In Confidence

Commercially sensitive

Office of the Minister for Climate Change

Chair

Cabinet Environment, Energy and Climate Committee

New Zealand Emissions Trading Scheme settings regulations

Proposal

1. This paper seeks your agreement to set regulations under the Climate Change Response Act 2002 as amended by the Climate Change Response (Emissions Trading Reform) Amendment Bill (the Bill). The regulations relate to setting a provisional emissions budget, New Zealand emissions unit (NZU) auction supply volumes, and price controls within the New Zealand Emissions Trading Scheme (NZ ETS).

2. I seek your approval for issuing the associated drafting instructions to the Parliamentary Counsel Office.

Executive summary

3. This Cabinet has agreed to improve the NZ ETS through amendments to the Climate Change Response Act 2002 (the Act) [CAB-17-MIN-0547.01 refers]. The Climate Change (Emissions Trading Reform) Amendment Bill 2019 was introduced to the House on 24 October 2019.

4. To operationalise the Bill, regulations on ETS settings need to be set. These regulations will specify the finer operational details and quantitative settings necessary for creating and implementing the cap on emissions and auctioning units.

5. Public consultation on a provisional emissions budget and NZ ETS settings regulations was undertaken from 20 December 2019 to 28 February 2020. Feedback from submitters has been considered in the analysis of the provisional emissions budget and settings regulations proposals in this paper.

6. Since the Bill was introduced to the House and the NZ ETS settings regulations were consulted on, it has become apparent that the COVID-19 pandemic will have significant impacts on the New Zealand economy. Although this is a time of economic uncertainty, I consider that this year remains the best time to make these NZ ETS setting regulations. This is because:

6.1. The ETS unit price will drop to meet reduced demand, so introducing these regulations on time won't cause any additional cost during the COVID-19 crisis, and

6.2. In addition, regulations and market mechanisms take time to get up and running, so deferring this set of decisions will cause delays two years from now, by which time we anticipate the worst of the COVID-19 crisis to have passed.

7. Despite the changed circumstances presented by COVID-19, officials have advised me that the NZ ETS settings that were proposed in the consultation document released in December 2019 [CAB-19-MIN-0688], are still broadly appropriate, and will not place an additional stress upon the economy.

8. The proposals in this paper are intended to determine the provisional emissions budget, and set regulations for the NZ ETS unit supply limits and price control settings for 2021-25. This paper seeks your agreement to:

8.1. set a total provisional emissions budget of 354 Mt CO_2-e for 2021-25

8.2. instruct the Parliamentary Counsel Office to draft new regulations for prescribing the limits on emissions covered by the NZ ETS in table 1

8.3. instruct the Parliamentary Counsel Office to draft new regulations for prescribing the price control settings in table 2

Table 1: Limits of emissions (in millions of New Zealand emission units (NZUs))

	2021	2022	2023	2024	2025	Total
Units to be auctioned	19.0	19.3	18.6	17.2	15.5	89.6
Units to be withheld from auctioning to reduce stockpile	5.4	5.4	5.4	5.4	5.4	27.0
Units released by other means	8.4	8.2	8.9	8.7	8.7	42.9
Approved overseas units	0	0	0	0	0	0
Combined volume limit	32.8	32.9	32.9	31.3	29.6	159.5

Table 2: Price control settings

	2021	2022	2023	2024	2025
Minimum sale price at auction ($NZD)[1]	20.00	20.40	20.81	21.22	21.65
Trigger price for sale of units from the cost containment reserve ($NZD)[2]	50.00	51.00	52.02	53.06	54.12
Cost containment reserve volume (NZU millions)	7.0	7.0	7.0	7.0	6.9

9. This paper also seeks your agreement to instruct the Parliamentary Counsel Office to draft new regulations for prescribing quarterly auctions of NZUs

[1] The annual increase is two percent until 2025, based on forecast annual inflation
[2] The annual increase is two percent until 2025, based on forecast annual inflation

including on the following dates in 2021: 17 March, 23 June, 1 September and 1 December.

10. Regulations for the NZ ETS proposed settings must be in place by the end of 2020 to ensure that auctioning can begin in 2021 and that action on capping emissions within the NZ ETS is not delayed.

11. Decisions on NZ ETS settings will then be announced annually by the Government and apply to the upcoming five years, through the 'coordinated decision making process' the Bill provides for. In this process, the NZ ETS settings for the first two years are fixed unless there are special circumstances that require a change. NZ ETS settings for the three years following are set and announced, but can be adjusted.

Background

12. Cabinet decided in December 2018 to amend the Act to establish a NZ ETS unit supply framework. Cabinet also agreed that the settings for the NZ ETS would be set in regulations [CAB-18-MIN-0606.01 refers].

13. The Emissions Trading Reform Bill that proposed the amendments to the Act was introduced to the House on 24 October 2019, and has been referred to the Environment Select Committee for consideration.

14. The Emissions Trading Reform Bill provides the Government with the ability to set limits on emissions units within the NZ ETS by limiting the supply of NZUs released onto the market through auctioning and approved overseas units.

15. The Emissions Trading Reform Bill also introduces the ability to apply price controls to auctioned NZUs. This is achieved using a cost containment reserve and auction reserve price.

16. Cabinet agreed to consultation from 20 December 2019 to 28 February 2020 on a proposed provisional emissions budget and NZ ETS settings [CAB-19-MIN-0688].

17. The NZ ETS settings consultation document sought views on a provisional emissions budget for the period 2021-25, which would be the forerunner of the budgets set under the Climate Change Response (Zero Carbon) Amendment Act (the Zero Carbon Act). The provisional emissions budget will be used to determine the supply of NZUs available for the Government to auction annually under the reformed scheme.

18. The consultation document also sought feedback on price control settings. This included a new price ceiling mechanism called a cost containment reserve and an auction reserve price. The cost containment reserve works as a backstop to reduce the risk of unacceptably high prices by releasing an additional supply of units when a specified price trigger is reached at auction. The trigger price should be set at a level above what NZU prices are expected to reach, and therefore should be used rarely, if at all, and not be the key driver for the market price.

19. The consultation document also proposed a transitional arrangement to bridge between current policies and the NZ ETS unit supply and price control settings. I proposed to allow NZ ETS participants to meet their obligations arising from 2020 activities by using the fixed price option, which I proposed to increase from $25 to $35 per NZU for activities over 2020, even if auctioning has begun. A decision about this proposed change to the fixed price option is being sought in a separate Cabinet paper (Supplementary Order Paper to amend the Emissions Trading Reform Bill) as this decision will require a change to the Climate Change Response Act 2002.

20. The consultation received 133 written submissions. Submitters generally supported setting a provisional emissions budget to help New Zealand meet its emission reduction targets, as well as the principle of the unit supply and price control settings. However, opinions on the specific provisional emissions budget volume and proposed price control levels differed between submitters. Twice as many submitters thought the provisional emissions budget isn't sufficient than those who thought it is too ambitious. Feedback from submitters has been considered in analysis for the proposals in this paper, and is summarised in Appendix 1.

The provisional emissions budget

21. The Zero Carbon Act requires the setting of emissions budgets from 2021 in order to assist the meeting of the 2050 target. The provisional emissions budget provides an initial pathway in order to begin making decisions on unit supply limits and price control settings to enable auctioning to begin in 2021, prior to the setting of the formal emissions budgets under the Act. The provisional emissions budget is the total volume we aim to limit New Zealand's net emissions to over the period of 2021-25.

22. The Climate Change Commission established by the Zero Carbon Act (the Commission) will recommend future emissions budgets, which the Minister then sets and notifies in the New Zealand Gazette. The Commission will recommend the first three emissions budgets in 2021 for the periods 2022-2025, 2026-2030 and 2031-2035. This means the provisional emissions budget will be superseded by the emissions budget for 2022-25 when it is adopted by the Government, by 31 December 2021.

23. Although the provisional budget settings project out to 2025 in order to provide regulatory predictability to business, colleagues should be aware these settings may change in 18 months when the provisional budget is superseded by the formal emissions budget recommended by the Commission.

24. Cabinet agreed to consult on a proposed provisional emissions budget of 354 Mt CO_2-e for the period 2021-25, based on a flat volume from 2020 projections to 2022 and then straight-line reductions towards the Zero Carbon Act 2050 target. The emissions projections used within the consultation were based on draft projections available in late 2019 which forecast a total volume of 368 Mt CO_2-e for the period 2021-25. Based on these draft projections, the proposed provisional emissions budget consulted on required an additional 13 Mt CO_2-e of emissions reductions or sequestration beyond current forecasts.

25. Submitters generally supported the proposed provisional emissions budget straight-line emissions reduction pathway, including the majority of the electricity sector and some business and industry groups. However, views regarding the total provisional emissions budget volume varied according to interest group: many individuals, NGOs, and other organisations considered the proposed provisional emissions budget was not sufficiently ambitious and did not match up with our nationally determined contribution under the Paris Agreement. In contrast, businesses and industry groups believed that the proposed provisional emissions budget would be too ambitious and expressed concerns about the economic impacts on households and businesses.

26. Officials have conducted analysis on what the potential impacts of COVID-19 may be on the national levels of emissions in future years. All scenarios saw a significant drop in emissions in 2020, and somewhat of a recovery in 2021, but all remaining lower than previous Fourth Biennial Report (BR4) projections.

27. I propose keeping the same volume for the provisional emissions budget as originally consulted on (354 Mt CO_2-e), but with minor adjustments to the annual volumes within the overall period to reflect the likelihood that emissions will be reduced in the short-term based on the impacts of COVID-19, as shown in Table 3. This updated distribution of volume reduces the possibility of oversupplying the market through auctions in the early part of the period.

Table 3: Original vs revised provisional emissions budget proposal (Mt CO_2-e)

	2021	**2022**	**2023**	**2024**	**2025**	**Total**
Originally proposed budget	73.1	73.1	71.2	69.4	67.6	**354.4**
Revised budget proposal	71.8	71.8	71.8	70.0	68.1	**353.6**

28. Keeping the overall volume of the provisional emissions budget the same as originally proposed (and not, for example, increasing it based on economic concerns), is appropriate for a number of reasons:

    28.1. Current reforms to the NZ ETS allow the NZU price to adjust as the outlook for the economy and emissions evolves. For example, if economic conditions were to worsen then (all else being equal) the demand for units will be lower and unit prices would also decline

    28.2. The scheme provides a number of important safety valves to avoid significant unacceptable impacts on NZU prices and/or operation of the market.

29. This recommended provisional emissions budget requires an additional 15 Mt CO_2-e of emissions reductions or sequestration beyond the current forecasts in recent reporting to the UNFCCC.[3] However, if COVID-19 substantially reduces emissions then this demand for additional abatement will be lower. How much

[3] Different level of abatement from specified in the original consultation document despite the same overall volume is due to an updated emissions forecast with minor changes.

lower is difficult to predict, and depends on the severity and duration of the downturn.

30. This provisional emissions budget is consistent with our long-term emissions reduction targets, because it is based on a straight-line trajectory from current levels towards the 2050 point-year target set under the Zero Carbon Act. Making emissions reductions more slowly than this straight-line approach would risk needing a more abrupt and potentially disruptive transition in the future. More ambitious targets in the short-term would be challenging to achieve given the limits to the speed with which physical assets, such as vehicles and factory equipment, can be replaced in a short time.

31. Although consistent with our long-term Zero Carbon Act target, this provisional emissions budget does not put us on track to domestically meet our Nationally Determined Contribution (NDC), under the Paris Agreement, to reduce our greenhouse gas emissions to 30 per cent below 2005 gross emissions levels by 2030. This mismatch exists because the NDC was proposed with the expectation that access to low-cost international carbon markets would be a major part of the mix of options to meet the target.

32. Officials have advised me that meeting the NDC entirely with domestic abatement would impose significant costs on the NZ economy. This concern is compounded by the fact emissions have not fallen in the five years since the NDC was developed. As a result, our starting point for reductions in the 2021-30 period is higher than if cuts in emissions had been achieved since 2015. Despite this challenge, the NDC could still be met domestically if emissions reductions were to pick up significantly in the second half of the decade.

Proposals for unit supply regulations

33. The Emissions Trading Reform Bill gives the Government the ability to set annual limits on the supply of units into the NZ ETS through a coordinated decision-making process. In this process, the NZ ETS limits and price control settings for the first two years are fixed unless there are special circumstances that require a change. NZ ETS settings for the three years following are set and announced, but can be adjusted.

Regulations for setting the overall limit on units in NZ ETS (the cap)

34. The overall volume limit originally consulted on accounted for forestry removals outside of the NZ ETS. Officials have revised the methodology to remove forestry emissions outside of the NZ ETS from the overall volume limit. Along with emissions projections from sectors not covered by the NZ ETS, this removes 194 Mt CO_2-e from the provisional emissions budget. This leaves a total of 160 Mt CO_2-e remaining within the NZ ETS cap.

35. I propose that this overall unit supply limit of 160 million NZUs is allocated as shown in table 4:

Table 4: Annual cap on emissions in the NZ ETS

	2021	2022	2023	2024	2025	Total
Unit supply limit (millions of NZUs)	32.8	32.9	32.9	31.3	29.6	**159.5**

Regulations for a limit on overseas units used

36. Access to international carbon markets is likely to play some role in helping New Zealand meet its Nationally Determined Contribution (NDC) under the Paris Agreement over the 2021-30 period. Currently no decisions have been made regarding New Zealand's access to these markets. This is why the limit of overseas units able to be used within the NZ ETS that was consulted on was zero.

37. Opinions on the international unit limit varied among submitters, with business/industry groups tending to support the ability to use high integrity international units and individuals/NGOs/community groups tending to be opposed to the NZ ETS being open to offshore units.

38. I continue to recommend an international unit limit of zero for the years 2021, 2022, 2023, 2024, 2025 under s20GB(2)(a)(ii) to be inserted by the Bill, because no decisions have been made regarding New Zealand's access to international carbon markets.

39. The five-year rolling cap requires this limit on international units to be adjusted annually as part of the coordinated decision-making process. The annual update to the NZ ETS settings in September 2021 can reflect any advancements in access to international markets.

Regulations for a limit on NZUs available by other means

40. The forecast volume of units that will be freely allocated through industrial allocation and negotiated greenhouse gas agreements needs to be removed from the volume of NZUs available to be auctioned within the NZ ETS cap.

41. The forecast volume put forward in the consultation was 44 million NZUs to be freely allocated within 2021-25. The forecast impacts of COVID-19 have led to only minor changes in this projection.

42. The total volume that I recommend be removed from auction based on free allocation is now 43 million NZUs for the period 2021-2025.

43. The forecast supply from industrial allocation may change as a result of the review of industrial allocation policy, updates to underlying parameters such as the electricity allocation factor, and from increases or decreases to eligible industrial output. Those policy changes will be included in the calculations for future annual decisions on NZ ETS settings.

Regulations for limits on NZUs available by auction

44. There is currently a large supply of over 130 million units already available within participant accounts within the NZ ETS.

45. In order to reduce this ‘stockpile’, it was proposed in the consultation document that the number of NZUs that go onto the NZ ETS market via auctioning would be reduced, so that participants would have to buy a proportion of units required to meet surrender obligations from the stockpile held by participants. The volume originally proposed to be removed from auctioning was 27 million units over the five-year period, based on an estimation of half of the units that were not being held in order to meet surrender obligations.

46. The majority of submitters who commented on the NZ ETS unit stockpile proposal reduction agreed with the general approach. This support came from a range of submitters including electricity companies, forestry groups, NGOs, agricultural groups, and individuals.

47. I continue to propose the stockpile reduction of 27 million units as I consider that this remains an appropriate way to reduce the stockpile volume in a managed and predictable manner. This moderate volume will allow testing of the secondary market and their willingness to sell banked units at prices compared to the NZUs sold in government held auctions. A better understanding of this will help when reviewing and updating future NZU supply volumes.

48. With the minor adjustments proposed above, I recommend a limit of 89.6 million units available by auction, for the period 2021-25, as shown in table 5:

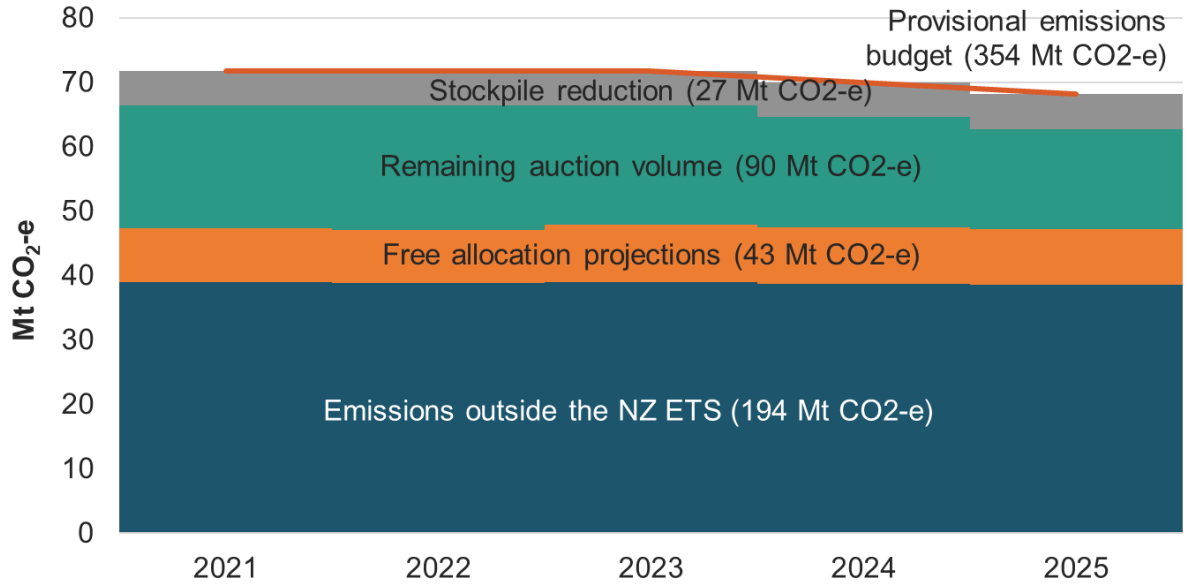
Table 5: Annual auction volumes (Millions of NZUs)

	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**Total**
Proposed auction volume	0.0	19.0	19.3	18.6	17.2	15.5	**89.6**

49. The proposed auction volume has increased from the original volume proposed in consultation of 82m auction units. This is mainly from removing the forestry emissions and removals outside of the NZ ETS from the NZ ETS cap. There have also been minor updates to the forecast free allocation volumes and the spread of the units across the five year period, largely based on the slight adjustments in the distribution of the provisional emissions budget when compared to the proposal that was consulted on. There will not be an auction in 2020.

50. Figure 1 illustrates how decisions on the provisional emissions budget, stockpile reduction and units from other sources combined to determine the available auction volume.

Figure 1: Auction volume remaining



51. Auctioning NZUs will result in cash paid to the Government, and I am actively considering proposals for the return of this cash to all New Zealanders.

Proposals for price control regulations

52. Price controls provide the government with a mechanism to help manage unacceptably low or high prices in the NZ ETS, and limit the risk of prices falling outside of a range needed to meet an emissions budget. All other international emissions trading schemes currently include some price control features.

53. Price controls also provide a secondary function by signalling to the market expectations of future emissions prices. Price controls 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.

Minimum auction reserve price

54. Cabinet agreed to consult on the introduction of a price floor set at $20 over the 2021-25 period, which would take the form of a minimum reserve price at auction. This means the government would not sell units below this price, although it would not prevent the secondary market from trading below this value. The auction reserve price is now a particularly important safety valve given the negative economic impacts of the COVID-19 pandemic, and a key source of financial support for foresters and new forest planters and investors in low-emissions infrastructure.

55. A range of submitters supported the proposal, including business groups and foresters. Submitters who advocated for a higher auction reserve price generally supported increased ambition and consequently also argued the auction reserve price should increase over time.

56. I recommend a minimum auction reserve price of $20 for 2021 that then rises by two percent, based on forecast annual inflation 6,[4] as shown in table 6:

Table 6: Minimum auction reserve price

	2021	2022	2023	2024	2025
Minimum auction reserve price ($NZD)	20.00	20.40	20.81	21.22	21.65

57. The adjustment for forecast inflation better aligns with consultation feedback, and also helps to fulfil the requirements regarding the additional matters that I must consider in relation to price control settings (new s30GC(6)(c) to be inserted by the Emissions Trading Reform Bill). This section requires me to consider factors such as inflation when setting price control settings for units.

The cost containment reserve trigger price

58. Cabinet also agreed to consult on a cost containment reserve trigger price of $50 for 2021-25. The cost containment reserve will release additional NZUs into the market if the price trigger is hit at auction, to increase supply and reduce pressure on price.

59. While the price trigger is the upper extreme of expected and acceptable prices in the NZ ETS, it will not be the key driver for the market price, which will be ultimately determined by unit supply and demand. It is a backstop mechanism and does not represent a forecast for NZU prices.

60. Most submitters, such as electricity companies, foresters, consultancies, community groups and individuals, held strong opinions that $50 was too low. Concerns were raised that the $50 ceiling price trigger would dampen NZU prices relative to international trends, and could risk muting domestic emission reduction projects. Some of these submitters also specified that the price ceiling trigger should rise each year, rather than be a flat price for the period. The Climate Change Commission expressed concern that the proposed flat price of $50 does not reflect the matters the Minister must consider in the Emissions Trading Reform Bill when recommending price controls, highlighting the lack of adjustment for inflation.

61. Submitters who believed the $50 trigger price was too high mistakenly saw it as a price forecast. They were concerned such an increase in emissions price could constrain the ability of companies from investing in the transition to lower emissions, or impose a competitive disadvantage.

62. Officials, in the attached regulatory impact analysis, recommend the auction reserve price floor and the cost containment reserve trigger price rise by 5 per cent plus inflation annually, observing this is likely to better allocate costs and to match our long-term emissions targets, and this remains my preference. When approving the consultation document, Cabinet chose instead to wait for further

[4] I have used forecast CPI inflation from Treasury based on the Half Year Economic and Fiscal Update published in December 2019, prior to the onset of COVID-19. The forecast is 2 percent for 2022-2024, with 2025 TBC. While the COVID-19 economic scenarios recently developed by Treasury suggest inflation rates lower than previously forecast, I have not selected inflation rates from one of these scenarios as it is unclear which would be most appropriate to use at this stage.

analysis and recommendations from the Climate Change Commission before making any decision on increases to the cost containment mechanisms. This recommendation will come when the Commission provides advice on the formal emissions budget.

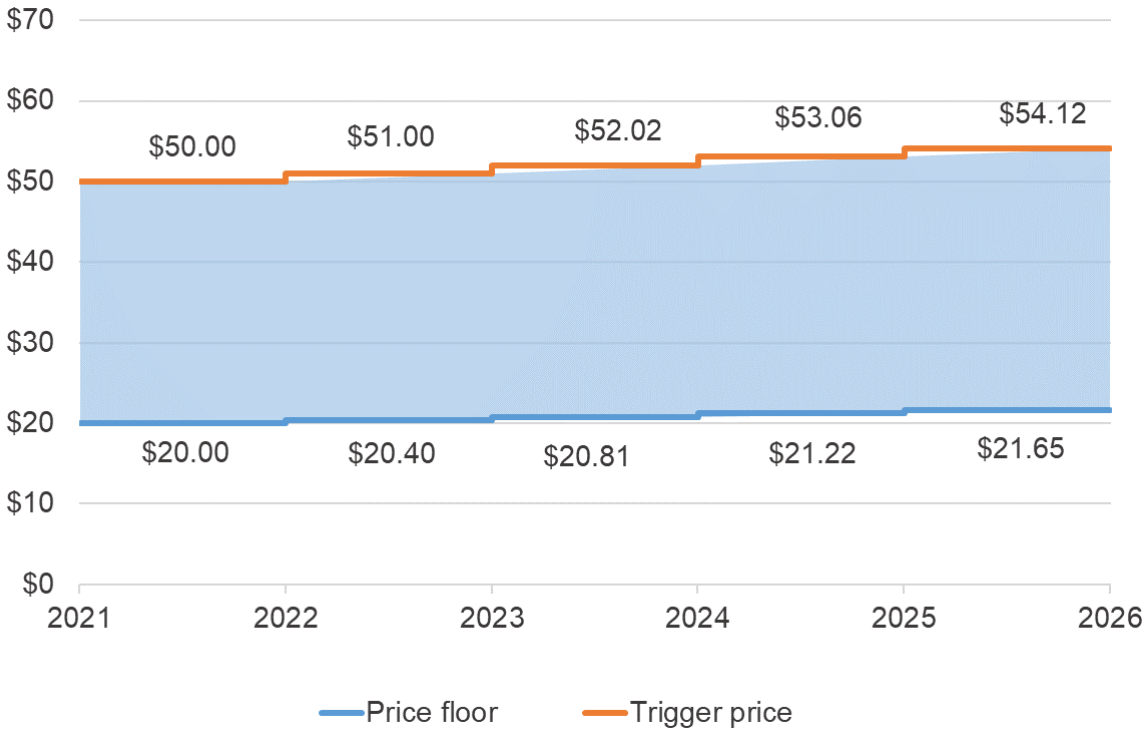
63. I recommend that a single trigger price of $50 remains for 2021, but increases annually by two percent, based on forecast annual inflation. This results in the cost containment reserve trigger prices in table 7.

Table 7: Cost containment reserve trigger prices

	2021	2022	2023	2024	2025
Cost containment reserve trigger price ($NZD)	50.00	51.00	52.02	53.06	54.12

64. My recommendations for the auction reserve price floor and cost containment reserve trigger price are depicted in Figure 2.

Figure 2: Proposed NZU auction price control regulations



65. I have considered the case for multiple price triggers. A multiple trigger price setting might, for example, include a first trigger price of $50 and another at $80, both with cost containment reserve volumes to be released. The first tranche of volume would be sufficiently small that it did not introduce a fiscal cost for the Government, achieved by the reserve being no larger in volume than the stockpile reduction volume. An additional quantity could then be available at $80. Aside from the fiscal impact, this graduation would reduce the risk of market manipulation and potential difficulty for participants to purchase emission units due to possible reluctance for sellers to enter the market.

66. The Ministry for the Environment procured expert economic advice on the potential market implications of releasing different reserve quantities at different prices. The report concluded that the stockpile serves as a potential cost containment reserve in its own right, as price rises will incentivise the release of a significant volume of additional units, helping to avoid any sudden price spikes. However, the report also recommended that a multiple tranche cost containment reserve with the first tranche volume no larger than the stockpile removal volume would be a sensible approach. This approach could limit fiscal risks, whilst still providing an initial level of supply

67. Although multiple tranches may be a sensible option to consider in the future, I consider a single trigger price and reserve volume is the most appropriate choice for these initial settings regulations. This is due to the simplicity and clearer market signal that it provides, particularly in these times of significant uncertainty. The majority of submitters on the use of single or multiple trigger prices supported a single price trigger, which was considered the simplest way to activate the cost containment reserve and send a clearer signal to the market of the maximum emissions prices.

68. The risks associated with reaching the trigger price and having to release the reserve are initially small due to the large stockpile. The Bill allows for a review of the settings if the reserve is triggered. If the trigger is reached and the volume released is deemed insufficient to dampen prices, additional trigger prices and cost containment reserve volume will be able to be considered.

69. The case for multiple price triggers will grow as the stockpile reduces and I expect the Commission will make relevant recommendations in their advice on NZ ETS settings in 2022, after further analysis around the impact of the stockpile on the NZ ETS market is able to take place.

The cost containment reserve volume

70. The effectiveness of the cost containment reserve in dampening emission unit prices is dependent on the volume of units allowed for release, and the impact this additional supply has on the required demand.

71. Cabinet agreed to consult on a quantity of NZUs available in the cost containment reserve based on 90 percent of the difference between forecast net emissions covered by the NZ ETS and the quantity of NZUs supplied into the scheme through free allocation and auction.

72. Although submitters had varying opinions on the cost containment reserve policy, none commented on the volumes that were proposed in the consultation document. Slightly less than half of submitters supported the proposal, believing that releasing the cost containment reserve volume is an appropriate way to manage unexpectedly high NZU prices, and that 90 percent of the difference between forecast net emissions and the proposed unit supply seemed a suitable method of determining the volume.

73. A majority of submitters did not support the proposal for a range of reasons, including that releasing a reserve threatens the environmental integrity of the

scheme (i.e. the cap should be tighter) or there will be a restriction on the supply of units in the reserve (i.e the cap should be looser).

74. Since consultation, officials have recommended an update to the originally proposed methodology. This was based on analysis that suggested a volume based on projected emissions is subject to considerable uncertainty, and the fact that the methodology resulted in the reserve volume increasing over time, rather than decreasing in line with the NZ ETS cap.

75. I recommend a revised methodology in which the total reserve volume is equal to the quantity of units withheld from auction for the purpose of reducing the stockpile (5.4m each year), plus an additional volume that is five percent of the NZ ETS cap. This will place more consideration on the interrelation between the stockpile and the cost containment reserve. The additional 5 percent volume to be released above the cap provides an additional safety valve for if the total units set within the NZ ETS cap is not sufficient to supply the market with units at an acceptable price.

76. The proportion of the volume released from the units withheld from the stockpile will not be required to be 'backed' with equivalent emissions reductions, because it falls under the cap of units allowed within NZ ETS. The additional 5 percent volume would have to be met with equivalent emissions reductions if it is purchased when the reserve is released.

77. Based on this methodology, and the requirements of section 30GC, I recommend the total volume of units held within the cost containment reserve shown in Table 8:

Table 8: Reserve volume of NZUs to be released if a trigger price is reached (millions of NZUs)

	2021	2022	2023	2024	2025	Total
Stockpile reduction	5.4	5.4	5.4	5.4	5.4	27.0
5 percent of total NZ ETS cap	1.6	1.6	1.6	1.6	1.5	8.0
Total reserve volume to be released if the trigger price is reached (millions)	7.0	7.0	7.0	7.0	6.9	35.0

Regulations for auctions to sell NZUs

78. Cabinet agreed in March 2020 on the majority of regulations for auctioning NZUs and approved issuing associated drafting instructions to the Parliamentary Counsel Office [DEV-20-MINS-0047]. Included was agreement in principle, subject to decisions on auction volumes, to schedule auctions to be held quarterly.

79. Three policy decisions for regulations under 30GA of the Emissions Trading Reform Bill are needed:

79.1. Confirmation that auctions will be held quarterly

79.2. the day on which the sale of New Zealand units by auction commences

79.3. an indicative schedule for when auctions are planned to be held

80. I recommend that auctions are held quarterly, with the following auction start date and indicative schedule for 2021: commencement on 17 March 2021, followed by auctions on 23 June 2021, 1 September 2021, and 1 December 2021. In setting this schedule, I have considered the requirement to avoid dates such as public holidays, regional anniversary holidays, and dates less than 20 calendar days before the annual compliance deadline of 31 May.

Impacts

81. Work to date has identified a range of opportunities that can deliver net cost savings to the New Zealand economy, sometimes even without pricing emissions. These include improving energy efficiency in process heat and electricity use, and improving vehicle fuel efficiency and adopting electric vehicles. Many opportunities are available at low-to-moderate costs that could collectively deliver substantial emissions reductions, such as:

- planting new forests, extending forestry harvest rotations, and avoiding deforestation ($0 - $50/t$CO_2$e)
- building wind farms or geothermal power stations to displace gas- and coal-fired electricity generation ($25 - $100/t$CO_2$e)
- switching from coal and diesel to biomass or electricity for low- and medium-temperature process heat ($50 - $100/t$CO_2$e)

82. In our recent Cabinet paper ‘Transition to a low emissions economy’, myself and the Minister for Economic Development identified our expectation that emissions prices in the NZ ETS will not go beyond $35 in the short-to-medium term, or beyond $50 in the long term [ENV-19-MIN-0023 refers]. The Productivity Commission, for the Low Emissions Economy report, modelled a range of pathways to different target options. The modelled scenarios, consistent with our announced 2050 target, show prices at 2030 between $25-$50/tonne CO_2e.

83. Regarding impact on households, a preliminary analysis led by the Treasury in August 2019 showed that the direct impacts of higher emissions prices on households was likely to be moderate, on average. For example, doubling emissions prices (to $50) from today’s level ($25) would increase costs for middle-income households by $3.40 (0.3%) per week.

84. Treasury noted that the lowest-income households face a slightly greater impact from emissions pricing because they spend a larger proportion of their income on emissions-intensive goods. An increase in the emission price to $50 would see households in the lowest 20% of income levels increase their weekly costs by $2.00 (0.4%). With fewer resources, lower income households will have less ability to change behaviour or invest to reduce their exposure to emissions prices.

85. The Treasury analysis was based on assumptions of no significant behaviour change, no improved vehicle fuel efficiency and no uptake of higher renewable electricity. Therefore, I consider that even these relatively low estimates are unlikely to be borne out in reality, and that actual costs may be lower.

86. In considering the impacts on businesses, it is important to distinguish between those businesses whose activities are both emissions-intensive and face competition from overseas producers from those which are not.

87. Emissions-intensive, trade-exposed (EITE) businesses receive 90 per cent or 60 per cent of their emissions obligations for free from the Crown, under the Government's industrial allocation policy. This aims to prevent any emissions leakage overseas. The impact of rising emission prices on any single firm will depend on a range of factors including the level of free allocation they receive and the emissions price. In general however, industrial allocation will limit any adverse impact of rising emissions prices on such EITE businesses. The Government has decided to gradually phase-down the level of industrial allocation, starting with the level of allocation declining by 1 per cent a year from 2021–30.

88. By definition, non-EITE firms are expected to face far less impact than EITE firms from emissions pricing. In general, such businesses will be able to pass-on a significant proportion of the costs of emissions prices to consumers – thereby giving rise to the impact on New Zealand households outlined in the Treasury analysis above. To the extent there is variation in the emissions-intensity of different firms, those which are most emissions-intensive may suffer a net reduction in profits, while those which are least emissions-intensive could enjoy a net increase in profits. Such a dynamic should also spur investment in low-emissions production, thereby driving down the long-term cost of an emissions price on the New Zealand economy.

89. Impacts that the emissions price has on land-use change, such as conversion of farm land to forestry, have the potential to be material. The level of sequestration that could be achieved by planting commercial forestry is significant. The most likely changes in the short- to medium-term are the conversion of sheep and beef farming land to forestry. The scale of such conversions and associated unit supply into the ETS are potentially large in comparison with New Zealand's gross emissions. As such, the price at which conversion to forestry becomes cost-effective could set the emissions price in New Zealand for many years.

90. This is likely to be true even in the short-term, despite the fact that it takes several years for land that has converted to forestry to start earning NZUs, and the fact that there may be possible initial supply constraints in terms of the ability of the forestry sector to respond to an emissions price and start planting. Despite this likely material delay in terms of additional forestry NZUs starting to enter the New Zealand market, this expectation of a future forestry-driven emissions price will influence the price at which holders of stockpiled NZUs will be willing to sell their NZUs in the short-term.

91. Further discussions about impacts on land-use change and the effect of forestry offsets on ETS emissions prices need to take place. The Climate Change Commission has been given a mandate within the development of its emissions budgets to consider the role that forestry should play in helping us to meet our future emissions budgets.

Consultation

Public consultation

92. The Ministry for the Environment has run three separate public consultations relating to these proposals:

    92.1. Consultation on the high-level design of the reformed scheme was undertaken in August and September 2018, including how to limit units into the scheme, and the price control mechanisms that would be used.

    92.2. Public consultation on the proposed rules for auctioning in the NZ ETS was then conducted in November and December 2019. This consultation received 47 submissions from a wide range of stakeholders, the majority of whom were either NZ ETS participants or otherwise actively involved in the NZ ETS market.

    92.3. Consultation on the provisional emissions budget, cap on emissions, and specific NZ ETS settings including unit supply and price controls was run between 19 December 2019 and 28 February 2020.

93. The NZ ETS settings consultation used online engagement and four public information sessions in Auckland, Wellington, Rotorua, and Christchurch in February. A series of regional hui were held throughout New Zealand by the Ministry of Environment in February 2020 to discuss a range of the Ministry's work programmes with Māori/iwi groups. The NZ ETS setting consultation was included on the agenda at these hui and was discussed with attendees.

94. A total of 133 written submissions were received, expressing a wide range of views. The largest proportion of submissions were from individuals, followed by business/industry groups, the electricity sector, NGOs, and other sectors.

95. Submitters generally supported the overall goal of reducing New Zealand's greenhouse gas emissions, and tended to support the principle of the unit supply and auction price control measures proposed to help achieve this. However, opinions on the level of ambition of the provisional emissions budget and the specific prices proposed for the cost containment reserve and auction reserve price varied significantly between submitters.

Agency consultation

96. This paper was prepared by the Ministry for the Environment. The Department of Prime Minister and Cabinet, The Treasury, the Environmental Protection Authority, Ministry of Business, Innovation and Employment, Ministry for Primary Industries, Ministry of Foreign Affairs and Trade, Ministry of Justice, Ministry of Transport, Te Puni Kōkiri and the Department of Conservation have been consulted in preparation of the paper. While agencies generally supported the

proposals, feedback from the Ministry of Business, Innovation and Employment and the Treasury highlighted interest in better understanding the proposal's economic implications.

Financial implications

97. This paper recommends updates to the auction volumes in our existing fiscal forecasts. I have used the same emission unit price used in current forecasts, which is the $27.55 value as at 31 January 2020. The significant decrease in 2020/21 is due to existing forecasts incorrectly assuming a full year of auctioning, when auctioning will only start in the second half of the year.

Table 9: Projected consolidated funding

	$M – increase/(decrease)			
Consolidated funding	**2020/21**	**2021/22**	**2022/23**	**2023/24**
Cash receipts forecast at Budget 2020	486.2	493.4	448.7	405.2
Updated cash receipts forecast	261.7	523.5	523.5	495.9
Variance in forecast	(224.5)	30.1	74.8	90.7

98. The introduction of a cap on emissions in the NZ ETS will impact non-tax revenue as fewer emission units will be surrendered. Table 10 uses the same emission unit price forecast as above.

Table 10: Projected Crown Revenue - Non-Tax Revenue

	$M – increase/(decrease)			
	2020/21	**2021/22**	**2022/23**	**2023/24**
Crown Revenue – Non-Tax Revenue	(32)	(72)	(70)	(78)

Legislative implications

99. Implementation of these proposals will require new regulations to be made under new sections 30GA, 30GB and 30GC to be inserted into the Act via the Bill.

100. With Cabinet's approval, I will issue instructions to the Parliamentary Counsel Office to draft Orders in Council for consideration by the Cabinet Legislation Committee. The Orders in Council will be presented to the Cabinet Legislation Committee after enactment of the Bill and will create new regulations under the amended Act. The proposals do not require further amendment of the Act.

101. Section 30GC of the Emissions Trading Reform Bill requires the Minister for Climate Change to be satisfied that the overall limits and price control settings are in accordance with:

101.1. The relevant emissions budget; and

101.2. The relevant Nationally Determined Contribution for New Zealand under the Paris agreement.

102. I am satisfied the first test is met, however I have noted the recommendations are not in accordance with our nationally determined contribution. Section 30GC allows this to occur, as long as the Minister is satisfied that the discrepancy is justified and these other matters are considered:

102.1. projected trends in emissions covered and not covered by the NZ ETS;

102.2. the proper functioning of the NZ ETS;

102.3. international climate change obligations as well as the use of international units and markets;

102.4. the forecast availability and cost of ways to reduce emissions and meet targets;

102.5. recommendations by the Climate Change Commission;

102.6. any other matters that the Minister considers relevant.

103. I am satisfied the discrepancy is justified and I have considered those other matters.

104. Also under section 30GC, before recommending price control settings, the Minister must also consider:

104.1. the impacts of emissions prices on households and the economy;

104.2. the level and trajectory of international emissions prices;

104.3. inflation.

105. I have considered those matters when recommending the price control settings in this paper.

Regulatory impact analysis

106. The Regulatory Impact Assessment Panel at the Ministry for the Environment has reviewed the "Regulatory Impact Statement on NZ ETS Unit Supply and Price Control Settings" produced by the Ministry for the Environment and considers that it **meets** the quality assurance criteria.

107. The RIA contains the required information, and clearly sets out the problem definition, objectives and criteria. There is evidence of efficient and effective consultation on the proposals, and consideration of the feedback from that consultation. There is a good evidence base for the analysis and alternative options have been considered. Implementation risks have been identified, including the significant uncertainties related to emissions projections and the economy, accentuated by the impacts of COVID-19. It is recognised that mitigation will be contingent on more accurate emissions forecasts over time.

Climate implications of policy assessment

108. The Ministry for the Environment confirms that the CIPA requirements do apply to this proposal. The proposal will influence behaviour and lead to business and consumer decisions to reduce emissions and increase sequestration through forestry. The proposal will play a major part in reducing our emissions but will need to be coupled with complementary measures to enable us to meet emission's budgets.

109. The difference between the PEB and current projections represents the emissions reductions that we aim to achieve from this proposal. However the impact of this proposal is a subset of these emissions reductions as a portion of the reductions will be driven by other factors (i.e. new technologies and other policy measures) that are not represented in the projections. The CIPA disclosure form provides the emissions reductions difference between the PEB and projections as well as estimates of the direct impact of the proposal

Te Tiriti o Waitangi

110. I acknowledge the significant interest iwi/Māori, including Māori entities, have in the NZ ETS. It is challenging to disaggregate the impact of these proposals on iwi/Māori from the rest of the economy. This is because while Māori are likely to be over represented in low-income households and therefore face higher relative costs from any emissions price increases, Māori also have substantial investments in forestry and renewable energy assets which would benefit financially from higher emissions prices.

111. A series of 14 regional hui were held throughout New Zealand by the Ministry of Environment in February 2020 to discuss a range of the Ministry's work programmes with Māori/iwi groups. The NZ ETS setting consultation was included on the agenda at these hui and was discussed with attendees.

112. Māori/iwi were invited to participate in consultation on these proposals alongside other stakeholders and notice of the consultation was included in a regular Ministry iwi newsletter.

Human rights implications

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

Gender implications

114. There are no immediate gender implications arising from this paper.

Disability perspective

115. There are no immediate disability implications of the proposals in this paper.

Communications

116. Announcements about the NZ ETS need to be managed carefully to avoid any inconsistencies and market risks, including sudden changes of NZU prices in the NZ ETS. In addition, information should not be disseminated in a way that advantages some market participants over others and compromises NZ ETS participants' ability to make decisions.

117. I recommend that the decisions in this paper are announced alongside the decisions taken in *New Zealand Emissions Trading Scheme: Regulatory Decisions on the Rules for Auctioning* Cabinet paper and *Approval of policy changes to the Climate Change Response (Emissions Trading Reform) Amendment Bill* Cabinet paper. These decisions should be announced at the same time, as together they form a package that establishes the reformed NZ ETS.

Proactive Release

118. I intend to proactively release this paper on MfE's website subject to withholdings as appropriate equivalent to those under the Official Information Act 1982 once all final relevant policy decisions have been announced.

Recommendations

The Minister for Climate Change recommends that the Committee:

1. Note that this paper provides proposals to set regulations under the Climate Change Response Act 2002 as amended by the Climate Change Response (Emissions Trading Reform) Amendment Bill to provide New Zealand Emissions Trading Scheme settings.

2. Note that proposals for NZ ETS settings will support the effective operation of the NZ ETS.

3. Note that regulations for NZ ETS settings must be in place by the end of 2020 to ensure that auctioning can begin in 2021.

4. Note that choices made within the NZ ETS settings are not just important for our domestic transition, but are also crucial for our ability to meet our international climate change targets.

5. Note that it is important to continue with work on the NZ ETS settings regulations through the COVID-19 situation so that we can help support the right type of economic recovery that keeps us on track to meet our long-term emissions reductions targets.

The provisional emissions budget

6. Note that setting the provisional emissions budget is important as it determines the total volume the Government aims to limit New Zealand's net emissions to over the period 2021-25.

7. Note that the Climate Change Commission will recommend future emissions budgets in 2021, for 2022-2025, 2026-2030, and 2031-2035, which will supersede the provisional emissions budget when adopted by the Government.

8. Agree, for the purpose of setting unit supply and price control regulations, the provisional emissions budget is 354 Mt CO_2-e for 2021-25.

Proposals for unit supply regulations

9. Note that emissions projections for sectors that are not currently required to surrender units within the NZ ETS have been updated and are 194 Mt CO_2-e.

10. Agree to draft regulations that set:

    10.1. The limit on overseas units used to be zero for 2021, 2022, 2023, 2024, and 2025;

    10.2. The annual limits on NZUs available by other means to be: 8.4 million in 2021, 8.2 million in 2022, 8.9 million in 2023, 8.7 million in 2024 and 8.7 million in 2025

    10.3. The annual limits on NZUs available by auction to be 19 million in 2021, 19 million in 2022 19 million in 2023, 17 million in 2024, and 16 million in 2025.

11. Agree to draft regulations that set the annual overall limits on NZ ETS unit supply to be: 32.8 million NZUs in 2021, 32.9 million NZUs in 2022, 32.9 million NZUs in 2023, 31.3 million NZUs in 2024 and 29.6 million NZUs in 2025.

Proposals for auction price control regulations

12. Note price controls are mechanisms that help manage unacceptably low or high prices in the NZ ETS and limit the risk of prices falling outside of a range needed to meet an emissions budget.

13. Agree to draft regulations for:

    13.1. A reserve price at auction of $20.00 for 2021, $20.40 for 2022, $20.81 for 2023, $21.22 for 2024, $21.65 for 2025; and

    13.2. A cost containment reserve trigger price of $50 for 2021, $51.00 in 2022, $52.02 in 2023, $53.06 in 2024 and $54.12 in 2025.

14. Note although the price ceiling is the upper extreme of expected and acceptable prices in the NZ ETS, it will not be the key driver for the market price, which will be ultimately determined by unit supply and demand.

15. Note that since the consultation, officials have proposed an update to the methodology of setting the cost containment reserve volume.

16. Agree to draft regulations for the volume of NZUs available annually within the cost containment reserve to be 7 million in 2021, 7 million in 2022, 7 million in 2023, 7 million in 2024, and 6.9 million in 2025.

Regulations for auctions to sell NZUs

17. Agree auctions of New Zealand units will be held quarterly

18. Agree to draft regulations that set 17 March 2021 as the day on which the sale of New Zealand units by auction commences

19. Agree to draft regulations that set 23 June, 1 September and 1 December as the remaining dates for the quarterly auctioning schedule for 2021.

Sensitivity

20. Note that the proposals in this document and the attached appendices are commercially sensitive and the release of this information will have implications for the NZ ETS market.

21. Note that considerations around public release of information need to be managed carefully.

Next steps

22. Invite the Minister for Climate Change to issue drafting instructions for new regulations to the Parliamentary Counsel Office based on the agreed decisions presented in this paper.

23. Note that subject to the enactment of the Bill and following drafting by the Parliamentary Counsel Office, both NZ ETS settings and auctioning regulations will be presented to the Cabinet Legislation Committee for approval later in 2020.

24. Agree that the Minister for Climate Change will proactively release this paper on the Ministry for the Environment's website, subject to redactions equivalent to withholdings under the Official Information Act 1982, once all final relevant policy decisions have been announced.

Authorised for lodgement.

Hon James Shaw

Minister for Climate Change

Appendix 1.

Summary of Submissions Report

Appendix 2.

Climate Implications of Policy Assessment: Disclosure Sheet