

Office of the Associate Minister for the Environment

Chair

Cabinet Business Committee

Improving waste management

Supporting New Zealand's transition to a circular economy

Proposal

1. This paper informs Cabinet on the intended work programme priorities for the waste and resource efficiency work programme to support New Zealand's transition to a circular economy. It invites Cabinet to provide feedback on the programme and how other agencies can support it.

Executive summary

2. New Zealand's waste to landfill is steadily increasing and the trend is set to continue. We need a new approach if we are to meet the Government's goal of a significant reduction of waste to landfill by 2020.
3. The work programme outlined here aims to transform how New Zealand manages waste, significantly reducing waste to landfill and greenhouse gas emissions, and laying the groundwork to accelerate the transition to a circular economy. This will take a coordinated national effort of central government, local government, the business sector, and the public.
4. I invite Cabinet to consider the work programme and how other agencies and portfolios can support it. The work programme is focused on:
 - Expansion of the waste disposal levy to more landfills
 - Strategic investment
 - Improving waste data
 - Transition to a circular economy
 - Product stewardship
 - Circular economy approach to plastic.
5. Expansion of the waste disposal levy was recommended by the 2017 *Review on the Effectiveness of the Waste Disposal Levy*. The project involves increasing the number of landfills subject to the levy and possibly changing the levy rate. The aim is to reduce waste diversion to non-levied landfills, and raise the cost of

waste disposal to provide the financial incentives to encourage redesign, reuse, recycling, and other waste minimisation activities.

6. An indicative timeline for the work programme is attached as Appendix 1.
7. I intend to publicly consult on a proposed ban on single-use plastic shopping bags. The public has expressed growing concern about the use of plastics. The proposed ban is a first step in a longer-term strategy to reduce plastic waste. Cabinet will be asked to make a decision to consult on the companion Cabinet paper: *Proposed ban on single-use plastic shopping bags*.

A new approach to waste minimisation is needed

8. New Zealand is lagging behind other countries in its efforts to reduce waste. The approach so far has been primarily market-driven along with ad hoc investment through the Waste Minimisation Fund, but this has not effectively reduced our overall waste.
9. Our tonnage of waste disposed to landfill has risen by 20 percent in three years between 2014 and 2017 and the upward trend is set to continue.¹ We appear to be among the highest generators of household waste per capita in the OECD.² In a recent Colmar Brunton survey,³ respondents indicated that reducing waste was one of the top three most important challenges facing New Zealanders in the next 20 years.
10. In order to reach the Government's goal of a significant reduction in waste to landfill, we need to take a new and bold approach to the way we address the issue of waste.
11. There is opportunity to significantly reduce waste to landfill, at the same time reducing greenhouse gas emissions, reducing pollution in our waterways and marine environments, and helping to make our cities more liveable.
12. The long-term goal is to transition New Zealand to a circular economy, which means moving away from our current 'take, make and dispose' economy to an economy where natural and human-made materials are re-used and recycled indefinitely.
13. This approach benefits the economy through job creation, innovation, and more efficient use of our valuable and finite resources.

Overview of the work programme

14. Set out below is a high-level overview of what I consider to be the top priorities in the waste and resource efficiency work programme to support New Zealand's transition to a circular economy. I welcome questions or suggestions from

¹ Review on the effectiveness of the waste disposal levy 2017.

² OECD Environmental Performance Reviews: New Zealand 2017.

³ Environmental Attitudes: Colmar Brunton, 2018.

ministerial colleagues, including any opportunities for us to work across portfolios.

15. I intend the waste work programme for the next three years to focus on:

- Expansion of the waste disposal levy to more landfills
- Strategic investment
- Improving waste data
- Transition to a circular economy
- Product stewardship
- Circular economy approach to plastic.

Expansion of the waste disposal levy

16. The waste disposal levy currently applies only to municipal landfills (those which accept household waste). The levy applies to an estimated 11 percent of disposal facilities and approximately 30 percent of total waste disposed of in New Zealand.

17. The 2017 statutory *Review of the Effectiveness of the Waste Disposal Levy* recommended expanding the levy to additional classes of landfills. I intend to implement this recommendation through a regulatory package with staged implementation that will:

- expand the number of landfills subject to the levy, and then
- potentially change the rate of the levy (for all landfills).

18. The aim is to reduce the likelihood of waste being diverted to non-levied sites and to send economic signals to encourage a reduction in waste, and investment in reuse, re-manufacturing and recycling. A change to the rate of the levy could help the transition to a low emissions, circular economy.

19. I propose to first expand coverage of the levy from class one (municipal) landfills to those accepting other types of waste. This will help limit diversion of waste from levied to unlevied sites. Regulations could be in place as early as 2019, but might not come into force until 2020 because a range of preparatory work will first need to be undertaken. I propose a single regulatory package with staggered implementation dates, first expanding the levy to other landfills and then potentially changing the rate of the levy in stages over time.

20. The current levy rate is significantly lower than other countries and does not provide the right incentive for waste minimisation. Changing the rate of the levy incrementally would provide signals to the waste sector over time. The 2017 OECD environmental performance report recommends extending the levy to cover all relevant landfill types.⁴

⁴ Environmental Performance Reviews: New Zealand, OECD, 2017.

21. The levy is currently set at \$10 per tonne of waste disposed to landfill, and currently raises \$33 million each year. Currently half the levy is distributed to local councils. The remainder, minus administration costs, is distributed via the contestable Waste Minimisation Fund.
22. Waste levy rates set by circular economy leaders Finland, Netherlands and the UK are between \$80 - \$160 NZD per tonne.⁵ Local Government New Zealand has endorsed a local government waste management manifesto⁶ recommending a rate of \$140 per tonne. Independent modelling work has also used an upper figure of \$140 per tonne.
23. Officials would consider detailed cost benefit analyses before making recommendations to me on any changes to the levy rates. I would also consider the role of a differential rate that may be higher for types of waste we wish to discourage from being landfilled, either because they represent a resource that could be better utilised elsewhere, or because of potential for environmental harm.
24. I also propose:
- requiring landfill operators to report on composition of waste (currently only the quantity of waste is reported on), in order to better enable planning and management of priority waste streams; and
 - developing a consistent national consenting and management framework for landfills (for example a National Environmental Standard for disposal to land).
25. I will bring specific proposals back to Cabinet when I am ready to begin consultation with stakeholders, either later in 2018 or in 2019.

Strategic investment

26. I propose to develop an investment strategy and outcomes and evaluation framework for waste minimisation. Evaluations of the Waste Minimisation Fund have demonstrated a need for a more strategic approach that takes into account the waste system as a whole or how projects connect to resolve issues in different waste streams.
27. The need for such an approach has been reinforced by the impact of the 'National Sword' (the recent decision from China to ban imports of poor quality recyclable material). As a result, New Zealand needs to improve the quality and integrity of materials collected for recycling. We also need to invest in good quality infrastructure and services for reuse and recycling in New Zealand.
28. Developing onshore processing capability as part of the investment strategy would make us less subject to fluctuations in global markets, and would provide jobs.

⁵ The New Zealand Waste Disposal Levy, Eunomia, 2017.

⁶ Local Government Waste Management Manifesto: Territorial Authority Forum, 2018.

Improving waste data

29. I propose to progressively increase the available data on waste, including any changes to the waste disposal levy (as outlined above), and exploration of statutory reporting from territorial authorities on their waste minimisation activities. S9(2)(f)(iv)
30. New Zealand currently lacks accurate and comprehensive data on the types and quantities of waste it generates, and the fate of that waste material (e.g. disposal to landfill, reused, or recycled). As highlighted by the 2017 Review, data is needed to:
- enable central and local government, industry, and other stakeholders to effectively make policies, prioritise, and plan waste minimisation services;
 - identify opportunities to better meet the purpose of the Waste Minimisation Act 2008 (the Act), to encourage waste minimisation and decreases in waste disposal;
 - meet statutory reporting obligations under the Act and Environmental Reporting Act 2015; and
 - enable New Zealand to report to relevant international bodies including the OECD.

Transition to a circular economy

31. Traditional waste management mechanisms have not effectively controlled waste produced throughout the lifecycle of products and infrastructure.
32. Countries, regions, and cities around the world are deliberately moving to a circular economy: 'make-consume-enrich' for biological resources, and 'make-use-return' for technical resources. Most of the countries with roadmaps for transitioning to a circular economy already have effective regulatory settings and a strong waste disposal levy to incentivise alternatives to the production of waste.
33. A core aspect of transitioning to a circular economy is designing out waste from products and services, both solid waste and waste to air and water.
34. In Finland, for instance, circular economy 'villages', or industrial parks, have been built in provincial areas using private sector finance. Waste-processing businesses emerged in response to clear regulatory settings and enabling planning rules, with no need for government assistance other than start-up advice services. New Zealand has many similarities to Finland such as population concentration and agriculture profile. There are opportunities to learn from Finland, and other countries, which have already started their transition.
35. International experience suggests that the first step for New Zealand is to conduct a high-level net benefit analysis for key sectors. The scope of this initial

project would involve projecting the economic, environmental, social, and cultural benefits likely to accrue to each sector including potential waste minimisation, greenhouse gas emission reductions, energy savings, and job creation.

36. This work will provide New Zealand-specific data demonstrating the value of a transition to a circular economy and support future initiatives, including cross-sectoral projects, which aligns with the desired outcomes of the Provincial Growth Fund.

Product stewardship

37. Product stewardship is a tool to encourage business responsibility as well as support the transition to a circular economy. A product stewardship scheme can be established when the industries involved in the production and life cycle of a product take responsibility for reusing and recycling the product's materials. The schemes typically involve a take-back service or an up-front fee on the product that is used to cover the costs of recycling and re-use.
38. Fifteen voluntary product stewardship schemes are operating. New Zealand schemes cover a range of products including, paint, carpet, tiles, mobile phones and toner cartridges. Over 350 New Zealand companies and other organisations participate in one or more product stewardship schemes that are government accredited. Collectively, these schemes have diverted more than 1.3 million tonnes of materials that would otherwise be landfill.
39. The Act contains powers to make product stewardship mandatory but these powers have not yet been used. I have asked officials for advice on how product stewardship schemes could operate better. Successful voluntary product schemes rely on industry participation. Schemes may not be effective if they do not achieve sufficient participation or have the right drivers and incentives.
40. Consequently, I am exploring the declaration of potentially harmful products as 'priority products' under the Act, which would be the first step towards product stewardship becoming mandatory for these products. My current focus is: tyres, refrigerants, agrichemicals, and e-waste (electronic and electrical waste) starting with lithium-ion batteries.
41. There is general support for product stewardship amongst industry groups in these sectors. I have asked my officials to begin work with the sectors to design cost-effective and fair co-regulatory proposals to bring back to Cabinet.
42. S9(2)(f)(iv)

Circular economy approach to plastic

43. Most plastics break down and eventually enter the sea, soils, and sediments as microplastic. There is increasing and concerning evidence of marine plastics harming a wide range of species and microplastics entering the marine food chain.

44. Plastics in the ocean are estimated to last decades if not hundreds of years. Our land-based and maritime activities directly contribute to the problem. Approaches overseas highlight the need to address the issue at the source, both on land and sea.

45. The long-term solution is to address the issues related to plastics through a circular economy approach. This means designing out low value single-use plastics and improving the management of high value and recyclable plastic material so that it recirculates in the economy indefinitely. S9(2)(f)(iv)

46. In the shorter term there are a number of Government and industry-led initiatives underway to address the problem:

- Working with business groups who are committed to minimising their plastic waste. This includes initiatives such as the New Zealand Plastic Packaging Declaration signed in June 2018. Signatories to the Declaration have committed to use 100 percent reusable, recyclable, or compostable packaging by 2025. There is scope for more business groups to sign the Declaration;
- Investigating options for dealing with beverage containers; and
- Banning single-use plastic shopping bags.

47. The first target for consultation is single-use plastic shopping bags, which are among the many contributors to litter and marine plastics.

48. I intend to release a public consultation document on a proposed ban of single-use plastic shopping bags. This is scheduled to come to Cabinet for decision to consult in the companion Cabinet Paper: *Proposed ban on single-use plastic shopping bags*.

Timeframes

49. A timeline for this work programme is attached as Appendix 1.

Publicity

50. I intend to announce projects in accordance with Cabinet approval, the first project being plastic bags.

Consultation

51. The Department of the Prime Minister and Cabinet (DPMC), Treasury, Ministry for Business, Innovation and Employment, Ministry for Primary Industries, Ministry of Foreign Affairs and Trade, and the Department of Internal Affairs have been consulted on this paper. Comments were received from DPMC and are reflected in the paper.

52. I have consulted with the Coalition partners on this paper, which now reflects their comments.

Financial implications

53. There are no financial implications arising from this paper; the implications for each project will be set out individually in their respective Cabinet papers. Specific parts of the work programme will be funded through the waste disposal levy.

Risks

54. Risks to the work programme may arise from a sudden future change to the world market, such as National Sword, which may require a response from the Government and the waste sector, diverting resources away from the planned work programme. Over the longer term, the risk from overseas fluctuations will be mitigated by investing in more onshore facilities, as envisioned by the work programme.

Human rights, gender, and disability perspective

55. There are no human rights, gender, or disability implications arising from this paper.

Legislative implications

56. No parts of the work programme require changes to existing legislation. Any changes that may occur will be through regulations using existing powers under the Waste Minimisation Act 2008 and the Resource Management Act 1991.

Regulatory impact analysis

57. Regulatory impact analysis requirements do not apply to this paper.

Recommendations

1. **Note** that New Zealand's waste to landfill is steadily increasing and the trend is set to continue.
2. **Note** that a new approach is needed if the Government's goal of a significant reduction of waste to landfill by 2020 is to be met.
3. **Note** that the intended work programme aims to transform the waste management system, significantly reducing waste to landfill and greenhouse gas emissions, and transition New Zealand to a circular economy.
4. **Note** that the work programme focuses on the following projects:
 - Expansion of the waste disposal levy to more landfills
 - Strategic investment
 - Improving waste data

- Transition to a circular economy
- Product stewardship
- Circular economy approach to plastic.

5. **Note** that the Associate Minister for Environment (Hon Eugenie Sage) will report back to Cabinet on these projects.

Authorised for lodgement

Hon Eugenie Sage
Associate Minister for the Environment

S9(2)(f)(iv)

Appendix 1. Improving Waste Management Work Programme Timeline



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