

In-Confidence

Office of the Minister of Climate Change

Chair, Cabinet Environment, Energy and Climate Committee

NZ ETS and SGG Levy Regulation Changes 2021: Consultation report back.

Proposal

- 1 This paper seeks your agreement to make and amend regulations under the Climate Change Response Act 2002 and your approval for issuing drafting instructions to the Parliamentary Counsel Office.

Relation to government priorities

- 2 The Government declared a climate change emergency on 2 December 2020, the Cabinet Business Committee (CBC) agreeing that climate change “demands a sufficiently ambitious, urgent, and coordinated response across government to meet the scale and complexity of the challenge” [CBC-20-MIN-0097 refers].
- 3 Enabling a just transition to a low-emissions, climate resilient future is also a Government priority. This was emphasised by CBC when they noted the intention to “put the climate at the centre of government decision-making” and agreed that “climate change requires decisive action by all levels of government, the private sector, and communities” [CBC-20-MIN-0097 refers].

Executive Summary

- 4 This paper seeks policy approval for amendments to regulations and drafting of new regulations under the Climate Change Response Act 2002 (the Act), and authorisation for drafting instructions to be issued. This paper also seeks approval of the next steps in agreeing a methodology for updating the electricity allocation factor used in industrial allocation.
- 5 Amendments and updates to regulations under the Act are considered every year to meet legislative requirements and to address policy issues.
- 6 Some of the recommended changes this year are more substantial than in previous years. The most significant is the update to price controls in New Zealand Emissions Trading Scheme (NZ ETS) auctions.

- 7 Public consultation in relation to these changes took place during April and May 2021.
- 8 Early engagement with the Parliamentary Counsel Office has identified timetables against which drafting could occur.
- 9 I recommend:
 - 9.1 updating unit limit and auction price control settings, noting that the recommended updates to price controls align with the Climate Change Commission's recommendations and may result in an increase to New Zealand Unit (NZU) prices
 - 9.2 updating the default emissions factors for waste and natural gas
 - 9.3 updating NZ ETS and synthetic greenhouse gas levy reference data to refer to the most recent global warming potential data if a decision is taken to update New Zealand's first nationally determined contribution (NDC1) under the Paris Agreement or set emissions budgets with reference to these most recent global warming potential data
 - 9.4 exempting redisposed waste from closed landfills from NZ ETS obligations
 - 9.5 updating the methodology for calculating the electricity allocation factor (EAF) used in calculating allocative baselines used for industrial allocation
 - 9.6 updating the schedule of goods covered by the synthetic greenhouse gas levy
 - 9.7 implementing new regulations for an NZ ETS Auction Monitor.
- 10 I anticipate bringing a set of papers with proposed amendments to the Cabinet Legislation Committee later in 2021. The first of these papers will be provided during September.

Background

- 11 The NZ ETS is New Zealand's primary tool for assisting New Zealand to meet its nationally determined contribution (NDC) under the Paris Agreement; and assisting New Zealand to meet its 2050 emissions targets. The synthetic greenhouse gas levy (SGG levy) imposes NZ ETS equivalent costs on importers of goods that contain synthetic greenhouse gases (SGGs) to assist New Zealand in meeting its climate reduction targets.
- 12 Updates to regulations under the Act are regularly needed to ensure the NZ ETS and SGG levy operate efficiently and remain accurate. Some regulations made under the Act are required to be updated every year, other updates occur to address policy issues as they arise. Additionally, recent changes to the Act enable new regulations to be made to further support operational efficiency and integrity.

- 13 The changes I recommend address specific technical issues and implement requirements under the Act to update various settings each year. There is some interplay between two of the updates and the Government's response to the Climate Change Commission's (the Commission's) advice.
- 14 The Ministry for the Environment carried out public consultation on these changes over April to May 2021[ENV-21-MIN-0008 refers]. Submissions clarified understanding of the issues and have assisted in the development of the recommendations in this paper.

Relationship of recommended changes to Climate Change Commission advice

- 15 The Commission provided advice to government on 31 May 2021 detailing paths that New Zealand can take to meet its climate targets. The Commission provided recommendations on the first three emissions budgets and direction on the policies and strategies needed for the emissions reduction plan. The Government is required to consider this advice and set the first three emissions budgets (2022-2025, 2026-2030, 2031-2035) by the end of 2021.
- 16 The Commission's advice included the role of emissions pricing and recommendations to update the NZ ETS unit limits and price control settings. The following recommended changes include factors that relate to recommendations from the Commission:
 - 16.1 updating unit limit settings: The Commission's advice includes recommendations for three emissions budgets to 2035. I recommend that the unit limit settings for 2024-26 are calculated based on the most up-to-date modelling used to inform the Commission's recommended emissions budgets
 - 16.2 updating auction price control settings: The Commission recommended increasing the auction floor price to \$30 (from \$20) and the cost containment reserve (CCR) price to \$70 (from \$50) as soon as possible, and then to have these increase annually at a rate greater than currently prescribed in regulation. Consultation on these changes included options based on the Commission's draft advice, in particular the consultation included the same price control values as the Commission recommends in their final advice.
- 17 From 2022, once emissions budgets have been set, the Commission will be required under the Act to provide advice on the NZ ETS unit limits and price control settings.

Analysis

Recommendations

- 18 I recommend changes to regulations or methodology in relation to the topics summarised in Table 1 below.

Table 1: List of recommended NZ ETS and SGG levy regulation updates, new regulations, and updates to methodology

Proposed change	Regulations	Reason for change	Summary of consultation feedback
Update unit limit and auction price control settings.	Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020.	Annual update required by legislation.	Diverse feedback received. Some supported making required updates only, others updating all data. No consensus view on updates to price control settings – some supported updates in response to Climate Change Commission recommendations, others did not.
Update the default emissions factors for waste and natural gas to reflect updated data on waste composition.	Climate Change (Waste) Regulations 2010, Climate Change (Unique Emissions Factors) Regulations 2009, Climate Change (Stationary Energy and Industrial Processes) Regulations 2009.	Maintain accuracy and avoid administrative costs for participants.	Feedback strongly supportive of making these updates.
Update default emissions factors and other reference data across ETS and SGG Levy regulations based on updated global warming potentials.	Most NZ ETS and SGG Levy regulations.	Consistency with reporting of New Zealand's emissions in the Greenhouse Gas Inventory.	Mixed feedback. Largely supportive of updating the reference data, diversity of views on the timing of such updates.
Update the electricity allocation factor (EAF) methodology used in industrial allocation.	Not applicable at this stage.	Increase accuracy.	Strong support for the proposed methodology.
Improve the NZ ETS treatment of re-disposed waste.	Climate Change (General Exemptions) Order 2009.	Increase accuracy and reduce the risk of NZ ETS cost considerations causing decisions on managing closed landfills that result in poor environmental outcomes.	Feedback strongly in support of addressing this policy problem via a general exemption for re-disposed waste from closed landfills.
Update the schedule of goods covered by the SGG levy.	Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013.	Improve coverage and reduce risk of greenhouse goods being imported in goods but not captured by the levy.	Feedback generally in agreement with proposed updates.
Implement new regulations for an NZ ETS auction monitor.	New regulations.	Enable the appointment of an auction monitor for NZ ETS auctions.	Diverse views on the type of entity that should be appointed as auction monitor. Consensus view that the auction monitor should be independent, and that the functions identified in the Act should be included as functions of the auction monitor.

Updating unit limit and auction price control settings

- 19 Section 30GB(3)(b) of the Act requires that updates to the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 be made to ensure that, at all times, they prescribe unit limits and price control settings for each of the following five calendar years. These settings are displayed in Tables 2 and 3 below.
- 20 The current unit limits and price controls settings contain values for years 2021-2025 inclusive. An update must be made to these settings to include settings for 2026.
- 21 The government will be required to update unit limit settings for years 2023-2026 and extend settings to include 2027 next year, once the first emissions budgets are set. Next year's updates will be required to reflect the emissions budget.
- 22 When making recommendations on these settings, I must also consider recommending updating the unit limit and price control settings for 2024 and 2025. I may consider recommending updating the settings for 2022 and 2023, however only if defined special circumstances are met¹. Settings for 2021 cannot be updated.
- 23 I consider that special circumstances exist that allow me to recommend updating both unit limit and price control settings for calendar years 2022 and 2023. These special circumstances are:
- 23.1 section 30GC(5)(d): changes to the forecast availability and cost of ways to reduce greenhouse gas emissions that may be needed for New Zealand to meet its targets for the reduction of emissions. The modelling of the Commission has provided new forecasts for costs of reducing emissions
- 23.2 section 30GC(5)(f): the Commission's advice on the cost of abatement, emissions budgets and price control settings are matters that I consider relevant
- 23.3 section 30GC(6)(b): in relation to price control settings only, the level and trajectory of international emissions prices (including price controls in linked markets). Since price controls were set in 2020, there have been significant changes in the level and trajectory of prices in the EU ETS.

Updates to price control settings

- 24 The Act requires that the price control settings are in accordance with emissions budgets, the NDC and the 2050 target.
- 25 Price control settings have the effect of setting a price envelope within which units can be sold at NZ ETS auctions. If NZU prices drop below the price floor they are unlikely to be sufficiently high to allow us to meet our targets and if they rise above the CCR trigger price they are too high to justify the costs they impose. What constitutes "too high" is something that might change over time, and similarly what constitutes "too low" will always be relative to targets, budgets, and specific policy goals and is also expected to change over time.

¹ Section 30GB of the Act

- 26 I recommend updating the price control settings for years 2022-2026 as shown in table 2. These updates are in line with the recommendations of the Commission. These updates are to:
- 26.1 the 'auction price floor', the minimum price below which units must not be sold at auction. While the prevailing market price for NZUs remains significantly above this price floor, it will not influence auction clearing price
 - 26.2 the 'cost containment reserve trigger price' (CCR trigger price), the auction trigger price at which the CCR volume of units become available for sale in that auction.
- 27 The increase to the price floor and CCR trigger price is justified for the following reasons:
- 27.1 increases in international and New Zealand emission unit prices
 - 27.2 updates to the forecast cost of ways to reduce greenhouse gas emissions
 - 27.3 the increasing risk of use of the CCR, which has fiscal implications from the requirement that some of these units may need to be 'backed' by the Government with emission reductions elsewhere.
- 28 The auction price control settings do not directly determine the value of an emission unit, rather they set an envelope for the value to move within. This means that a higher floor or CCR trigger price does not necessarily mean immediately higher emissions and economic costs. I acknowledge market participants may see them as signals of future prices and the NZU value may continue the recent upwards price trajectory, noting that NZUs have recently traded at just under \$50 on the NZ ETS secondary market.
- 29 Since price controls were set in 2020, there have been significant changes in the level and trajectory of European Union Allowance (EUA) prices in the EU ETS. EUA prices have more than doubled in less than a year, from NZ\$43 at end June 2020 to over NZ\$90 at end June 2021. Since the United Kingdom's ETS became independent from the EU ETS earlier in 2021, their prices have ranged between NZ\$80 and NZ\$100. The linked ETS markets of California and Quebec have increased less significantly, from NZ\$25 to NZ\$32, over that same period.

Expected impacts of increased NZU market price

- 30 Expected impacts of any increase to NZU market prices are described in the regulatory impact statement accompanying these proposals. A 2019 Treasury analysis assessed the impact of higher emissions prices on short-term household spending. It showed that a rise from \$50 to \$75 would increase low-income household spending by \$2 per week, and \$4.10 per week for high-income households.
- 31 The just transition work and the emissions reduction plan will include proposals to address potential disproportionate impacts from higher emissions costs. The emissions reduction plan will include proposals for how to manage the impacts of the transition with a particular focus on those firms, workers and communities with the least ability to respond.

- 32 Increasing the CCR trigger price from \$50 to \$70 allows the NZ ETS market to realise potential cost-efficient emissions abatement options in this range. Marginal abatement cost analysis shows that options to reduce gross emissions around this price range are predominantly associated with energy production from combustion fuels within the industrial sector and renewable energy replacing fossil fuel generation. The expectation of a strong and rising ETS price path is critical to underpin investment decisions in energy, transport and industry that are needed to achieve reductions in gross emissions.
- 33 A higher NZU price is likely to increase the incentive for forestry (primarily pine trees) as the lowest cost abatement option.
- 34 The work on the emissions reduction plan is intended to address the implications this has for the NZ ETS and forestry. Decisions on the emissions reduction plan will be made later this year. This may include consideration of the role of exotic afforestation in the NZ ETS. This should be clearly communicated to address the risk that afforestation responses occur before the broader context is known.
- 35 A higher NZU price is also likely to have a flow on impact on petrol prices and may impact on the ability to raise fuel excise duty (FED) and road user charges (RUC) in future. Sources of funding to address national land transport fund (NLTF) cost pressures will need to be considered in this context. Further work on the implications of increased NZU prices on transport revenue and resulting distributional impacts is recommended.
- 36 Details on proposed updates to the reserve amount of New Zealand units available at auction (the cost containment reserve) are contained in the updates to unit limit settings section below.
- 37 The recommended updates to price control settings are presented in Table 2 below.

Table 2: Price control settings

Calendar Year	Minimum price below which units must not be sold by auction (\$)		Trigger price for sale of reserve amount of New Zealand units (\$)		Reserve amount of New Zealand units (millions)	
	Current	Recommended	Current	Recommended	Current	Recommended
2022	20.40	30.00	51.00	70.00	7.0	7.0
2023	20.81	32.10	52.02	78.40	7.0	7.0
2024	21.22	34.35	53.06	87.81	7.0	7.0
2025	21.65	36.75	54.12	98.34	6.9	6.8
2026	-	39.32	-	110.15	-	6.7

Updates to unit limit settings

- 38 The Act requires that decisions on unit limit settings made now are in accordance with the provisional emissions budget (PEB), the NDC, and the 2050 target. However, they need not strictly accord with the PEB if I am satisfied that a discrepancy is justified.

- 39 The methodology for calculating annual unit limits was established last year and used for updates this year. The methodology uses a starting emissions data point for each year and then considers a number of steps to arrive at the total units to be made available in auctions. The steps include removing all forecast emissions from outside of the NZ ETS, accounting for forecast free allocation units, and setting a stockpile reduction volume.
- 40 The method to determine the CCR unit volume was also established last year and used for updates this year. I did not specifically consult on a different option for reaching the CCR volume, however did ask a question on people's views about the volumes and received no substantive feedback.
- 41 The calculation of total units available by auction in a year combines base auction units plus units available within the CCR. Calculation of the overall limit on units considers the total units available by auction plus forecasts for industrial allocation units.
- 42 In arriving at my recommendations, I consider the PEB should continue to be used as the base emissions budget, prior to Cabinet decisions required by the end of 2021 on emissions budgets. Despite the special circumstances applying, I recommend that the unit limit settings for years 2022 and 2023 remain unchanged, to support the proper functioning of the scheme and maintain market certainty.
- 43 This means that the unit limit settings for years 2022/23 will continue to directly reflect the PEB and data, forecasts, and modelling available in 2020.
- 44 I recommend that the unit limits for 2024-2025 be adjusted with reference to the Commission's emissions modelling on the recommended pathway for achieving their recommended emissions budgets, and recalculated to reflect most up-to-date data and forecasts.
- 45 The unit limit settings for years 2024-2026 will not be strictly in accordance with the PEB. They will be instead be calculated with reference to the Commission's emissions budget advice for those years, which are in line with the most up-to-date emissions forecasts available. There will be no adjustment to consider the proposed full emissions budgets over the budget periods. I consider this to be justified as it takes into consideration the most recent modelling and data available. As there is no provisional budget applying to 2026, it will be set with reference to the Commission's recommended pathway.
- 46 Unit limit settings for years 2023-2026 will be required to be updated next year, once the first emissions budget is set.
- 47 The use of the Commission's data does not pre-empt upcoming Cabinet decisions on New Zealand's emissions budgets to 2035. The Act requires the setting of unit limits for 2026, and I have chosen the best available data for this purpose. The Act allows amendment of unit limit settings following Cabinet decisions on emission budgets.
- 48 When recommending regulations for unit and price control settings, I am required to consider matters described in section 30GC of the Act. I have considered these matters.

49 The recommended updates to unit limit settings are presented in Table 3 below.

Table 3: Unit Limit settings

Calendar Year	New Zealand units available by auction (millions)		Approved overseas units used (millions)		Overall limit on units (millions)	
	Current	Recommended	Current	Recommended	Current	Recommended
2022	26.3	26.3	0	0	34.5	34.5
2023	25.6	25.6	0	0	34.5	34.5
2024	24.2	25.0	0	0	32.9	32.9
2025	22.4	23.3	0	0	31.1	29.6
2026	-	21.7	-	0	-	27.9

Updating the default emissions factors for waste and natural gas fields

- 50 NZ ETS participants use emissions factors to calculate emissions. This includes emissions factors for operators of municipal landfills and purchasers of natural gas. Emissions factors for waste and natural gas are based on waste and gas composition respectively.
- 51 The compositions of both waste and mined natural gas change over time. The 'default emissions factors' (DEFs) for waste and natural gas need to be updated to align with most recent waste and natural gas composition analysis so that NZ ETS reported emissions are accurate.
- 52 I recommend the default emissions factor for waste is updated in the Climate Change (Waste) Regulations 2010 and the Climate Change (Unique Emissions Factors) Regulations 2009 to a new DEF of 0.91 to align with most recent waste composition analysis.
- 53 Natural gas emissions factors are published in the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009. I recommend that these be updated with emissions factors and classes based on 2020 calendar year data.

Updating default emissions factors and other reference data to take into account new global warming potentials

- 54 Non-carbon dioxide (CO₂) emissions reported in the NZ ETS and the SGG levy are converted to CO₂ equivalent values using the global warming potential relative to CO₂ over a 100-year time horizon (known as GWP₁₀₀).
- 55 GWP₁₀₀ is assessed by the Intergovernmental Panel on Climate Change (IPCC). The IPCC released its Fifth Assessment Report (AR5) in 2014 and updated the GWP₁₀₀ values for all greenhouse gases, including methane and nitrous oxide.

- 56 Emissions factors and reference data in the NZ ETS and SGG levy use GWP₁₀₀ values from the Fourth Assessment Report (AR4). New Zealand's first nationally determined contribution (NDC1) under the Paris Agreement was also submitted using AR4 metrics.²
- 57 New Zealand's official annual estimate of greenhouse gas emissions and removals (the Inventory) is currently reported using AR4 metrics. However, emissions from 2021 onwards (which will not be published until 2023 in the Inventory) will be required to use AR5 metrics.
- 58 The Commission recommended updating New Zealand's Nationally Determined Contribution and setting New Zealand's first emissions budgets with reference to updated global warming potential data for greenhouse gases.
- 59 If this recommendation is taken, consideration needs to be given to amending NZ ETS and SGG levy reference data to reflect these updated data. The Act requires that the NZ ETS and SGG levy assist New Zealand to meet its international obligations, 2050 target and emissions budgets.³ This requires that the NZ ETS and SGG levy reflect the same reference data as these obligations, budgets, and targets.
- 60 I seek Cabinet's approval to commence work on amendment regulations for NZ ETS and SGG levy reference data to reflect AR5 metrics if a decision is taken to update NDC1 or set first emissions budgets in reference to AR5 data.
- 61 I am not considering any updates to the emissions factors used to report agricultural emissions. An ongoing work programme through the He Waka Eke Noa Primary Sector Climate Action Partnership aims to develop an appropriate pricing mechanism for agricultural emissions by 2025.
- 62 Updating the default emissions factors and other reference data would require changes to the following regulations:
- 62.1 Climate Change (Liquid Fossil Fuels) Regulations 2008
 - 62.2 Climate Change (Other Removal Activities) Regulations 2009
 - 62.3 Climate Change (Stationary Energy and Industrial Processes) Regulations 2009
 - 62.4 Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013
 - 62.5 Climate Change (Unique Emissions Factors) Regulations 2009
 - 62.6 Climate Change (Waste) Regulations 2010.

² Decision 18/CMA.1 Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement – UNFCCCRA.

³ Section 3 of the Act

Updating the electricity allocation factor methodology and value used in industrial allocation

- 63 Emissions intensive and trade-exposed firms carrying out some industrial activities receive allocations of emissions units to manage the risk of emissions leakage⁴. The industrial allocation received is based in part on the indirect NZ ETS costs faced by businesses carrying out these activities, including the indirect cost of the NZ ETS on electricity prices.
- 64 The impact of the NZ ETS on electricity prices is measured by the electricity allocation factor (EAF). The EAF is a component of allocative baselines in the Climate Change (Eligible Industrial Activities) Regulations 2010 that are used in calculating industrial allocation. Approximately one third of allocations to industry are based on the EAF value.⁵
- 65 MfE consulted on revising the methodology calculating and updating the EAF value. My recommended approach, supported by submitters, is to use historical data and a publicly available model of outcomes in the electricity market. A new EAF would be determined at the start of each year, based on a rolling average of results for the previous three years. This EAF would be used in a subsequent process to update allocative baselines, which are used to determine the number of emission units firms in eligible industries are allocated. This option has high levels of accuracy, while having the additional benefit of providing certainty and clarity to recipients of industrial allocation. The work on the review of industrial allocation will address barriers to updating allocative baselines to reflect updates to the EAF.
- 66 Given the importance of the EAF methodology to industry and its fiscal implications, I will report back to Cabinet to seek agreement on implementation arrangements before the end of 2021. No changes to regulations are recommended at this stage.

Exempting redisposal of waste from closed landfills from NZ ETS obligations

- 67 The effects of climate change are increasing the risks to closed landfills from flooding and erosion, creating challenges for ongoing management. This means that waste from closed landfills which are vulnerable to the effects of climate change may need to be excavated and disposed of elsewhere.
- 68 The NZ ETS incorrectly calculates emissions from waste that is redispored. This is because NZ ETS settings assume a composition of waste that has not yet biodegraded. The current reported emissions, and associated costs, from redispored waste are significantly higher than the actual emissions. Those potential costs are important considerations for decisions on where to redispore excavated waste.
- 69 I recommend exempting this class of waste from NZ ETS obligations by amendment to the Climate Change (General Exemptions) Order 2009. This is consistent with the

⁴ Emissions leakage (also known as carbon leakage) can occur if the NZ ETS does not reduce emissions as intended, but exports (or leaks) them overseas. This can result when New Zealand firms lose market share or shift production to other countries with weaker climate policies, in order to reduce compliance costs and remain competitive in an international market. If our emissions were exported to countries without a hard emissions cap in place, leakage would undermine New Zealand's commitment to reduce global emissions.

⁵ In 2019, emission units valued at over \$300 million were allocated to industry.

feedback received during consultation, which highlighted issues of cost and accuracy if other approaches were taken.

- 70 Section 60 of the Act allows the Minister to recommend exemptions providing particular tests are met, including not materially undermining the environmental integrity of the emissions trading scheme and that the costs of making the order do not exceed the benefits. I am satisfied that these tests are met.

Updating the schedule of goods covered by the synthetic greenhouse gas levy

- 71 The Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013 (SGG levy regulations) ensure imports of synthetic greenhouse gases (SGGs) in goods and vehicles incur comparable emission costs to bulk imports of SGGs and domestic manufacturing of SGGs subject to the New Zealand Emissions Trading Scheme (NZ ETS). Using a levy, rather than an NZ ETS obligation, decreases administration and compliance costs for the many importers of SGG-containing goods and motor vehicles.
- 72 There are a small number of minor errors and inconsistencies in the descriptions of some SGG contents and amounts in the SGG levy regulations (described in tables 2 and 3 of appendix one). I recommend correcting these.
- 73 Several unlevied synthetic greenhouse gas blends are likely to be contained in goods being imported into New Zealand (described in table 1 of appendix one). This creates a gap in coverage of the levy, where some goods face an emissions price and some do not. There is a need to improve the SGG goods levy coverage to include these goods.
- 74 I recommend updating the SGG levy coverage to capture the broadest number of imported goods containing SGGs, as well as to address identified inconsistencies and errors. Although consultation feedback on this subject was light, this is consistent with the feedback received.
- 75 Implementing improved coverage of the SGG levy will require a number of steps:
- 75.1 updates to the working tariff document to reflect Cabinet decisions
 - 75.2 subsequent creation of drafting instructions to reflect these updates
 - 75.3 subsequent drafting by PCO, including time for appropriate review.
- 76 Updates to levy coverage and rates cannot come into effect until at least three months after the date of their notification in the Gazette. Due to the complexity of the steps above, extending the coverage of the SGG levy to include new goods containing new SGGs will not be able to be implemented for 1 January 2022. While retrospective application of these NZ ETS regulation amendments is allowed under the Act, this is not practical in this case. Implementation of these changes can occur with effect from 1 January 2023, noting that where imports of goods containing these gases is occurring there will be a delay before they face the same costs as importers of these gases in bulk.

Implementing new regulations for an NZ ETS Auction Monitor

- 77 Auctioning in the NZ ETS commenced in March 2021. Section 30GD of the Act enables the making of regulations for an auction monitor to perform functions including validating auction results and publishing reports on the results of auctions. These functions may also include monitoring conduct in auctions, and assessing the auction system. There is work underway to address broader market governance questions in relation to the NZ ETS, which may have implications for the role of the auction monitor.
- 78 Cabinet has already agreed that the auction monitor must publish a report on the outcome of each auction before the next auction occurs, including decisions on the content of this report [DEV-20-MIN-0047].
- 79 Regulations for an auction monitor can include prescribing their appointment method or process and specifying their functions.
- 80 There are two key considerations in setting regulations for appointing an auction monitor:
- 80.1 whether the appointment method or process is prescribed, including whether there should be guidance on the entity to be appointed
 - 80.2 what functions the monitor should carry out.
- 81 Consultation feedback was consistent on the need for the auction monitor to be independent. Views on whether the auction monitor should be a private entity, an existing public entity, or a new public entity were diverse. I recommend prescribing a method to appoint an auction monitor that achieves this flexibility and allows me to appoint an auction monitor on behalf of the Crown.
- 82 The regulations are also required to prescribe the following two functions of the auction monitor:
- 82.1 validating auction results; and
 - 82.2 publishing reports on the results of auctions.
- 83 Additionally, I recommend specifying in regulations the three auction monitor functions suggested in the Act. Consultation feedback was supportive of this approach, and consistent with the work that led to these listed functions being incorporated into the Act. These functions are:
- 83.1 monitoring the conduct of any auction agents and auction participants
 - 83.2 providing periodic assessments of the auction system and making recommendations for improvements
 - 83.3 calculating additional specified metrics in respect of the auction process and auction results (such as bid volume statistics and relevant aggregate information).

Financial Implications

Updating unit limit and auction price control settings

- 84 The recommended updates to unit limit settings will leave auction volumes unchanged for 2022 and 2023. Updates to unit limit settings thus have no anticipated financial implications for 2022 and 2023, and it is premature to assess financial implications in relation to later years.
- 85 Updating the price floor settings has no direct financial implications. The price floor and trigger price for selling units from the cost containment reserve describe a pathway within which the NZ ETS auction clearing price can move. However, now that a confidential reserve price has also been legislated, and the NZU price on the secondary market is significantly higher than the recommended price floor, the chances of the price floor impacting auction clearing prices is minimal.
- 86 Updating the cost containment reserve trigger (CCR trigger) price has no immediate direct financial implications. The CCR trigger price does not indicate a forecast of the NZU price and raising this does not mean that NZU prices will immediately respond to this increase. However, it allows for the possibility that NZU prices can now increase at auction from \$51.00 up to \$70 in 2022, and from \$55.20 up to \$110 by 2026. This allows for significantly more flexibility in the range of future NZU clearing prices at NZ ETS auctions, which could flow through to secondary market prices.
- 87 Increasing the CCR trigger price has potential financial implications for increasing NZ ETS Crown revenue by allowing for higher clearing prices at auction. It also limits fiscal risks associated with release of the CCR volume. It has potential financial implications of influencing NZU market prices and the impacts on purchasing costs for participants and the flow-on implications of this to consumers including households and businesses.

Updating the electricity allocation factor methodology and value used in industrial allocation

- 88 Updating the methodology for calculating industrial allocation's EAF has no direct financial implications. The implementation of the updated EAF in calculating allocative baselines will impact both the industrial allocation of NZUs transferred to NZ ETS account holders and the amount of NZUs available for auction. I will provide details on those financial impacts when I recommend relevant implementation policy decisions.

Updating the default emissions factors for waste and natural gas fields

- 89 Updating the default emissions factors for natural gas will not have a material financial impact.
- 90 Updating the default emissions factor for waste will decrease NZ ETS revenue (and costs to waste sector participants) by reducing NZ ETS surrender obligations to more accurately reflect actual emissions. This impact is approximately \$11 million per annum.

Other recommended changes

- 91 The other recommended changes have only minor financial implications.

Legislative Implications

- 92 Regulations will be required to implement all recommendations other than the update to the EAF methodology.
- 93 The following regulations and orders will be updated to implement the recommendations:
- 93.1 Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020.
 - 93.2 Climate Change (Eligible Industrial Activities) Regulations 2010
 - 93.3 Climate Change (General Exemptions) Order 2009
 - 93.4 Climate Change (Liquid Fossil Fuels) Regulations 2008
 - 93.5 Climate Change (Other Removal Activities) Regulations 2009
 - 93.6 Climate Change (Stationary Energy and Industrial Processes) Regulations 2009
 - 93.7 Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013
 - 93.8 Climate Change (Unique Emissions Factors) Regulations 2009
 - 93.9 Climate Change (Waste) Regulations 2010.
- 94 Most of the amendment regulations need to be published in the New Zealand Gazette by the end of September 2021 to ensure the updates apply from 1 January 2022. The auction monitor regulations will come into force during early 2022. The amendments made to the SGG levies regulations and to implement AR5 will likely come into force from 1 January 2023.

Te Tiriti o Waitangi Implications

- 95 Māori have a significant stake in climate change action, and a significant interest in the NZ ETS. Māori have a large economy and asset base sitting largely in the primary industries, as well as Treaty-based rights and interests in natural resource use and management.
- 96 I am satisfied under section 3A of the Act, that iwi and Māori interested in NZ ETS regulations have had the opportunity to provide feedback on the changes.
- 97 There are no direct Te Tiriti o Waitangi implications from these changes. Although these changes do not impact emissions costs directly as they do not fundamentally change NZU supply and demand, they create market expectation.

- 98 It is well known that higher emissions costs disproportionately impact lower socio-economic groups, where Māori are over-represented.
- 99 The government is addressing these concerns through supporting policies to accelerate New Zealand's transition to a low emissions economy.

Impact Analysis

Regulatory Impact Statements

- 100 For all changes described in this paper the impact analysis requirements apply. Six corresponding Regulatory Impact Statements have been prepared and are in appendices two to seven to this Cabinet paper.
- 101 The Ministry for the Environment's Regulatory Impact Analysis Panel has reviewed the package of Regulatory Impact Statements supporting these proposals. The Panel confirms that the level of information provided meets the quality assessment criteria.

Climate Implications of Policy Assessment

- 102 The Ministry for the Environment has been consulted and confirm that the CIPA requirements do not apply to these changes as the threshold for significance is not met.

Population Implications

Gender implications

- 103 There are no immediate gender implications arising from this paper.

Disability perspective

- 104 There are no immediate disability implications of the recommendations in this paper.

Human Rights

- 105 The recommendations in this paper are not inconsistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Consultation

- 106 The Ministry for the Environment published a discussion document for public consultation on the proposed changes to regulations in April and May 2021.
- 107 Thirty-eight submissions were received. Submitters ranged from individuals through to large companies and industry groups. Views of submitters are described in each section above.
- 108 This paper was prepared by the Ministry for the Environment. The Treasury, Ministry of Business, Innovation and Employment, Ministry for Primary Industries, Environmental Protection Authority, Ministry of Foreign Affairs and Trade, Te Puni Kōkiri, Māori Crown Relations – Te Arawhiti and New Zealand Customs Service

were consulted in preparation of the paper and all comments are reflected in the paper. The Department of Prime Minister and Cabinet was informed.

Communications

- 109 Announcements about the NZ ETS need to be managed carefully to avoid any inconsistencies and market risks, including sudden NZU price rises in the NZ ETS. In addition, information should not be disseminated in a way that advantages some markets participants over others and compromises NZ ETS investments.
- 110 Communications on the decisions in this paper will be made as part of announcements following Cabinet consideration of the emissions reduction plan, updating the nationally determined contribution, and New Zealand's first set of emissions budgets. Communication of the relationship between auction price control settings, forestry, the emissions reduction plan, and the broader emissions trading scheme will need to be carefully considered.

Proactive Release

- 111 I propose to proactively release this paper on the Ministry for the Environment's website, subject to redactions as appropriate to those under the Official Information Act 1982, as part of the communications plan identified above.

Recommendations

The Minister of Climate Change recommends that the Committee:

Consultation

- 1 **note** that in April and May 2021 the Ministry for the Environment undertook public consultation on proposals to address specific updates to the New Zealand Emissions Trading Scheme
 - 1.1 updating unit limit and auction price control settings
 - 1.2 updating the default emissions factor for waste and natural gas fields
 - 1.3 updating default emissions factors and other reference data to take into account new global warming potentials
 - 1.4 improving the methodology that accounts for the re-disposal of waste in the NZ ETS
 - 1.5 updating the electricity allocation factor methodology and value used in industrial allocation
 - 1.6 updating the schedule of goods covered by the synthetic greenhouse gas levy
 - 1.7 implementing new regulations for an NZ ETS Auction Monitor

Updating unit limit and auction price control settings

- 2 **note** that the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 need to be updated to include 2026 values for unit limit settings and price control settings
- 3 **note** that updates to other years can also occur
- 4 **note** that increases to the price control settings may result in NZU prices continuing to increase
- 5 **note** that a higher NZU price is likely to increase the incentive for forestry (primarily pine trees) as the lowest cost abatement option. Work on the Emissions Reduction Plan is intended to address these implications with decisions to be made later this year
- 6 **note** that further work by Ministry for the Environment and Ministry of Transport on the implications of increased NZU prices on transport revenue and resulting distributional impacts may be required
- 7 **agree** to make updates to Schedule 3 of the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 as detailed in the tables below:

Limits

Column 1	Column 2	Column 3	Column 4
Calendar Year	New Zealand units available by auction (millions)	Approved overseas units used (millions)	Overall limit on units (millions)
2021	unchanged	unchanged	unchanged
2022	unchanged	unchanged	unchanged
2023	unchanged	unchanged	unchanged
2024	25.0	0	32.9
2025	23.3	0	29.6
2026	21.7	0	27.9

Price Control Settings

Column 1	Column 2	Column 3	Column 4
Calendar Year	Minimum price below which units must not be sold by auction (\$)	Trigger price for sale of reserve amount of New Zealand units (\$)	Reserve amount of New Zealand units (millions)
2021	unchanged	unchanged	unchanged
2022	30.00	70.00	unchanged
2023	32.10	78.40	unchanged
2024	34.35	87.81	unchanged
2025	36.75	98.34	6.8
2026	39.32	110.15	6.7

Updating the default emissions factor for waste and natural gas fields

- 8 **note** that emissions factors for waste and natural gas fields need to be updated to align with the most recent waste and natural gas composition data
- 9 **agree** to update the waste default emissions factor from 1.19 to 0.91 in regulation 5(1)(a) of the Climate Change (Waste) Regulations 2010
- 10 **agree** to update the waste default emissions factor used in calculation of a unique emissions factor from 1.19 to 0.91 in regulation 23C(1)(g) of the Climate Change (Unique Emissions Factors) Regulations 2009
- 11 **agree** that Schedule 2 Table 10 of the Climate Change (Stationary Energy and Industrial Processes) Regulations 2009 be updated with emissions factors and classes based on 2020 calendar year data

Updating default emissions factors and other reference data to take into account new global warming potentials

- 12 **note** that Emissions factors and reference data in the NZ ETS and SGG levy use GWP₁₀₀ values from the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC)
- 13 **note** that the IPCC released its Fifth Assessment Report (AR5) in 2014 and updated the GWP₁₀₀ values for all greenhouse gases, including methane and nitrous oxide
- 14 **note** that New Zealand's first nationally determined contribution (NDC1) under the Paris Agreement was also submitted using AR4 reference data
- 15 **note** that consistency between NZ ETS and SGG levy data and New Zealand's international obligations, targets, and emissions budgets is required
- 16 **note** that New Zealand's first emissions budget must be set this year, and an update to NDC1 is also likely to occur this year

17 **agree** to updating NZ ETS and SGG Levy reference data to reflect AR5 GWP₁₀₀ values if a decision is taken to update NDC1 or set first emissions budgets in reference to AR5 reference data.

18 **note** that updating default emissions factors and other reference date will require updates to the following regulations:

18.1 Climate Change (Liquid Fossil Fuels) Regulations 2008

18.2 Climate Change (Other Removal Activities) Regulations 2009

18.3 Climate Change (Stationary Energy and Industrial Processes) Regulations 2009

18.4 Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013

18.5 Climate Change (Unique Emissions Factors) Regulations 2009

18.6 Climate Change (Waste) Regulations 2010

Improving the methodology that accounts for the re-disposal of waste in the NZ ETS

19 **note** that the NZ ETS settings result in calculations of emissions from waste that is redispersed that are inconsistent with actual emissions

20 **note** that this could result in negative environmental outcomes with respect to the management of closed landfills at risk of flooding and erosion

21 **note** that section 60 of the CCRA allows the Minister of Climate Change to recommend the making of an Order in Council exempting a person or class of persons from emissions liabilities under the NZ ETS if certain tests are met

22 **note** that the Minister of Climate Change is satisfied that relevant tests have been met

23 **note** that the Minister of Climate Change has had regard to the required matters under section 60(3) and that the required consultation under section 60(5) of the Act has been undertaken

24 **agree** to make regulations to amend the Climate Change Response (General Exemptions) Order 2009 to provide a full exemption from NZ ETS obligations for redispersing waste from closed landfills

Updating the electricity allocation factor methodology used in industrial allocation

25 **note** that a new methodology for calculating the electricity allocation factor (EAF) used as a component of allocative baselines used for industrial allocation was supported by submitters

26 **note** that any change to the EAF value from implementing this new methodology would require a subsequent regulatory amendment process to incorporate the changed EAF in allocative baselines

27 **invite** the Minister of Climate Change to report back to Cabinet before the end of 2021 with further details on the methodology and options for its implementation

Updating the schedule of goods covered by the synthetic greenhouse gas levy

- 28 **note** that the synthetic greenhouse gas levy fails to include all imported goods containing synthetic greenhouse gases
- 29 **note** that updates to the working tariff document are required to allow for extending the levy coverage
- 30 **agree** to extending the synthetic greenhouse gas levy to cover products containing R407C, R407F, R513A, R448A & R449A, R452A and HFC-365mfc as described in table 1 of appendix one.
- 31 **note** that drafting will not be able to occur in time for these to be in effect until 1 January 2023
- 32 **note** that there are some minor errors and inconsistencies in the descriptions of some SGG contents and amounts in the SGG Levy regulations
- 33 **agree** to update the Climate Change (Synthetic Greenhouse Gas Levies) Regulations 2013 to address these minor errors and inconsistencies as described in tables 2 and 3 of appendix one.

Implementing new regulations for an NZ ETS auction monitor

- 34 **note** that regulations need to be made to enable the appointment of an auction monitor for NZ ETS auctions
- 35 **note** that there is interplay between the auction monitor role and work underway on market governance in the NZ ETS
- 36 **agree** to the making of regulations for an auction monitor under section 30GD of the Act
- 37 **note** that regulations can include prescribed appointment method or process and specified functions
- 38 **agree** to allow the Minister of Climate Change to appoint an auction monitor on behalf of the Crown
- 39 **note** that this will also require that the regulations prescribe that the person appointed be independent of any auction agents and any persons who are likely to be auction participants
- 40 **agree** that the following are included as functions of the auction monitor
- 40.1 validating auction results; and
- 40.2 publishing reports on the results of auctions
- 41 **note** that regulations can specify additional functions of the auction monitor

- 42 **agree** that the regulations made will also include the following specified functions of the auction monitor:
- 42.1 monitoring the conduct of any auction agents and auction participants
 - 42.2 providing periodic assessments of the auction system and making recommendations for improvements
 - 42.3 calculating additional specified metrics in respect of the auction process and auction results (such as bid volume statistics and relevant aggregate information)
- 43 **note** that Cabinet agreed in 2020 [DEV-20-MIN-0047] to the auction monitor publishing a report on the outcome of each auction before the next auction occurs, including detail of the information to be included in that report.
- 44 **agree** to prescribing this previously agreed report content in regulation
- 45 **authorise** the Minister of Climate Change to further clarify and develop policy matters relating to the auction monitor regulations recommended above, in a way not inconsistent with Cabinet's decisions

Drafting instructions

- 46 **authorise** the Minister of Climate Change to further clarify and develop policy matters relating to the amendments recommended above, in a way not inconsistent with Cabinet's decisions
- 47 **invite** the Minister of Climate Change to issue drafting instructions to Parliamentary Counsel Office in order to promulgate amendment regulations by 26 September 2021 for updates described in recommendations for:
- 47.1 updating unit limit and auction price control settings
 - 47.2 updating the default emissions factors for waste and natural gas fields
 - 47.3 improving the methodology that accounts for the re-disposal of waste in the NZ ETS
 - 47.4 updating the schedule of goods covered by the synthetic greenhouse gas levy to address known inconsistencies
- 48 **invite** the Minister of Climate Change to issue drafting instructions to Parliamentary Counsel Office in order to promulgate further amendment regulations at a later date consistent with Cabinet decisions in this paper.

Authorised for lodgement

Hon James Shaw

Minister of Climate Change

Appendices:

Appendix one – Proposed updates to the synthetic greenhouse gas levy

Appendix two – Regulatory impact statement: Updates to NZ ETS unit limits and price control setting regulations

Appendix three – Regulatory impact statement: Updating emissions factors and other NZ ETS and SGG Levy reference data

Appendix four – Regulatory impact statement: Updating the electricity allocation factor used in the NZ ETS

Appendix five – Regulatory impact statement: Improving the methodology that accounts for waste in the NZ ETS

Appendix six – Regulatory impact statement: Updating the Synthetic Greenhouse Gas Levy goods schedule

Appendix seven – Regulatory impact statement: New regulations for an NZ ETS auction monitor