

Regulatory Impact Assessment: Updating the Climate Change (Other Removal Activities) Regulations 2009

Coversheet

Purpose of Document	
Decision sought:	<i>Analysis produced for the purpose of informing final Cabinet decisions on the proposed change to the Climate Change (Other Removal Activities) Regulations 2009</i>
Advising agencies:	<i>Ministry for the Environment</i>
Proposing Ministers:	<i>Minister for Climate Change</i>
Date finalised:	<i>9 June 2022</i>
Problem Definition	
Reductions in New Zealand's net emissions from the export or destruction of refrigerant gases are not as high as they could be.	
Executive Summary	
<p>The New Zealand Emissions Trading Scheme (NZ ETS) prices the emissions from all sectors of the economy, apart from agriculture. It was established by the Climate Change Response Act 2002 (the CCRA). The CCRA also established the synthetic greenhouse gas levy (SGG levy).</p> <p>The NZ ETS creates a trading market for New Zealand Units (NZUs), where each NZU represents one tonne of emissions. Participants are required to surrender one NZU for each tonne of emissions they produce and are eligible to receive one NZU from the Crown for every tonne of emissions removals. The NZ ETS provides opportunities to earn NZUs by carrying out an eligible removal activity which supports New Zealand meeting domestic and international emissions targets.</p> <p>Removal activities reduce emissions reported in New Zealand's Greenhouse Gas Inventory (the Inventory). For example, a 'forestry removal activity' is one in which post-1989 forest growth sequesters carbon dioxide. 'Other Removal Activities' either:</p> <ul style="list-style-type: none"> permanently embed (or at least until exported) a substance that would otherwise emit greenhouse gases to the atmosphere; store carbon dioxide after capture; or export or destroy hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs). <p>Existing criteria in the Climate Change (Other Removal Activities) Regulations 2009 (ORA regulations) were introduced to stop stockpiling of synthetic greenhouse gases (SGGs) for re-export and earning NZUs before the start of NZ ETS coverage. This risk has been mitigated by the passage of time.</p>	

Stakeholders have indicated that there is potential to increase the amount of HFCs and PFCs removed from New Zealand, and that those regulations were preventing them from such action.

The preferred option for addressing this problem is to remove the criteria that limits who can participate in the NZ ETS for performing the removal activity of exporting or destroying HFCs or PFCs.

There are significant differences in stakeholder opinions about the proposal. Some submitters from the refrigerant industry supported the proposal, with some providing support based on the proposal changing to meet certain conditions. s 9(2)(b)(ii)

Some opposition to the proposal resulted from the fact that refrigerant gases were declared a priority product under the Waste Minimisation Act (2008). The priority product declaration, gazetted in July 2020, requires the gases at issue in ORA regulations to be managed over their lifecycle by a regulated product stewardship scheme (PSS). There was a concern expressed that the proposed NZ ETS changes might affect the implementation of a PSS for these gases. There were also concerns that the proposed change might result in negative environmental outcomes resulting from more people handling and storing these gases.

The management of the various environmental risks associated with HFCs and PFCs is reflected across several legislative instruments, agreements and plans. The proposed change which is the focus of this RIS relates only to criteria for eligibility to receive NZUs for carrying out an activity and does not affect the rules or regulations pertaining to HFCs and PFCs elsewhere.

This proposal does not address the functional aspects of capturing HFCs and PFCs for storage prior to export or destruction. Removing criteria to register for the ETS activity does not remove other barriers to undertaking the activity such as the infrastructure required for collection and export.

The recommended option is to remove criteria from ORA regulations for exporting or destroying HFCs and PFCs. This option is most likely to meet ETS objectives to reduce New Zealand's emissions.

Limitations and Constraints on Analysis

We are confident in the analysis in this RIA.

The data for the status quo level of removals reported into the NZ ETS are known.

The impact of the recommended change on removals reported into the NZ ETS, and corresponding reductions in New Zealand's emissions, is difficult to predict with precision. The analysis assumes that exports of HFCs and PFCs would increase with a change to the regulation. We assess this is likely based on consultation feedback indicating industry stakeholders have detailed plans to do so. However, the Ministry cannot be certain this would occur. The Ministry is confident that the perverse outcome of a decrease in exports is very unlikely.

There is uncertainty around whether stockpiling occurred prior to 2013 for subsequent export for claiming NZUs. We have assessed it as unlikely due to:

- the time elapsed since this activity was introduced into the NZ ETS;
- the value of the materials involved;

- the costs of storage.

Stockpiling for subsequent use prior to the implementation of ETS costs for importing these gases is known to have occurred to avoid these ETS costs. This is unrelated to the proposal at hand, as the criteria restricting registration for this NZ ETS activity were established to address arbitrage risk, rather than stockpiling for subsequent use.

Responsible Manager

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 Ministry for the Environment

9 June 2022

Quality Assurance (completed by QA panel)

Reviewing Agency:	Ministry for the Environment
Panel Assessment & Comment:	The Ministry for the Environment’s Regulatory Impact Analysis Panel has reviewed the Impact Statement: Updating the Climate Change (Other Removal Activities) Regulations 2009. The panel considers that it meets the quality assessment criteria necessary for Ministers to make informed decisions.

Section 1: Diagnosing the policy problem

What is the context behind the policy problem and how is the status quo expected to develop?

1. The NZ ETS is New Zealand’s main emissions pricing tool. It prices the emissions from all sectors of the economy, apart from agriculture. It was established by the CCRA. The CCRA also established the SGG levy.
2. The NZ ETS creates a trading market for NZUs, where each NZU represents one tonne of emissions. Participants are required to surrender one NZU for each tonne of emissions they produce and are eligible to receive one NZU from the Crown for every tonne of emissions removals.
3. An overall ‘mit or cap’ on the supply of NZUs into the NZ ETS, excluding NZUs transferred for removal activities, was recently introduced in the NZ ETS. This limits the level of net emissions in the economy.
4. The NZ ETS is designed to limit net emissions in line with New Zealand’s emissions budgets and targets.

Other Removal Activities in the NZ ETS

5. Some people and businesses may have opportunities to earn NZUs by carrying out an eligible removal activity. These prescribed activities¹ reduce emissions reported in New Zealand’s Greenhouse Gas Inventory (the Inventory), and NZUs are earned to reflect

¹ Forestry Removal Activities and Other Removal Activities are prescribed in Schedule 4 of the Climate Change Response Act 2002

this. For example, a ‘forestry removal activity’ is one in which post-1989 forest growth sequesters carbon dioxide. ‘Other removal activities’ (ORA) either:

- a. permanently embed (or at least until exported) a substance that would otherwise emit greenhouse gases to the atmosphere;
 - b. store carbon dioxide after capture;
 - c. export HFCs or PFCs;
 - d. destroy HFCs or PFCs.
6. The focus of the proposed change to regulations is the NZ ETS removal activity of exporting or destroying HFCs or PFCs. There are no facilities for destruction of SGGs in New Zealand, and no removals have been reported for this activity. However, this proposal addresses the criteria for both activities. The CCRA defines “synthetic greenhouse gases” as HFCs and PFCs, and where SGGs are referred to through the RIS, that is the definition being used.
7. 2020 calendar year emissions removals reported for the removal activity of exporting HFCs or PFCs were 410,995 tonnes CO₂ equivalent (tCO₂e). Most of these exports were either in manufactured goods or bulk exports for use overseas, primarily in the Pacific region. In the same year, there were a total of 2,713,350 tCO₂e reported participant emission removals across all ORA activities (including HFCs and PFCs).
8. The Environmental Protection Authority (EPA) publishes participant level removals by firms carrying out this activity. Approximately 40,000 tCO₂e were removed by exports of used HFCs and PFCs for re-use or destruction.²
9. Most refrigerants imported into New Zealand are eventually emitted here or are exported in bulk or in manufactured goods such as air conditioning units. Only a very small percentage are being recovered and exported.
10. The Inventory report released in 2022 shows sectoral background data for industrial processes and product use. It reports between 4% and 14% of SGG disposal emissions in 2020 were avoided through collection.³ These numbers indicate there is potentially large amounts of SGG that could be collected instead of emitted on disposal, however these are only estimates, and not exact numbers. There are many thousands of untracked potential sources of disposal emissions.

Legislative context

Climate Change Response Act 2002

11. The ORA Regulations prescribe who can register as a participant to undertake the activity. Other parts of CCRA make it illegal to release HFCs and PFCs into the atmosphere.⁴
12. Current regulatory settings restrict registration as a participant in the NZ ETS to receive New Zealand Units (NZUs) for the export or destruction of refrigerant gases. This limits the NZ ETS incentive to reduce net emissions, and as a result limits:
 - a. the extent to which these gases are being captured for export or destruction; and
 - b. any corresponding decrease of New Zealand’s net emissions.

² [EPA: ETS participant emissions returns reports](#)

³ [New Zealand's Greenhouse Gas Inventory 1990–2020](#): Table 2(II).B-H Sectoral background data for industrial processes and product use

⁴ Climate Change Response Act 2002, Section 264 *Offence in relation to release of synthetic greenhouse gases*

13. The ORA regulations require persons exporting or destroying HFCs or PFCs to meet eligibility criteria to be able to register in the ETS for this activity to receive NZUs. To be eligible to register for this activity, persons must:
 - a. be the manager of a product stewardship scheme accredited under the Waste Minimisation Act 2008; or
 - b. show that the HFC or PFC that is the subject of the activity or goods that contain them were imported on or after 1 January 2013.
14. These criteria were introduced to remove an arbitrage opportunity when these activities were introduced into the ETS. Without them, people could have imported SGGs and stockpiled ahead of ETS costs taking effect for importation of SGGs, then re-export and earn NZUs.
15. These criteria are unrelated to stockpiling for subsequent use prior to the implementation of ETS costs for importing these gases. The criteria restricting registration for this NZ ETS activity were established to address the arbitrage risk described above, rather than stockpiling for subsequent use

Waste Minimisation Act 2008

16. The Waste Minimisation Act 2008 (WMA) allows for products to be declared priority products if satisfied that:
 - a. Either
 - i. The product will or may cause significant environmental harm when it becomes waste; or
 - ii. There are significant benefits from reduction, reuse, recycling, recover, or treatment of the product; and
 - b. The product can be effectively managed under a product stewardship scheme.
17. The WMA requires that a product stewardship scheme is developed, and accreditation of the scheme obtained as soon as practicable after a product is declared a priority product.
18. In July 2020, HFCs and PFCs were declared a priority product under the WMA, and work towards developing a product stewardship scheme (PSS) for HFCs and PFCs is underway.
19. PSS involve regulations related to:
 - a. Increase circular resource use; and
 - b. Place responsibilities for managing end-of-life products on producers, importers and retailers rather than on communities, councils, neighbourhoods, and nature
20. A scoping report has been prepared by an industry working group as part of a process to develop an industry led product stewardship programme for SGG refrigerants in New Zealand⁵.
21. This report was supported by funding from the Waste Minimisation Fund. It is important to note that the Ministry for the Environment does not necessarily endorse or support the content of the publication.
22. Development of a PSS will require a formal consultation process and subsequent development of regulations. Consultation on proposed WMA regulations for a PSS is expected to occur sometime in late 2022.

⁵ Synthetic Refrigerant Stewardship Milestone 4: Report 1 – Guiding principles for preferred industry stewardship solution: [index.php \(refrigerantstewardship.co.nz\)](https://index.php/refrigerantstewardship.co.nz)

Ozone Layer Protection Act 1996

23. The Ozone Layer Protection Act 1996 (OLPA) is intended to help protect human health and the environment from adverse effects caused by ozone depleting substances, and to give effect to New Zealand's international obligations. HFCs are prescribed as controlled substances in regulations made under OLPA.

Interplay between Acts

24. These legislative instruments are complementary. The ability to register for the NZ ETS activity of exporting or destroying SGGs only applies for people carrying out the activity, as permitted under the other legislative instruments.

How the status quo expected to develop

25. The quantity of exports of SGGs is expected to remain relatively constant. Most SGG exports are to supply offshore markets. Less than 10 per cent of exports of SGG in 2020 were those collected at their end of use⁶. If onshore destruction facilities are established, this may increase the amount of SGGs collected at end of use in New Zealand due to removing the cost of shipping these offshore, however it is unclear when or if this might occur.
26. It is possible, but not able to be measured, that removals of end of use HFCs and PFCs could increase without policy intervention for the following reasons;
- Increasing NZU prices providing a stronger incentive for removals.
 - Reduced supply of the gases due to Kigali controls likely make it more attractive to collect the HFCs and PFCs and improve collection networks.
 - As NZ ETS prices change, there is a greater incentive for minimising loss through leakage and increased desirability to recycle.

What is the policy problem or opportunity

27. Reductions in New Zealand's net emissions from the export or destruction of refrigerant gases are not as high as they could be.
28. This has been communicated to the Government through engagement with industry.
29. Evidence for this problem is noted above, and includes the inventory data and industry engagement.

What objectives are sought in relation to the policy problem?

30. The main objective of NZ ETS policy and regulations is to support and encourage efforts to reduce greenhouse gas emissions by
- assisting New Zealand to meet its international obligations; and
 - assisting New Zealand to meet its 2050 target and emissions budgets.
31. To address the policy problem presented, the proposed option should provide more opportunities than the status quo for New Zealand to lower its net emissions.

⁶ [EPA: ETS participant emissions returns reports](#) table 13

Section 2: Deciding upon an option to address the policy problem

What criteria will be used to compare options to the status quo?

32. Changing regulations that impact the NZ ETS must contribute to meeting its objectives. Therefore, changes should be accurate, efficient, and clear.
33. The options are 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 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.
34. 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.
 - **No change** – there is no difference between the option and status quo.
 - **Good** – the option performs well against the status quo.

What scope will options be considered within?

35. Options to be considered relate to the NZ ETS activities described within Schedule 4, Part 2, subpart 3 of the CCRA. This allows people exporting or destroying HFCs or PFCs, including those contained in goods, to be a participant in the NZ ETS for that removal activity.
36. Analysis has explored the wider legislative framework and is described in text. Changes to the wider legislative framework are out of scope.

What options are being considered?

37. This proposal is limited to options that can progress under the CCRA through changing regulation. That is, removing the criteria that limit who can participate in the NZ ETS for performing the removal activity of exporting or destroying HFCs or PFCs, including those contained in goods.
38. We considered removing only the import date or product stewardship scheme requirements to include as options for this change. However:
 - Removing only the 2013 import date requirement from regulations would not work as an option for this change. Removing the import date would render participants currently receiving NZUs for exporting SGGs imported after 2013 ineligible to register for the removal activity.
 - Removing only the requirement to be the manager 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.
39. As a result of the above, we have assessed one option against the status quo of no regulatory change.

Option One – Status quo – no update

40. Under this option there will be no change to the ORA regulations. The only persons who can register as an NZ ETS participant and earn NZUs from export or destruction of HFCs or PFCs are those that:
- are managers of a product stewardship scheme; or
 - export or destroy HFCs and PFCs which were imported after 2013.

Option Two – Update the Climate Change (Other Removal Activities) regulations 2009

41. This option is to remove the criteria limiting NZ ETS registration as a participant for the NZ ETS activities of export or destruction of HFCs and PFCs.
42. Under this option, anyone exporting or destroying HFCs or PFCs can register as an NZ ETS participant for doing so and receive NZUs for this activity. The import date of the HFCs or PFCs being exported or destroyed would not impact their eligibility to earn NZUs. There would also be no requirement to be a manager of a product stewardship scheme to be able to register for the NZ ETS activity.
43. This change would take effect in January 2023 and would not be applied retrospectively.

Consultation

44. Consultation was carried out on this proposal between 17 March 2022 and 28 April 2022. A total of 16 responses were received on this issue. Consultation material was available on the Ministry's website and sent via email to all NZ ETS participants. The Ministry also ran a workshop on the proposal, and attended a webinar hosted by industry stakeholders.
45. The Ministry endeavoured to understand if there would be any disproportionate negative impacts on Māori due to the proposed change. Therefore, we specifically requested as part of consultation that submitters consider whether there could be disproportionate impacts on Māori because of the proposed change. There were no responses to that question to suggest any disproportionate negative impacts of this proposed change on Māori. However, we note there are likely gaps in our analysis that cannot be filled and are unable to provide a fulsome assessment.

Divergence of opinion between stakeholders: Support from Industry

46. There are significant differences in stakeholder opinions about the proposal. Some submitters from the refrigerant industry supported the proposal, with some providing support based on the proposal adjusting to meet certain conditions. s 9(2)(b)(ii)

47. There was acknowledgement from those who supported the proposed change that current settings are not suitable and do not meet the needs of some parts of the industry.

48. Industry stakeholders who supported the change noted the following:

s 9(2)(b)(ii), s 9(2)(a)

s 9(2)(b)(ii), s 9(2)(a)

Divergence of opinion between stakeholders: Product Stewardship and the Refrigerant Recovery Trust

49. The removal of criteria to register as a participant in this activity means any person with the appropriate qualifications, expertise, equipment, and approvals could do it. Several risks were raised by submitters around handling and management of HFCs and PFCs. However, the proposal is not intended to mitigate risks associated with management and handling of HFCs and PFCs as these risks are managed by frameworks that are independent of the NZ ETS.
50. Some feedback opposed to the proposal from stakeholders resulted, in part, from the fact that refrigerant gases were declared a priority product under the Waste Minimisation Act (2008). The priority product declaration gazetted in July 2020⁷ requires the establishment of a mandatory PSS to manage HFCs and PFCs over their lifecycle.
51. As described earlier in this RIS, product stewardship is when a producer, brand owner, importer, retailer or consumer accepts responsibility for reducing a product's environmental impact. 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.
52. A product stewardship scheme currently exists for HFCs and PFCs — a voluntary scheme operated by the Recovery Trust (Refrigerant Recovery New Zealand). It has been running since 1993. It is accredited by and reports on its performance to the Ministry.
53. With the declaration of refrigerant gases as a priority product by the Government, the Trust has undertaken a co-design process with the intent of becoming a manager of a regulated product stewardship scheme for the lifecycle of refrigerant gases. The Trust is opposed to the proposed change to eligibility criteria for NZ ETS participation as they anticipate that it could reduce the volume of NZUs they earn from the Trust's activities. They argue that:
 - a. The proposal to change regulations is disconnected from broader government environment policy proposals including upcoming regulatory consultations to bring in a regulated product stewardship scheme.
 - b. The regulations not requiring destruction of gases is counter to waste minimisation strategies and does not align with international agreements like the Basel Convention.⁸
 - c. The proposal could expose the environment to unnecessary risks resulting from the removal activity being undertaken by unknown bad actors.
 - d. The proposal could result in the disruption of broader system solutions to problems related to refrigerant leakage, and investment in New Zealand-based destruction alternatives.
54. The Recovery Trust is not the manager of a regulated product stewardship scheme for refrigerant gas disposal; regulations for this do not exist yet. Proposals for regulations for a product stewardship scheme, and the allocation of those responsibilities to a particular organisation, are currently still in development. Therefore, the proposed change is not immediately impacted by this.

⁷ [Declaration of Priority Products Notice 2020 - 2020-go3343 - New Zealand Gazette](#)

⁸ [Basel Convention > The Convention > Overview > Text of the Convention](#) – Accessed 4 May 2022

55. The proposal impacts the suggested funding model of the unendorsed PS scheme by removing the monopolisation of obtaining NZU revenue. The impact that this proposal has on an unendorsed future PS scheme funding model is not in scope of this work.
56. The NZ ETS regulation change can co-exist with a refrigerant PSS. It simply increases the number of persons collecting end of life refrigerants and who will also have participation and reporting requirements under PSS regulations.
57. Consultation feedback suggests a view from key stakeholders, including the Recovery Trust and associated entities, that option two is at odds with New Zealand's climate change response objectives. This view included opinions that the regulations do not ensure destruction of the collected and exported SGG. Some submitters stated that export of the gases under current regulations represents a deferral of responsibility by New Zealand for emissions. Some stated they would support such a proposal if criteria imposing conditions to require destruction were included as part of the change.
58. In response, there is potential for the exported refrigerants to be recycled offshore, reducing the global need for new refrigerants, and providing an economic opportunity that may increase the collection of refrigerants here.
59. Additionally, such a restriction would have unintended consequences given a large amount of currently eligible SGG exporters supply overseas markets.
60. The ORA regulations currently do not, and will not, contain criteria related to safe destruction. The removal activity at issue is about decreasing New Zealand's emissions per the purpose of the NZ ETS in the CCRA. "For destruction only" is not part of the activity, nor is it the intent of the CCRA. Increasing the removal of emissions from New Zealand's greenhouse gas inventory is the point of the proposed change. The Ministry recognises the significance of the risks related to possible unknown outcomes as a result of removing these criteria, while recognising other regulatory activity can be taken by other agencies to diminish the likelihood of negative outcomes.
61. Submitters also considered there was a risk of increased leakage domestically from any uptick in collection activity. This was connected to the submission from the Recovery Trust, which, by becoming the regulated product stewardship scheme, they aim to address through training and upskilling in the industry.
62. Emissions due to leakage of refrigerants can happen, and all imports are priced on the assumption that it will happen. This pricing signal enables the reward of capture and export and destruction. The proposal is not intended to address the risk of leakage from refrigerants.
63. Critically, the Ministry notes that removing these criteria does not absolve the NZ ETS participant undertaking the activity from other responsibilities under the law in managing these substances.
64. One submission stated that the Ministry's assessment in the consultation regarding the risk of a arbitrage for these gases as being mitigated by the passage of time was incorrect. They suggested there is likely significant amounts of HFC and PFC containing goods currently 'banked' which, because of the proposed change, would transition into a valuable commodity.
65. It is highly unlikely these gases have been 'banked' for the purposes of arbitrage in the event of a regulatory change. This would have required the import of the gases before 2013 and storage in the hope regulations would be amended. Additionally, there is a strong economic benefit to supplying the domestic market instead of exporting such stockpiled gases, through receiving a market price on sale compared to the lower emission unit value and the costs of export.
66. If the submitter was focussed on the bank of SGG contained in old equipment, then this is not an objection to the proposal. The collection of these gases, instead of emissions on disposal, is in the interest of New Zealand. This is not an arbitrage opportunity.

How this proposal interacts with the emissions reduction plan

67. New Zealand's first emissions reduction plan (ERP)⁹ was released on 16 May 2022. The fluorinated gases chapter contains four actions reduce emissions from the mismanagement of fluorinated gases, including HFCs and PFCs.
68. The ERP contains a complementing suite of policies to work alongside the New Zealand Government's key tool, the NZ ETS. The four actions in the fluorinated gases chapter of the ERP can be implemented and coexist with the NZ ETS.
69. The actions listed in the fluorinated gases chapter in the ERP are:
 - a. Develop training and accreditation for handling fluorinated gases.
 - b. Prohibit imports of equipment pre charged with fluorinated gases.
 - c. Investigate prohibiting fluorinated gases with high global warming potentials (GWP).
 - d. Introduce a mandatory product stewardship scheme for refrigerants
70. Implementation of the recommended option of removing the criteria restricting NZ ETS registration for the activities of exporting and destroying SGGs does not impact the delivery of these actions.

⁹ [Aotearoa New Zealand's first emissions reduction plan | Ministry for the Environment](#)

How do the options compare to the status quo/counterfactual?

	Option One – Status Quo – No Update	Option Two – Update the Climate Change (Other Removal Activities) regulations 2009
Alignment	0	Good – supports the achievement of emissions budgets and targets. Could support the introduction of novel technology and new companies to this removal activity, potentially accelerating the timeframes for meeting those emission targets.
Accuracy	0	No change – no impact on measuring emissions.
Efficiency	0	Good – reduces administrative burdens from disposal processes. Removes barriers to persons wanting to participate in the removal activity.
Clarity	0	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.
Overall Assessment	0	Good - aligns with the objectives of the NZ ETS and increases efficiency of removals through expanding participant registration to undertake removal activities by abandoning the criteria. It also increases the clarity around regulations, as there would be no criteria to meet to participate.

71. As seen in the criteria analysis assessment above, option 2 performs well against the status quo. Alignment and efficiency were deemed the most important criteria for this proposal. Against those criteria, option 2 performs particularly well, as the potential to increase emissions removals that New Zealand is currently forgoing due to restrictive criteria is significant.

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

72. We assess option 2 is most likely to address the policy problem and meet ETS objectives to reduce New Zealand’s emissions.

73. Stakeholders who support the proposal provided industry expert insights into how the proposed change would benefit their businesses and increase emission removals. These included:

- a. Novel approaches and new businesses to undertake activities at scale to replace, export and destroy high GWP HFCs and PFCs.
- b. Ensure positive outcomes through these novel activities, by following rigorous processes.

- c. Discussion on investment in local infrastructure to support efforts for the export and destruction of HFCs and PFCs.

74. Some stakeholders stated current criteria restricting NZ ETS registration for this activity were preventing innovation in this area, and that industry experts were keen to address the risks related to refrigerants, leakage, and negative environmental outcomes associated with them. This suggests New Zealand would almost certainly see an increased rate of this removal activity, as initially assessed.

What are the marginal costs and benefits of the option?

Affected groups	Comment nature of cost	Impact.	Evidence Certainty
Additional costs of the preferred option compared to taking no action			
Regulated groups: ETS participants	No additional cost to existing NZ ETS participants, NZ ETS compliance costs for additional persons who choose to opt-in to this NZ ETS activity	Low	High – basis of proposal allows introducing new costs to ETS participants.
Regulators	Potential for increased administration costs because of additional participants reporting and receiving NZUs for this activity	Low	High – prior regulatory changes impacting registrations are known.
Crown	Fiscal cost of any increase in removals reported into the NZ ETS and the associated allocation of NZUs to participants	Low – will fall within existing appropriations and are minor compared to other NZ ETS entitlements	Medium – cannot be sure of total volumes of extra removals requiring more NZUs
Total monetised costs	Costs covered by existing appropriations	Low	High
Non-monetised costs	Low – No	Low – most broader concerns addressed in other regulations and legislation	Medium – unknowns related to non-monetised impacts.
Additional benefits of the preferred option compared to taking no action			
Regulated groups	Medium - increased ability to participate in removal activity and receive financial incentive	High	High

Regulators	Nil	Low – increase in participants has a minor impact on the ETS register	High – the register is a known quantity
Consumers	Nil – no impact on consumers	Nil	N/A
Crown	Increased removals, resulting in a decrease in NZ’s net emissions, assisting in meeting emissions targets	Medium	Medium
Total monetised benefits		Nil	High
Non-monetised benefits		Medium	High

75. We assess option 2 will increase SGG removals but have no ability to estimate to what degree. The net benefit of this policy change is based on two inputs: those supportive submissions from industry and the recording of low SGG recovery in the greenhouse gas inventory.
76. There is currently one eligible person that meet the criteria to receive NZUs for the export of pre-2013 SGG in bulk. They received 36 372 NZUs for 2020 removals (valued at \$2.8m NZD based on NZU prices of \$75.00).¹⁰ Their annual removals measured in tonnes of carbon dioxide equivalent over the last 28 years are around 40,000, so this is reflective of activity over a long period.¹¹
77. The current participant will likely perform the bulk of removal activities for the near future due to having established physical assets and relationships (informal or commercial) with service agents. Critically, we note that some of the removals that would be reported by newly eligible participants may have otherwise been reported by the current participant.

¹⁰ Normalised amount per NZU. Actual price applied to NZUs at the time of emission return submission not accounted for.

¹¹ [Program Performance - Refrigerant Recovery](#) – since 1993 Refrigerant Recovery has destroyed gases equating to 1,156,000 tonnes of CO2 equivalent

Section 3: Delivering an option

How will the new arrangements be implemented?

78. The recommendations will be integrated into existing regulatory systems, and be subject to the monitoring, evaluation, and review arrangements already in place.
79. New participants registering for the activity will have to submit documentation to the Environmental Protection Agency (EPA) to collect NZUs. Participants would also need to apply for export permits from the EPA and be subject to Ozone Layer Protection Act and Regulations 1996. The EPA also regulates the behaviour of participants in the ETS.
80. NZ ETS regulations are reviewed and updated annually as part of standard processes. If the proposed change results in significant issues and fails to function as expected, criteria can be reintroduced.

Proactively released