



Ministry for the  
**Environment**  
Manatū Mō Te Taiao

# PROACTIVE RELEASE COVERSHEET: NZ ETS technical regulation updates 2024

<b>Minister</b>	Hon Simon Watts	<b>Portfolio</b>	Climate Change
<b>Name of package</b>	NZ ETS technical regulation updates 2024	<b>Date to be published</b>	Recommend 20 August 2024, if approved by the Minister

List of documents that have been proactively released		
<b>Date</b>	<b>Title</b>	<b>Author</b>
On approval by Minister	1. Briefing: <i>Approval to issue drafting instructions on NZ ETS annual regulatory updates 2024</i>	Ministry for the Environment
	2. Briefing: <i>NZ ETS regulatory updates 2024: Further updates on delegated items and waste sector impacts</i>	Ministry for the Environment
	3. Cabinet paper: <i>New Zealand Emissions Trading Scheme Technical Updates 2024</i>	Office of the Minister of Climate Change
	4. Cabinet minute: CBC-24-MIN-0084 <i>New Zealand Emissions Trading Scheme Technical Updates 2024</i>	Cabinet Office
<b>Information redacted</b> <b>YES / NO</b>		

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## Briefing: Approval to issue drafting instructions on NZ ETS annual regulatory updates 2024

Date submitted: 25/06/2024

Tracking number: BRF-4916

Sub Security level: n-Confidence

MfE priority: Urgent

### Actions sought from Ministers

<i>Name and position</i>	<i>Action sought</i>	<i>Response by</i>
To Hon Simon Watts <b>Minister of Climate Change</b>	Approve officials to issue drafting instructions on the regulatory updates covered in this briefing	01/07/2024

### Actions for Minister's office staff

Return the signed briefing to the Ministry for the Environment ([ministerials@mfe.govt.nz](mailto:ministerials@mfe.govt.nz)).

### Appendices and attachments

N/A

### Key contacts at Ministry for the Environment

<i>Position</i>	<i>Name</i>	<i>Cell phone</i>	<i>First contact</i>
Principal Author	Jay Forlong		
Responsible Manager	Kate Whitwell	022 137 5939	
General Manager	Mark Vink	021 176 2243	✓

### Minister's comments

# Approval to issue drafting instructions on NZ ETS annual regulatory updates 2024

## Key messages

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1. Alongside consultation on mandatory updates to New Zealand Emissions Trading Scheme (NZ ETS) limits and price control settings for units, Cabinet approved consultation on technical regulatory updates to other NZ ETS regulations. Consultation is now complete.
2. All except two update items (affecting geothermal and liquid fossil fuel activities) were delegated to you to make policy decisions post-consultation, including to directly issue drafting instructions to the Parliamentary Counsel Office (PCO) to amend the regulations.
3. This briefing:
  - Seeks your approval to issue drafting instructions for each of the individual update items that were delegated, and provides analysis, submitter feedback, and officials' recommended options to support your decision;
  - Seeks your approval to make technical updates to the price of carbon and levy rates used in the Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013 (SGGL Regulations), for which you have a standing delegation to update every year;
  - Specifically draws your attention to feedback and concerns from the waste sector on two update items, which have received a greater level of interest than anticipated through the consultation process.
4. Timeframes and next steps, including for two non-delegated updates, are also provided. PCO need to make a start on drafting soon, so that any amended regulations are agreed by Cabinet and published no later than 30 September 2024. This is the same deadline as for NZ ETS settings, in order to come into effect for 1 January 2025.

## Recommendations

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We recommend that you:

- a. **note** that Cabinet delegated the authority to issue drafting instructions on the set of updates to NZ ETS regulations presented in this briefing to the Minister of Climate Change.
- b. **note** that submitter feedback has been considered in the analysis and recommendations for options now that consultation is completed.
- c. **agree** the recommended options for each of the delegated items as set out in Table 1:
  - (1) Proceed with *Updating DEFs for natural gas activities* as proposed;
  - (2) Proceed with *Improving accuracy for the waste sector* as proposed, while ensuring that the implementation process supports participants to fully understand and act on sub-proposals (A) and (B);

Yes | No

Yes | No

- (3) Proceed with *Clarifying how the destruction of synthetic greenhouse gases is recognised*, with minor revisions that simplify the change based on key evidence received;

Yes | No

- (4) Proceed with *Clarifying the definition of qualified person* as proposed;

Yes | No

- (5) Proceed with *Improving auctioning collateral methodology*, while ensuring that the implementation process supports participants to fully understand and act on the changes.

Yes | No

- d. **approve** officials to provide PCO with drafting instructions for each of the delegated items.

Yes | No

- e. **approve** officials' proposed approach to managing the feedback and concerns from the waste sector on two updates (2A/B), via implementation rather than directly in regulations.

Yes | No

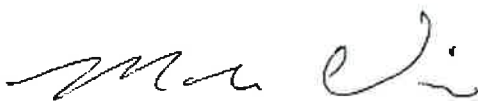
- f. **note** that the Minister of Climate Change has a standing delegation to make two specific technical updates relating to the Synthetic Greenhouse Gas Levy (in addition to the update items explicitly delegated this year), and that these also did not require public consultation.

- g. **approve** officials to provide PCO with drafting instructions for the items with standing delegations.

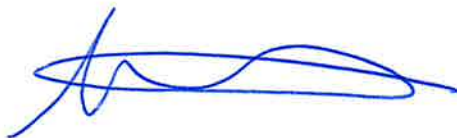
Yes | No

## Signatures

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Mark Vink  
General Manager  
**Markets Unit**  
Date: 24/06/2024



Hon Simon Watts  
**Minister of Climate Change**

Date: 30/6/24.

# Approval to issue drafting instructions on NZ ETS annual regulatory updates 2024

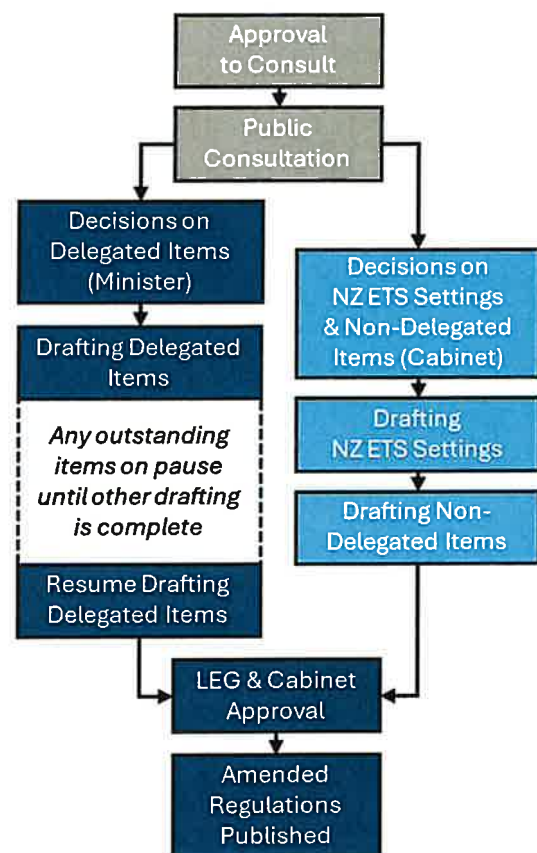
## Purpose

1. This briefing sets out recommended options for your approval on items delegated by Cabinet, for technical updates to regulations that govern the New Zealand Emissions Trading Scheme (NZ ETS), as well as technical updates to the price of carbon Synthetic Greenhouse Gas Levy.

## Background

2. As part of the approval to consult on NZ ETS limits and price control settings for units, and other technical regulatory updates, you received delegated authority from Cabinet to progress a series of the technical updates without returning to Cabinet for policy decisions [CAB-24-MIN-0156 and ECO-24-MIN-0075 refer].
3. This includes authority to directly issue drafting instructions to the Parliamentary Counsel Office (PCO).
4. The flow diagram to the right summarises the separate decision-making processes for delegated and non-delegated update items, as well as how this relates to the NZ ETS settings, with the decisions presented in this briefing shown in darker blue.
5. The overall package of NZ ETS updates will come back together for final approval of amended regulations by the LEG committee and Cabinet for publication no later than 30 September 2024.

Sequence of decisions for NZ ETS updates in 2024



6. This delegation also includes future years, for items that meet the following agreed criteria:
  - Routine updates to default and unique emissions factors (provided there are no changes to how participants report their emissions, or any significant economic or other implications);
  - Correct errors in the NZ ETS regulations;
  - Make similar minor or technical changes consistent with Government policy.

## Analysis and advice

7. The table below outlines technical updates proposed to NZ ETS regulations, which were delegated to you to issue drafting instructions directly. It provides officials' recommended options for your approval. None of the updates have changed substantively from the descriptions in the consultation document, with most of the recent evidence and analysis serving to reinforce and/or refine the existing proposals.
8. These regulations will be made under sections 163 (regulations relating to methodologies and verifiers) and 164 (regulations relating to unique emissions factors) of the Climate Change Response Act 2002 (CCRA).

*Table 1: Overview and recommendations for delegated NZ ETS annual regulatory updates 2024*

Item	Summary	Feedback	Analysis / Impacts & Recommendation
(1) Updating DEFs for natural gas activities	<p>Participants who opt into the NZ ETS for the natural gas that they purchase use DEFs listed in regulations to report their estimated emissions, based on where the natural gas was mined.</p> <p>Keeping these DEFs updated can avoid significant compliance cost to these participants in addition to supporting accuracy in the scheme.</p>	<p>There is general support across respondents to make this update, including from energy sector participants in the NZ ETS.</p>	<p>This update has no cost impacts for mandatory natural gas participants (gas miners), and is used to reduce the cost and burden of opt-in participants, without changing their actual emissions obligation.</p> <p>Data recently received from the EPA indicate that changes in values are sufficient to warrant the update, without any particularly unexpected shifts.</p> <p><b>Officials recommend proceeding with this update as proposed.</b></p>
(2) Improving accuracy for the waste sector	<p>(A) Waste participants can apply for a site-specific UEF that is up to 90% of the DEF, which can better reflect their actual emissions. Updating the UEF regulations for waste corrects a problematic misalignment introduced in 2022.</p> <p>(B) Waste participants applying for a UEF for collection and destruction of landfill gas use national waste composition data (if they do not have historic composition data available) to model the efficiency of the landfill gas capture system. Allowing UEF applicants to use historical national waste composition datapoints improves the accuracy of the model.</p> <p>(C) Currently, UEF applicants for collection and destruction of landfill gas are required to destroy the gas onsite. This proposal would allow landfill gas to</p>	<p>There is general support across respondents to make these updates, including from waste and energy sector participants in the NZ ETS.</p> <p>There is some concern about timeframes for adoption of changes, especially regarding parts A and B of this update, and the costs that are associated with this.</p> <p>Respondents often sought clarification and the opportunity to work with officials to understand the implications of these updates, and to ensure that the values proposed are accurate.</p>	<p>Updates A and B would mean all waste UEFs change, meaning that all waste participants with a UEF would have to reapply. There are costs associated with this process, as each UEF must be verified by an independent party. Therefore, we recommend both changes A and B are made together to ensure participants do not have to apply for a new UEF twice.</p> <p>Both A and B are proposed to take effect from 01 January 2025. All UEF changes apply in January for the previous year. Therefore, these updates will apply to 2024 emissions. However, UEFs often change over a year, resulting in reapplications being required that then apply retrospectively, even when there is no regulatory update.</p> <p>Participants have raised concerns about this as they have not incorporated the change across 2024 (further advice on this is provided below). We consider this change still needs to be made now to improve the accuracy and fairness of the emissions factors.</p>

Item	Summary	Feedback	Analysis / Impacts & Recommendation
	be destroyed offsite and still be eligible for a UEF, giving participants more flexibility.		<b>Officials recommend proceeding with waste updates A and B</b> , while ensuring that the implementation process supports participants to fully understand and act on the changes. Update C has no cost impacts. <b>Officials recommend proceeding with waste update C as proposed.</b>
<b>(3)</b> Clarifying how the destruction of synthetic greenhouse gases is recognised	Onshore destruction of synthetic greenhouse gases is provided for in regulations, but the provision is currently unused. There is evidence that this may change soon if domestic destruction begins. Participants should have certainty that the destruction of eligible synthetic greenhouse gases will be recognised, and will therefore be awarded NZUs.	There is general support across respondents to make this update. A key respondent from the sector correctly identified that the gas that causes the ambiguity has changed status in law, so could be removed entirely and correct this problem.	The suggested approach by the submitter has the same policy outcome as the option presented in the consultation document, but is a cleaner and more consistent way of addressing the problem. <b>Officials recommend proceeding with this update</b> , with minor revisions that simplify the change based on key evidence received.
<b>(4)</b> Clarifying the definition of qualified person	We propose clarifying the definition of and requirements to be a qualified person, to ensure that only suitable individuals can manage holding accounts for NZUs. Individuals otherwise unsuitable under one part of the definition need to manage a holding account if they are a mandatory NZ ETS participant. Clarifying the wording would mitigate risk to the integrity of the scheme.	No comments were received on this update.	This update has no cost implications for any groups or individuals. Implementation should not change for the EPA, except that they will have greater clarity when making future decisions on management of holding accounts. <b>Officials recommend proceeding with this update as proposed.</b>
<b>(5)</b> Improving auctioning collateral methodology	The current method for calculating auctioning collateral can result in participants paying for more collateral than necessary. Clarifying the formula used would reduce the upfront cost to participants to engage in auctions.	There is a mix of support and opposition for this update. The sector participant that originally suggested this update confirmed their support. The concerns raised all related to perceived complexity in the proposed formula. This could signal a lack of understanding – a similarly complex formula is already in place, required data is comparable, and this update would be actioned by NZX not the participants.	This update has minimal cost implications for participants to shift to, and otherwise reduces costs as it on average lowers collateral amounts relative to overall bid volume. Understanding the new methodology, so that participants can (e.g.) incorporate it in their bid strategies, can be managed through implementation and NZX's existing engagement channels. <b>Officials recommend proceeding with this update</b> , while ensuring that the implementation process supports participants to fully understand and act on the changes.



## **Impacts on the waste sector**

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9. The first two sub-items for waste activities (A and B) have received a greater level of interest from submitters than anticipated.
10. The majority of this feedback has come from the waste sector, including independent landfills, local government, and Waste Management New Zealand. In general, they are supportive of making the updates. The sector originally signalled the need for this update to officials. However, the cost implications for the sector are noted throughout submissions, along with the implementation burden that it may create.
11. Following assessment of this feedback, officials still advise that these two waste items meet the criteria for delegation, as they remain primarily technical and our assessment of the cost impacts has not increased.
12. Officials advise that these concerns have possible mitigations, and can largely be worked through with the sector as part of the implementation process, rather than incorporated into the text of the regulations. We will return to you with more information on this approach as implementation begins.

## **Regulatory impact analysis**

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13. Summary impact analysis is included in the table above where notable, but full regulatory impact assessment will only be required at a high level for final approval of the amended regulations by Cabinet following drafting.
14. As the delegated items are not expected to have significant economic impacts or are technical decisions, they are exempt from regulatory impact assessment requirements.

## **Te Tiriti analysis**

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15. No feedback was received via public consultation on Tiriti matters or impacts for these delegated items, nor did iwi/Māori-affiliated submitters respond to these updates in detail.
16. Due to the targeted and technical nature of these items, officials have considered and not identified unique Tiriti implications or impacts on iwi/Māori of these updates.
17. Any regulatory changes that come with general economic impacts will indirectly impact iwi/Māori. These updates are not expected to have significant general economic impacts, hence the basis of the delegation from Cabinet, but there nevertheless may be minor and/or indirect economic consequences of these changes that may impact iwi/Māori.

## **Synthetic Greenhouse Gas Levy updates**

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18. There are also two routine technical updates for which the Minister of Climate Change has a standing delegation:
  - Update the price of carbon;
  - Update the Synthetic Greenhouse Gas Levy (SGGL) rates.



19. These items have been identified as requiring no policy decisions each year since 2015, for the purposes of impact assessment requirements. Cabinet has also confirmed that these updates could be made directly by the Minister of Climate Change several times since, typically with reference to the Cabinet manual (section 7.95(d) refers). Consequently, in recent years, this precedent has been treated as a standing delegation by the Minister of Climate Change.
20. These two items do not require public consultation, so were not presented in the decision to approve consultation or in the consultation material.
21. The **price of carbon**, which is set in clause 10 of the SGGL regulations, is based on a rolling average of the NZU prices for the previous year (01 July to 30 June). This means that the increases and decreases in the NZ ETS secondary market prices are smoothed out and have a delayed effect on the calculated price of carbon.
22. This calculated price is used for two purposes:
  - Calculating penalties for NZ ETS non-compliance, for example where they are based on an estimated value of units that were not surrendered;
  - Calculating the SGGL rates, as described below.
23. Based on the price of carbon, **levy rates** are prescribed in Schedules 1 (motor vehicles levy schedule) and 2 (goods levy schedule) of the SGGL regulations. Each item subject to the levy attracts a different levy rate depending on the amount of SGG in the item and its global warming potential.
24. Increasing the SGGL will increase prices of some consumer goods. However, the levy is a relatively minor portion of the total cost of most of these goods. Additionally, local manufacturers of heating, ventilation, and air conditioning equipment who purchase bulk SGGLs for their products would be at a competitive disadvantage if the levy is not increased to match the increased price of carbon.
25. You are required by section 30W of the CCRA to consider three matters before updating the price of carbon:

*The price of units used to calculate revenue from the NZ ETS in the Crown annual financial statements in the preceding 12 months*

- The SGGL regulations are not materially different to the carbon price used to reflect revenue. The two methodologies use the same source data and similar calculations.

*The price of NZUs sold by auction in the preceding 12 months*

- There have been four auctions in this period. Only one of these auctions (partially) cleared, at a clearing price of \$64.00.
- The price of NZUs sold at auction are accounted for through the existing methodology as the auction clearing price is generally close to the secondary market price.

*Any changes to the operation of the NZ ETS that have affected the price of the units surrendered, or may do so before the end of the next levy year*

- The methodology also accounts for changes to the operation of the NZ ETS because this is reflected in the secondary market price. It is difficult to predict the impact of NZ ETS changes on the price of units to be surrendered in 2025.
- There is a lag between the carbon price faced by NZ ETS participants and the SGGL, so the impact will be accounted for next year.

- Many participants with surrender obligations will have secured 2025 supply already, at prices used in calculating the update to the price of carbon.
26. Officials recommend proceeding with the precedent to calculate a new price of carbon once data is available, and new SGGL rates to reflect this. This should be possible in time to incorporate alongside the other drafting instructions recommended in this briefing.
27. We can then provide details on the new price of carbon and levy rates.

## Next steps

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28. There are two remaining technical updates that were taken to public consultation: *Updating DEFs and UEF methodologies for geothermal activities*; and, *Updating DEFs for liquid fossil fuel activities*.
- These were both considered to potentially have more-than-minor impacts, and the geothermal item includes a possible policy decision about restructuring the emissions reporting approach set out in the regulations.
  - Feedback received on these items has been broadly supportive, though both sectors are interested in continuing to participate in engagement on the details of these updates as they are rolled out.
  - We will return to you with further advice on options and information on submissions as part of the Cabinet material that also includes NZ ETS settings decisions.
29. Officials will continue to discuss with PCO their capacity and the likely time implications of the staggered drafting approach to delegated technical items, non-delegated technical items, and NZ ETS settings decisions under compressed timeframes.
30. Once amendment regulations have been drafted, they will return to Cabinet for final approval to publish. This process will include all delegated items, non-delegated items, and NZ ETS settings. Publication of the new regulations must occur no later than 30 September 2024 to come into effect on 01 January 2025.



## Briefing – NZ ETS regulatory updates 2024: Further updates on delegated items and waste sector impacts

Date submitted: 04/07/2024

Tracking number: BRF-4978

Sub-Security level: In-Confidence

MfE priority: Urgent

### Actions sought from Ministers

<i>Name &amp; position</i>	<i>Action sought</i>	<i>Response by</i>
Hon Simon Watts <b>Minister of Climate Change</b>	Indicate your preferred option for implementing updates to NZ ETS waste regulations. Note updates being made to the price of carbon and Synthetic Greenhouse Gas Levy rates.	08/07/2024

### Actions for Minister's office staff

Return the signed briefing to the Ministry for the Environment ([ministerials@mfe.govt.nz](mailto:ministerials@mfe.govt.nz)).

### Appendices and attachments

N/A

### Key contacts at Ministry for the Environment

<i>Position</i>	<i>Name</i>	<i>Cell phone</i>	<i>First contact</i>
Principal Author	Jay Forlong		
Responsible Manager	Kate Whitwell	022 137 5939	✓
General Manager	Mark Vink	021 176 2243	

### Minister's comments

# NZ ETS regulatory updates 2024: Further updates on delegated items and waste sector impacts

## Key messages

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1. This briefing provides further information on two regulatory updates to the NZ ETS, for which you have approved officials to issue drafting instructions [BRF-4916 refers].

### Regulatory updates for the waste sector

2. This update corrects an error in the Climate Change (Unique Emissions Factors) Regulations 2009 (UEF regulations) relating to how the waste sector uses historical waste data in their emissions reporting.

Since providing you with the previous advice on these matters, all of the submitter feedback has been considered. This has resulted in additional evidence and analysis on the impacts of this update. The correction to regulations needs to be made, and is supported by sector submissions, but you have choices around when the corrections come into effect.

3. A concern raised, however, was that the impact of this update on participants is estimated to be an increase in their 2025 UEF of up to 45%. For two councils that submitted, this means an additional \$500k to \$1m required to cover their respective NZ ETS obligations.
4. Submitters have suggested deferring implementation for a year to prepare for this cost. UEFs apply to the emissions return that covers the previous year, so this update coming into effect on 01 January 2025 means that it applies to 2024 emissions.
5. The 45% difference in the waste UEFs is proportional to NZUs not surrendered (this is about 400,000 NZUs not surrendered by the waste sector per year). This also means that participants are not facing the full incentive to reduce these emissions.
6. The decision on how to progress with this waste update also affects the timing and impacts of another related waste update, which corrects an error where the waste default emissions factors (DEFs) are not properly referenced in the UEF regulations. Both of these updates will require waste sector participants to reapply for their UEFs, and therefore are most efficient and least cost if they come into effect at the same time.

### Regulatory updates for the price of carbon and Synthetic Greenhouse Gas Levy rates

7. The second set of updates relate to the price of carbon, which is calculated every year on the basis of an average NZU value from the previous year. The price of carbon then informs Synthetic Greenhouse Gas Levy (SGGL) rates. These are routine technical updates that involve no policy decisions, for which you have a standing delegation.
8. Tariff codes will reflect the new price of carbon and levy rates once regulations are made.

## Recommendations

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We recommend that you:

### In relation to the regulatory updates for the waste sector—

- a. **note** that the waste update to correctly reflect historical waste data (Waste Update B) fixes an error, but there are trade-offs involved in deciding when this comes into effect, with impacts on both the sector and the government of each option.

b. **agree** to progress with one of the following options, noting that officials recommend either Option 1 or 3, due to the extra complexity and cost to participants created by Option 2:

- (1) Consultation proposal – Make both Waste Update A (to align with default emissions factors) and Waste Update B as proposed, to come into effect on 01 January 2025 and apply to 2024 emissions;

Yes ☒ No

- (2) Suggested by submitters – Defer Waste Update B from coming into effect until 01 January 2026, and therefore apply to 2025 emissions. Make Waste Update A as proposed, to come into effect on 01 January 2025 and apply to 2024 emissions;

Yes ☒ No

- (3) Aligned deferral – Defer both Waste Updates A and B for a year, to come into effect on 01 January 2026 and apply to 2025 emissions.

☒ Yes ☐ No

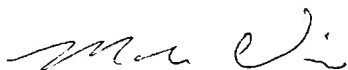
In relation to the regulatory updates for price of carbon and SGGL rates—

c. **note** that officials have now received the data required to calculate the price of carbon, and that the new price of carbon is \$61.32 (approximately 13% lower than last year).

d. **note** that the price of carbon is then used to calculate new SGGL rates for 2025.

## Signatures

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Mark Vink  
**General Manager**  
Markets Unit  
Date: 04/07/2024



Hon Simon Watts  
**Minister of Climate Change**

Date: 14/7/24.

# NZ ETS regulatory updates 2024: Further updates on delegated items and waste sector impacts

## Purpose

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1. This briefing provides additional information on two of the technical regulatory updates to the NZ ETS, for which you have approved officials to issue drafting instructions as part of the wider set of technical regulatory updates [BRF-4916 refers].
2. Following the receipt of further information, and completing additional analysis, officials have developed a clearer picture of the degree of impact of one of the updates on waste participants. A range of options are presented for mitigating this impact through when the change is implemented.
3. Routine technical updates to the price of carbon and derived Synthetic Greenhouse Gas Levy (SGGL) rates occur each year under a standing delegation. This update has no policy decisions. The new price of carbon and rates are presented below for your information.

## Impacts of updates on the waste sector

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4. As part of the public consultation on the NZ ETS regulatory updates, we received feedback from a range of stakeholders in the waste sector, including private landfill operators (notably, Waste Management NZ) and local councils.
5. All of the feedback from the sector and other relevant parties was supportive of making the changes proposed.
6. In addition to their general support, waste sector submitters expressed concern about the cost of implementing one of the proposals, which corrects how historical data is used in calculating waste emissions under the Climate Change (Unique Emissions Factors) Regulations 2009 (UEF regulations). This was **Waste Update B** in the consultation document.
7. Waste Update B was proposed to come into effect from 01 January 2025, and therefore affect the cost of emissions from 2024, as UEFs apply to the previous year's emissions.
8. Notably, two councils provided specific estimations of the increase in emissions obligation of this update, in addition to the cost of needing to reapply for their UEF:
  - a. Queenstown Lakes District Council – About a 40% increase in UEF, resulting in an additional \$1m in emissions costs in 2025;
  - b. Dunedin City Council – About a 45% increase in UEF, resulting in an additional \$500k in emissions costs in 2025.
9. Both councils noted that they had not hedged to cover the additional cost created by this update, and that this cost would need to fall on rate payers in an out-of-cycle adjustment to rates. They suggested that this could be mitigated by deferring Waste Update B by a year, to come into effect from 01 January 2026 and apply to 2025 emissions.
10. Officials' assessment has determined that the impact on privately run landfills is likely to be similar, though these two councils will be at the higher end of the level of impact.
11. It is worth noting that errors in the UEF regulations were identified by waste sector participants about 2 years ago. We also signalled the direction of the new updates via the consultation document, which was published before the end of the last financial year and

therefore before gate fees were updated for the emissions reporting period to which these proposals would apply.

12. In addition, for as long as this cost is avoided by the sector, waste participants are not facing an incentive to reduce emissions to support meeting our targets and budgets. This difference in UEF of up to 45% is directly proportional to NZUs not being surrendered to the government. Bringing these updates into effect from 01 January 2025 would support positive climate outcomes, and also remedy the misalignment in surrenders.
13. If Waste Update B is deferred, it will be most efficient to also defer **Waste Update A** from the consultation document. Waste Update A corrects the value used in the UEF regulations to align with the default emissions factor for waste set out in the Climate Change (Waste) Regulations 2010. Both Waste Updates A and B will require participants to reapply for their UEF, the cost of which falls on the participant, so both coming into effect at the same time avoids the cost and burden of having to reapply twice.
14. As an indication of the scale of these combined updates: In 2021, total waste emissions reported under the NZ ETS were about 987,000 tCO<sub>2</sub>-e. This dropped to about 572,000 tCO<sub>2</sub>-e in 2022 after the introduction of this error into regulations. This results in a difference of about 413,000 NZUs that ought to have been surrendered if the regulations were correct, the majority of which is attributable to the error in the UEF regulations (though not all). This margin of difference is expected to be comparable in subsequent years.
15. You therefore have the following options for implementation of the waste updates:

*Table 1: Options assessment for regulatory updates affecting the waste sector*

Option	Explanation	Benefits	Consequences	Emissions Impact
(1) Original proposal	Make both Waste Updates A and B as proposed, to come into effect on 01 January 2025 and apply to 2024 emissions.	Participants face the cost of updating their UEF once. 2025 emissions reporting accurate. NZU surrenders not lost in 2025.	Participants face potentially significant increased emissions cost in 2025.	Waste is about 4.5% of NZ emissions. (1) means that this total volume faces the full price. Waste costs are passed through and most reductions come from technology, so the impact on overall emissions is marginal.
(2) Submitters' suggestion to defer	Defer Waste Update B from coming into effect until 01 January 2026, and therefore apply to 2025 emissions. Make Waste Update A as proposed, to come into effect on 01 January 2025 and apply to 2024 emissions.	Participants avoid potentially significant increased emissions cost until 2026, allowing them to plan/hedge in advance.	Participants face the cost of updating their UEF twice. Emissions reporting partially inaccurate until 2026. NZU surrenders partially incorrect until 2026.	Waste is about 4.5% of NZ emissions. (2) means that some of these emissions still aren't priced, but more than (3). Waste costs are passed through and most reductions come from technology, so the impact on overall emissions is marginal.
(3) Aligned deferral	Defer both Waste Updates A and B for a year, to come into effect on 01 January 2026 and apply to 2025 emissions.	Participants face the cost of updating their UEF once. Participants avoid potentially significant increased emissions cost until 2026, allowing them to plan/hedge in advance.	Emissions reporting remains inaccurate until 2026. NZU surrenders incorrect until 2026.	Waste is about 4.5% of NZ emissions. (3) means that up to 1% of NZ's emissions aren't priced for another year. Waste costs are passed through and most reductions come from technology, so the impact on overall emissions is marginal.

16. Because of the added drafting complexity of Option 2, and the need for participants to reapply for their UEF twice, officials do not recommend this option.
17. The key trade-off between Options 1 and 3 is whether the government wants to take on the cost and risk of the inaccurate regulations and misaligned NZU surrenders for another year to reduce the costs that the waste sector faces, and that will in part be passed onto rates payers. Both Options 1 and 3 are simpler to implement and reduce the burden of UEF reapplication requirement compared to Option 2.



18. We do not believe that there is legal risk in deferring this update, as the existing regulations are valid and in force even if they are incorrect.

## Price of carbon and Synthetic Greenhouse Gas Levy rates

19. You recently approved officials to issue drafting instructions to update the price of carbon in the Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013 (SGGL regulations), which is used to then calculate Synthetic Greenhouse Gas Levy (SGGL) rates. This value is also part of determining compliance penalties under the NZ ETS.
20. Since our previous advice on this matter, the latest data on NZU values for 01 July 2023 to 30 June 2024 is now available to calculate the price of carbon.
21. The new price of carbon for 2025 will be \$62.32, which is approximately a 13% decrease from last year's price. This value is averaged from weekly average NZU prices, which ranged from as low as \$38.25 (in July 2023) to as high as \$74.43 (in December 2023). The table below shows the history of the price of carbon since 2016.

Table 2: Annual prices of carbon

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Price (NZD)	\$0.30	\$9.85	\$17.67	\$19.88	\$24.54	\$25.60	\$36.50	\$67.63	\$71.97	\$62.32

22. The price of carbon is then used to derive SGGL rates. SGGL rates are prescribed in Schedules 1 and 2 of the SGGL regulations, and each item subject to the levy attracts a different rate depending on the amount of gas contained in the item and its global warming potential.
23. Schedule 1 applies to eight classes of motor vehicles. Schedule 2 applies to an extensive list of goods, including refrigerators and freezers, heating and air-conditioning, polyurethanes, fire extinguishers, and printers. The table below shows a selection of levied goods to illustrate the proposed rate changes. The amount that each levy rate changes is directly proportional to the change in price of carbon.

Table 3: Selected annual levy rates

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Medium-sized refrigerator	\$0.02	\$0.94	\$2.11	\$2.84	\$3.51	\$3.66	\$5.22	\$9.67	\$10.29	\$8.91
Medium-sized domestic heat pump (w. R410a)	\$0.47	\$20.59	\$46.16	\$62.32	\$76.93	\$80.26	\$114.43	\$194.77	\$207.27	\$179.48
Private car	\$0.13	\$5.63	\$12.63	\$17.06	\$21.06	\$21.96	\$31.32	\$52.75	\$56.14	\$48.61

## Next steps

24. Following your decision on how to progress with the waste updates, officials will incorporate the selected approach into the drafting instructions to the Parliamentary Counsel Office, alongside drafting instructions on the other technical regulatory updates.
25. The new price of carbon and SGGL rates will also form part of these drafting instructions.
26. These draft regulations will return for Cabinet approval together with draft regulations on the non-delegated technical updates and the NZ ETS settings, in order to be published no later than 30 September 2024.

**In-Confidence**

Office of the Minister of Climate Change

CBC – Cabinet Business Committee

## **New Zealand Emissions Trading Scheme Technical Updates 2024**

### **Proposal**

- 1 I seek Cabinet approval to update emissions factors and methodologies for the geothermal and liquid fossil fuel sectors in the New Zealand Emissions Trading Scheme (NZ ETS).

### **Relation to government priorities**

- 2 The proposals in this paper support the coalition agreements between the National Party and our coalition partners to restore confidence and certainty in the NZ ETS.

### **Executive Summary**

- 3 The NZ ETS is our primary tool to reduce emissions, and “credible markets” is one of the five pillars of the Coalition Government’s climate strategy.
- 4 I am proposing technical updates to three sets of regulations:
  - 4.1 Geothermal default emissions factors (DEF) in the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009 (SEIP regulations);
  - 4.2 Geothermal unique emissions factor (UEF) methodologies in the Climate Change (Unique Emissions Factors) Regulations 2009 (UEF regulations);
  - 4.3 Liquid fossil fuel (LFF) DEFs in the Climate Change (Liquid Fossil Fuels) Regulations 2008 (LFF regulations).
- 5 These annual updates are routine but important to maintain the efficiency and accuracy of the NZ ETS. Updating the emissions factors and methodologies ensures that the NZ ETS is accurate for participants in the geothermal and liquid fossil fuel sectors and reflects their actual emissions.
- 6 I am bringing these proposals to Cabinet because they fall outside the scope of previous Cabinet delegations to me to make minor and technical updates to ETS regulations.
- 7 Sector participants were directly engaged on these updates, in addition to public consultation, and are supportive of these updates being made.

## Background & Analysis

- 8 I consulted on a range of technical updates to regulations that govern the NZ ETS, between 15 May and 14 June.<sup>1</sup> The majority were delegated to me to issue drafting instructions, including in future years [ECO-24-MIN-0075 refers].
- 9 Three of the proposals, affecting the geothermal and LFF sectors, were not delegated and are presented in this paper for Cabinet's final decisions.

### *Default emissions factors and unique emissions factor methodologies for geothermal activities*

- 10 Geothermal DEFs and UEFs are used in calculating participants' emissions returns. The majority of participants use a UEF, despite this being more expensive and complex. This is because the DEFs lag behind, especially since they have not been updated in the last few years, so the UEFs are more accurate.
- 11 I propose to update the DEFs for geothermal activities listed in the SEIP regulations, based on recent sectoral data. The proposed DEFs are listed in *Table 1* below.

*Table 1: Proposed geothermal default emissions factors*

Plant	Participant	Existing DEF	Proposed DEF	% change
<i>Plants or processes that use geothermal steam to produce electricity or industrial heat</i>				
Kawerau II	Mercury	0.0202	0.0125	-38.12
Kawerau Industrial	Various	0.0202	0.0174	-13.86
Kawerau KA24	Eastland	0.0202	0.0131	-35.15
Miraka Milk	Tuaropaki Trust	New	0.0053	N/A
Mokai I and II	Mercury	0.0053	0.0046	-13.21
Nga Awa Purua	Mercury	0.0181	0.0082	-54.70
Ngāwhā I and II	NGL	0.0930	0.0555	-40.32
Ngāwhā III	NGL	New	0.0655	N/A
Ngā Tamariki	Mercury	New	0.0091	N/A
Ohaaki	Contact	0.0604	0.0320	-47.02
Poihipi Road	Contact	0.0049	0.0051	4.08
Rotokawa I	Mercury	0.0228	0.0128	-43.86
Te Ahi o Maui	Eastland	New	0.0101	N/A
Te Huka	Contact	New	0.0074	N/A
Te Mihi	Contact	New	0.0045	N/A
TOPP1	Eastland	New	0.0107	N/A
Wairakei Station Site	Contact	0.0051	0.0021	-58.82
Any other plant or process		0.0300	0.0300	No change
<i>Plants or processes that use geothermal fluid to produce electricity or industrial heat through a process other than production of geothermal steam</i>				
Mokai Greenhouse	Tuaropaki Trust	Nil	Nil	No change
Tauhara Tenon	Contact	0.0009	Nil	-100.00
Any other plant or process		0.0009	0.0009	No change

- 12 I also propose to update the methodologies available to calculate geothermal UEFs in the UEF regulations to better reflect the practice of reinjecting non-condensable gases (NCGs) back into the geothermal reservoir, rather than emitting them to the atmosphere. The new methodologies are set out below.

<sup>1</sup> Alongside the mandatory annual updates to NZ ETS "limits and price control settings for units" (NZ ETS Settings).

13 Mass-balance measurement:

13.1 This method calculates the UEF by considering the total greenhouse gases in the inputs to a plant and the total greenhouse gases in the outputs to reinjection. The difference is taken to be the emissions to the atmosphere. The analysis must be done as total bicarbonate and reported as total CO<sub>2</sub>.

14 Direct gas-flow measurement:

14.1 This method continuously measures the flow rate(s) of the vapour discharge(s) regardless of the steam and brine flows. The units of this UEF will be tonnes of CO<sub>2</sub> equivalent per tonne of non-steam vapour. The vapour discharge flow rates, pressure, and temperature will be recorded.

15 Recognition of 100 per cent reinjection of non-condensable gases (NCGs):

15.1 This method recognises where there is 100% reinjection of NCGs. An inspection by a recognised verifier would result in a zero emissions factor. This will require permanent connection of the NCG offtake to a reinjection pipeline.

15.2 Allowance will be given for small discharges to the atmosphere, such as on start-up, station trips, and other similar occurrences, of 4000t/year.

15.3 A recorded indicator of NCG emissions will be required, such as a NCG flowmeter, a temperature gauge on the gas emission line, or other indicator that positively records when emissions are occurring. A standard flow rate and DEF for each NCG emission would apply without requiring use of a separate UEF for these emissions. The yearly allowance will still apply.

16 In future years, under the standing delegation approved by Cabinet, I intend to keep the DEFs up to date by using a three-year rolling average of UEFs and DEFs.

17 The impacts of these updates are not substantively different from the status quo, and are expected to reduce over time on average as the rolling averages come into use.

*Default emissions factors for liquid fossil fuel activities*

18 Liquid fossil fuel (LFF) DEFs are used in calculating participant's emissions returns. Since the previous substantive update to the LFF DEFs, Refining NZ's Marsden Point Oil Refinery has closed. All fuel consumed in New Zealand is now imported, resulting in the average fuel composition shifting.

19 I propose to update the DEFs for LFF activities listed in the LFF regulations, based on recent data from the Ministry of Business, Innovation, and Employment. The proposed DEFs are listed in *Table 2* below.

*Table 2: Proposed liquid fossil fuel default emissions factors*

Category	Source	Current DEF	Proposed DEF	% change
Petrol	Regular petrol	2.313	2.319	0.26
	Premium petrol	2.369	2.322	-1.98
Diesel	Automotive / marine diesel	2.664	2.665	0.04
Aviation	Aviation spirit	2.198	2.252	2.46
	Jet fuel	2.522	2.519	-0.12

Fuel oil	Light fuel oil	2.928	3.003	2.56
	Heavy fuel oil	3.013	3.119	3.52
Any other fuel		3.299	3.299	No change

- 20 The impacts of these changes on fuel prices are expected to include a combination of increases and decreases, detailed in the 'Cost-of-living Implications' section below.
- 21 It has also been identified that the excise and tariff item numbers used in the LFF regulations to specify the above fuel types need to be amended to match the latest item numbers. The item numbers currently referenced in the regulations have expired, and new item numbers are now used in the tariff and excise tables.

### Cost-of-living Implications

- 22 The update proposed for geothermal activities does not have cost-of-living impacts that vary notably from the status quo. The changes to DEFs are significant; however, the majority of geothermal participants are using UEFs because the DEFs have been out of date, which align with their current emissions.
- 23 The update proposed for liquid fossil fuel activities will have cost-of-living impacts as they are likely to result in a combination of increases or decreases to fuel prices:
- 23.1 The greatest increase in default emissions factor (DEF) is heavy fuel oil, of about +3.5%. However, as the NZ ETS cost only makes up a proportion of fuel prices, this translates to about +0.7% impact on the price of heavy fuel oil. This is not a consumer-facing fuel and is primarily used as a marine fuel for large vessels;
- 23.2 The light fuel oil and aviation spirit DEFs also increase by approximately +2.5%, while the jet fuel DEF decreases by about -0.12%, and consequent fuel price impacts are proportionately less (under 0.5%), as with heavy fuel oil;
- 23.3 For consumer-facing fuels, changes are much smaller, and include reductions: For diesel, +0.04% to DEF is about +0.003% to fuel price; for regular petrol, +0.26% to DEF is about +0.015% to fuel price; and, for premium petrol, -1.98% to DEF is about -0.107% to fuel price.
- 24 All changes and overall NZ ETS impact of these proposals are well within range of typical energy and fuel price fluctuations.

### Financial Implications

- 25 There are no quantifiable fiscal impacts of the technical regulatory updates proposed.

### Legislative Implications

- 26 I intend the amended regulations to take effect from 01 January 2025, as this is the beginning of a new compliance year for NZ ETS participants. Therefore, the amended regulations need to be notified prior to 30 September 2024, as three months are required before they come into force.
- 27 This aligns with the timeframes for the NZ ETS Settings updates occurring in parallel.

## **Impact Analysis**

### *Regulatory Impact Statement*

- 28 The Ministry for Regulations was consulted, and agreed that these proposals are exempt from regulatory impact assessment requirements, as they are technical and involve no policy changes, and analysis indicates that impacts are minor.

### *Climate Implications of Policy Assessment*

- 29 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements do not apply to this proposal as the impacts are indirect. The CIPA team provided the following statement:

*This proposal is not able to be meaningfully quantified and it is unclear if it would have any impact on emissions. However, it is expected to improve the functioning of the NZ ETS and to lead to improved emissions reductions outcomes over time. Likely emissions impacts were reconsidered following consultation, and confirmed to be minor and unquantifiable.*

## **Population Implications**

- 30 There are minimal population impacts associated with these proposals that are additional to the cost-of-living implications outlined above.
- 31 For the technical updates relating to geothermal activities, the impact on Māori trusts and incorporations is expected to be minor and/or positive. In particular, the new UEF methods create options at lower cost over time for low-emissions geothermal practices.
- 32 The Waitangi Tribunal is conducting its National Freshwater and Geothermal Resources Inquiry (Wai 2358). Claimants and interested parties have filed evidence that, broadly, the law in respect of geothermal resources is not consistent with the Treaty of Waitangi. The proposals in this paper may not directly impact Māori rights and interests in geothermal resources, but may impact their management, use, and development, so may be in scope of the Tribunal's considerations.

## **Human Rights**

- 33 The proposals in this paper are consistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

## **Use of External Resources**

- 34 No external resources were used in the development of this paper or the underlying analysis that occurred this year. The new DEF values for both geothermal and liquid fossil fuel activities, and the new geothermal UEF methodologies, are based on previous advice that was externally resourced in 2022.

## **Consultation**

- 35 Feedback from public consultation has informed the proposals in this paper. 38 submissions commented on the technical regulatory update proposals, most of which

were broadly supportive of the specific proposals, as well as the general process of regularly updating NZ ETS regulations.

- 36 The Treasury, the Department of Prime Minister and Cabinet, the Ministry of Foreign Affairs and Trade, the Ministry for Primary Industries, the Ministry of Business, Innovation and Employment, the Environmental Protection Authority, the Ministry of Transport, the Ministry of Social Development, Waka Kotahi New Zealand Transport Agency, Te Arawhiti, and Te Puni Kōkiri were consulted on the content in this paper as part of agency consultation on the parallel NZ ETS Settings Cabinet paper.
- 37 Where I received feedback, it has been considered and incorporated as appropriate.

## **Communications**

- 38 Announcements about the NZ ETS need to be managed carefully to avoid market risks and to ensure that information does not advantage some market participants over others or compromise investments in NZUs or decarbonisation actions.
- 39 Following established protocols, I will announce Cabinet's decisions on this paper via press release, an email sent to NZ ETS stakeholders and NZ ETS participants, and publication on the Ministry for the Environment's website. This is ahead of final decisions on the amendment regulations. However, early release of decisions will ensure all participants have the information at the same time and that announcements can be managed appropriately.

## **Proactive Release**

- 40 I intend to proactively release this paper and associated Cabinet committee papers and minutes within 30 business days of final decisions being confirmed by Cabinet, subject to redaction as appropriate under the Official Information Act 1982.

## **Recommendations**

The Minister of Climate Change (the Minister) recommends that the Committee:

1. **note** that the New Zealand Emissions Trading Scheme (NZ ETS) requires regular maintenance via regulatory update to ensure that the scheme remains credible;
2. **note** that consultation on a range of NZ ETS technical regulatory updates and NZ ETS settings ran from 15 May 2024 to 14 June 2024, with a total of 38 submissions received that responded to the technical regulatory update proposals;
3. **agree** to update the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009 (SEIP Regulations) with the values listed in *Table 1*;
4. **agree** to update the Climate Change (Unique Emissions Factors) Regulations 2009 (UEF Regulations) with the methodologies set out under *paragraph 12*;
5. **note** that the Minister intends to update geothermal default emissions factors (DEF) in future, under the standing delegation authorised by Cabinet as part of the approval to consult [ECO-24-MIN-0075 refers];
6. **agree** to update the Climate Change (Liquid Fossil Fuels) Regulations 2008 (LFF Regulations) to the values listed in *Table 2*;



7. **note** that updating liquid fossil fuel DEFs will affect fuel costs, but the changes and overall NZ ETS impact are well within range of typical fuel price fluctuations;
8. **note** that the excise and tariff reference numbers in the LFF Regulations also require replacing with the latest reference numbers;
9. **authorise** the Minister to issue drafting instructions to the Parliamentary Counsel Office to amend the SEIP, UEF, and LFF regulations to give effect to *recs 5–10*;
10. **authorise** the Minister to further clarify and develop policy matters relating to the amendments recommended above, in a manner consistent with Cabinet decisions.

Authorised for lodgement

Hon Simon Watts

Minister of Climate Change



# Cabinet Business Committee

## Minute of Decision

*This document contains information for the New Zealand Cabinet. It must be treated in confidence and handled in accordance with any security classification, or other endorsement. The information can only be released, including under the Official Information Act 1982, by persons with the appropriate authority.*

### New Zealand Emissions Trading Scheme: Technical Updates 2024

Portfolio                      Climate Change

On 12 August 2024, the Cabinet Business Committee:

- 1        **noted** that the New Zealand Emissions Trading Scheme (NZ ETS) requires regular maintenance via regulatory update to ensure that the scheme remains credible;
- 2        **noted** that consultation ran on a range of NZ ETS technical regulatory updates and NZ ETS settings from 15 May 2024 to 14 June 2024, with a total of 38 submissions received that responded to the technical regulatory update proposals;
- 3        **agreed** to update the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009 (SEIP Regulations) with the values listed in Table 1 of the paper under CBC-24-SUB-0084;
- 4        **agreed** to update the Climate Change (Unique Emissions Factors) Regulations 2009 (UEF Regulations) with the methodologies set out in paragraphs 13-15 of the paper under CBC-24-SUB-0084;
- 5        **noted** that the Minister of Climate Change (the Minister) intends to update geothermal default emissions factors (DEFs) in future, as authorised by the Cabinet Economic Policy Committee in May 2024 [ECO-24-MIN-0075];
- 6        **agreed** to update the Climate Change (Liquid Fossil Fuels) Regulations 2008 (LFF Regulations) to the values listed in Table 2 of the paper under CBC-24-SUB-0084;
- 7        **noted** that updating liquid fossil fuel DEFs will affect fuel costs, but the changes and overall NZ ETS impact are well within the range of typical fuel price fluctuations;
- 8        **noted** that the excise and tariff reference numbers in the LFF Regulations also require replacing with the latest reference numbers;
- 9        **authorised** the Minister to issue drafting instructions to the Parliamentary Counsel Office to amend the SEIP, UEF, and LFF regulations to give effect to the decisions under CBC-24-MIN-0084;

- 10 **authorised** the Minister to further clarify and develop policy matters relating to the decisions under CBC-24-MIN-0084, in a manner consistent with Cabinet decisions.

Jenny Vickers  
Committee Secretary

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**Present:**

Rt Hon Christopher Luxon (Chair)  
Hon David Seymour  
Hon Nicola Willis  
Hon Brooke van Velden  
Hon Chris Bishop  
Hon Dr Shane Reti  
Hon Simeon Brown  
Hon Erica Stanford  
Hon Paul Goldsmith  
Hon Matt Doocey  
Hon Simon Watts

**Officials present from:**

Office of the Prime Minister  
Department of the Prime Minister and Cabinet