materials.

### Improving materials recovery facilities

The WMF and CRRF invested in the upgrades of optical and mechanical sorting at a range of resource recovery facilities across New Zealand.

Including in:

- Auckland
- Christchurch
- Wellington
- Taranaki / New Plymouth
- Hamilton
- Thames-Coromandel



We expect to continue to look for opportunities to support bundles of related investments to support recycling and resource recovery, and specifically for infrastructure improvements that address priority products. Another example is for tyres (e.g. WMF investment in shredding and infrastructure at Golden Bay Cement). We have also made investments to address e-waste, and expect targeted investment signals and packages to be designed in support of extended producer responsibility schemes.

These investment bundles will be developed as collection methods and sorting technologies change, in response to extended producer responsibility scheme design and / or due to technological innovation.

## Behavioural change

The Waste Strategy notes the importance of people and organisations taking different approaches to ‘waste’, including shifting their view of the value of these materials and taking action to avoid its creation. The symbiotic nature of investing in behavioural change and infrastructure was highlighted in the [Infrastructure](#) section earlier: people and organisations can’t do the right thing without accessible waste infrastructure (and services), and likewise infrastructure isn’t viable or relevant without people and organisations making use of it.

Since inception, the WMF has invested in a number of projects to raise awareness, provide information and encourage action. Whilst many of these have been effective and scalable (eg Love Food Hate Waste programme) they have typically been short-term in nature and in response to proposals around a local or sector need, without the benefit of a national waste strategy or campaign to provide clear context and direction. Many have lacked the scale or expertise to make significant long-term impact.



**“We will need to support people to examine and change their current business practices, personal habits and routines, in all their consumption, management and disposal activities”<sup>27</sup>**

We have shifted to a more strategic and proactive investment approach. The new approach focusses on national programmes developed and delivered by key partners with central support. This approach is currently (2023) being implemented for food waste reduction, with a small number of partner organisations funded to deliver national-scale food waste reduction programmes across three categories: household, Māori-led and business.

Although these programmes and resources are currently being funded from the Climate Emergency Response Fund (CERF) to meet ERP goals during the levy ‘ramp up’ period, it establishes a sound model for how levy money can be invested in behavioural change programmes in other areas. Consideration will be given to new programmes in 2024. Potential areas could include delivery of strategic national waste prevention campaigns, support for extended producer responsibility programmes, kerbside collection changes or other priority waste materials.

## **System change through Extended Producer Responsibility**

A goal of Phase 1 of the Waste Strategy is that “We all take responsibility for how we produce, manage and dispose of things, and are accountable for our actions and their consequences”. A key mechanism to help achieve this goal is extended producer responsibility, both regulated and voluntary.

Extended producer responsibility, also called ‘product stewardship’ puts responsibility for a product’s life-cycle and waste management on manufacturers, importers, retailers and users rather than communities, councils, neighbourhoods and nature.

As outlined in the [Priority waste materials](#) section, six products have been declared priorities for extended producer responsibility schemes: plastic packaging, tyres, e-waste including large batteries, agrichemicals and their containers, refrigerants and synthetic greenhouse gases, and farm plastics. Further tranches of products are expected in the future.

The WMF has provided funding to support the co-design (with industry) of product stewardship schemes for tyres, large batteries and plastic packaging. Continuing to support the design and implementation of extended producer responsibility schemes (and enabling infrastructure as outlined above) was recognised as a priority area of investment. Under proposed new legislation, levy funding may also be used for start-up costs of these and future schemes, if those costs cannot be met by the scheme itself or by industry.

This category of investment would also include the proposed Container Return Scheme (CRS), which was deferred in early 2023. If the CRS comes back onto the waste work

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<sup>27</sup> Waste Strategy, p36

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programme we anticipate that infrastructure support and potentially other investment requirements will come out of the system design.

### Investment to support product stewardship: Tyres

WMF investment has been used to support the industry co-design of the scheme for tyres. Over \$20 million in funding from WMF has been used to develop and de-risk critical infrastructure for recovery of value from waste tyres, through co-investments at Golden Bay Cement and with Waste Management New Zealand. The investments helped the decarbonisation of the cement-making process, while also providing an end market for a significant number of waste tyres in New Zealand.



## A commitment to innovation

Under a broad goal of using less for longer, the Waste Strategy puts a priority on creating a climate of innovation. This is key to having more solutions at the top levels of the waste hierarchy, towards the goal of reducing waste generation by 10% per person by 2030<sup>28</sup>.

Investment of levy monies through the WMF and PIF is impact-driven, leading directly to waste minimisation and a decrease in waste disposal to landfill. This means that the WMF and PIF do not fund pure research or science, which are addressed by other agencies and funds such as Callaghan Innovation, Crown Research Institutes and MBIE's Endeavour fund. Instead the waste funds, through the Innovation category will continue to focus on projects at a pilot or 'scale up' phase, generally with a well-defined commercialisation pathway. These types of innovation and development projects will be prioritised against those that are earlier in the research phase or are unlikely to result in tangible minimisation of waste directly.

Product redesign or solutions to enable product re-use are examples of the type of initiatives we are interested in supporting more. We anticipate funding for innovation and other work at the top of the hierarchy, such as extended producer responsibility, to increase over the period of this investment plan. We also recognise that innovation comes with a higher risk of failure. To maximise benefits and potential for success from levy investment in innovation, we will continue to engage with groups across the research/science sector, and related agencies to ensure opportunities are optimised.

Further, we take a proactive approach to intellectual property (IP), working closely with recipients to ensure the benefits of any IP created through Government co-investment are realised and maximise public benefit for New Zealand.

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<sup>28</sup> Waste Strategy, p25

## A commitment to the community

The value of community-level projects is well understood. The WMF has provided grants to a wide range of initiatives such as local food rescue services, composting hubs and environmental education projects. Many are significant for their local communities and stimulate local action, build resilience and grow awareness of waste issues.

Our investment plan seeks to balance the need to ensure community-level approaches are still provided for, with the requirement to maximise the opportunity for New Zealand presented by the increase in levy revenue.

As discussed earlier in this plan<sup>29</sup>, the levy is increasing significantly but there are many competing demands. This means making choices based on priorities. Given the need to make significant progress, and quickly, towards the 2030 targets of the Waste Strategy, this plan takes the approach that investment should be prioritised to projects that deliver high impact and are scalable.

High demand for funding means administration costs must be minimised, ensuring as much of the levy as possible is available to invest in projects. Smaller community projects tend to have high delivery risks and consume a level of administrative resources that is inefficient and out of proportion to their value.

Many of these smaller projects also need ongoing support to deliver their objectives. Despite efforts to streamline the funds, ongoing support cannot be accommodated efficiently or effectively by WMF or PIF as gazetted criteria excludes funding being used for ongoing operational costs.

The Community Solutions funding category aims to provide potential access to funding for community initiatives whilst delivering scalability and administrative efficiency. The category supports sector-wide or regional initiatives that bring a collaborative approach to a key problem, with enough potential scalability and/or replicability to be competitive for funding against other applications. For example, this type of approach works well when there is an opportunity to join up a group of local or community-based endeavours through a collaborative 'umbrella' programme. We have seen this used when funding food rescue organisations, or in support of local resource recovery / reuse centres through a network.

This approach allows for local delivery while building capacity through knowledge sharing across the rohe or at a national level with the programme coordinated through a network. Potential initiatives could be identified through the regional planning approach discussed in the [Infrastructure](#) section.

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<sup>29</sup> See the section [Investment in waste minimisation is increasing](#)

## **Supporting waste minimisation at marae: Para Kore**

With its origins as a pilot programme in three Waikato marae, with the help of Ministry for the Environment funding, Para Kore has been able to expand its successful Oranga Taiao programme model to over 580 marae, kōhanga reo, kura, wānanga and community organisations across Aotearoa New Zealand.

An efficient and effective means to scale the impact of Government co-investment, the organisation has diverted over 500,000 kgs of waste from landfill to beneficial use. A key part of the mahi is drawing on the mātauranga and building capability and capacity across the rohe.

## **Contaminated and vulnerable land**

The sustainable management and remediation of contaminated land, including sites vulnerable to the impacts of climate change such as historic landfills, is one of the eight goals of Phase 1 of the Waste Strategy.

At present, the Ministry supports this goal through the Contaminated Sites Remediation Fund. Funding comes from a separate appropriation, as this type of activity cannot be funded with levy funds under the existing legislation. The proposed new legislation (expected in 2025) aims to broaden the scope of use of levy funds, enabling levy money to be utilised for this purpose. The relative priority for this funding will be set through the AIP.

## **Emergency Response may be supported by levy but is not an ‘investment’ category**

Emergency response is not considered a levy investment category. However the new legislation is proposed to broaden the use of levy funds (by councils and/or central Government) to support emergency response waste management and minimisation under specific circumstances. It is expected this use of levy monies would be within tight parameters and would not be funded as 'investment' through the WMF vehicle, therefore it is not in scope for this investment plan.

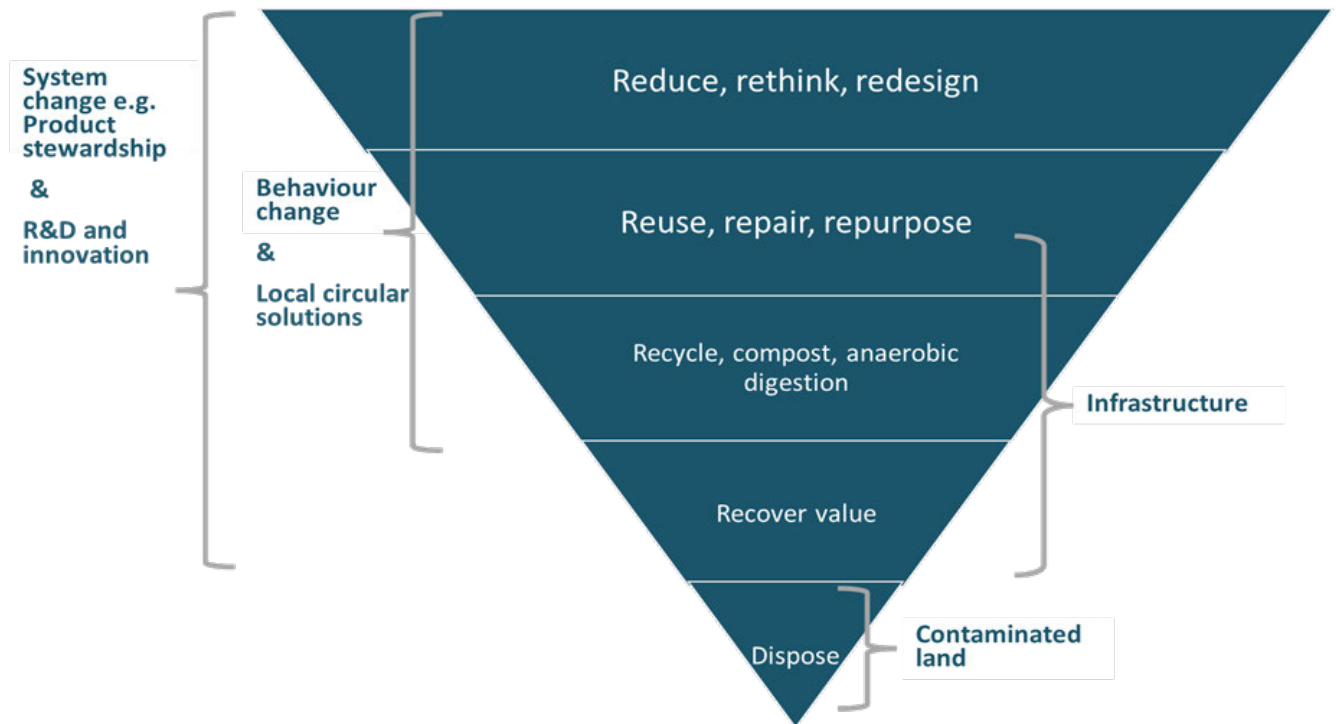
## **How investment categories align to waste hierarchy**

The figure below demonstrates how the investment categories are spread across the waste hierarchy.

It shows how we use investment in different types of projects as a means to address the waste problem in different ways. In some cases, we are using several types of investment simultaneously.

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Figure 4: Investment types applied to the waste hierarchy



## How we will prioritise our investment

The section [Investment in waste minimisation is increasing](#) highlighted that demand for central Government funding is expected to be high, due to the national waste infrastructure gap. This means trade-offs and choices will be required at multiple levels:

- portfolio level – across the levels of the waste hierarchy and the range of waste materials; and
- between individual projects.

Navigating these choices requires a multi-tiered approach to prioritisation that is simple, transparent and robust to support sound decision-making.

### Tier 1: Portfolio level – across the waste hierarchy and priority materials

Investment signals are the main tool we use to manage the makeup of the investment portfolio. The current signals issued in late 2022 are:

- WMF: Reducing landfill emissions from organic waste
- PIF: Innovative ideas to prevent or reduce plastic waste, including from manufacturers. Increasing processing capacity for kerbside materials and other recyclable plastics; projects at the top of the waste hierarchy, either for reusable infrastructure, the designing out of waste, and planning and implementing of waste prevention.

Historically investment signals have been updated approximately annually, according to policy priorities at the time, and approved by the Minister for the Environment. Going forward, this AIP, drawing from the Waste Strategy, the ERP and the National Plastics Action Plan, and other key policies, will provide context and continuity in relation to the investment



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signals. It is possible that fine-tuning is needed as more detailed policy priorities emerge over the AIP period.

We will monitor the effectiveness of the investment signals in delivering applications that meet the goals of the Waste Strategy. A degree of flexibility will be maintained, for example through targeted funding rounds aimed at specific materials or products. However, we have heard the call from the sector for more long term certainty in order to make investment decisions.

As a way of balancing these conflicting needs, we propose recommending a sequenced approach for Ministerial approval based on priority materials, as follows:

- Maintaining the focus of the WMF on organics until at least the end of 2025;
- In early 2024, broadening the organics focus to more explicitly encourage proposals at the top of the waste hierarchy as well as the middle;
- Maintaining the specific focus on plastics through the PIF until the \$50 million allocation is fully committed, or the fund reaches the end of its four-year term in 2025;
- Supporting set-up costs for extended producer responsibility schemes and a container return scheme, as applicable throughout the duration of this first AIP;
- In early 2026 open up to all priority waste materials including plastics, for proposals aimed at the top and middle of the waste hierarchy.

This sequencing takes a “vertical” approach, on the basis that key material streams require integrated action at both the middle and top of the hierarchy simultaneously. This approach allows priority materials to be given the attention needed to achieve meaningful results.

### Tier 2: Between projects

The Ministry undertake detailed assessment and due diligence across a range of criteria<sup>30</sup> to support decision-making. Criteria include environmental, social, cultural and economic benefit, value for money, additionality, level of impact, consideration of the technical solution, ability to deliver and finance viability. Projects should ideally involve Māori and/or deliver benefits to Māori. We also consider other activity in the market to ensure against ‘crowding out’.

## The funding balance across the hierarchy will change

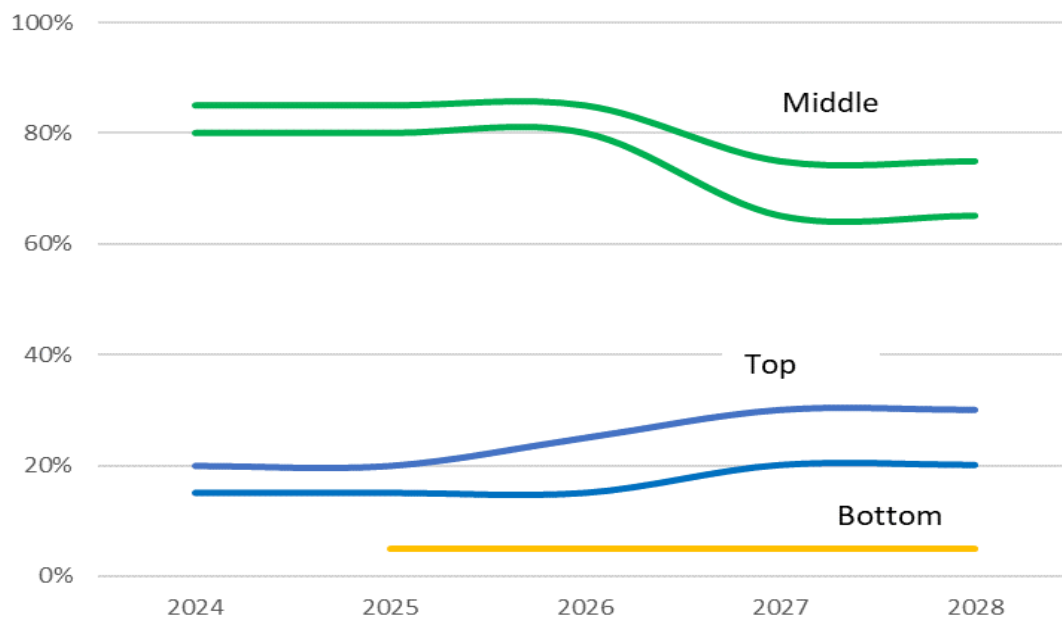
Earlier sections set out a range of opportunities for investment to promote more circular, up-the-hierarchy solutions for priority materials. Sequencing these as described above would result in the relative portion of funds at the top of the hierarchy growing over time. Figure 5 shows indicative ranges of investment at each level of the hierarchy, as a percentage of total investment, over the next five years.

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<sup>30</sup> The gazetted criteria for the [Waste Minimisation Fund](#) and [Plastics Innovation Fund](#)

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Figure 5: Indicative portion of waste funding across hierarchy, the first AIP



Top of the hierarchy: investment at these levels is mainly through the PIF at the start of the period, but is anticipated to increase as a share of funds invested in initiatives above the “decision to dispose” line: designing out waste, reducing the generation of waste, extended producer responsibility, behavioural change, and re-using and re-purposing material streams.

We expect to maintain a consistent level of spend on research, development and innovation, while system change will ramp up steadily as work on the six designated priority products progresses.

We also expect to make provision for behavioural change programmes from 25/26 noting the focus in the first years of this plan is on national programmes to support food organics recovery, which is funded through the CERF.

Middle of the hierarchy infrastructure investment will ramp up and potentially peak within the five-year period of this AIP, primarily reflecting the critical need to bring more organics and C&D collection and processing capacity onstream early to meet emissions targets, whilst also addressing the deficits in other waste streams noted earlier eg plastics, glass etc.

Bottom of the hierarchy: the proposed new legislation (anticipated to be in place by 2025) will enable levy monies to be used to remediate contaminated and vulnerable land. The cost is estimated up to 5% of available funds. Whilst still significant in total dollar terms the relatively small share reflects the need for greater investment further up the hierarchy to meet the long-term goals of the Waste Strategy.

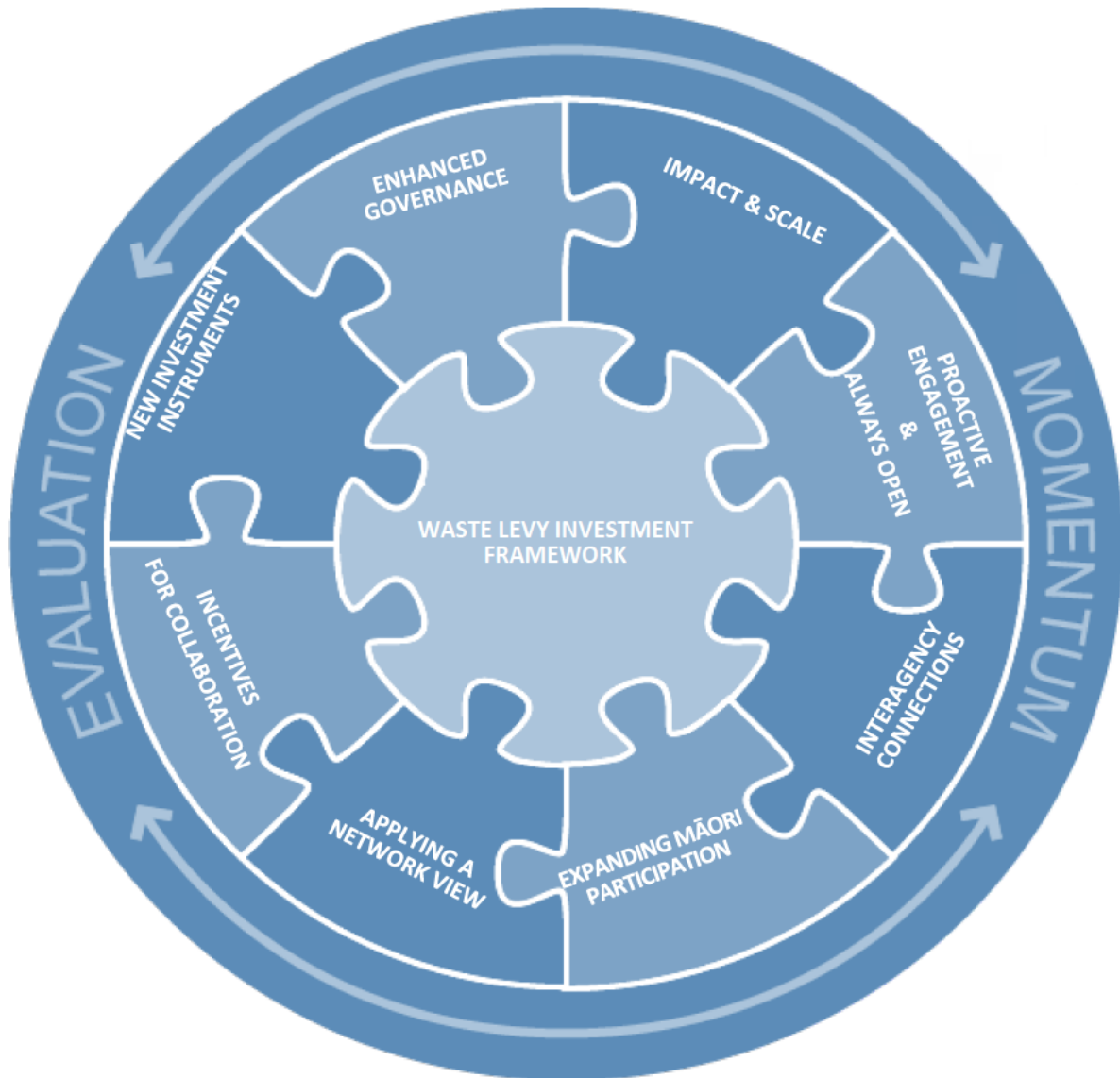
Due to the range of variables involved, we recommend against setting aside definitive allocations over the next five years. Variables include the margin of error involved in levy revenue projections, the wide variability of costs involved, and the as-yet unknown impact of recent policies such as levy expansion and kerbside standardisation.



# Our investment approach

The investment framework referred to earlier helps give effect to a more strategic approach to maximise the return from the levy. The key features of our approach, discussed below, are outlined in the figure below.

Figure 6: Features of our investment framework



## Focussing on impact and scale

As a previously relatively small fund, the tended to attract predominantly small and medium-sized organisations due to limits on funding and maximum grant size. Only a small number of significant infrastructure projects has been funded for example. The effect has been to limit the size and ambition of projects, and the impact of solutions supported by the WMF.

During the life of the WMF, over 30% of projects have received funding of \$100,000 or less. Typically the impact of these projects was low and the delivery risks relatively high. They

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also consumed a level of administrative resources that was inefficient and out of proportion to their value.

Now, more large-scale and targeted initiatives are key to achieving our strategic goals in waste. Accordingly, with levy revenue ramping up significantly, the priority has shifted to larger projects with the potential to make significant regional or national impact. This requires collaboration and private capital.

We seek to leverage non-central Government capital from private enterprise, iwi, local government and the charitable and community sector by requiring co-investment.

Projects deemed commercial will require a minimum of 60 per cent contribution from the applicant or related third party.

We will maintain flexibility to seek a greater co-investment contribution for highly commercial projects, or alternatively lower the applicant co-investment requirement where there is high public benefit and those benefits might not otherwise be realised without intervention.

We are cognisant of the need to only invest where funding is genuinely required. This is a key focus of our assessment process, which considers additionality (see the sections on [Process controls on funding decisions](#) and [How we will prioritise](#)).

## Applying a network view

In the section [What we will invest in](#), we noted that a picture of regional and national opportunities is rapidly emerging. The infrastructure stocktake and our engagement with the sector has built understanding of gaps, catchments and available feedstocks. This equips us to consider funding applications not just on their own merits, but crucially also on how they complement other existing or planned investments.

Applying this network view is a key step towards the goals in phase 1 of the Waste Strategy: a comprehensive national network of facilities supporting collection and circular management of products and materials.

## Sector focused engagement

Several changes have been made to the waste funds to make them more applicant- centric. The WMF has historically run short annual funding rounds, but is now open year-round. This enables stakeholders to apply at the most appropriate time, makes the funding more accessible and eliminates processing bottlenecks for applicants and the Ministry.

Being open year-round also provides a basis for more proactive engagement with the sector. Rather than wait for the annual funding round we are actively seeking opportunities and building relationships. A notable feature of this element of our approach is the introduction of an initial conversation with potential applicants before starting the online written process. In approximately 30% of cases this results in the conclusion that it is not a good fit with the funds, or unlikely to be competitive and at times a referral is made to other funds. This

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saves time and the effort of submitting an expression of interest. The feedback from prospective applicants has been strongly positive.

This engagement flows through the rest of the application cycle, with applicants given feedback and opportunities to iterate their proposals for a better chance of success. As well as improving the experience, this level of engagement raises the quality of our relationships, pipeline and improves our market knowledge.

## Improving outcomes for Māori and increasing participation in funds

As noted earlier it is important to address Māori under-representation in the funds and through that, deliver improved outcomes for Māori from levy investment and greater progress toward circular economy outcomes. Benefits include broadening the impact through taking a te ao Māori approach to para kore (broadly, zero waste and emissions), whilst also operating according to the spirit of te Tiriti o Waitangi. Increasing the reach of the funds into the Māori economy translates into improved and more equitable outcomes, and it allows for additional solutions and stimulation of projects grounded in mātauranga Māori and te ao Māori.

Mana whenua are significant stakeholders but have not been significant investors in the waste sector across the motu. Iwi/Māori bring a strong sense of kaitiakitanga (guardianship and protection) over the whenua, a long-term and relationship-based approach, as well as land assets and/or capital to invest in the growing Māori economy aimed at sustainable prosperity and (particularly in the case of the post-settlement governance entities) significant balance sheets. Circular economy solutions are at the heart of a te ao Māori worldview. The challenge is to put investment in waste “on the radar” amongst competing priorities for time and resources.

Our Māori engagement plan will be further developed to build on initial steps and progress to date (2023). Our plan will link to the regional planning approach set out in the [Infrastructure](#) section and be based on:

- Collaboration with large iwi/Māori entities to build understanding of the environmental, economic, social and cultural value of investment in waste and building the Ministry’s understanding of how we can best assist
- Supporting and enabling collaboration with private entities who can assist with execution
- Further improving our processes to remove barriers to participation.

Our Waste Investment Panel (see Enhanced process controls section) has strong Māori representation which can assist these efforts.

## Encouraging and incentivising collaboration and performance

Maximising collaboration across the sector is key to achieving the goals of the Waste Strategy. This means more solutions across local boundaries and, where appropriate, more joint proposals from industry, councils, iwi/hapū and community partners. Only in this way can the necessary scale be achieved and duplication minimised.

We incentivise this approach through:

- Providing a higher ratio of funding to collaborative projects, such as the packages developed to support councils with kerbside collection implementation. Our funding contribution for those packages is greater if there is coordination and collaboration between multiple councils. We will consider taking the same approach on a case by case basis for other shared services proposals.
- Giving more weight in our assessment of funding applications and business cases to those that show evidence of collaboration, for example engagement with local or regional council, economic development agency and iwi, and whether they support the project.

We will also consider, on a case by case basis, including incentives into our funding to reward achievement over and above project goals. This reflects the importance of making significant and quick progress towards the 2030 targets of the Waste Strategy. Examples could include additional funding for greatly exceeding waste reduction goals, or completing projects well ahead of time.

## A broader array of investment instruments

Both the WMF and PIF currently provide funding only through grants. Whilst this funding method has been an appropriate mechanism for the typically small projects funded in the past, more sophisticated tools are likely to be needed for more complex and large-scale commercial or quasi-commercial infrastructure projects.

Other financial instruments include loans, equity positions or special provisions for some or all of a grant to be returned in certain circumstances. These tools enable monies to be returned to the public purse for re-use once the initial reason to fund the project has been met – for example, to bring it forward, or overcome a funding shortfall until it becomes self-sustaining. They also provide a means of balancing the risk and reward between the Government and the recipient of the funding.

A number of agencies already provide funding in this way, for example Kānoa within MBIE, and New Zealand Green Investment Finance. We have learned from their experiences and have considered the requirements in terms of capability and capacity to effectively administer funding of this nature. Our approach in this respect is to utilise existing legal tools through Deeds of Funding and to explore the potential for a delivery partnership with an agency that is already set up in this way.

## Stronger connections with key agencies and funding programmes

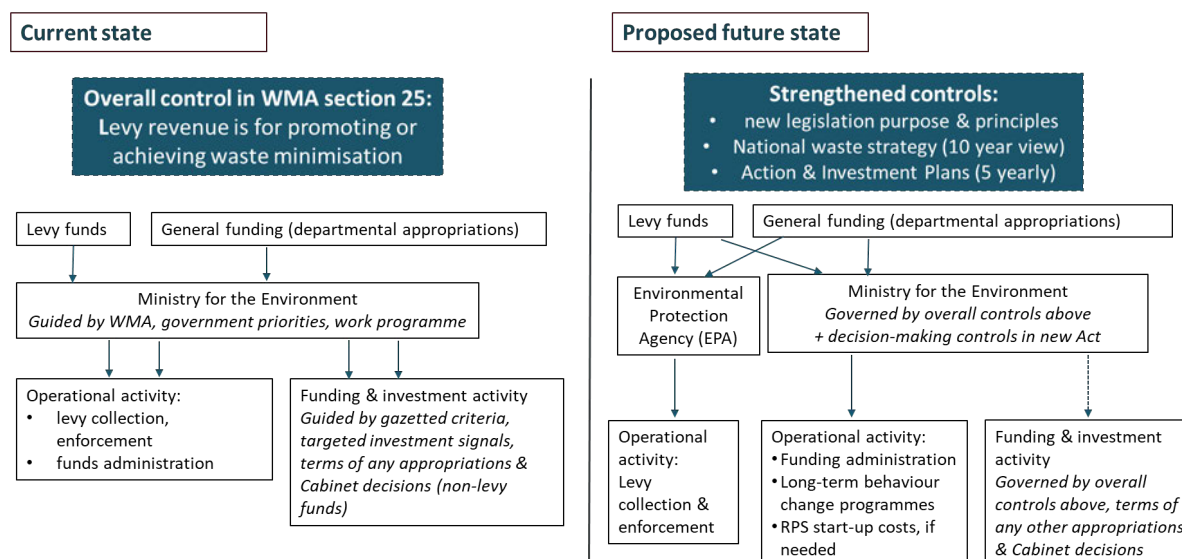
In the section, [The context for waste investment](#) and above, we highlighted the need for greater alignment with relevant agencies. Our plan includes collaborating more strongly with the agencies and funding programmes most relevant to waste, including those listed in that section. Collaboration in investment can take many forms such as sharing information about fund outcomes, investment strategies, and in some cases considering the assessment of specific projects. It can also include referring enquiries to the most relevant agency, promoting their funding programmes, leveraging each other's regional presence and even jointly funding projects. As noted in the preceding section we also intend to form a delivery partnership to fund projects through mechanisms other than grants.

We are developing an agency engagement framework that will prioritise the relationships and set out the nature of the engagement with each agency and how that will be implemented.

## Enhanced governance mechanisms

The proposed new legislation together with the Waste Strategy and Action and Investment Plan will provide a stronger framework of direction and control over the implementation of the waste levy. An overview of what is proposed to change, as it applies to the central Government portion of levy funds, is shown in the figure below:

Figure 7: How Government portion of levy is governed and used, now and under new legislation



Although the new legislation is not yet in place, the Waste Strategy has been published. The [Investment Logic Model](#) discussed earlier shows how the Waste Strategy provides direction for the waste funds.

## There are robust process controls over funding decisions

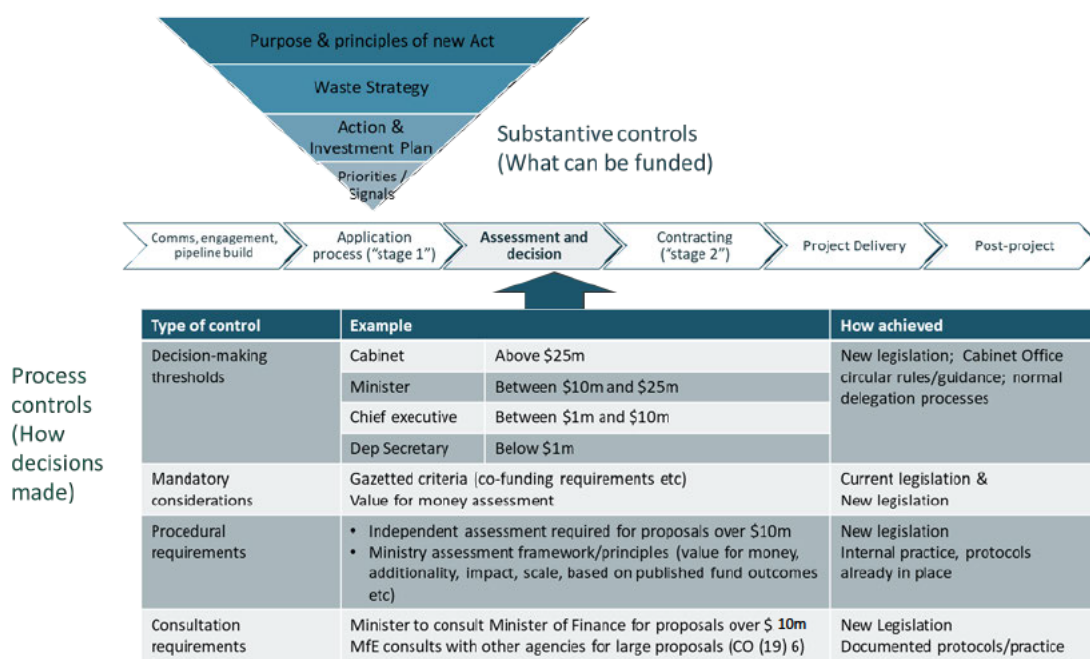
In anticipation of higher value, more complex applications, a new multi-stage assessment and due diligence approach was introduced for the WMF and PIF. This includes internal assessment, consultation with relevant agencies, Subject Matter Expert assessment (technical advice), and an internal moderation panel for all expressions of interest (EOIs). Successful EOIs are invited to complete a full application, which are pooled for comparison, and are subject to further assessment and due diligence. All applications over \$1 million in funding requested must supply a business case and detailed financials.

These applications also go to an independent Waste Investment Panel for consideration before a funding award is recommended. Members of the new Panel are experienced professional directors, many of whom have extensive waste backgrounds<sup>31</sup>. The Panel provides advice on how to address risks and issues in the waste investment space, particularly with respect to strategic, commercial and cultural aspects.

Final approval of applications is by Deputy Secretary (up to \$1 million in funding) or Minister (above \$1 million). Proposals for the new waste legislation include revised thresholds set out in the figure below. However, any proposals received now above \$25 million will be referred to Cabinet even though the new legislation is not expected to be in effect before 2025. Treasury, the New Zealand Infrastructure Commission - Te Waihangā and other relevant agencies will also be consulted as part of that process.

The figure below summarises the cascading relationship between substantive and process controls with respect to funding decision-making.

Figure 8: Substantive and process controls over funding decisions



<sup>31</sup> <https://environment.govt.nz/what-you-can-do/funding/waste-minimisation-fund/waste-investment-panel/>



## Fund-specific logic platforms

We have also represented the alignment between strategic goals and investment priorities in more detailed logic framework platforms for both the WMF and PIF, showing that there is a clear line of sight from our strategic goals through the investment signals to the types of projects we are supporting through both funds. These are shown in the figures below.

Figure 9: Logic platform for the Waste Minimisation Fund

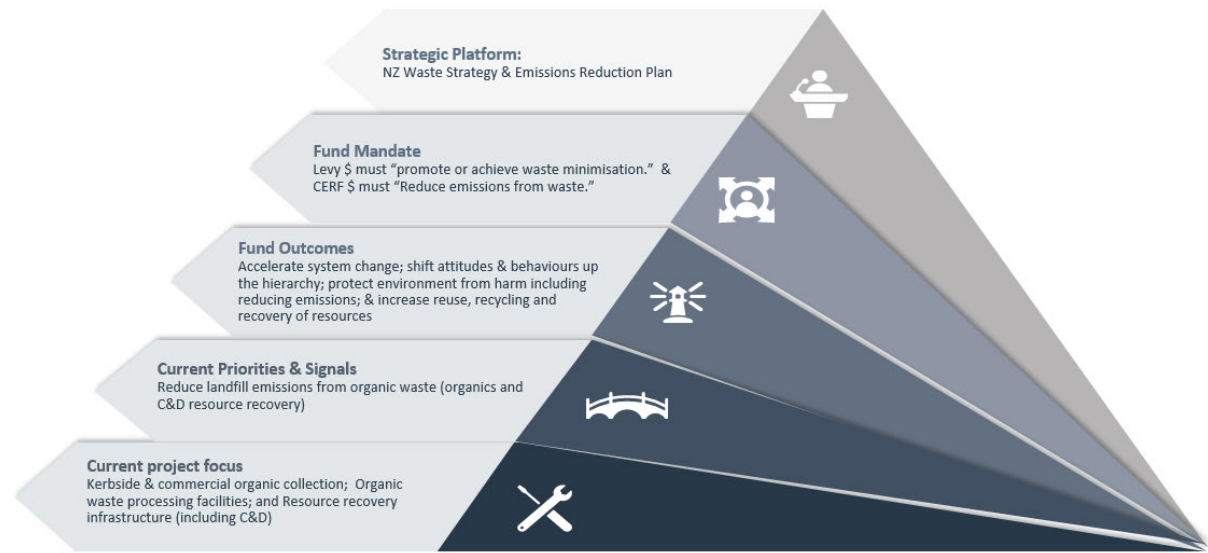
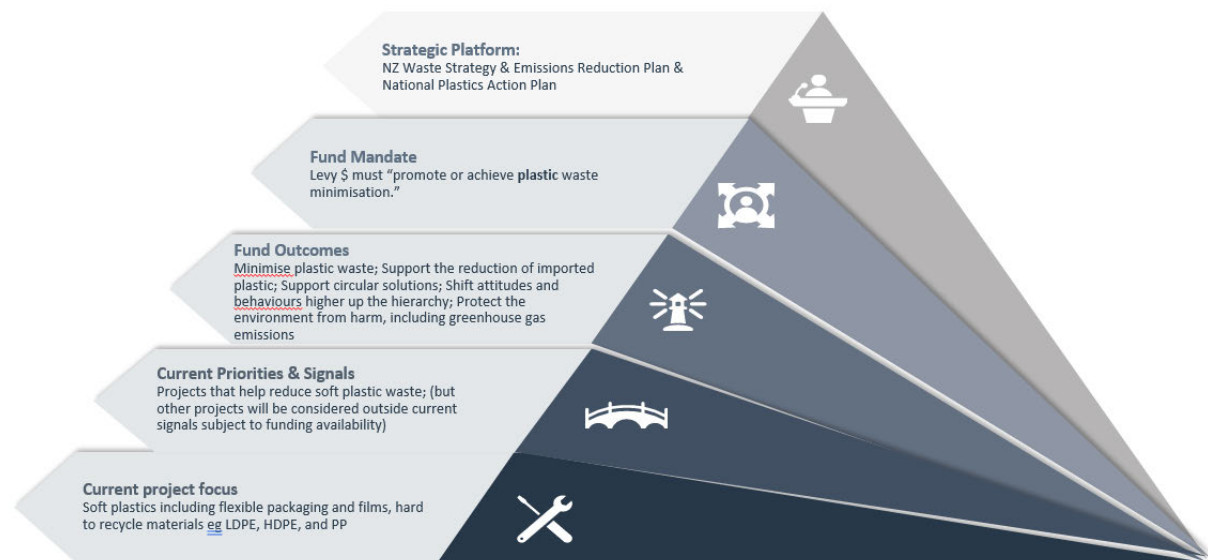


Figure 10: Logic platform for the Plastics Innovation Fund





# How we will measure success

This section gives an overview of how we will measure success and tangible results over the life of this investment plan.

As demonstrated in the [Investment Logic Model](#) earlier, we have identified a set of output and outcomes indicators that allow us to measure the results against all our investment activity and of this plan over the life of subsequent 5-year Action and Investment Plan periods (first plan 2024-2028). Such measures are critical indicators with respect to the national Waste Strategy and ERP targets.

Measures directly correspond to outputs and short-term outcomes from investment activity, including:

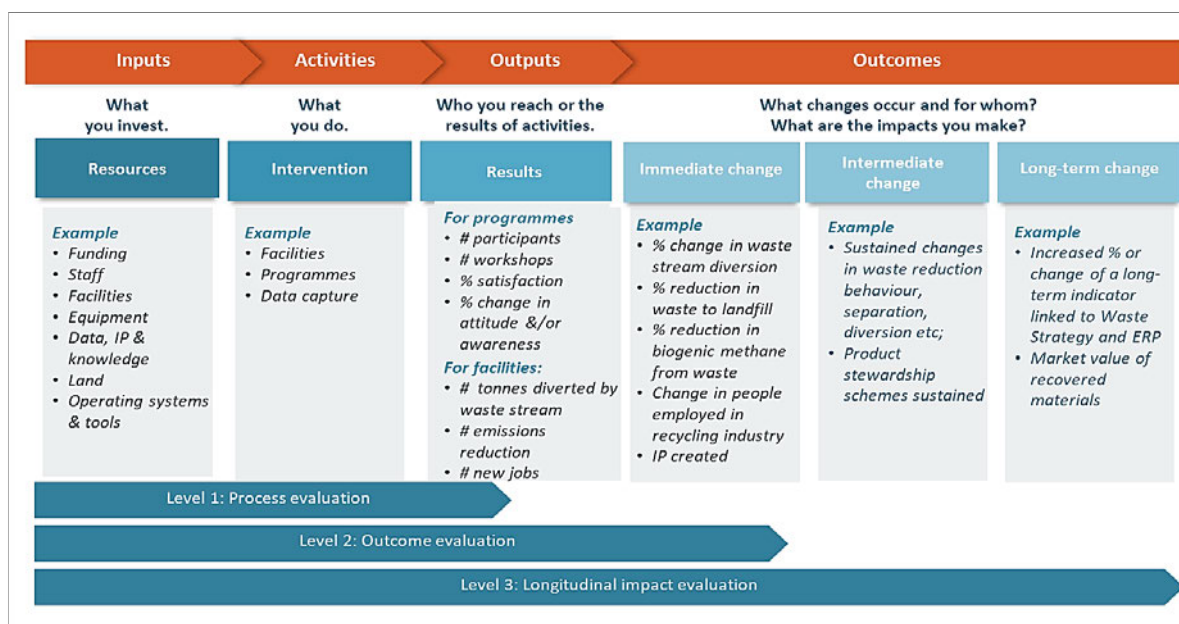
- The type of and number of co-investments made e.g. infrastructure for processing facilities
- Forecasted and actual waste minimisation arising from each project, including associated emissions reduction as a result (e.g. tonnes of waste diverted to beneficial use / recycling)
- Co-funding from industry unlocked through the investment plan
- Diversity of investment profile including increased Māori led investment and participation in funds

We also have medium- and longer-term measures that give evidence on whether longer-term change is emerging. These include wider benefits such as job and IP creation and outcomes that will be visible e.g. is waste to landfill slowing or plateauing? Are total recovered materials and recycling recovery rates improving by comparison to the current baseline?

The figure below is an example generic logic model for an individual funded project to demonstrate alignment to broader outcomes.

## Not Government Policy

Figure 11: Sample intervention logic model for a funded project



We capture output and outcomes data as part of each project, through requirements in our Deed of Funding. In addition to this information and reporting, we will also continue to conduct regular third-party evaluation of our funding administration processes, and outcomes evaluation.

The waste investment programmes are reported on through various channels, as part of the Ministry's Annual Report<sup>32</sup> and also through information published online about funded projects and outcomes<sup>33</sup>.

<sup>32</sup> Ministry for the Environment annual report

<sup>33</sup> [Waste Investments online dashboard](#)

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