



PROACTIVE RELEASE COVERSHEET

Minister	Minister Shaw	Portfolio	Minister of Climate Change
Name of package	Approval to consult on the annual update to New Zealand Emissions Trading Scheme limit and price control settings for units	Date to be published	30 August 2023

List of documents that have been proactively released

Date	Title	Author
19 August 2022	Approval to consult on the annual update to New Zealand Emissions Trading Scheme limit and price control settings for units	Office of the Minister of Climate Change
29 August 2022	Minute of Decision	Cabinet Office

Information redacted **YES**

Any information redacted in this document is redacted in accordance with the Ministry for the Environment's policy on proactive release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Summary of reasons for redaction

Information has been withheld for the reasons of commercial information, in line with s 9(2)(b)(ii) of the Act.

Policy and Privacy

In-Confidence

Office of the Minister of Climate Change

DEV - Cabinet Economic Development Committee

Approval to consult on the annual update to New Zealand Emissions Trading Scheme limit and price control settings for units

Proposal

- 1 I seek Cabinet approval to publicly consult on updates to New Zealand's Emissions Trading Scheme (NZ ETS) limit and price control settings for units. Amendments to regulations are required so that these unit settings continue to cover five calendar years at all times.

Relation to government priorities

- 2 The Government declared a climate change emergency on 2 December 2020. The Cabinet Business Committee (CBC) agreed 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 the 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].
- 4 The proposals in this paper relate to the Cooperation Agreement between the Labour and Green Parties. Achieving the purpose and goals of the 2019 zero carbon amendments to the Act is an agreed area of cooperation.
- 5 The proposals in this paper relate to action 5.1 of New Zealand's first emissions reduction plan, aligning the NZ ETS settings with emissions budgets.

Executive Summary

- 6 Limits for units describe the volume of new units the Government can provide to the market annually. This limits units available in the ETS, other than units transferred for removal activities (e.g. forestry sequestration), which are unlimited. Price control settings provide the government with a mechanism to help manage unacceptably low or high prices in the NZ ETS.

- 7 Under the Climate Change Response Act 2002 (the Act) updates to unit setting regulations are made annually to ensure that, at all times, they cover each of the next five calendar years. Currently, unit settings are prescribed in regulations until 2026, and do not extend to 2027. I must propose amendment regulations this year to extend NZ ETS unit settings to include 2027 and I must consult on these. The Climate Change Commission (the Commission) provided advice on these settings, and this advice must be considered when making these updates.
- 8 These unit settings affect supply and demand, and indirectly influence secondary market prices. The price of units has a direct impact on the costs of electricity, petrol, and other energy sources. It can also affect land use change decisions for land registered in the NZ ETS whilst removal activities like forestry sequestration remain unlimited. These costs influence emission abatement and investment decisions.

Background

- 9 NZ ETS limit and auction price control settings for units (unit settings) are set in the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 (Auctions and Unit Settings Regulations) for five years in advance.
- 10 This is the second year that these settings will be updated since they were prescribed in regulations in 2020. The first regulations for NZ ETS unit settings entered into force in January 2021, in time for the introduction of NZ ETS auctions. These were updated in 2021 and reflect recommendations from the Commission provided in *Ināia tonu nei: a low emissions future for Aotearoa*.
- 11 Regulation updates for 2022 are being made significantly later than usual and timeframes are very compressed. This is because decisions on emissions budgets were delayed from 31 December 2021 to 31 May 2022. The Commission's advice, that needed to consider those emissions budgets, was subsequently also delayed. Amendment regulations need to be made by 31 December 2022 to meet legislative requirements
- 12 The Act requires unit setting regulations to cover each of the next five calendar years. This requires amendment of the Auctions and Unit Settings Regulations.
- 13 The Act requires the Commission to provide recommendations on these settings. Their advice is one of the matters that must be considered as part of updating these settings.
- 14 The Commission provided its advice to me on Friday 15 July. The advice was tabled in the House and made public on Wednesday 27 July. This advice includes commentary on factors outside of the scope of the required updates to NZ ETS unit settings, but which has an impact on those settings.

Analysis

Updates are required to extend NZ ETS unit settings to include 2027

- 15 Unit settings are prescribed in regulations for 2022-2026. These need to be updated this year to include settings for 2027.

Updates to prior years can also be made

- 16 The Act allows updates to settings for the immediately following two years (2023 and 2024 in this case) in certain circumstances, such as changes to emissions budgets for those years (including the first setting of the budgets) and sale of cost containment reserve units. These circumstances have been met this year.

Summary of options to be consulted on

- 17 The Commission's recommendations on unit settings are presented in the discussion document. Additional options are included for consideration for the following elements which are described in more detail below:
- 17.1 The way in which the surplus component of the stockpile of private held units is managed down
 - 17.2 Auction reserve price
 - 17.3 Cost containment reserve structure (one or two tiers)
 - 17.4 Cost containment reserve trigger prices
 - 17.5 Calculation of the cost containment reserve volume of units.

Limit settings for units

- 18 Unit settings include the following three limits for units:
- 18.1 A limit on the NZUs available by auction, which is comprised of the annual auction volume and the volume available within the cost containment reserve (CCR).
 - 18.2 A limit on approved overseas units.
 - 18.3 An overall limit on units, commonly known as the 'ETS Cap', which is the sum of the annual auction volume, the CCR volume, the projected volume of units allocated to emissions intensive and trade exposed firms, and the volume of approved overseas units).

Calculating limit settings for units uses a well understood methodology

- 19 Limit settings have been calculated using a consistent methodology since there were first set in 2020. The Commission recommends following this well understood methodology for 2022 but with one additional step¹.
- 20 This approach follows the following steps:
- 20.1 Allocate the emissions budgets to NZ ETS and non-NZ ETS sectors
 - 20.2 Make technical adjustments
 - 20.3 Account for free NZU allocation volumes
 - 20.4 Set reduction volume to address unit surplus
 - 20.5 Set approved overseas unit limit
 - 20.6 Calculate the auction volume and assess sensitivity and risks
- 21 There are two key differences between calculations of these limits recommended by the Commission this year and the inputs for these calculations in previous years.

Different options for technical adjustments

- 22 In previous years, the technical adjustments have not been deemed necessary and have been treated as zero. This year, the Commission has identified what appears to be a discrepancy between emissions reported in New Zealand's greenhouse gas inventory and the NZ ETS.
- 23 The discrepancy relates to energy sector emissions for coal and liquid fossil fuels. At this stage, officials have yet to confirm the basis for the discrepancy and, if it is valid, whether addressing it will require adjustments to the inventory and/or NZ ETS technical adjustments to emissions factors or calculations.
- 24 Officials across agencies began work on this when it was first raised by the Commission earlier this year. While the Commission has concluded that there is an issue, and that it does require technical adjustments, officials have yet to complete their analysis and will provide further advice on this matter when policy decisions are sought.

Different options for addressing the unit surplus

- 25 A large quantity of units has accumulated in private accounts. This 'stockpile' of units provides essential liquidity in the market, but it could also dampen the NZU price. Units move in and out of the stockpile as they are:

¹ This first step considers the way in which NZ ETS limits would be in accordance with the nationally determined contribution, emissions budgets and targets, as required by the Act. The Commission concluded that the limits should be set in line with emissions budgets, as steppingstones to the 2050 target and intended domestic contribution to the NDC. This step does not affect the calculated limits in its advice.

- 25.1 Sold by auction
- 25.2 Transferred for industrial allocation
- 25.3 Transferred for removal activities
- 25.4 Surrendered to the Crown by NZ ETS participants to meet their ETS obligations.
- 26 The stockpile could cause significant challenges in meeting emissions budgets. This is because of the current size of the stockpile and large number of ‘surplus’ units that are not held against future surrender liabilities. The stockpile at 1 June 2022 was 144 million units, approximately four times as many units as were surrendered for 2021 emissions.
- 27 The Commission has made an estimate of this liquid component of the stockpile, the portion that is likely to be actively traded in the market, rather than retained for future surrender obligations. This estimate takes into consideration the large portion of the stockpile that is tightly held by NZ ETS participants to meet future obligations to surrender units.
- 28 The Commission recommends adjusting the stockpile to remove this liquid component by 2030.
- 29 In the discussion document two alternatives to the status quo are presented. One is based on removing the entire estimated liquid component of the stockpile by 2030 (the Commission’s recommended option). The other is based on retaining some stockpile with the purpose of ensuring the market contains a level of liquidity to efficiently function.

Alternative approaches affect annual auction volumes

- 30 There is a range of annual auction volumes resulting from choices of different options for addressing the technical adjustments and stockpile reduction steps described immediately above. This is presented in Table 1 below for context. The Commission’s advice is the lower end of this range.

Table 1 – Range of annual auction volumes, which is the prescribed limit on units available to be auctioned less the volume of units in the cost containment reserve. This reflects options presented for stockpile reduction and the Commission’s recommendation on technical adjustments.

Origin of auction volume	Auction volumes (million units)				
	Year				
	2023	2024	2025	2026	2027
Status quo	18.6	18.0	16.5	15.0	Not set
Upper end of options presented	18.9	17.9	15.7	13.6	11.6
Commission advice	16.3	15.6	14.0	12.1	10.3

Impacts of auction volumes

- 31 Auctions are a key source of NZU supply into the NZ ETS. New units transferred for forest sequestration also enter the stockpile of units. Reductions in auction supply requires NZ ETS participants to acquire units from the stockpile to meet their surrender obligations. Any failure to meet surrender obligations results in significant financial penalties.
- 32 Reductions in auction volumes increase the incentive to reduce emissions, and the reduced units supplied into the market affects price. As the supply to the market tightens and sources to procure emissions units for surrender shrink, the interaction between demand and supply in the market will impact price which will then drive further action.

Relation to nationally determined contribution and offshore mitigation

- 33 The Commission has highlighted the need for Government to clarify what role the NZ ETS will have in delivering the offshore mitigation required to meet the NDC. Recommendations currently do not consider how this might be done. Future decisions on this topic are not anticipated to influence decisions this year, but could have a significant impact on unit settings in future.

Price control settings for units

- 34 Price controls provide the government with a mechanism to help manage unacceptably low or high prices in the NZ ETS. This range of prices has implications for the economic impacts of the NZ ETS as well as the contribution of emissions pricing to achieving emissions budgets and targets. All other international emissions trading schemes currently include some price control features.
- 35 Price controls can also enable businesses to develop long-term expectations of their costs of participating in the NZ ETS to better inform their investment decisions and business planning.
- 36 The price control settings consist of:
- 36.1 A minimum price that units can be sold at auction (price floor)
 - 36.2 A cost containment reserve (CCR) trigger price or prices (often referred to as a 'price ceiling')
 - 36.3 CCR unit volume or volumes.

The Commission has provided recommendations on price control settings

- 37 The Commission's recommended price control settings differ significantly from current settings and include much higher and wider auction price control settings for units.
- 38 Price control settings do not directly determine the secondary market price. However they, alongside limit settings, may have a significant influence on

market expectations. On the day that the Commission's advice was released, prices on the NZ ETS secondary market rose eleven percent, from \$73 to \$83. Since then, it has been stable at around \$80².

- 39 This correlation between price control settings and secondary price settings is likely in part due to demand for units not being influenced in the short-term by changes in price.³ NZ ETS participants need to acquire and surrender NZUs to meet NZ ETS obligations. This is well understood by holders of NZUs, who recognise the market power they exert.
- 40 The correlation may also be due to a speculative response to the signal sent by increasing price controls, and an expectation that prices will continue to rise in future, which is influenced through the use of price control settings.
- 41 Failure to surrender NZUs by the deadline results in a financial penalty of three times the price of carbon. This is prescribed in regulations⁴ and used for assessing penalties and calculating synthetic greenhouse gas levy rates. This penalty is unable to be discounted, and is additional to the ongoing requirement to meet the original obligation to surrender units.
- 42 For 2023, this penalty is approximately \$200 per unit, which influences the price that NZ ETS participants are prepared to pay to acquire units needed to meet surrender liabilities.

Consideration of gross and net emissions reductions in the Commission's advice

- 43 The Commission has used modelling of prices required to meet gross emissions reduction targets implied by the ERP to inform its recommendations. This has involved use of the sector sub-targets in the ERP which were set as a tool for monitoring sectoral progress.
- 44 Notably, updates to unit settings are required to be in accordance with net emissions budgets and targets legislated in the Act. The consultation document asks for feedback on the Commission's approach.
- 45 When decisions are made on these settings later this year, the role of the NZ ETS in driving gross emissions reductions will need to be considered. I intend to take a paper to Cabinet in September for a review of the NZ ETS, which will consider this.
- 46 Cabinet's choices on the balance of gross and net emissions reductions in the NZ ETS will have significant implications for unit supply and price settings.

Commission recommendations on price control settings

- 47 Current price settings and Commission recommendations are illustrated in figure 1 below. The Commission has recommended the following changes:

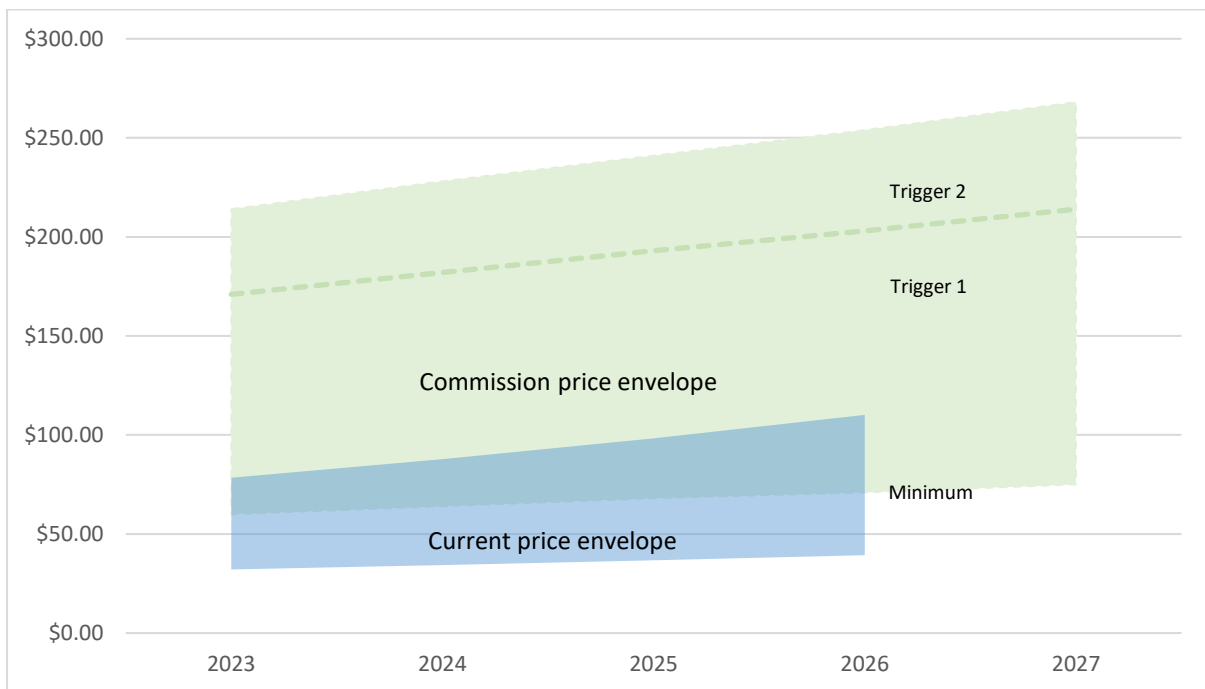
² Secondary market price at close on 16 August was \$83.50

³ This is technically called demand inelasticity, where demand is largely independent of price

⁴ Small forestry obligations face a different penalty for failure to surrender units as a transitional measure.

- 47.1 Increasing the price floor for 2023 from \$32.10 to \$60
- 47.2 Changing the price floor trajectory so that it increases more quickly each year, resulting in a 2027 price floor of \$75, in contrast to current rate and start point which results in a 2027 price floor of \$42
- 47.3 Moving away from the current cost containment reserve trigger price of \$78.40 in 2023, and current trajectory that has this trigger price increasing to \$123 in 2027
- 47.4 Moving from one to two cost containment reserve volumes
- 47.5 Implementing two new trigger prices:
 - 47.5.1 a lower tier CCR trigger price of \$171 for 2023, increasing to \$214 by 2027; and
 - 47.5.2 a higher tier CCR trigger price of \$214, increasing to \$268 in 2027.

Figure 1 - Price control settings for units – Commission and current recommendations



Alternative options for price control settings are also presented in the consultation document

48 The Commission’s recommendations for price control settings are presented as options in the consultation document. Additionally, options to continue with status quo settings adjusted for inflation, and to make inflation only changes for the first two years then move towards the Commission’s recommended settings are presented. Options are assessed against the status quo.

Implications of updates to price control settings

- 49 The price of NZUs has a direct impact on the costs of electricity, petrol, and other energy sources. The Commission leverages work undertaken by the Treasury to present impacts at various price points. Any increase in the prices of goods has a corresponding cost-of-living and inflationary impact.
- 50 Impacts of different NZU prices on electricity and fossil fuel costs are displayed in the table below.

Table 2: Impacts of NZU price on electricity and fossil fuels

electricity	Sector	2021 price (c/kWh)	\$50	\$75	\$100	\$150	\$200	\$250
High impact	Residential	30.6	1.9	2.9	3.8	5.7	7.6	9.5
	Commercial	18.5	1.7	2.5	3.3	5.0	6.6	8.3
	Industrial	17.1	1.6	2.4	3.1	4.7	6.2	7.8
Low impact	Residential	30.6	1.1	1.7	2.2	3.3	4.4	5.5
	Commercial	18.5	1.0	1.5	1.9	2.9	3.8	4.8
	Industrial	17.1	0.9	1.4	1.8	2.7	3.6	4.5

fossil fuels			Emissions price					
	Sector	2021 price	\$50	\$75	\$100	\$150	\$200	\$250
Fossil gas (c/kWh)	Residential	14.7	1.2	1.8	2.3	3.5	4.6	5.8
	Commercial	6.6	1.0	1.5	2.0	3.0	4.0	5.0
	Industrial	3.2	1.0	1.5	2.0	3.0	4.0	5.0
Diesel (c/l)	Residential	150.6	15.4	23.1	30.7	46.1	61.5	76.8
Petrol (c/l)	Commercial	224.7	13.4	20.2	26.9	40.3	53.8	67.2
Coal (c/GJ)	Industrial	10.0	4.5	6.8	9.0	13.6	18.1	22.6

- 51 The price of NZUs also affects the financial viability of emissions intensive and trade exposed industries. This is addressed by industrial allocation; however, at some price point the industrial allocation settings become insufficient to prevent emissions leakage.⁵
- 52 Higher prices affect land-use decisions and incentivise conversion of farmland to forestry for carbon farming while sequestration units remain unlimited. If unconstrained, prices this high are expected to increase afforestation above current levels.
- 53 These impacts are described in the consultation document, and feedback is sought on these impacts.

⁵ s 9(2)(b)(ii)

Impacts on emissions reductions

- 54 Detail on the emissions reductions expected at different price points will be provided in the consultation report-back when I seek policy decisions. This will draw from the Commission's modelling.

Impacts on other work programmes

- 55 There are several work programmes underway that have some relationship with emission unit prices, and therefore decisions on unit settings. These include:
- 55.1 Pricing of agricultural emissions/He Waka Eke Noa
 - 55.2 The eligibility of exotic forestry in the permanent forestry category in the NZ ETS
 - 55.3 A proposed targeted review of the NZ ETS considering the balance of gross and net emissions reductions incentivised by the scheme
 - 55.4 The portfolio of overseas mitigation required to meet New Zealand's NDC
 - 55.5 Implementation of industrial allocation reform decisions
 - 55.6 Implementation and funding of ERP actions and other climate initiatives.
- 56 This will be further described in the consultation report-back.

Timing pressures in delivering these updates

- 57 There are significant timing pressures in meeting the legal requirement to deliver these updates in 2022. Public consultation will need to be limited to four weeks, and Ministerial consultation for the policy decisions and/or legislative cabinet papers will need to be reduced to one week.

Proposal to consult

- 58 I have appended the consultation document, *Proposed changes to New Zealand Emissions Trading Scheme Limit and Price Control Settings for Units 2022*. I propose to consult on the proposals outlined in this paper during September 2022.

Financial Implications

- 59 There are no financial implications of approving consultation. Financial implications of any updates proposed will be provided in the post-consultation report back Cabinet paper seeking policy decisions.
- 60 Amendments to unit and price settings within the NZ ETS will have fiscal implications since the NZ ETS is a source of revenue to the Crown. Given the current relationship between NZ ETS forecast proceeds and the size of the Climate Emergency Response Fund (CERF), unit and price setting changes

are also therefore anticipated to have implications for the CERF. However, what these implications are will depend on several things including which settings are ultimately agreed upon, how the market reacts.

Legislative Implications

- 61 Regulatory amendments will be required to implement the proposals. Drafting approval for these would be sought at the time of policy decisions in October 2022. The Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2022 will need to be amended to update the prescribed unit settings.

Impact Analysis

Regulatory Impact Statement

- 62 The Ministry for the Environment's Regulatory Impact Assessment Panel has reviewed the Consultation document: Proposed changes to New Zealand Emissions Trading Scheme limit and price control settings for units 2022. The assessment is made on the basis of the consultation document being an interim RIS. The Panel confirms that the level of information provided meets the quality assessment criteria for the consultation stage of the process. Consultation should draw out further information on the proposals for change. This will inform further policy development and support the later delivery of a Regulatory Impact Assessment to inform subsequent decisions.

Climate Implications of Policy Assessment

- 63 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirm that the CIPA requirements do not apply as there is no decision at this stage with direct emissions impacts. This proposal is an annual update to the unit limits and price control settings for auctions in the NZ ETS, which will support the effectiveness of the ETS but will not have a specific direct impact on emissions.

Population Implications

- 64 The decision to undertake public consultation involves no population implications. Population implications of any updates proposed after consultation will be provided in the post-consultation report back Cabinet paper seeking policy decisions.

Te Tiriti o Waitangi Implications

- 65 Māori have a significant interest in climate change action and the NZ ETS, particularly in the forestry sector. There are no direct Te Tiriti o Waitangi implications from consulting on unit settings. Impacts of recommended proposals will be described in the consultation report-back.

Human Rights

- 66 There are no inconsistencies between these proposals and the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993.

Next steps

- 67 After analysing submissions, I will seek Cabinet agreement to amend the Auctions and Unit Settings regulations and issue drafting instructions to the Parliamentary Counsel Office in November 2022.
- 68 The amendment regulations need to be published in the New Zealand Gazette no later than the end of December 2022. This is to align with the statutory requirement that NZ ETS unit settings at all times prescribe unit settings for each of the next five calendar years.

Consultation

- 69 The Treasury, Ministry of Foreign Affairs and Trade, Ministry for Primary Industries, Ministry for Business, Innovation and Employment, Environmental Protection Authority, the New Zealand Customs Service, and the Ministry of Transport were consulted on this paper. The Department of Prime Minister and Cabinet and Te Puni Kōkiri were informed.
- 70 Where feedback has been received, it has been considered and incorporated as appropriate.

Communications

- 71 Notification of consultation will be sent to NZ ETS stakeholders the day before release. It will then be published on the Ministry's website prior to market opening the following day.

Proactive Release

- 72 I propose to proactively release this paper on the Ministry's website, subject to redactions as appropriate under the Official Information Act 1982, once consultation has begun.

Recommendations

The Minister of Climate Change recommends that the Committee:

- 1 **note** that amendments need to be made in 2022 to update NZ ETS limit and price control settings and extend them to 2027
- 2 **note** that timeframes are tight as amendments to the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 are required to be made by 31 December
- 3 **note** that the Climate Change Commission has provided advice on unit settings

- 4 **note** that the advice from the Commission must be considered when making updates to unit settings

Limit settings for units

- 5 **note** that the impacts of the volume of privately owned units and required secondary market liquidity are key considerations in setting these limits and auction volumes as they relate to the accordence of these settings with the NDC, emissions budgets and 2050 target, and the proper functioning of the ETS

Price control settings for units

- 6 **note** that price controls provide the government with a mechanism to help manage unacceptably low or high prices in the NZ ETS
- 7 **note** that price controls can also enable businesses to develop long-term expectations of their costs of participating in the NZ ETS to better inform their investment decisions and business planning

Impacts of unit prices

- 8 **note** that NZU prices directly affect electricity, petrol, and natural gas prices. At current prices of \$75, this is estimated to have the following impacts:
 - 8.1 1.7-2.9c/kWh on residential electricity (approximately ten percent of cost)
 - 8.2 23c/l for diesel
 - 8.3 20c/l for petrol
- 9 **note** that NZU prices also affect the ability of industrial allocation to prevent emissions leakage – the risk of New Zealand companies losing market share or shifting overseas to avoid emissions pricing
- 10 **note** that NZU prices affect land-use decisions, including afforestation
- 11 **note** that decisions on the balance of gross- and net-emissions reductions, and forestry settings within the NZ ETS will have significant implications for the impacts/implications of these settings

Content of Climate Change Commission advice

- 12 **note** that the Commission's advice included commentary on factors outside of the scope of the required updates to NZ ETS unit settings
- 13 **note** that the Commission has highlighted the prioritisation of gross emissions reductions to meet emissions budgets and 2050 emissions targets
- 14 **note** that the Commission describes an emerging risk that forestry in the NZ ETS will displace gross emissions reductions

- 15 **note** that the Commission concludes that NZ ETS settings are not the appropriate tool for managing distributional and other equity considerations in the just transition
- 16 **note** that the Commission's recommendations on price control settings drew heavily on the prices needed to deliver gross emissions reductions that reflect the aggregate of sector sub-targets referenced in table one of the ERP
- 17 **note** I intend to bring a paper to Cabinet later this year seeking approval to the scope and process for a targeted review of the NZ ETS to strengthen incentives for gross emissions reduction

Consultation

- 18 **agree** to release the attached discussion document, *Proposed changes to New Zealand Emissions Trading Scheme Limit and Price Control Settings for Units 2022*, to support consultation on updates to these settings
- 19 **agree** that I can make minor design, editorial and technical changes to the consultation document as needed prior to its release
- 20 **note** that I will seek Cabinet approval for making amendment regulations in November 2022

Authorised for lodgement

Hon James Shaw

Minister of Climate Change

Appendix: Discussion document - *Proposed changes to New Zealand Emissions Trading Scheme Limit and Price Control Settings for Units 2022*