

07 June 2018

To the Productivity Commission

WasteMINZ's TAO Forum Steering Committee thanks the Productivity Commission for the opportunity to provide feedback on the *Productivity Commission's draft report on transitioning to a low-emissions economy*.

[WasteMINZ](#) is the membership organisation for the waste and resource recovery sectors. The TAO Forum is a sector group of WasteMINZ, made up of council waste officers from 64 territorial authorities. The Forum was established to “create consistency and efficiency amongst territorial authorities through sharing knowledge and best practice on waste”

The TAO Forum supports the Commissions call for improved waste data in New Zealand and for extending the waste levy across all known solid waste sites.

The TAO Forum has more detailed feedback below on the specific findings and recommendations of the Commission below.

The following feedback relates to Chapter 14 – Waste

Findings

- F14.1** Mitigation in the waste sector does not require the development of new technology. Waste emissions can be effectively mitigated by current technologies such as landfill gas recovery systems or anaerobic digestion.
- F14.2** Good quality data on waste in New Zealand is lacking. This has major implications for understanding emissions management practices related to waste in New Zealand and identifying subsequent opportunities to further reduce emissions. In response to these issues, the Ministry for the Environment is developing a project to collect better waste data in New Zealand.
- F14.3** There are a large number of solid waste sites that, while known and consented, are technically considered to be “unmanaged”. Reducing emissions from these sites is vital because current data estimates that they comprise nearly two-thirds of all waste emissions. The most effective solution to achieving emissions reductions at these sites is to apply an effective waste disposal levy. The Ministry for the Environment is planning to extend the levy to all 381 known, consented facilities not currently subject to the levy.

Comment: Most material going into unmanaged landfill sites is inert (e.g. cleanfill type material). Whilst extending the waste levy would encourage waste minimisation (by making recovery options for materials like concrete or brick more attractive) it wouldn't necessarily impact on emissions.

Recommendation: A more effective solution could be to apply the levy at differential rates for inert and active materials regardless of which type of landfill they are disposed at. This would push active material to disposal sites with gas capture or recovery, as well as encouraging the separation of organic waste for recovery (because it would avoid the levy).¹

- F14.4** Emissions reductions at farm dumps and other, unknown, waste disposal sites, could be encouraged by the creation of bylaws as allowed under the Waste Minimisation Act 2008 (and Part 8 of the Local Government Act 2002), or resource consenting processes under the Resource Management Act 1991.
- F14.5** The most effective actions to reduce emissions at managed municipal solid waste sites are a reduction in organic waste volumes to landfill and better management of CH₄ at landfill. An effective emissions price will help to achieve both, while giving facility operators (particularly local authorities) the flexibility to determine which strategy is likely to be the most cost-effective at reducing emissions in their own jurisdiction.

Comment: Currently landfills can claim up to 90% reduction of emissions based on their gas capture. When calculating this, landfills can choose between using a default emissions factor which is based on a default composition or a unique emissions factor based on the composition of the waste at that landfill. Landfills can make their gas capture appear higher by choosing the lowest emission factor (default or unique).

It is suggested that the current system has created an unintended perverse consequence whereby the more organic materials sent to landfill the more gas is generated and so the better the landfill gas capture rate appears against the default emissions factor. Because there is no requirement to use a unique emissions factor based on waste composition when claiming gas capture the current system incentivises more organic waste to landfill.²

Recommendation: That landfills which claim a gas capture rate above base level (for example 50%) need to use a unique emission factor based on their waste composition.

¹ Eunomia Research & Consulting (2017) [The New Zealand Waste Disposal Levy, Potential Impacts of Adjustments to the Current Levy Rate and Structure](#) Refer: Section 3.0 Options for Changes to the Levy p.25 & Section A.1.3 Levies Structure p.61

² Eunomia Research & Consulting (2017) [The New Zealand Waste Disposal Levy, Potential Impacts of Adjustments to the Current Levy Rate and Structure](#). Refer: Section A.3.3.3 Impacts of the NZ ETS p94

F14.6 Waste-to-energy provides an opportunity to reduce emissions by diverting waste from landfill and substituting for fossil fuels. Anaerobic digestion (eg, at wastewater treatment plants) is a current cost-effective approach to reduce emissions, but the potential to incinerate waste (especially household waste) is less clear.

Recommendations

R14.1 The Ministry for the Environment should ensure that, in its project to collect better waste data in New Zealand, emissions-related data is included so as to reduce the very large uncertainty regarding waste emissions, and to identify opportunities to reduce emissions in the future.

Agree

R14.2 The Government should amend the Waste Minimisation Act 2008 so that the waste disposal levy is applied to all known, consented waste disposal facilities.

Agree

Note: *The Waste Minimisation Act does not need to be amended. Section 41(1) of the Act enables the Minister to make regulations regarding the types of facilities and classes of waste to which the levy is applied and the application of different rates to types of facility or classes of waste.*

R14.3 As part of its work to extend the waste disposal levy, the Ministry for the Environment should investigate, for all 426 sites subject to the levy, both increasing the levy rate via a graduated process, and introducing a differentiated levy rate where organic waste is charged at a higher rate than non-organic waste.

Comment:

Currently 381 sites are not subject to any levy. We suggest a wording change for clarity.

As part of its work to extend the waste disposal levy, the Ministry for the Environment should investigate, for all 426 sites **potentially** subject to the levy

Agree that a differentiated levy should apply. Disagree that the levy should be differentiated between organic and non-organic. Recommend that the differentiated levy rate be applied to inert v active material instead.

As per the comments on F14.3 a differentiated levy rate could be applied to inert v active material rather than organic v non-organic waste.

Setting different rates for active and inert waste is most common in the EU countries, where the levy rate for inert wastes are set at a much lower level than the rate for active wastes. This is because the environmental damages from landfilling inert waste are much lower than landfilling active wastes. Moreover the large quantities and low disposal costs result in significant marginal changes, even at low levy rates.³

In the UK inert material is defined as waste which is

- *Non-hazardous;*
- *Low potential for greenhouse gas emissions (i.e. waste which are not biodegradable with little or no organic content); and*
- *Low polluting potential in the landfill environment⁴*

In the New Zealand context inert waste could include

- *inert manufactured materials (concrete, brick, tiles)*
- *natural materials soils, clays, gravel and rocks.*
- *material that is not chemically inert but is an aggregate-type material, e.g slag from the steel industry and ash, also included here.⁵*

This category effectively includes all waste categorised as rubble.

Inert or cleanfill loads are relatively easy to identify at the weighbridge. However, organic waste is often intermingled amongst other materials. It would be impractical to assess whether each load has organic waste or not and apply the levy only to the portion of the load that is organic (which is what is implied by the current wording).

R14.4 Local government should be better supported, as needed, to develop effective bylaws or consenting requirements for farm dumps and other, unknown, waste disposal sites, through an overarching regulatory framework for wastes such as agricultural waste. The Ministry for the Environment should investigate whether a national environmental standard relating to waste is an appropriate mechanism to deliver this framework.

³ Eunomia Research & Consulting (2017) [The New Zealand Waste Disposal Levy, Potential Impacts of Adjustments to the Current Levy Rate and Structure](#) Suggested levy structure for New Zealand p.25.

⁴ Eunomia Research & Consulting (2017) [The New Zealand Waste Disposal Levy, Potential Impacts of Adjustments to the Current Levy Rate and Structure](#) Levy Structures around the world p.61

⁵ Eunomia Research & Consulting (2017) [The New Zealand Waste Disposal Levy, Potential Impacts of Adjustments to the Current Levy Rate and Structure](#) Suggested levy structure for New Zealand p.25.

Agree

- R14.5** As part of any analysis regarding the rate of the waste disposal levy, the Government should consider whether a partial levy offset is required to avoid unnecessary overlap with the emissions price under the New Zealand Emissions Trading Scheme.

Disagree

Comment: *If a gas capture rate of up to 90% can be claimed the price impact from the ETS will be minor and it can effectively be ignored in terms of deciding where to set the waste levy rate.*⁶

On Behalf of the Chair of the TAO Forum Steering Committee

⁶Eunomia Research & Consulting (2017) [The New Zealand Waste Disposal Levy, Potential Impacts of Adjustments to the Current Levy Rate and Structure](#). Section: 2.1.3.4 Impact of the NZ Emissions Trading Scheme (ETS) p.13