1 June 2025

Waste Amendment
Waste and Resource Efficiency Division
Ministry for the Environment
PO Box 10362
Wellington 6143

wasteamendment@mfe.govt.nz

Subject: Bioenergy Association submission on proposals to amend the Waste Minimisation Act 2008 and Litter Act 1979

The Bioenergy Association has reviewed the proposals set out in the Ministry for the Environment discussion document 2025 *'Have your say on proposed amendments to waste legislation: Consultation document'* and considers the proposals for changing the levy waivers as regressive, counter-productive and a poorly considered policy approach to waste management. The Bioenergy Association is generally concerned that the proposed levy changes will not encourage the recycling of organic material into valuable products such as energy, biofertiliser and compost as a soil conditioner. The proposals would generally put the emerging nation-wide waste practices backwards and encourage all organic waste to be disposed of to landfill.

The proposed changes, particularly the removal of the levy exemption for waste-to-energy technologies, will not only fail to incentivise recycling — they will actively punish it. Instead of promoting a sustainable economy, these amendments send a clear message: It is easier and cheaper to dump organic waste into a landfill than to recycle it into clean energy and fertiliser. This is in direct contradiction to the Government's own Waste Strategy and climate goals.

Our stakeholders

The Bioenergy Association represents a significant portion of owners of biofueled heat plant, gaseous biofuel producers and suppliers, gas distributors, waste-to-energy investors and their consultants, gaseous biofuels users, researchers and equipment/appliance suppliers across New Zealand. It has members who have an interest in policies relating to:

- the recycling of biomass and organic residues for the production of energy and fertilisers
- reduction of emissions to air in communities from both residential and commercial/industrial scale heating applications, and
- wise use of our renewable natural biomass resources for the betterment of communities

This submission has been prepared under the oversight of the Association's Gaseous Biofuels Interest Group and is complementary to the individual submissions from members who may provide more detail on specific aspects of the discussion document.

The Association is interested in the recycling of organic residues into energy, biofuel, biofertiliser and other beneficial products. There are proven technologies such as anaerobic digestion which can recycle organics into valuable biogas and biofertiliser. Anaerobic wastewater treatment can produce biogas and biosolids. Other conventional technologies are also available as are new technologies such as pyrolysis, fermentation, hydrothermal liquefaction, and gasification. Residual organic materials including mixed organic materials unsuited to recycling can go to landfill with gas capture systems in place. With this range of options, plus the option of composting, or being supplied as animal feed, there are a full suite of technologies for recycling organic material which previously has gone to waste. It is essential that the Government's waste policies encourage organic material to be recycled using the appropriate technology.

General comments

A key principle of modern waste management policies is that the organic material that has traditionally been considered to be "waste" has value and is not just a problem material to be disposed of. The Waste Hierarchy sets out a framework of value and this is emphasised in the Government's Waste Strategy.

Recycling technologies

It is deeply concerning that the Ministry has lumped all waste-to-energy technologies together under an oversimplified and misleading label — a failure that reveals a lack of technical understanding and a disregard for the Waste Hierarchy.

Anaerobic digestion is not incineration. Pyrolysis is not landfill. These technologies recover value, reduce methane emissions, produce renewable energy, and recycle nutrients back into soil. Yet the Ministry's Factsheet continues to peddle outdated, inaccurate, and misleading information.

The Factsheet provides no guidance on the attributes of the different technologies and how each technology contributes to the principles of the Waste Hierarchy. When the Fact sheet was originally published the Bioenergy Association suggested significant editorial changes to correct its misleading information. At the time it was agreed that as the Minister of the day had just approved it that it would not be able to be changed. The Factsheet remains misleading by confusing the technologies. Bioenergy Association is happy to assist MfE edit the Factsheet so that it would be helpful to the public and contribute to recycling of organic residues according to the Waste Hierarchy.

In practice there is a crucial distinction between waste-to-energy processes that has not been considered. Anaerobic digestion and incineration may both convert waste into energy, but their environmental impacts vary significantly. Anaerobic digestion, for instance, tends

to be more sustainable, reducing methane emissions and producing biogas, whereas incineration can generate air pollutants unless appropriate equipment is installed in order for the emissions to air to meet environmental standards.

Waste and Resource Efficiency Strategy

The Government has adopted a ***Waste and Resource Efficiency Strategy*** that sets out the outcomes it wants to achieve for waste and resource efficiency, and the tools it will use for achieving the outcomes. A sub-title is *Minimising waste and improving waste management.* The proposed changes to the Levy do not take this Strategy into account.

The strategy set out that one of the methods for achieving those outcomes is:

- Cost-effective, outcomes-focused investment of the waste disposal levy in infrastructure, innovation and local projects

A key objective of the Waste and Resource Efficiency Strategy is:

- increasing reuse and recycling of materials and products so that we retain valuable resources in the economy

If the waste levy is to be used to achieve the outcomes of the strategy, then the proposed changes should set that out. The proposed amendments do not do that. In fact, they will result in the opposite occurring.

Using the levy to incentivise recycling and environmental outcomes.

A blanket levy on all waste-to-energy facilities would potentially discourage environmentally beneficial technologies like anaerobic digestion. A more refined system, one that assesses levy rates based on environmental outcomes or facility types, would promote better practices while still ensuring accountability in the diversion of waste.

Barriers to achieving the desired outcomes of the Waste Strategy.

The current economics of recycling organic waste material into valuable products such as biogas and biofertiliser does not encourage recycling. In many countries a subsidy is required to make recycling economically viable. In New Zealand the waiver from payment of the levy provides small economic assistance to commercial recycling. If the waiver is removed from waste-to-energy processing that would result in no future recycling facilities being built and all organic waste would be disposed of to landfill. This would be a national policy failure.

Valuable products from recycling organic wastes

Recycling organic material to produce energy and fertiliser has high value to New Zealand. These are not available if all organic material is disposed of to landfill.

The decreasing availability of natural gas to manufacturers and other business throughout the NZ economy can be addressed if biogas/biomethane is produced from anaerobic digestion facilities. Similarly, the availability of biofertiliser can be a replacement for imported synthetic fertilisers. Landfills with gas capture produce biogas but are not as efficient and they do not produce fertiliser.

The inclusion of woody biomass used to produce wood fuel as waste shows a misunderstanding of the biofuels market. Woody or herbaceous biomass is a valuable feedstock for the production of biofuels. Treating the material as a waste rather than a potential feedstock perpetuates the perceptions of lack of value. A key principle of the Waste Strategy is that solid biomass and organic residues are potentially valuable feedstocks for the manufacture of higher value products. If we are to make the Waste Strategy a success, then we have to change our thinking about "waste". The discussion document and its proposals perpetuate out of date thinking and fails to advance the objectives of the Waste Strategy.

The consequences

Removing the waste levy exemption for anaerobic digestion and other advanced bio-recycling technologies will stop future investment.

The result?

- Valuable biomass and organic resources will be dumped into landfills.
- New Zealand will fail to meet its emissions targets under the Emissions Reduction Plan (ERP2)
- Bioenergy infrastructure will stagnate
- Domestic production of biogas, biomethane and biofertiliser will collapse
- Local governments and industry will be left with no financially viable alternatives to landfill

This isn't hypothetical. The economics of organic waste recycling are already tight. Remove the exemption, and you remove the last thread of viability for the entire recycling sector.

Disposal vs recycling

All anaerobic digestion, vermiculture, and composting technologies are methods for recycling waste organic material into valuable products.

Similarly, the use of solid biofuels derived from woody and other herbaceous material are recycling technologies as they produce heat and electricity. The residual ash is small in volume and can also be used in specific applications. The definition of incineration must exclude combustion of organic material in heat plant.

Disposal to landfill and waste to energy facilities using incineration with no useful products being produced are not recycling technologies. The definition of incineration should not include thermal treatment technologies where the organic waste is recycled into pyrolysis oil or other biofuels. The definition of incineration should be clear that it is where no valuable product is produced from the combustion.

Bioenergy Association recommends that the levy be waived for recycling facilities (such as anaerobic digestion, composting and liquid biofuel production) but not for disposal facilities (e.g. landfill and incineration). Focusing the level of the waiver on the degree of recycling rather than a technology definition which has so many variations would be consistent with the principles of the Waste Hierarchy and the Waste Strategy.

The Bioenergy Association recommends that the blanket waiver of "waste-to-energy" be replaced with a tiered system that recognises and rewards high-value recycling outcomes (e.g., anaerobic digestion, composting, pyrolysis producing renewable fuels, etc.). Such a tiered system should also include landfill so that landfill operators are rewarded by building and operating their landfill to maximises biogas recovery.

Response to specific questions.

5. Do you support removal of the current blanket exclusion from the levy for waste-to-energy facilities?

No

To ensure that a waste-to-energy levy align with waste policy objectives (such as ERP2), it's essential to distinguish between different facility types based on their environmental impact. A uniform levy on all waste-to-energy applications could inadvertently penalize low-impact, beneficial technologies such as anaerobic digestion while failing to discourage more polluting methods such as incineration plants and landfills with inefficient gas capture.

A more effective approach would be a tiered levy system that accounts for environmental outcomes, incentivising cleaner technologies like anaerobic digestion while imposing higher levies on more emissions-intensive methods such as landfill without gas capture. Bioenergy Association would suggest MfE establish a reviewable classification system, regularly assessing and updating levy rates to reflect evolving best practices and scientific findings.

Additionally, this could encourage investment in sustainable infrastructure such as anaerobic digestion, wood fuelled boilers and biorefineries, fostering innovation in solutions that maximise energy recovery and other beneficial products while minimising environmental harm. Such a nuanced approach would ensure that levies support climate and regional economic growth goals, rather than becoming a barrier to progressive industry investment in managing organic waste.

Separate approaches for disposal or recycling technologies would provide clarity.

6. Do you agree that the Minister's considerations for a review of the effectiveness of the waste levy should mirror the scope of the purpose of the WMA and the parameters for levy spend (once these are decided)?

Yes

As changes to the levy will be significant it is important that these are reviewed after some years in use.

8. Do you support changing the timeframe for review of the effectiveness of the waste levy from every three years to at least every five years?

No

Bioenergy Association has a preference for every 3 years because the bioeconomy is just emerging in New Zealand and the rate of change of best practice is expected to change very fast and keep changing. The recycling of organic wastes is a significant part of a circular economy and so should be reviewed often.

20. Do you agree the regulator should have greater powers to receive data, including the ability to share with other regulators and the Ministry?

Yes

There is a great need for collection and availability of data on organic wastes. Investors are constrained in their feasibility investigations because of the lack of publicly available data. The data should be collected regionally and include all sources of organic waste excluding commercially sensitive data but including from commercial waste collections.

The Bioenergy Association would be pleased to work with the Ministry to design a progressive levy scheme which encouraged the recycling of organic material which would otherwise be wasted.

Regards

Brian Cox
Executive Officer
Bioenergy Association