



5 February 2025

OIAD-1436

9(2)(a)

Tēnā koe 9(2)(a)

Thank you for your email of 24 December 2024 requesting the following under the Official Information Act 1982 (the Act):

*Please accept this as an OIA request for information and answers. All as raised in the article as the link below, from the Centralist, 23 December 2024. This quote refers to the Environment Minister Penny Simmonds. "Four of five proposed waste minimisation policies have been shelved, including mandatory recycling standards and performance reporting. Environment Minister Penny Simmonds stated the decision aims to reduce costs for councils and allow flexibility in introducing waste services. She encouraged councils to apply for Waste Minimisation Fund grants to establish new collection systems. However, critics, including Labour's Rachel Brooking, described the move as a "backwards step," accusing the government of lacking environmental ambition. Wellington City Councillor Iona Pannett called the cuts "deeply disappointing," arguing that food scraps form a significant portion of landfill waste, contributing to methane emissions. The Waste Minimisation Fund itself faces reduced government contributions, with \$177.7m slashed over four years and criteria broadened to include unrelated freshwater restoration projects." It has also been reported that the NZ National debt is as large as was the case under the previous Labour Government. I say it is time to think out of the square and look for a new method of dealing with waste. More of the same does not 'cut the mustard' in 2025.*

- 1. There are some 61 Councils that have to buy and pay for carbon credits for the rubbish they handle. The estimated annual cost for all Councils is some \$140 million, Please confirm the actual costs for carbon credits paid for by Councils for the year ending 30 June 2023. When Councils close their annual accounts.*
- 2. Carbon credits need to be 'purchased' because of the supposed GHGs emitted by the waste in each of the Council Districts. Please confirm.*
- 3. How then do the Councils measure the methane that is emitted. Both the values and the quantities, as reported by Councils, for the year ending 31 June 2024*
- 4. Please confirm that your understanding of 'warming' due to methane in NZ is in the order of 0.000004° C per year. Professor David Frame accepts that 'warming due to methane of 4 millionths of one degree Centigrade from all NZ ruminants per year is likely'. Just 0.000004° C per year.*
- 5. Incineration plants have been established in Japan and in Scandinavia. Please check this link. Trash and Recycling in Japan: How the Country Keeps Its Streets Spotless - Geinokai BIJ Big In Japan A quote from this link states. "A central component of Japan's waste management is the incineration of burnable trash. Materials like food waste, paper, and certain plastics are often sent to high-temperature burning plants. These facilities are designed not only to reduce the volume of waste but also to harness the energy generated from burning. This waste-to-energy process helps power local communities, reducing the*

*need for other energy sources." Please advise what research is MfE doing to action a similar waste management system here in New Zealand.*

*6. If MfE or another Government organization is not investigating a new waste management system, then please advise why not.*

The Ministry for the Environment (the Ministry) has addressed each part of your request in turn below.

### **Questions 1-3:**

**1. There are some 61 Councils that have to buy and pay for carbon credits for the rubbish they handle. The estimated annual cost for all Councils is some \$140 million, Please confirm the actual costs for carbon credits paid for by Councils for the year ending 30 June 2023. When Councils close their annual accounts.**

**2. Carbon credits need to be 'purchased' because of the supposed GHGs emitted by the waste in each of the Council Districts. Please confirm.**

**3. How then do the Councils measure the methane that is emitted. Both the values and the quantities, as reported by Councils, for the year ending 31 June 2024.**

Since 2013, disposal facility operators have had an obligation to report their emissions and surrender New Zealand Units (NZUs) under the NZ Emissions Trading Scheme (ETS). For the purposes of the NZ ETS, a disposal facility is any facility including a landfill that operates (at least in part) as a business to dispose of waste, at which:

- waste is disposed, and
- the waste disposed includes waste from a household that is not entirely from construction, renovation, or demolition of a house.

There are 26 participants in the NZ ETS, for operating a landfill. These are a mix of Council operated and privately operated landfills. These waste participants are responsible for methane emitted through the biodegradation of organic waste in their facilities. This means they are required to surrender one NZU for every one tonne of carbon dioxide equivalent emissions (tCO<sub>2</sub>-e) reported in the NZ ETS.

You can find more information on the Emissions Register here:

[emissionsregister.govt.nz/Common/ViewPublicReport.aspx?rt=a3c6953e-5a22-43a4-95e9-8c867d20f9e8](https://emissionsregister.govt.nz/Common/ViewPublicReport.aspx?rt=a3c6953e-5a22-43a4-95e9-8c867d20f9e8).

To calculate their emissions, waste participants are required to record information about the tonnage of waste entering their landfill facility in a calendar year and submit this as part of their annual emissions return. This figure is then multiplied by an emissions factor that estimates the emissions per tonne of waste to give a total emissions figure. Participants can use a default emissions factor set by the government using data from landfills around the country. The requirements for calculating waste emissions, and the default emissions factor, are set in the Climate Change (Waste) Regulations 2010 ([legislation.govt.nz/regulation/public/2010/0338/latest/whole.html](https://legislation.govt.nz/regulation/public/2010/0338/latest/whole.html)).

If a participant has evidence that the emissions factor for their landfill is lower than the default one, they may apply for a "Unique Emissions Factor" which more accurately reflects the actual emissions from their facility. The process for applying for calculating and applying for a unique

emissions factor is found in the Climate Change (Unique Emissions Factors) Regulations 2009 ([legislation.govt.nz/regulation/public/2009/0286/latest/whole.html](https://legislation.govt.nz/regulation/public/2009/0286/latest/whole.html)).

Total reported emissions from waste participants were 574,223 tCO<sub>2</sub>-e in 2022/23, and 524,956 tCO<sub>2</sub>-e in 2023/24 ([epa.govt.nz/industry-areas/emissions-trading-scheme/ets-reports/emissions-returns/](https://epa.govt.nz/industry-areas/emissions-trading-scheme/ets-reports/emissions-returns/)).

The cost of purchasing NZUs varies depending on how the NZUs were procured, for example if the NZUs were brought at a government auction, or from the secondary market. As this is an individual business decision, the Government is not privy to the cost of NZUs paid for by Councils.

**Question 4: Please confirm that your understanding of 'warming' due to methane in NZ is in the order of 0.000004° C per year. Professor David Frame accepts that 'warming due to methane of 4 millionths of one degree Centigrade from all NZ ruminants per year is likely'. Just 0.000004° C per year.**

Recent modelling of the warming impact of New Zealand's biogenic methane emissions by the Climate Change Commission and Ministerial advisory panel appointed in June 2024 to undertake a review of methane science and target estimated that the cumulative warming impact associated with New Zealand's current and historical (from 1850 onwards) biogenic methane emissions in 2022 was in the order of 0.0021°C (from both the agricultural and waste sector).

The Intergovernmental Panel on Climate Change (IPCC) recently estimated that human-caused methane emissions have contributed approximately 0.5°C of global warming (based on the median results comparing emissions to 2010-2019 warming relative to 1850-1900; see footnote 8: ([ipcc.ch/report/ar6/syr/downloads/report/IPCC\\_AR6\\_SYR\\_FullVolume.pdf](https://ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf))). Based on the values outlined above, it is estimated that New Zealand is currently responsible for about 0.42% of the warming attributed to global human-caused methane emissions – which is much larger than New Zealand's proportion of the global population.

The estimated change in cumulative warming from year to year that is attributed to New Zealand's biogenic methane emissions varies and is not a single fixed number. From a climate change mitigation perspective, it is New Zealand's total cumulative warming impact that is important and the direction of travel – whether New Zealand is increasing or reducing its warming impact.

**Question 5: Please advise what research is MfE doing to action a similar waste management system here in New Zealand.**

The Ministry is not conducting research into municipal solid waste incineration (with or without energy recovery).

**Question 6: If MfE or another Government organization is not investigating a new waste management system, then please advise why not.**

Relevant research is already publicly available at the following websites:

1. Waste to energy technology implications in the Aotearoa New Zealand context ([waikatoregion.govt.nz/services/publications/tr202327/](https://waikatoregion.govt.nz/services/publications/tr202327/))
2. Waste to energy: the incineration option ([berl.co.nz/sites/default/files/2020-07/BERL%20Report%20WtE%20final%20July.pdf](https://berl.co.nz/sites/default/files/2020-07/BERL%20Report%20WtE%20final%20July.pdf))

3. The Ministry's Waste to energy guide for New Zealand (2020; [environment.govt.nz/assets/Publications/Files/waste-to-energy-guide-for-new-zealand.pdf](https://environment.govt.nz/assets/Publications/Files/waste-to-energy-guide-for-new-zealand.pdf))

You have the right to seek an investigation and review by the Office of the Ombudsman of my decision relating to this request, in accordance with section 28(3) of the Act. The relevant details can be found on their website at: [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz).

Please note that due to the public interest in our work the Ministry for the Environment publishes responses to requests for official information on our [OIA responses page](#) shortly after the response has been sent. If you have any queries about this, please feel free to contact our Ministerial Services team: [ministerials@mfe.govt.nz](mailto:ministerials@mfe.govt.nz).

Nāku noa, nā



**Hemi Smiler**

General Manager – Climate Change Mitigation  
Ministry for the Environment | Manatū Mō Te Taiao