



# Proposed changes to regulations for the New Zealand Emissions Trading Scheme 2022

## Consultation document



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



**Te Kāwanatanga o Aotearoa**  
New Zealand Government

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# Contents

About this consultation	6
Background	6
The role of the NZ ETS and SGG levy in the emissions reduction plan	6
How businesses interact with the NZ ETS and SGG levy	7
Scope of regulations being consulted on	8
Criteria for assessing options	9
Your views	9
Consultation process	9
Submitting your views	9
Summary of proposals	10
1.    Updating the Climate Change (Unit Register) Regulations 2008	11
Context	11
Background	11
Why update the Climate Change (Unit Register) Regulations 2008	11
Options	12
Analysis	13
Your views	13
Questions	13
2.    Updating the Climate Change (Other Removal Activities) Regulations 2009	14
Context	14
Why update the Climate Change (Other Removal Activities) Regulations 2009	14
Legislative requirements for the Climate Change (Other Removal Activities) Regulations 2009	15
Options	15
Analysis	17
Impacts	17
Your views	18
Questions	18
3.    Updating the schedule of default emissions factors for natural gas	19
Background	19
Why update the schedule of natural gas DEFs	19
Options	19
Your views	19
Approach	19
Questions	19

4.	Changing the Climate Change (Liquid Fossil Fuels) Regulations 2008	22
	Context	22
	Background	22
	Why change the Climate Change (Liquid Fossil Fuels) Regulations 2008	24
	Legislative requirements for regulations about calculating emissions	26
	Options	26
	Analysis	27
	Impacts	27
	Your view	27
	Questions	24
	How to have your say	30
	Timeframes	30
	How to make a submission	30
	For more information	31
	Publishing and releasing submissions	31
	Appendix: Other regulation changes for 2022	32
	Glossary	32
	References	35

# Tables

Table 1: Summary of proposals	10
Table 2: Assessing option 2 against status quo	12
Table 3: Assessing option 2 against status quo	17
Table 4: Assessing option 2 against status quo	20
Table 5: Assessing option 2 against status quo	28

# Figure

Figure 1: Impacts of biofuel supply for other airlines that are not in the NZ ETS	24
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# About this consultation

The audience for this consultation are mandatory and opt-in participants in the New Zealand Emissions Trading Scheme (NZ ETS), who have some technical understanding and interest in the regulatory framework underpinning it.

This consultation contains technical language that may be unfamiliar to some readers. A [glossary](#) provides the meanings of terms used.

## Background

The New Zealand Emissions Trading Scheme (NZ ETS) is one of the Government's key tools to address climate change. It was established by the Climate Change Response Act 2002 (the Act). The Act also established the synthetic greenhouse gas levy (SGG levy).

The NZ ETS and the SGG levy support and encourage domestic and global efforts to reduce greenhouse gas emissions. Their purpose is to:

- assist New Zealand to meet its international obligations under the Paris Agreement
- help New Zealand meet its 2050 target and emissions budgets.

## What is the SGG levy?

The Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013 ensure imports of synthetic greenhouse gases (SGGs) in goods and vehicles face comparable emissions costs to bulk imports of SGGs subject to the NZ ETS. This policy simplifies NZ ETS obligations for importers of goods and motor vehicles containing SGGs.

Importers of goods and motor vehicles must pay a levy through the New Zealand Customs Service (NZCS) or Waka Kotahi NZ Transport Agency. The Environmental Protection Authority (EPA) reports on the number and type of imported goods and the types of SGGs they contain. The Working Tariff Document, which is maintained by NZCS, sets out the tariff rates on imported goods. The motor vehicle and goods levy schedules are in [schedules 1 and 2 of the regulations](#), respectively. The SGG levy rates are updated annually in amendment regulations.

## The role of the NZ ETS and SGG levy in the emissions reduction plan

The Government is about to publish the first emissions reduction plan (the ERP), which will describe how we are going to meet the first (2022–25), second (2026–30) and third (2031–35) emissions budgets and progress towards our 2050 target.

The ERP will include:

- policies and strategies for specific sectors (eg, transport, waste, heat, industry, power, building and construction, agriculture and forestry)
- a multi-sector strategy to meet emissions budgets and improve how those sectors adapt to the effects of climate change



- ways to mitigate the impacts of reducing emissions and increasing removals on employees and employers, regions, iwi and Māori, and wider communities
- any other policies or strategies that are necessary.

The ERP sets out coherent measures that are complementary and reinforcing. Emissions pricing, through the NZ ETS and the SGG levy, will be a critical part of the ERP policy package.

This consultation document proposes technical amendments to some of the regulations made under the Climate Change Response Act 2002 that maintain the accuracy of the NZ ETS. Any submissions received on the proposals in this consultation document are unlikely to impact the emissions reduction plan. It will take a combination of pricing and other policies and measures to move to a low-emissions economy.

## How businesses interact with the NZ ETS and SGG levy

People and businesses interact directly with the NZ ETS and the SGG levy in several ways. These include the following.

### Reporting emissions and surrendering emissions units

Some people and businesses have obligations to report their emissions. Of these, some must surrender emissions units (NZUs) to cover their direct greenhouse gas emissions, or the emissions associated with their products.

To do this, businesses need to calculate the emissions from their activity over a calendar year, report to the EPA by the end of March the following year, and then surrender NZUs before the 31 May deadline.

This effectively puts a price on greenhouse gas emissions. Regulations set out the requirements for calculating emissions. This document contains proposals that affect people with these NZ ETS obligations.

Some firms receive NZUs from the Government if they are emissions intensive (where a significant portion of their revenue is emissions costs passed on to the consumer) and exposed to international trade. These participants face higher costs because of the NZ ETS, including on emissions which result from their production outputs and consuming electricity, coal, or natural gas.

### Removing greenhouse gases

Some people and businesses may have opportunities to earn NZUs by carrying out an eligible removal activity. This must reduce emissions reported in New Zealand's Greenhouse Gas Inventory (the Inventory), and units are earned to reflect this. A 'forestry removal activity' is one in which post-1989 forest growth sequesters carbon dioxide. An 'other removal activity' is one in which an eligible product must permanently embed (or at least until exported) a substance that would otherwise emit greenhouse gases to the atmosphere. This ensures that NZ ETS costs are not incurred for emissions that do not occur in New Zealand. This document contains proposals that may affect some people carrying out 'other removal activities'.

# Scope of regulations being consulted on

A set of regulations and Orders in Council support the efficient and accurate running of the NZ ETS and SGG levy. Periodically:

- the existing regulations need to be amended or replaced
- new regulations need to be created
- updates to technical factors need to be made to keep them current.

In this document, the Government is consulting on a subset of these regulations covering:

- unit registers
- other removal activities (non-forestry removals)
- emission factors for natural gas
- liquid fossil fuels.

This consultation does not include:

- updates to the unit supply settings and price controls for the NZ ETS
- any changes affecting forestry participants in the NZ ETS
- any changes affecting industrial allocation in the NZ ETS
- regulation updates that do not require consultation.

Consultation on unit supply and price control settings will happen until after emissions budgets have been finalised in May 2022 and the Climate Change Commission has provided its unit supply and price control setting recommendations to the Government.

The Government has consulted on proposed new regulations for forestry through a different process. Information on those proposals is available on the [Ministry for Primary Industries website](#).

Several other updates to regulations and one set of new regulations are not part of this consultation. The [appendix](#) briefly outlines the information and context for these other regulation changes. These matters have either already been consulted on and have policy approvals, are technical, or do not require consultation or Cabinet policy decisions.

## The impact on Māori of these proposed changes

We recognise Māori have a significant interest in climate change action and the NZ ETS.

We have assessed that there is unlikely to be a disproportionate negative impact on Māori due to any proposed change in this consultation. However, we acknowledge there is a possibility of gaps in our analysis. Therefore, we are specifically requesting as part of this consultation that submitters consider whether there could be disproportionate impacts on Māori from the proposed changes. We have included this question against each proposed change.



## Criteria for assessing options

Changing regulations that impact the NZ ETS contribute to meeting its objectives. Therefore, changes must be accurate, efficient and clear.

Each option in this document is assessed against the status quo using the following four criteria.

- **Alignment** with the objectives of the NZ ETS. The objectives are to support and encourage global efforts to reduce the emission of greenhouse gases by helping New Zealand meet its international climate obligations<sup>1</sup> as well as the 2050 domestic target and emissions budgets.
- **Accuracy** means ensuring the methodologies and emissions factors in the regulations result in calculations of emissions that are as close as practically possible to those that are released into the atmosphere from the activity.
- **Efficiency** concerns administrative and compliance costs for participants and the Government.
- **Clarity** means the regulations must be unambiguous and consistent, so the obligations and costs imposed on regulated parties are equivalent and unavoidable.

Assessment of each option against each criterion is given a rating of poor, good or no change.

- Poor – the option performs poorly against the status quo.
- Good – the option performs well against the status quo.

## Your views

We want to know your thoughts on the proposed updates to regulations outlined in this document. Your response will help us understand the issues and options, and their impact.

The sections of this document explain the issues, present options and analysis, and include questions for you to consider. Your views will help us fill information gaps and measure support for the options.

## Consultation process

This consultation will close at 5pm on Thursday 28 April 2022. Once we have considered submissions, we will put final proposals to the Minister of Climate Change and Cabinet for approval. Following Cabinet approval, any new regulations or amendments to existing regulations will be published in the New Zealand Gazette by late September 2022 and come into force from 1 January 2023.

## Submitting your views

For details on sending feedback to us, see the [How to have your say](#) section.

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<sup>1</sup> Under the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement.

# Summary of proposals

**Table 1: Summary of proposals**

Regulations	Proposal	Rationale
Climate Change (Unit Register) Regulations 2008	Repeal Regulation 11D to remove an accounting transaction which relates to voluntary emissions offsetting activity during the Kyoto Protocol commitment periods (2008–12 and 2013–20 inclusive).	<p>The use of Kyoto Protocol-era emission units is no longer consistent with our updated guidance on voluntary emissions offsetting.</p> <p>We have recently published new interim guidance on offsetting activities for post-2020 emissions and will further update this guidance over time. According to the most recent Environmental Protection Agency data, no participants are using this method anymore.</p>
Climate Change (Other Removal Activities) Regulations 2009	Update to the regulations to remove the criteria for registering as a participant in relation to specific potent greenhouse gas removal activities.	Updating these regulations may increase the number of people that register to participate in the New Zealand Emissions Trading Scheme for exporting or destroying specific potent greenhouse gases and increase the amount of gases that are exported or destroyed.
Climate Change (Stationary Energy and Industrial Processes) Regulations 2009	Update the schedule of emissions factors listed in regulations to reflect changes to the chemistry of mined natural gas.	Emissions factors for sources of mined natural gas change over time. These regulations need to be updated periodically to reflect those changes so 24 natural gas mining participants can minimise their New Zealand Emissions Trading Scheme administration costs.
Climate Change (Liquid Fossil Fuels) Regulations 2008	Change the methodologies that opt-in participant and obligation fuel participants use to calculate emissions, so the full reduction in emissions caused by the opt-in participant's supply of biofuel is part of their emissions return.	If opt-in participants can use the total volume of biofuel they supply to reduce their surrender obligations, instead of only the volume they use, this may reduce the cost of supplying biofuel which in turn could potentially increase its use.

# 1. Updating the Climate Change (Unit Register) Regulations 2008

## Context

Currently, NZ ETS account holders exchange NZUs they own for Crown-held New Zealand Assigned Amount Units (AAUs), which they can then cancel. This has been important in the past for participants in voluntary emission offsetting markets to meet our previous guidance on what constitutes credible voluntary carbon offsetting. However, continuing this method for cancellation under Regulation 11D allows access to a way of making offsetting claims that are no longer credible due to the Paris Agreement.

We have published new [interim guidance on voluntary climate change mitigation](#) for post-2020 emissions and will update the guidance further over time.

## Background

Under current regulations, holders of NZUs can apply to have an AAU allocated to them for cancellation. The regulation's purpose is to allow ETS account holders with NZUs a way to use AAUs for unit conversion to support claims related to voluntary carbon offsetting.

We publish guidance to provide good practice principles for offsetting activities in the voluntary carbon market. Up until the end of 2020, this guidance recommended cancelling AAUs as a means of accounting for voluntary offsets against New Zealand's international targets. Regulation 11D of the requires the Registrar to give effect to this cancellation process.

The cancellation process has been kept in place beyond 31 December 2020, and voluntary offset providers have continued to use it to account for offsetting activities that occurred before that date. From 2009 through to 2021, approximately 1.5 million NZUs were converted to AAUs for cancellation. Over 100,000 of those conversions occurred in 2021. Its use has never been recommended for activities that occurred after 2020. Consequently, it is not appropriate for regulations to continue to allow this process.

## Why update the Climate Change (Unit Register) Regulations 2008

We have published interim guidance on voluntary carbon market participation with support and input from voluntary carbon market stakeholders. The guidance better reflects developments internationally in voluntary carbon offsetting practices. Regulation 11D is currently redundant in the recommended process for offsetting in the interim guidance. Repealing this regulation will ensure current regulations are in line with our guidance and with prevailing practice in voluntary carbon market activities in New Zealand and internationally.

# Options

We have assessed the status quo (option 1) against the proposal to update them as outlined above (option 2).

## Option 1: Status quo—No update

Under this option there will be no change to the regulation, and people will continue to be able to apply to convert NZUs into AAUs and have these cancelled, for as long as the Government continues to hold AAUs.

## Option 2: Update the Climate Change (Unit Register) Regulations 2008

Under this option, account holders will not be able to apply to the Registrar to convert any held NZUs into NZ AAUs for cancellation from 1 January 2023.

## Assessing the options

Table 2 assesses the status quo against the criteria on page 9, and option 2 against those same criteria and the status quo. We believe the most important criteria for this decision are alignment and clarity.

**Table 2: Assessing option 2 against the status quo**

Option	Alignment	Accuracy	Efficiency	Clarity
Option 1 – Status quo	Poor – does not align with NZ ETS objectives as it is now redundant.	No change – no impact on emissions factors or methodologies related to the removal of greenhouse gases.	Poor – maintains administrative and compliance burdens on the Registrar.	Poor – does not align with the Government’s interim guidance on voluntary carbon market participation.
Option 2	Good – this change aligns with NZ ETS objectives to support meeting emissions targets aligned with New Zealand's obligations.	No change – no impact on emissions factors or methodologies related to the removal of greenhouse gases.	Good – removes administration and compliance burdens for the Registrar.	Good – improves consistency with the Government’s interim guidance on voluntary carbon market participation.

## Analysis

### Who would be affected by updating

Participants who would convert their NZUs into AAUs for cancellation as part of voluntary carbon market offsetting activities.

### Your views

We are interested in your views of our analysis and the assessment against the criteria in table 2. This includes whether you think any criteria should be given more weighting than others.

### Questions

1. To what extent do you agree with the way we have described the issue? Please explain any additional aspects of the problem you think we should consider.
2. Do you agree that the option outlined in this consultation document is the correct one to consider? If not, why not?
3. Do you have views on the timing for implementing this update?
4. In your opinion, could the proposed change to regulations impact Māori negatively? If so, what are the impacts? Why might they occur?

## 2. Updating the Climate Change (Other Removal Activities) Regulations 2009

### Context

The Climate Change (Other Removal Activities) Regulations 2009 require persons exporting or destroying hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs) to meet eligibility criteria to receive NZUs. To be eligible to receive NZUs, persons must know if the date of the exported refrigerants imported into New Zealand was on or after 1 January 2013, or to be part of a registered product stewardship scheme.

### Intent of original regulation no longer holds

This regulation was introduced to stop stockpiling of SGGs for re-export and earning units before the start of NZ ETS coverage. This risk has been mitigated by the passage of time.

### Product stewardship

Product stewardship is when a producer, brand owner, importer, retailer or consumer accepts responsibility for reducing a product's environmental impact.<sup>2</sup> Product stewardship schemes are co-designed with stakeholders and shift the responsibility for managing the harm of certain products away from communities, councils, neighbourhoods and nature.

Only one product stewardship scheme currently exists for HFC and PFC removal activity — The Recovery Trust (Refrigerant Recovery New Zealand). It has been running since 1993, is accredited by the Ministry and reports on its performance to us.<sup>3</sup>

## Why update the Climate Change (Other Removal Activities) Regulations 2009

Updating the Climate Change (Other Removal Activities) Regulations 2009 to remove the 2013 date and the product stewardship scheme requirements under Regulation 22 will allow people to receive NZUs for exporting or destroying HFCs and PFCs as a removal activity. This is regardless of when the greenhouse gases were imported or whether they are a member of a product stewardship scheme.

This change would take effect in January 2023 and would not be applied retrospectively to pre-2013 HFCs and PFCs exported or destroyed by non-product stewardship scheme members between 2013 and the end of 2022. Non-product stewardship scheme members exporting HFCs and PFCs after the 2013 import date would have already been covered by the current regulations to earn NZUs.

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<sup>2</sup> [About product stewardship in New Zealand](#) — Accessed 17 January 2022.

<sup>3</sup> [What is product stewardship?](#) — Accessed 17 January 2022.



This can help encourage the export or destruction of potent greenhouse gases, which can in turn help New Zealand meet international climate change obligations and the 2050 target and emissions budgets. This change also has an environmental benefit as it would increase the potential for collection and recycling, or destruction, of these potent greenhouse gases.

There is no rationale for removing just one of the eligibility criteria (ie, the import date or participation in a product stewardship scheme) when the objective is to increase the amount of greenhouse gases collected for export or destruction. Multiple criteria allow persons flexibility in achieving eligibility, while mitigating the risks of undesirable outcomes such as opportunities for arbitrage.

## Legislative requirements for the Climate Change (Other Removal Activities) Regulations 2009

Schedule 4 Part 2 subpart 3 of the Act allows people exporting or destroying HFCs or PFCs, including those contained in goods, to be a participant under the NZ ETS as they are performing a removal activity.

In October 2016, New Zealand joined 196 other countries to adopt the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer.<sup>4</sup> The Kigali Amendment aims to phase down the production and use of refrigerants that contribute to climate change and are substitutes for ozone-depleting substances.

## Options

The options for addressing this issue are limited to updating the requirements which prohibit people from participating in the NZ ETS for performing the removal activity of exporting or destroying HFCs or PFCs, including those contained in goods.

We considered removing only the import date or product stewardship scheme requirements to include as options for this change. However, we assessed the following.

- Removing only the 2013 import date requirement from regulations would not work as an option for this change. This removal activity is already valid as part of the product stewardship scheme despite the import date criteria. Therefore, only removing the import date is redundant.
- Removing only the requirement to be part of a product stewardship scheme would not work as an option for this change. Such a change would mean any pre-2013 SGGs could not be exported or destroyed, as the current product stewardship scheme covers those.

As a result of the above, we have assessed one option against the status quo or no regulatory change.

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<sup>4</sup> The [Montreal Protocol on Substances that Deplete the Ozone Layer](#) | Ozone Secretariat (unep.org) —Accessed 11 January 2022.

## **Option 1: Status quo — no update**

Under this option there will be no change to the Climate Change (Other Removal Activities) Regulations 2009. Only persons that export or destroy HFCs or PFCs that are part of a product stewardship scheme, or remove those which were imported after 2013, can earn NZUs from this removal activity.

## **Option 2: Update the Climate Change (Other Removal Activities) regulations 2009**

Under option 2, anyone can receive NZUs for exporting or destroying HFCs or PFCs, including those gases contained in goods. The import date of the HFCs or PFCs would not impact their eligibility to earn NZUs. There would also be no requirement to participate in a product stewardship scheme.

This change would take effect in January 2023 and could not be applied retrospectively to pre-2013 HFCs and PFCs which were exported or destroyed by non-product stewardship scheme members between 2013 and the end of 2022. Such activity would have been against the regulations. Non-product stewardship scheme persons exporting HFCs and PFCs imported after the 2013 date would have already been covered by the current regulations to earn NZUs.

## **Assessing the options**

Table 3 assesses the status quo against the criteria on page 9, and option 2 against those same criteria and the status quo. We think the most important criterion for this decision is alignment with the NZ ETS objectives.

**Table 3: Assessing option 2 against the status quo**

Option	Alignment	Accuracy	Efficiency	Clarity
Option 1 – Status quo	Poor – does not encourage increased participation in the removal of the activity, limiting opportunities to meet 2050 emissions target goals and international agreements to which New Zealand is a party.	No change – no impacts on measuring emissions.	Poor – maintains administrative burdens on disposal processes and discourages people from participating in the removal activity.	Good – current regulations are unambiguous and consistent.
Option 2	Good – aligns with 2050 emissions target goals and international agreements to which New Zealand is a party. Could support the introduction of novel technology and new companies to this removal activity, potentially accelerating the timeframes for meeting those emission targets.	No change – no impacts on measuring emissions.	Good – reduces administrative burdens from disposal processes. Removes barriers to persons wanting to participate in the removal activity.	Good – by removing criteria, the clarity of who can participate becomes clearer. Clarity of purpose in the regulation is compounded by this, as there are less technical requirements to participate in the removal activity.

## Analysis

### Who would be affected by updating the Climate Change (Other Removal Activities) Regulations 2009?

- People wanting to collect HFCs or PFCs for export or destruction.
- Product stewardship scheme administrators and participants, in particular Refrigerant Recovery New Zealand (the Recovery Trust) and its members.

## Impacts

Updating the Climate Change (Other Removal Activities) Regulations 2009 to remove the 2013 import date and product stewardship scheme requirements will motivate people to collect HFCs or PFCs for export or destruction. This could contribute towards the Paris Agreement’s objective of keeping the global temperature rise “well below” 2 degrees Celsius. It is also in line with commitments made under the Kigali Amendment.

Removing the product stewardship scheme requirements is unlikely to increase the risk of undesirable environmental outcomes, given the regulations already allow people to be considered eligible removal participants if they can show the HFCs or PFCs exported or destroyed were imported after 1 January 2013.

Additionally, this change in regulations would allow people to earn NZUs if a facility for destroying HFC and PFC gases was built in New Zealand, because the regulation would continue to classify the activity as a removal if that person exported or destroyed the gases.

## **Possible impacts on Refrigerant Recovery New Zealand**

The Recovery Trust is New Zealand's only product stewardship scheme for HFC and PFC removal activity and is a not-for-profit organisation. The Trust ensures the HFCs and PFCs are both removed from New Zealand as well as permanently from circulation in the global market. Implementing option 2 would not require the safe disposal of gases, only that they were either exported or destroyed.

The Recovery Trust will likely be impacted financially if option 2 is implemented. The Trust finances their activities using NZUs they earn, as well as a voluntary advanced disposal fee paid by importers of bulk refrigerants. If the Trust needs to compete with for-profit entities undertaking the same removal activity, a mandatory fee may need to be introduced to help cover costs.

## **Your views**

We are seeking your feedback on:

- the option to update the Climate Change (Other Removal Activities) Regulations 2009 to remove the 2013 date and the product stewardship scheme participation requirements
- our assessment against the criteria in table 3, including whether you think any criteria should be given more weight than others.

## **Questions**

5. To what extent do you agree with the way we have described the issue? Please explain any additional aspects of the problem you think we should consider.
6. Do you agree that the option outlined in this consultation document is the correct one to consider? If not, why not?
7. In your opinion, could the proposed change to regulations impact Māori negatively? If so, what are the impacts? Why might they occur?

# 3. Updating the schedule of default emissions factors for natural gas

## Background

The schedule of prescribed emissions factors for natural gas fields needs regular updating due to changes in the composition of mined gas over time and the opening of new fields. We are consulting on updating the schedule of default emissions factors (DEFs) for natural gas fields. This update occurs most years to maintain the accuracy of emissions reported in the NZ ETS.

Natural gas miners and NZ ETS opt-in participants use the methodologies and emissions factors in the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009 (SEIP) to calculate their emissions.

Gas miners are required to run various tests on their gas to calculate an emissions factor specific to their field. Opt-in participants are not required to perform the same gas tests as gas miners. Instead, they can report emissions by referring to the gas field-specific and national average DEFs in Table 10, Schedule 2 of the SEIP regulations.

DEFs allow gas purchasing (opt-in) participants to report their emissions without seeking information beyond total terajoules in the natural gas from the gas miner.

Updating the schedule of prescribed emissions factors for natural gas fields is routine. The precise changes to the schedule can only be determined, then shared, once the Environmental Protection Authority (EPA) has reviewed the emissions returns of gas miners.

## Why update the schedule of natural gas DEFs

The schedule of DEFs for natural gas needs to be updated regularly because the chemistry of natural gas from any one field is not constant, and because new fields open. If the schedule is not updated, gas purchasing (opt-in) participants will either inaccurately report emissions or have to contact gas miners for accurate information. The latter option would impose administrative and compliance costs on participants.

The schedule of DEFs has been regularly updated in the past to ensure it continues to reflect current field operations and remains accurate. This involves exchange of data between the EPA and the Ministry for the Environment.

## Options

The options for maintaining the accuracy of the schedule of DEFs for natural gas are limited to updating it or not updating it. DEFs are calculated based on gas composition, so any change depends on robust and reliable data.

The schedule can be updated for gas fields from emissions returns data. This increases the accuracy of the NZ ETS and potentially lowers administrative costs for participants.

Feedback from previous updates was that opt-in participants (and some gas miners) strongly supported the retention and regular updating of Table 10 in Schedule 2.

The schedule of DEFs was last updated on 1 January 2022 and enabled it to be used for reporting emissions for the 2021 calendar year.

## Assessing the options

**Table 4: Assessing option 2 against the status quo**

Option	Alignment	Accuracy	Efficiency	Clarity
Option 1 – Status quo	Poor – reported emissions and associated NZ ETS costs are not consistent with actual emissions.	Poor – does not reflect current data and actual emissions.	Poor – adds cost for opt-in participants who must perform their own tests to calculate emissions accurately.	No change – numbers in the schedule would be static and make no difference to the interpretation of the regulation by mandatory or opt-in participants.
Option 2	Good – reported emissions and associated NZ ETS costs consistent with actual emissions. This change also helps ensure that the cost of emissions to people and companies helps New Zealand.	Good – reflects current data and actual emissions. Using up-to-date data to calculate the emissions and ensure these are accurate is essential to meeting emissions targets.	Good – avoids cost for opt-in participants in performing their own chemical tests to calculate emissions accurately. This change lowers the total administrative burden associated with emissions reporting for these participants.	No change – the option only changes the number in a schedule, making no difference to the interpretation of the regulation by mandatory or opt-in participants.

## Your views

We are seeking your feedback on:

- the proposal to update the schedule of DEFs for natural gas
- our assessment against the criteria in table 4, including whether you think any criteria should be given more weight than others.

## Approach

Any updates would involve estimating national and field-specific DEFs from the annual emissions returns data that gas miners provide to the EPA. A draft Table 10, Schedule 2 of the SEIP regulations will be separately forwarded to all affected NZ ETS gas mining and opt-in purchasing participants for comment by the end of June.

The schedule of DEFs for natural gas fields was last updated in the 2021 reporting year. These returns will be used to estimate national and field-specific DEFs for the 2022 reporting year.



## Questions

8. To what extent do you agree with the way we have described the issue? Please explain any additional aspects of the problem you think we should consider.
9. Would you prefer the DEFs to be updated or for the current DEFs to remain unchanged?
10. In your opinion, could the proposed change to regulations impact Māori negatively? If so, what are the impacts? Why might they occur?

# 4. Changing the Climate Change (Liquid Fossil Fuels) Regulations 2008

## Context

Regulations for the NZ ETS allow participants that supply liquid fossil fuels to deduct the supply of biofuels when calculating emissions. Some participants voluntarily opt-in to the NZ ETS because they are large fuel users, such as airlines. For opt-in airline participants, biofuels supplied by the upstream supplier can be excluded from emissions calculations.

The regulations do not enable an opt-in airline participant that is also a supplier of biofuels to include the full emissions reduction benefits from the supply of biofuels as a deduction in their opt in emissions calculations. The regulations only refer to biofuels supplied by the obligation fuel supplier. Although biofuels that enter the supply chain later will result in reduced fossil fuel use by the opt-in participant, that participant cannot claim all the emissions benefits. This is because the infrastructure at airports mixes and shares fuel to all airlines when needed.

Sustainable aviation fuel (SAF) is a biofuel that can replace a portion of fossil fuels in jet aircrafts. SAF is currently more expensive than jet fuel, but airlines internationally are developing sources of SAF and aim to increase its use.

This consultation explores an update to the Climate Change (Liquid Fossil Fuels) Regulations 2008, so an opt-in airline participant that has supplied SAF during the reporting year can use the total amount of SAF supplied when calculating their opt in emissions. To avoid double counting, the methodology for any obligation fuel suppliers would need to be adjusted as well. As a result, the opt-in participant would receive an economic reward (eg, reduced NZ ETS costs) for enabling emission reductions from other users, increasing the likelihood of SAF use.

## Background

### Points of obligation for liquid fossil fuels

Points of obligation are defined by legislation for each greenhouse gas emitting activity. Liquid fossil fuel emission obligations apply at the point where fuel is removed from import or refining for consumption. This means fuel suppliers measure and report the emissions from the carbon emitting fuel they supply to the New Zealand market, less any intended for export, allowing most of the emissions from fuel use to be accounted for. For purchasers/users of the carbon-emitting fuel, there are no mandatory NZ ETS obligations to measure or report emissions.

### Large fuel users can opt-in to the NZ ETS

Despite fuel use not being a point of obligation as described above, the Act allows large fuel users to voluntarily opt-in to the NZ ETS. By doing this, they take on the obligation themselves, with a corresponding carve-out of the upstream obligation from the supplier. There is one liquid fossil fuel opt-in participant at present; Air NZ Limited.

## **The impact of biofuel on NZ ETS participant emissions calculations**

The NZ ETS puts an emissions price on almost all liquid fossil fuels. The person that reports emissions – either the fuel supplier or an opt-in participant – should not include any biofuel supplied or used when determining the amount of fuel for their emissions calculations.

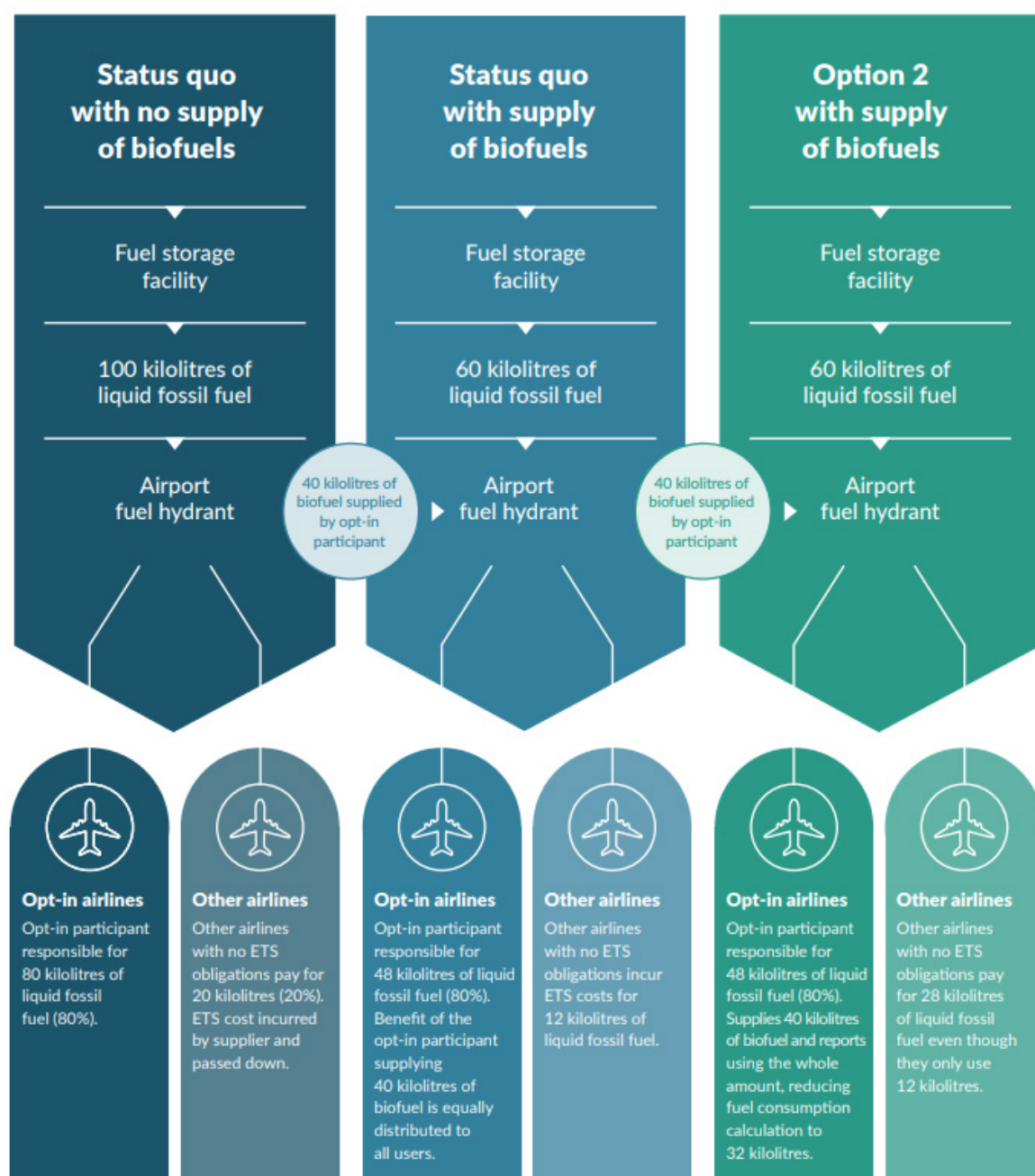
Biofuels can replace fossil fuels. If the supplier supplies biofuels, this should not be part of their emissions obligations. This is because burning biofuel does not add to atmospheric concentrations of greenhouse gases. Similarly, opt-in participants do not need to account for the biofuels they receive from the obligation fuel supplier.

SAF is a form of biofuel. This document explores an opportunity to increase the use of SAF by changing the methodologies in the regulations. In this case, the possible SAF supplier is also the opt-in airline participant.

The diagram below outlines how the supply of biofuels from an opt-in airline participant impacts the emissions costs for other airlines.

For the purposes of this diagram, we have simplified the values. Explanations of the scenarios are below the diagram.

Figure 1: Impacts of biofuel supply for other airlines that are not in the NZ ETS



## Status quo with no supply of biofuels

Under the status quo with no supply of biofuels the opt-in participant is responsible for 80 kilolitres of liquid fossil fuel (80%), and no ETS costs passed through to them from the obligation fuel supplier. This is because that participant has taken the ETS obligation on themselves, and the fuel supplier does not need to report the emissions or surrender units from that portion of fuel supply.

Other airlines purchase 20 kilolitres of liquid fossil fuel (20%). The fuel supplier probably passes through the ETS costs to the other airlines through the price of the fuel.

## **Status quo with supply of biofuels from opt-in participant**

Under the status quo with new supply of biofuels (from the opt-in participant), 40 kilolitres of biofuel replace the need for 40 kilolitres of liquid fossil fuel.

The opt-in participant pays for the 40 kilolitres of supplied biofuel but can only use the emissions benefits from consuming 32 kilolitres of it because of the regulations and the airport fuel supply infrastructure. The opt-in participant continues to report for 48 kilolitres of liquid fossil fuel (80% of the total fossil fuel consumed).

The obligation fuel supplier is responsible for the ETS obligations for the remaining 12 kilolitres of fossil fuel, which it is likely to pass through to the other airlines. This is a reduction because less fossil fuel is being supplied due to the biofuel substitution at the airport fuel supply infrastructure.

## **Option 2 with supply of biofuels from opt-in participant**

Under option 2, despite the opt in participant actually consuming 48 kilolitres of liquid fossil fuel (80%), it is able to reduce its emissions costs by deducting the full supply of biofuel from fuels consumed. While it will still be consuming 48 kilolitres of fossil fuel, it will only report emissions for 40 kilolitres. This is because its supply of biofuels to the other users displaced 8 kilolitres of fossil fuels. While the opt in participant only uses 32 kilolitres of the biofuel, it receives the full benefit of supplying the total 40 kilolitres.

Initially, the obligation fuel supplier will calculate emissions having supplied 60 kilolitres of fossil fuel. Consequently, it also receives the full benefit of the biofuel supply. There is a double counting of the emissions benefit from reduced fossil fuel supply to the other airlines.

To avoid this double counting, information would need to be shared between the opt-in participant and the fossil fuel supplier. This information would be the difference between the biofuel supplied and what the opt-in participant consumed. This difference would need to be added to the fossil fuel supplier ETS obligation and costs recovered from other airlines.

Consequently, under this option and to avoid double counting, those other airlines will face emissions costs for as if they consumed 28 kilolitres of liquid fossil fuel, when they only consumed 12 kilolitres.

## **Why change the Climate Change (Liquid Fossil Fuels) Regulations 2008**

The regulations do not enable an opt-in airline participant that is also a supplier of biofuels to include the full emissions impact of supplying of biofuels in its emissions calculations. This is partially because of airport infrastructure. SAF that has been imported by a supplier cannot be accurately traced into the importing supplier's planes. This is because all jet fuel, including SAF, is mixed into a common supply tank known as the airport fuel hydrant. The airport fuel hydrant blends all fuel supplies and distributes it to each airline's planes. All users of fuel from the airport fuel hydrant have reduced emissions if biofuel is added, not just the opt in participant. Therefore, opt-in airline participants that also supply SAF cannot receive the full benefit of the supply under the NZ ETS and thus have less incentive to buy it.

If the biofuel was only used by the opt-in participant, then there would be no problem. The opt-in participant is still only required to report emissions from the fossil fuel it uses, which would be less

as some have been replaced with biofuels. But because the fuel is mixed, the emissions benefit is shared.

SAF is more expensive than fossil jet fuel. If opt-in participants could include the full volume of SAF supplied in their emissions calculations, this could make its use more economic.

However, given obligation fuel suppliers would also report less emissions due the substitution of some of its fossil fuel supply with SAF, the amended regulations would also need to avoid double counting. This would occur because the obligation fuel supplier would report less emissions due to some of its supply to other airlines being replaced by biofuels. But if the opt-in participant is already claiming those benefits, there would be double counting.

To avoid double counting, this proposal includes an adjustment to the emissions calculations of obligation fuel suppliers. These suppliers must add to their fuel supply calculations the quantity of fossil fuels displaced by the biofuels used by other airlines. This will require information sharing between the opt-in participant, other airlines, and the obligation fuel supplier.

## Legislative requirements for regulations about calculating emissions

Section 62(b) of the Act states a participant must collect data about their activity and calculate their emissions and removals from that activity in accordance with the methodology set out in the regulations. The Climate Change (Liquid Fossil Fuels) Regulations 2008 set out the information required to be collected and the methodologies to be followed by obligation fuel suppliers and any opt in participants.

## Options

The options for addressing this issue are limited to the status quo or adjusting the methodologies for obligation fuel suppliers and opt-in participants where an opt-in participant also supplies biofuels to the market.

We considered only updating the methodology that opt-in participants use. However, we decided that only updating the methodology for opt-in participants would lead to the double counting of emissions. This is not in line with the objectives of the NZ ETS and poses risks New Zealand meeting its climate change objectives.

As a result of the above, we have assessed one option against the status quo or no regulatory change.

### **Option 1: Status quo — no change to the Climate Change (Liquid Fossil Fuel) Regulations 2008**

Under this option, there would be no change to the current list of obligations fuels or the prescribed methodology.

The supply and use of biofuels depends largely on how cost competitive they are against other fuels, as well as any legal requirements. A biofuel supplier benefits from emissions pricing as the price of emission units increases the costs of using fossil fuel, making biofuels more cost competitive. Biofuel demand may increase over time and influence a wide range of supply- and demand-side changes. This impact on relative costs is a core feature of any emissions pricing regime.



Under the status quo, the opt-in participant should not include any biofuel they used in their emissions calculations and obligations. This begins with recording the fuel they have received from the obligation fuel supplier over the year and noting how much of this is biofuel. Similarly, the upstream obligation fuel supplier will record the fossil fuel supplied to market as well as any biofuels.

This proposal examines the situation where if a biofuel supplier is also an opt-in participant, there might be changes to regulations that would further motivate the supply of biofuel.

## **Option 2: Change the Climate Change (Liquid Fossil Fuel) Regulations 2008**

Under this option, the prescribed methodologies for how obligation fuel suppliers and opt-in participants calculate emissions would be changed in two ways:

- First, change the methodology for an opt-in participant to require them to collect the volume of biofuel they have supplied in the year to their airport fuel hydrant and used by other airlines. This figure is then deducted from their fuel consumption calculation.
- Secondly, change the methodology for obligation fuel suppliers so that the emissions from fuel that the biofuel has displaced for non-opt-in participants is added to their obligations. This would avoid double counting the emissions benefits of biofuel use.

Pending your consultation feedback and consideration by Cabinet, any regulation changes would be published in the New Zealand Gazette by September 2022 and come into force from 1 January 2023.

## **Analysis**

### **Who would be affected by changing the Climate Change (Liquid Fossil Fuels) Regulations 2008?**

Changing the regulations would affect obligation fuel suppliers and all users of obligation fuel where there is an opt-in participant who is also supplying biofuel into the distribution system at an airport. Assessing the options

Table 5 assesses the status quo against the criteria on page 9, and option 2 against those same criteria and the status quo. We think the most important criterion for this decision is alignment with the NZ ETS objectives.

**Table 5: Assessing option 2 against the status quo**

Option	Alignment	Accuracy	Efficiency	Clarity
Option 1 – Status quo	Good - the status quo supports global efforts to reduce the emission of greenhouse gases by recognising the emissions benefits from supply biofuels, through reduce obligations for opt-in participants and obligation fuel suppliers.	Good – the current methodology allows the calculation of fossil fuel emissions to be as close as practically possible to those that are released into the atmosphere from the activity.	Good – the status quo does not place unnecessary administrative burden between an opt-in participant and an obligation participant.	No change.
Option 2	Good – the option performs well against the status quo as it increases the support for biofuel supply and use. This option increases alignment with a key NZ ETS objective to drive investment in lower emission technologies.	Poor – the option requires inaccurate reporting of emissions at the participant level, even though they net out accurately at the sector level.	Poor – the option requires additional information sharing and administrative adjustments for the opt-in participant and upstream obligation fuel supplier before they submit their emissions returns.	No change.

## Impacts

Implementing option 2, compared to the status quo, would encourage reduced emissions from domestic aviation by further incentivising the supply of SAF.

In effect, the NZ ETS would price the correct amount of emissions. However, the benefits would accrue solely to the opt-in participant who is supplying the SAF into the airport distribution system. It is worth noting this would mean the opt-in participant would no longer be reporting their actual fossil fuel emissions or facing a full NZ ETS cost for those emissions. Other SAF users may be incurring NZ ETS costs for emissions they have not physically emitted.

There is also some precedent risk involved in implementing option 2. There might be similarities with other NZ ETS activities where an opt-in participant involved in different emissions trading activities could displace emissions within their sector through an upstream intervention. For example, such an occurrence would be possible in natural gas mining.

## Your views

We are interested in your views of our assessment against the criteria in table 5. This includes whether you think any criteria should be given more weight than others.

## Questions

11. To what extent do you agree with the way we have described the issue? Please explain any additional aspects of the problem you think we should consider.
12. Do you agree that the option outlined in this consultation document is the correct one to consider? If not, why not?
13. Do you have views on the timing for implementing this update?
14. Do you think there are any other options to consider for addressing this issue?
15. In your opinion, could the proposed change to regulations disproportionately impact Māori negatively? If so, what are the impacts? Why might they occur?

# How to have your say

The Government welcomes your feedback on this consultation document. The questions throughout the document and summarised here are a guide only. You do not have to answer them all and any additional comments are welcome.

To ensure others clearly understand your point of view, you should explain the reasons for your views and give any supporting evidence.

## Timeframes

This consultation starts on 17 March 2022 and ends on 28 April 2022.

When the consultation period has ended, we will develop recommendations on changes to regulations.

## How to make a submission

There are two ways you can make a submission.

1. Via Citizen Space, our consultation hub:  
<https://consult.environment.govt.nz/climate/proposed-changes-nz-ets-2022>.
2. Write your own submission.

If you want to provide your own written submission you can provide this as an uploaded file in Citizen Space.

We request that you don't email or post submissions as this makes analysis more difficult. However, if you need to please send written submissions to ETS regulation updates, Ministry for the Environment, PO Box 10362, Wellington 6143 and include:

- the title of the consultation
- your name or organisation
- your postal address
- your telephone number
- your email address.

If you are emailing your submission, send it to [etsconsultation@mfe.govt.nz](mailto:etsconsultation@mfe.govt.nz) as a:

- PDF
- Microsoft Word document (2003 or later version).

**Submissions close on Thursday 28 April 2022.**

## For more information

Please direct any queries to:

Email: [etsconsultation@mfe.govt.nz](mailto:etsconsultation@mfe.govt.nz)

Postal: ETS regulation updates, Ministry for the Environment, PO Box 10362,  
Wellington 6143

## Publishing and releasing submissions

All or part of any written comments (including names of submitters), may be published on the Ministry for the Environment's website, [environment.govt.nz](https://environment.govt.nz). Unless you clearly specify otherwise in your submission, the Ministry will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this document under the Official Information Act.

The Privacy Act 2020 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this document. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

If you have any questions or want more information about the submission process, please email [etsconsultation@mfe.govt.nz](mailto:etsconsultation@mfe.govt.nz).

# Appendix: Other regulation changes for 2022

The following items are due to be implemented in 2022 but are not being consulted on as they have either already been consulted on, already have policy approvals, or are minor and technical and do not require consultation or policy decisions from Cabinet.

Details on these changes were consulted on in 2021 and can be found [on our website](#).

The changes were:

- the annual update to the price of carbon used in calculation of the SGG levy and NZ ETS administrative penalties and the annual update to the SGG levy
- minor corrections to align SGG levy regulations with changes to tariff codes
- updating the global warming potential values for certain substances to align with AR5 data.



# Glossary

Biogenic cycle	Carbon cycles between plants and the atmosphere in a short period of time, usually in the range of a few years to a few decades
Carbon sequestration	Capturing and storing atmospheric CO <sub>2</sub>
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent. The amount of another greenhouse gas with the same global warming potential as one tonne of CO <sub>2</sub>
DEF	Default emissions factor
Emissions factor	A value given to an activity in the NZ ETS based on how emissions-intensive it is and used to calculate emissions
Emission unit	Represents one metric tonne of CO <sub>2</sub> or CO <sub>2</sub> e
Emissions return	Data submitted by an NZ ETS participant about the emissions caused by carrying out their activity, and/or about removals of greenhouse gases from the atmosphere
EPA	Environmental Protection Authority
GHG	Greenhouse gas
HFC	Hydrofluorocarbon
Inventory	New Zealand's Greenhouse Gas Inventory — the official annual estimate of GHG emissions and removals which have occurred here since 1990
Kigali Amendment	An international agreement to gradually reduce the consumption and production of hydrofluorocarbons
Kyoto Protocol	An international treaty which extended the 1992 United Nations Framework Convention on Climate Change that commits state parties to reduce greenhouse gas emissions
Mandatory participant	Participants in the New Zealand Emissions Trading Scheme (NZ ETS) required to meet a number of obligations in the scheme
Montreal Protocol	An international treaty designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion
Mt CO <sub>2</sub> -e	Megatonnes carbon dioxide equivalent
NZ ETS (New Zealand Emissions Trading Scheme)	The Government's main tool for meeting international and domestic climate change targets. The scheme aims to encourage people to reduce GHG emissions.
NZU (New Zealand Unit)	This represents one metric tonne of CO <sub>2</sub> or CO <sub>2</sub> e
Obligation fuel	Fuel that is imported or removed from a New Zealand Customs-controlled area for use in New Zealand which is required to be reported on by NZ ETS participants

Opt-in participant	A voluntary participant in the NZ ETS who takes on obligations that would normally be the responsibility of a mandatory participant
Paris Agreement	An international treaty on climate change which came into force on 4 November 2016. Its goal is to limit global warming to well below 2 degrees Celsius (preferably below 1.5 degrees) compared to pre-industrial levels.
PFC	Perfluorocarbon
Register	The Register acts like a bank but holds emission units instead of money. Businesses must have an account in the Register to be able to own or trade emission units in New Zealand.
Removal	Withdrawal of a greenhouse gas from the atmosphere
SAF	Sustainable aviation fuel
SEIP	Stationary energy and industrial processes
SGG	Synthetic greenhouse gas
Surrender obligations	Obligations to surrender NZUs equal to the emissions reported in an emission return
UEF	Unique emissions factor. A value given to an activity based on a unique estimate of how emissions-intensive it is. Used to calculate emissions. UEFs must be applied for and approved for use by the EPA.

# References

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