



Waste and F-gas content in upcoming Emissions Reduction Plan Cabinet paper

Date Submitted:	22/11/21	Tracking #: BRF-939	
Security Level	Policy and Privacy In-Confidence	MfE Priority:	Urgent

	Action sought:	Response by:
Hon David PARKER, Minister for the Environment	Forward this briefing note to Ministers Woods and Shaw	N/A
	Provide officials with any feedback on content in draft ERP Cabinet paper	Before paper is finalised for lodging (9 December)

Actions for Minister's Office Staff	Forward this report to Minister Woods and Minister Shaw's offices (if agreed) Return the signed report to MfE.
Number of appendices and attachments #1	

Key contacts

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Waste and F-gas content in upcoming Emissions Reduction Plan Cabinet paper

Key Messages

Consultation on the Emissions Reduction Plan began on 13 October 2021 and concluded on 24 November 2021. The Emissions Reduction Plan is due to be finalised by 31 May 2022. Officials are preparing advice for Cabinet to consider (on 20 December 2021) potential content for the Emissions Reduction Plan including potential final decisions and decisions in principle. Preliminary public feedback will be available to inform the Cabinet discussion, with more detailed advice to be provided in March 2022.

This briefing seeks your feedback on the enclosed sections of the Cabinet paper *Emissions Reduction Plan: core policies* covering waste and F-gases.¹ You will also receive the full draft Cabinet paper shortly.

Officials have considered feedback to date from consultation webinars, as well as preliminary analysis of emerging themes. At this stage, officials do not propose any substantial change from the range of potential measures outlined in the Emissions Reduction Plan consultation. However, more detailed analysis may identify additional actions that could be incorporated before the plan is finalised next year.

In addition to behaviour change interventions, key actions proposed by officials to reduce emissions from waste and F-gases include:

- improving our knowledge base
- building the systems needed to keep materials cycling in the economy (not generating greenhouse gas emissions in landfill)
- ensuring we have appropriate legislative and regulatory tools in place (including for landfill gas capture improvements)
- signalling further policy steps to reduce emissions from F-gas refrigerants.

Proposals for investment through both waste disposal levy (waste levy) and the Climate Emissions Response Fund (CERF) will be critical to meeting projected emissions reductions. The CERF bid seeks to unlock “transformational” investment by territorial authorities and the private sector in the first four years (first emissions budget period). Investment will also generate wider benefits across other parts of the economy, in addition to reducing emissions.

¹ Topics covered by the Cabinet paper include Te Tiriti and an equitable transition for Māori; government accountability and coordination; behaviour change; waste; and F-gases.

[IN-CONFIDENCE]

Recommendations We

recommend that you:


- a. **Forward** this briefing note to Minister Woods
- b. **Forward** this briefing note to Minister Shaw
- c. **Provide** officials with any feedback on proposed waste and F-gas content in the attached draft Cabinet paper *Emissions Reduction Plan: core policies* before it is lodged on 9 December 2021

Yes/No

Yes/No

Yes/No

Signature

Glenn Wigley Director - Policy and Regulatory Waste and Resource Efficiency	
Hon David PARKER, Minister for the Environment	
Date	

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Purpose

1. This cover briefing provides you with an overview of proposed content on reducing waste and F-gas emissions in the draft Cabinet paper *Emissions Reduction Plan: core policies* (see appendix 1).
2. You have an opportunity to provide officials with feedback to incorporate before it is finalised for lodging on 9 December 2021.

Context

Analysis and Advice

The existing waste work programme will reduce GHG emissions from waste

3. The Emissions Trading Scheme (ETS) and National Environmental Standards for Air Quality 2004 (NES Air Quality) require landfills over a certain size and materials composition to collect greenhouse gas emissions. The NES Air Quality requirements led to marked reductions in modelled emissions from waste since 2004, although reductions have tapered off following a sharp initial impact.
4. The ERP consultation document summarises further work underway to reduce emissions from disposal of organic material to landfills.²

We can (nearly) achieve the Climate Change Commission's ambitious target for waste if we significantly accelerate investment

5. The Climate Change Commission (CCC) recommended we reduce waste biogenic methane emissions to at least 40 per cent below 2017 levels by 2035.
6. If funded and implemented fully, the waste policies proposed for inclusion in the ERP would largely achieve this target (including measures recommended for in-principle decision, investment, or further development). In combination, waste and F-gas policies are projected to exceed the target for the first emissions reduction period.
7. Because of uncertainties about the scale of emissions produced by landfills that do not currently have landfill gas capture in place we recommend taking an aligned but slightly different pathway from the CCC's recommendations, to achieve substantially the same level of abatement.³

² See page 103 of the ERP consultation document. Key projects include increasing and expanding the waste disposal levy; revising the New Zealand waste strategy, including setting targets for reduction of emissions from waste that are consistent with ERP targets; developing a national infrastructure plan for waste; and regulated product stewardship for six priority product groupings (including refrigerants and e-waste, including electric vehicle batteries). The wider work programme for waste is summarised in the *Waste Reduction Work Programme* [Waste-reduction-work-programme-final.pdf](#) (environment.govt.nz).

³ The modelling has a range of +/- 140 per cent for landfills other than those that take household waste at present.

8. Subject to funding, we propose:

- **improving our knowledge base** on a range of matters that affect emissions from disposal of organic waste, and/or the likely effectiveness of potential interventions⁴, to better inform future policy development.
- **building the systems needed to keep materials cycling in the economy (not generating GHG emissions in landfill):** organic materials that are currently disposed of in landfills are potential resources for the economy. Food and green waste could be collected from households and businesses and turned into compost, or anaerobically digested to produce bio-gas. A nation-wide resource recovery network for a range of materials, including green waste, paper and cardboard; and construction and demolition waste such as wood products would generate useful products while reducing emissions. Behaviour change (working with both businesses and consumers) will also help to reduce organic waste and minimise loss of food.
- **ensuring we have appropriate legislative and regulatory tools in place:** consultation on a new waste strategy and legislation (running 15 October to 10 December) [CAB-21-MIN-0402] provides an opportunity to make sure the appropriate legislative and regulatory tools are in place to support a low-emissions, low waste future, including licensing, duties of care, and refreshing roles and responsibilities for local government.

Funding

9. Some public and private investment has already taken place, including through the Waste Minimisation Fund and Covid-19 Response and Recovery Fund. But much more will be required in order to achieve the targeted biogenic methane reduction.
10. The expansion of the waste disposal levy (waste levy) will provide future funding opportunities for both central and local government. But the waste levy revenue on its own is insufficient to deliver the modelled emissions abatement needed to meet waste emissions budgets.
11. We have prepared scaled options to deliver on waste emission reduction proposals through the Budget 2022 Climate Emissions Response Fund (CERF) process [BRF-873 refers].

12. In brief,

- a dedicated fund to deliver national resource recovery and kerbside collection infrastructure, collecting and processing organic waste over the next four years
- behaviour change programmes for businesses and consumers, focused on reducing food waste

⁴ Key areas of uncertainty include: the composition of materials being landfilled at different types of landfill sites and at farm dumps; GHG emissions from landfills that do not have LFG capture systems in place, and the suitability of such sites for retro-fitting LFG capture; what scope is there to manage challenging materials such as treated timber differently.

- development of a supporting evidence base and regulatory changes to be implemented under the new waste legislation
 - a national data collection and reporting programme on emissions reductions from waste, including landfill gas capture feasibility studies
13. Officials consider investment in all of these areas is required to meet the target waste emissions reductions. We need to enable the behaviours, collection and processing capacity, and regulatory tools needed to keep organic materials circulating in the economy instead of generating emissions in landfill. We also need the evidence base and regulatory tools to better understand and manage waste emissions.
14. Decisions on funding options will have implications for the waste emissions reduction pathway and contribution to meeting emissions budgets.

Agreements in principle are sought for improved collection of food waste and establishment of a licensing system

15. We propose to seek agreements *in principle* on establishment of:
- requirements for kerbside collection of food waste and, where appropriate, green waste for most communities
 - requirements for businesses to ensure commercial food waste is separated and collected
 - new legislation and regulations to support a licensing scheme for more effective regulation, administration, and data collection from a range of parties.
16. Agreements sought would be subject to funding, further analysis, and further consultation (including with Māori).

Food waste collection

17. Standardising the system for kerbside collections of recycling and food waste is part of the Labour Government's manifesto. Officials consider also signalling the intended development of future controls on disposal of food waste from businesses will send stronger investment signals to the sector about the likely capacity required for processing of food waste. Establishing collections of food waste from households will require investment in additional processing capacity, and ensuring there is also enough capacity for food waste from businesses will help future proof this investment.
18. You will shortly receive a briefing [BRF-963] outlining additional detail on these two topics, with a proposal that a draft Cabinet paper and consultation document be taken to Cabinet in February 2022.
19. Implementation would be phased progressively from 2022 to minimise impacts on local government, communities, and businesses. Some implementation will rely on tools proposed to be established in new waste legislation.

Licensing

20. Reliable data is vital for reducing emissions, and minimising waste. A national waste operator licensing system is proposed to meet the CCC's recommendations for improving waste data.

21. A licensing system would provide a more efficient and robust basis for administering the range of requirements for how sites operate (including the waste levy and potentially the NZ ETS), as well as strengthening the evidence base for organic waste disposal bans and/or alternative options.
22. Pending improvements to other regulations (NES Air Quality and the NZ ETS), it could also be used to capture information on waste composition and landfill gas, leading to improvements in the measurement of site-specific landfill gas capture efficiency, which is another key option for reducing emissions.
23. The system would require new legislation and is canvassed in the current consultation on a new waste strategy and legislation (closing 10 December). While officials will do more detailed analysis of this proposal (including incorporating the results of the current consultation as well as ERP feedback), a decision in-principle is sought at this time to provide greater confidence in the key policies to be included in the finalised ERP.

Benefits

24. The proposed investment and other interventions will bring many benefits beyond direct reductions in GHG emissions from landfills:
 - food scraps and garden waste, when composted or anaerobically digested, can be turned into a variety of products which improve soil quality, displace artificial fertiliser, improve water retention and (in the case of anaerobic digestion) generate power. Resource recovery of Gibraltar board products could also provide a lower-emissions soil amendment product as an alternative to artificial fertilisers
 - paper and cardboard are highly recyclable and can be used in place of virgin materials (particularly given a potential shift from plastic to cardboard-based packaging)
 - some treated and untreated timber products can provide an alternative fuel source for industrial process heat
 - investing in better systems and infrastructure for separation of organic wastes will also help recovery of inorganic resources such as metals and plastics, which will in turn reduce GHG emissions associated with the extraction and processing of virgin materials
 - reducing avoidable food waste saves water and embodied energy resources and can contribute to sustainable food systems and food security.

Further regulatory intervention will be needed

25. All of the waste measures outlined in the ERP will be needed to (nearly) meet the emissions reduction target.⁵ In addition to the information gathering and investment proposals outlined, we seek a direction in the Cabinet paper that MfE does further work on specific regulatory proposals to better manage greenhouse gas (GHG) emissions from landfills in the future.

⁵ Refer figure 12 of the ERP consultation document.

26. This would include requiring landfill gas capture at all municipal landfills that receive organic material by 31 December 2026 (as recommended by the CCC). It would also involve investigating the requirement for landfill gas capture at a wider range of landfill sites that receive organic waste and/or banning specified organic materials from landfill by 2030.

F-gases

We have measures in place to reduce emissions from F-gases – but there is scope to move faster

27. The heating and cooling sector is already making the transition to more environmentally friendly refrigerants, with support from existing government policies (Kigali Amendment, ETS, Synthetic Greenhouse Gas Levy). However, the CCC recommended further work to expand import restrictions (where feasible); improve industry practice; and enable businesses and consumers to switch to low climate impact alternatives.

Agreement in principle is sought for prohibitions on finished products containing high-GWP HFCs, where feasible

28. The CCC recommended expanding import restrictions on F-gases where feasible. The emissions reduction plan discussion document presented three options to do this:
- accelerating the phase down of hydrofluorocarbons (HFCs) imported in bulk;
 - extending the Kigali Amendment phase down approach to include finished products and recycled HFCs;
 - prohibiting imports of certain finished products containing high global warming potential (GWP) HFCs where alternatives exist.
29. We propose in the draft Cabinet paper to progress option c: prohibiting imports of certain finished products containing high-GWP HFCs where alternatives exist. Under this approach, finished products containing high-GWP HFCs would not be accepted for import or sale in the New Zealand market if there are other options available that contain lower-GWP refrigerants.
30. This policy recognises that while the Kigali Amendment is phasing down the quantity of HFCs imported into New Zealand, there are some refrigerant applications where high-GWP HFCs could be phased out entirely, earlier than the phase down timetable. This approach is taken in the EU, USA and Japan, and is being examined in Australia.
31. The key benefit of prohibiting certain finished products containing high-GWP HFCs is that the New Zealand market is set up to transition to lower-GWP refrigerants as they become widely accessible. This will ensure New Zealand does not lag other markets and that we maximise the emissions reductions potential available.
32. We propose you seek Cabinet's agreement in principle to this policy approach. This agreement would be subject to finance, more detailed analysis, feedback from the ERP consultation, further engagement with iwi/Māori and more detailed public consultation.

Detailed policy development would take place over 2022, with stakeholder and public consultation.

33. In the Emissions Reduction Plan discussion document, this proposal also included prohibitions on HFCs used for servicing equipment. To date we have received significant commentary from stakeholders about this proposal during informal consultation. Consequently, we have held back this proposal for further analysis in conjunction with other through-life policy proposals (see below).
34. An interim RIS is being prepared to support this recommendation to Cabinet. This document will incorporate feedback from public consultation, which does not conclude until 24 November 2021. Your office will receive a copy alongside the final Cabinet documents for lodgement.
35. The other two import restriction options are not proposed to be progressed at this stage. We have not had sufficient time to review consultation feedback on these options. There are existing review mechanisms under the Ozone Layer Protection Act 1996 that can be used to review the speed of the phase down approach.

Further policy changes will be examined in advance of the final ERP

36. Specific policies to reduce HFC imports are only one part of the picture of reducing emissions in this sector. Measures to address leakage (as recommended by the Commission) are also being considered.
37. Between import controls and end of life management, there are a variety of through-life activities, or opportunities for refrigerants to leak. For example, improper installation and maintenance can lead to refrigerant leakage and sub-optimal functioning. The working bank of existing HFC refrigerants in New Zealand was estimated at 7,000 carbon dioxide equivalent metric tonnes in 2017. Leakage rates vary, but were, on average, seven per cent in 2017. In addition, deliberate venting is commonplace.
38. Significant abatement potential could be found in through-life management, a view shared by members of the industry. Based on feedback so far, stakeholders are expected to call for a more joined-up approach to regulating the sector, particularly to support increased training needs associated with capturing high-GWP refrigerants and the transition to alternative refrigerants. Co-benefits of increasing workforce professionalisation and safety have also been raised.
39. Responsibility for regulation of refrigerants lies across multiple departments and agencies. While Ministry for the Environment regulates environmental management, MBIE/WorkSafe regulate health and safety requirements and training, and MBIE/EECA regulate energy efficiency of refrigerant-containing equipment.
40. The Ministry for the Environment plans to work with other agencies to examine abatement opportunities in through-life management of refrigerants more closely before final ERP decisions are taken in March.

Consultation and collaboration

41. Public consultation on the ERP began on 13 October and concluded on 24 November 2021. Submissions have been invited via consultation hub Citizen Space. Public webinars have provided an opportunity for questions, discussion, and feedback.

42. We will provide you with weekly updates on consultation feedback themes in the Environment Weekly Update, starting with the week beginning 29 November.
43. Proposed measures to reduce GHG emissions from waste and F-gases are generally well-supported.
44. From consultation events held to date, feedback themes include support for moving to a more circular economy, including interventions at the top and middle of the waste hierarchy. Stakeholders supported the need for better data and reporting.
45. The sector has mixed views on the production of GHG emissions from managed and unmanaged landfills, as well as the need for and urgency of organic waste bans.
46. Stakeholders at F-gas consultation events have not been strongly opposed to applying prohibitions to imports of finished products containing high-GWP HFCs, where alternatives are available. We expect that we will receive technical feedback in formal submissions regarding what specific prohibitions are seen to be feasible. This feedback will inform development of specific prohibition proposals for detailed consultation in 2022. We propose to work closely with a subgroup of the industry in 2022 to assist in finalising these proposals.
47. Decisions that are proposed to be sought in principle would be subject to additional, targeted consultation.
48. Officials have shared a draft of the Cabinet paper including waste content with other agencies and discussed at an inter-agency meeting.
49. We recommend that you share this briefing with Minister Woods, for review of recommendations on F-gas policy, which has significant cross-over with existing energy efficiency work programmes.
50. We also recommend that you share this briefing note with Minister Shaw.

Risks and mitigations

51. The timeline for officials to develop advice to Cabinet following the ERP consultation is tight, meaning public feedback may not have been fully processed before Cabinet makes decisions. Officials consider this risk is mitigated because the in-principle decisions being sought will be subject to additional consultation and more detailed analysis over the course of the next several years.

Legal issues

52. No legal issues have been identified with this briefing. We are awaiting response from MFAT on trade and international legal implications of prohibiting import of finished products containing high-GWP refrigerants.

Financial, regulatory and legislative implications

53. Interim Regulatory Impact Statements are being produced to support any agreements in principle sought from Cabinet. In some cases, implementation of proposals will use tools that will be established in the new waste legislation (for which consultation closes on 10 December). However, seeking agreement in principle at this early stage is considered appropriate in order to:

- provide stakeholders with more certainty on the content of the ERP, to be finalised by 31 May 2022
- send investment signals to the sector (particularly in relation to processing and collection infrastructure for organic waste)

Next Steps

54. You will receive a range of briefing notes on the Emissions Reduction Plan and other waste policies in the lead up to discussion at Cabinet on 20 December 2021:

Table 1: Key ERP dates for remainder of 2021

Date	Item
24 November	ERP consultation closes
24 November	Briefing note on CERF budget proposals [BRF-873]
25 November	Draft Cabinet paper on 'Emissions Reduction Plan: core policies' (including waste and F-gases) provided to Ministers Parker and Shaw (see attachment one)
25 November	Briefing note on proposals to improve collection of recycling and food waste from households and businesses
25 or 26 November (TBC)	Briefing note on proposals to improve collection of recycling and food waste from households and businesses
29 November – 3 December	Ministerial consultation
9 December	Cabinet paper lodged
Week of 13 December	Cabinet Committee meeting
20 December	Cabinet meeting

