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POWERING A BETTER NEW ZEALAND TOGETHER

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Ministry for the Environment
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Submission on Proposed changes to NZ ETS limit and price control settings for units for 2023

Introduction

1. Energy Resources Aotearoa is New Zealand's peak energy advocacy organisation. Our purpose is to enable collaboration across the energy sector through and beyond New Zealand's transition to net zero carbon emissions in 2050.

2. This document constitutes our submission on the Ministry for the Environment (the **Ministry**) document *Proposed changes to NZ ETS limit and price control settings for units for 2023*, which are informed in part by the Climate Change Commission (the **CCC**) advice on Emissions Trading Scheme (the **ETS**) settings for 2024-2028.

3. *Appendix One* provides our responses to the specific questions raised by the discussion document, either with a direct response or reference to the parts of this submission which address them.

Recommendations

4. We support existing (status quo) unit and price settings for the ETS for 2024-2028.

5. Fundamentally, our position is that none of the relevant factors have materially changed since ETS unit and price control settings decisions were made in late 2022. In the absence of new information or significantly different economic conditions, we do not believe a departure from the previous decision is justified.

6. Our position is also based on the following:

    - the ETS review, on which consultation is expected soon, is considering the fundamental role of the ETS in the low emissions transition (specifically, the role of forestry and the relative incentives for gross reductions and removals). Any changes to price and unit control settings should be deferred until the ETS review is concluded and the overarching policy intent for the ETS is clarified;

- the Equitable Transition Strategy will consider additional measures to mitigate the impact of emissions price spikes. This should be in place before bullish changes to ETS settings are made;

- notwithstanding the recent drop in emissions prices, we have still seen a significant rise in emissions prices over the last three years. We suspect this has been driven, at least in part, by speculation about regulatory change and the 'magnet effect' rather than supply and demand fundamentals. These signals take time to flow through into investment decisions; and

- bullish changes to ETS settings could increase costs on businesses and households in an already inflationary environment, which could undermine support for the transition.

Submission

We support the ETS, aligned with net emissions targets, as the best tool to cost-effectively reduce emissions

7. We unequivocally support transitioning to a low emissions economy, and we agree on the end point of net zero emissions by 2050. We believe the ETS is the best tool to achieve this, and that additional measures must address a clearly demonstrated market issue with a solution that is more desirable.[1]

8. In determining unit and price control settings for the ETS, policymakers must strike a balance between several priorities:

    - ensuring emissions pricing incentivises net emissions reductions consistent with a trajectory toward national net zero emissions by 2050;

    - avoiding sharply rising emissions prices that outpace the availability and affordability of alternative technologies and fuels for households and businesses; and

    - maintaining policy stability and long-term investment confidence by minimising the frequency and materiality of changes to ETS settings.

Significant changes should be deferred until related policy work is concluded

9. We note the Government has publicly announced it is reviewing the ETS, with consultation on any proposals or findings in mid-2023 (hereafter 'the **ETS review**').[2] The ETS review is considering the design of the ETS and its role in

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1 See page 2 of our 2021 submission on proposed changes to NZ ETS settings for further commentary on this point: https://www.energyresources.org.nz/dmsdocument/175

2 See: https://environment.govt.nz/news/review-underway-of-role-of-nz-ets-in-climate-response/#:~:text=The%20review%20of%20the%20NZ,reduction%20plan%2C%20(action%205.2.

New Zealand's climate change response. We understand this includes – per the advice of the CCC – considering changes to strengthen incentives for gross emissions reductions relative to emissions removals (e.g., forestry). If any such changes are pursued, this could represent a significant shift in the structure, role, and overarching policy direction of the ETS.

10. The Government is also still developing its Equitable Transition Strategy, on which consultation is also expected in mid-2023. This strategy will establish and align potential policies to address the cost of living and distributional impacts of potentially higher NZU prices in future (which we understand could include a carbon dividend or similar policy).

11. On the basis that the ETS review and Equitable Transition Strategy are still underway, we strongly support a status quo approach to limit and price control settings for units. If the ETS review results in significant changes to the mechanism, consequential changes to unit and price settings can be made once the full picture is available. Having an Equitable Transition Strategy in place ahead of further changes to unit and price control settings will mitigate against the distributional impacts of any resulting price spike risk.

Potential issues with the Commission's model remain

12. Our 2022 submission identified some potential issues with the modelling underpinning the CCC's advice on unit and price control settings.[3] These appear to remain relevant here. To restate these:

    - the ENZ model does not capture the effect of emission pricing on a range of significant abatement sources, instead treating them as CCC inputs to the model. These include energy and transport demand; energy efficiency measures; the pace of EV uptake; and household fuel switching. This means, the ENZ model likely understates the mitigation response to higher emissions prices (meaning it overstates the emissions prices required to meet the CCC's targets);

    - some of the abatement attributed to other policies in the Government's Emissions Reduction Plan, such as the Government Investment in Decarbonising Industry Fund, is instead driven by the emissions price in the CCC's modelling. Where this occurs, the abatement from the other policy may not reduce the level of emissions price required. This suggests the CCC is, to some extent, ignoring the emissions abatement and the price-moderating impact of non-NZ ETS policies. Again, this potentially drives the emissions price required in the CCC's model higher; and

    - the CCC's scenarios appear to assume that at higher oil prices, the capital cost of new renewable generation decreases faster. We are not sure how this follows, given oil is, and will remain, a critical input to the manufacture,

3 See paragraphs 33-35 of our 2022 submission: https://www.energyresources.org.nz/dmsdocument/221

transport, and installation of capital components and infrastructure.[4] It is unclear what implications this has for the model's outputs.

Auction volume settings

Technical adjustment to reflect discrepancies between the Greenhouse Gas Inventory and the ETS

13. The discussion document revisits the question of how to address an identified discrepancy between the emissions reported in the Greenhouse Gas Inventory and the ETS. Our position remains the same as in 2022 – while we support technical adjustment in principle, this should continue to be deferred until officials have established a full understanding of its cause and the appropriate response.

14. If sticking with the status quo results in an additional 'surplus' component of the stockpile, this can be addressed through routine stockpile reduction in the future. On balance we believe this means that running the risk of under-correcting the discrepancy in the short term is likely less-regrets than the risk of over-correcting.

Stockpile reduction

15. We support the status quo approach to stockpile reduction, with annual updates to estimates of stockpile liquidity. A one-off adjustment would introduce even more regulatory uncertainty and predictability into the regime and could drive a significant step-change in auction volumes in 2026.

16. We generally do not support adjustments to auction volumes being made to address historic actions; rather, they should be made on a forward-looking basis in accordance with New Zealand's emissions targets.

17. It is important to recognise that these stockpiled units may not even enter the market (in which case the units will obviously not be used). Removal of units deemed as surplus should not occur until greater depth and liquidity is realised in the carbon market, especially since the regime is only now subject to a cap and time is needed for the effects of that to bed in.

18. Aggressively reducing stockpile volumes creates greater investment uncertainty and upward pressure on the NZ ETS price. This should be done only once robust data and evidence is available to confirm the genuine 'excess' in the market. We also note that liquidity risk in the NZ ETS market will increase as industrial allocation is gradually phased out.

19. We question the urgency in driving the stockpile surplus to zero. As such the implied target of 2030 appears to be an arbitrary one. It bears emphasising that the surplus has existed for 6-7 years, in which time the emissions price has risen sharply.

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4 See page 4 of the technical annex: https://www.climatecommission.govt.nz/public/ETS-advice-July-22/Technical-annexes-and-supplementary-documents/Technical-Annex-2-ENZ-Modelling.pdf

Price control settings

Setting price controls with reference to prices required to deliver gross emissions reductions

20. We strongly support the legislated focus on *net* emissions. We oppose the CCC's continued focus on gross reductions, and its reliance on sectoral gross emissions sub-targets, as the basis for its recommendations on price control settings. New Zealand has an economy-wide emission reduction target (net-zero by 2050).

21. We understand the practical appeal of demonstrative sector budgets which in turn add up to a national demonstrative emissions pathway. They make a complex task more manageable by breaking up the work into intuitive sector groupings.

22. But we remain deeply concerned that this reductionist approach is driving suboptimal outcomes, because these pathways are being treated as determinative sector budgets.[5] The demonstrative sector gross emissions pathways are taking on a determinative status (such as determining ETS price control settings) that was never intended.

Auction reserve price

23. Our preferred options for auction reserve prices are in the order they are presented, i.e., option one (status quo) is our most preferred, and option four (CCC's recommendations in all years) is least preferred.

24. Again, while work is underway (via the ETS review) to resolve the Government's intended role for forestry in the low emissions transition, we suggest a status quo approach is a prudent, least regrets pathway. Further raising the auction reserve price, particularly in the short term, could strengthen incentives for new forestry which might then be undermined by subsequent changes in the next year or so to reflect the ETS review's conclusions.

Cost containment reserve structure and volume

25. We support the single tier cost containment reserve (CCR) structure.

26. We agree with the CCC, and the analysis in the Ministry's discussion document, that the CCR should not be disabled by setting its reserve volume at zero. We oppose this option.

27. We understand the intent behind a two-tier CCR – i.e., to reduce the likelihood the full CCR volume is sold at auction – but the counterpoint is it will correspondingly be less effective at mitigating emissions prices at unacceptable levels. Additionally, on balance:

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5 Reductionism the practice of analysing and describing a complex phenomenon in terms of its simple or fundamental constituents, especially when this is said to provide a sufficient explanation.

- we consider a two-tier CCR trigger will introduce more complexity into the mechanism that only serves to further undermine investment confidence and predictability in the regime; and

- more evidence is required to back the CCC's assertion that a two-tiered trigger would mitigate the 'magnet effect' of NZU prices being pulled toward the CCR trigger price.

Cost containment reserve trigger price

28. We strongly prefer option one (status quo) on the basis that:

    - the ETS review should be concluded before any further significant settings changes are made, so that there is greater clarity about the role afforestation (offsets) will play in the transition and specifically within the ETS;

    - the Equitable Transition Strategy and any resulting policies should be put in place first to ensure the distributional and cost-of-living risk of emissions price spikes can be managed; and

    - we have already seen a significant rise in ETS prices relative to 2-3 years ago (driven at least in part, we suspect, by speculation about regulatory change rather than supply and demand fundamentals); and

    - adopting the CCC's advice would further disrupt stability and predictability in the market, given equivalent changes were not agreed to last year.

29. We disagree with the overall assessment on page 43 of the discussion document, which suggests that options three to five are superior to the status quo. We suggest weighting of the criteria would change this conclusion.

30. The discussion document indicates that every $25 increase in NZU prices will increase costs for middle-income households by $3.40 per week, or $176.80 per year. Taken as a rough rule of thumb, this suggests:

    - an increase from $60 to $100 per tonne could increase household costs by $5.40 per week, or $289 per year;

    - an increase from $60 to $120 per tonne could increase household costs by $8.20 per week, or $424 per year; and

    - an increase from $60 to $150 per tonne could increase household costs by $12.25 per week, or $636 per year.

31. Commentators have differing views about the likelihood of such price spikes. We do not purport to know the mind of market participants. Given this uncertainty, the key considerations as we see them are:

- if the CCC's lower CCR tier of $171 in 2024 were adopted, price spikes in the ranges above – if they occur – would not trigger any additional unit supply to moderate them;

- until the Equitable Transitions Strategy is finalised, there is no clarity whether and what additional measures might be employed by the Government to mitigate the effects of such price spikes;

- the likelihood of a price spike is increased by a significant increase in the CCR trigger price (given the 'magnet effect'), particularly given this follows a decision to the contrary in the last annual settings decision; and

- the likelihood of a price spike is increased further still if the ETS review proposes significant changes to forestry in the ETS.

32. Over the medium to long term, consumers and businesses will adjust behaviour in response to rising emissions prices. This is the fundamental policy rationale for the ETS. Our concern is short-term price spikes, driven by policy and regulatory change (or speculation about it) rather than supply and demand fundamentals, impose costs that cannot readily be avoided and lead to suboptimal resource allocation. Emissions reduction investments (e.g., fuel switching) take some time given decision-making processes and alignment with asset-life timeframes. We believe the investments required by the low-emissions transition are best served by a stable, gradually rising emissions price.

Enabling carbon capture, utilisation, and storage (CCUS) through the NZ ETS

33. Our submission on the 2022 NZ ETS limit and price control settings highlighted the need for a review of the NZ ETS as it applies to CCUS, to enable and incentivise this technology in New Zealand.[6] CCUS could form a critical part of our emissions reduction efforts and significantly reduce the gross emissions profile of some of our industrial activities that are otherwise hard to abate.

34. Since we raised this issue in the 2022 version of this submission, both the CCC's draft advice on the second Emissions Reduction Plan and the International Energy Agency's 2023 Energy Policy Review have highlighted CCUS as being an opportunity for New Zealand.[7]

35. We are pleased to note the Minister of Climate Change wrote to us on 9 May 2023 and agreed that the current review of the NZ ETS – on which consultation is

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6 Note that ensuring the NZ ETS appropriately recognises CCUS is an essential issue, but there is a wider range of potential regulatory issues to be worked through in parallel. We have consistently called for a dedicated regulatory regime for CCUS to enable this activity while managing the various permitting, environmental, operational, liability, and decommissioning issues.

7 IEA New Zealand 2023 Energy Policy Review: https://iea.blob.core.windows.net/assets/124ce0b0-b74e-4156-960b-bba1693ba13f/NewZealand2023.pdf

expected mid-2023 – is an appropriate vehicle to explore whether the NZ ETS is a barrier to CCUS. We look forward to engaging with the review on this point.

Conclusion

36. We strongly support the NZ ETS as New Zealand's best tool to reduce net emissions in line with our national targets. Its 2020 reform into a genuinely quantity capped mechanism has unlocked its potential to drive meaningful progress over the coming decades.

37. While we appreciate NZ ETS settings need to be updated periodically to reflect changes in the market, we question the frequency and materiality of tactical changes advanced by the CCC advice. This is particularly so because the ETS review, now underway, could bring very significant strategic changes to the purpose and shape of the ETS. A holding pattern is prudent while the ETS review runs its course.

38. Households and businesses are facing rising cost pressures, and the legislative framework is clear that this should be factored into decisions on NZ ETS settings. Government must be sensitive to the significant risk of creating unintended opportunities for speculative behaviour that is driven by policy signals rather than supply and demand fundamentals. The NZ ETS relies on – and currently enjoys – broad social and political support. In considering the optimum unit and price settings to drive an orderly transition to net zero, this support should not be taken lightly.

Attachment 1: Response to consultation document questions

Question		Our response
1	Do you think the decisions on NZ ETS unit settings announced in December 2022 had any impact on NZ ETS market behaviour?	Yes – a market response to the Government's decisions was evident. However, we reject claims that the fall in the carbon price reflects a 'loss of confidence' in the ETS as a market mechanism. Rather, we suggest this market response was a return to more reasonable market expectations based on market fundamentals. We suggest the market's expectations had been anchored to the Climate Change Commission's advice, which had proposed to set price control settings on a much higher trajectory, and to significantly reduce unit availability. If there is a magnet effect, it works both ways – and the consequences of pulling expectations too high, too quickly, should be seriously considered before significant changes in line with the CCC's advice are adopted. Further, regarding the decline of the March 2023 ETS auction: we suspect that with surrender date approaching, most emitters had already secured sufficient volumes to meet their obligations. They were therefore in a position of softened demand and able to 'test' the lower limits of the auction reserve. Similarly, we suspect market fundamentals also underpin the decline in the June 2023 ETS auction, especially in light of soft global and domestic economic conditions, and therefore demand. This reinforces the need to avoid making "ad-hoc" changes to reduce the stockpile.
2	Do you think that the proposed update to auction volumes to reflect a change in forestry emissions outside the NZ ETS is sufficient to allow unit settings for 2024 and 2025 to be updated?	No.
3	What other special circumstances, if any, do you think exist that might enable updating NZ ETS unit settings for 2024 and 2025?	None.

Question		Our response
4	If there are special circumstances, do you think updates to NZ ETS unit settings for 2024 and 2025 are justified and should be made?	No – in our view, status quo settings are justified until the ETS review is concluded and significant policy questions (such as the relative weighting of gross reductions and removals) that could materially alter the shape and role of the ETS are resolved. Similarly, holding status quo settings for 2023 will enable the Government to progress its Equitable Transitions Strategy, to ensure it has settings in place to address the distributional and cost-of-living impact risks of the CCC's preferred ETS price settings trajectory. See *Significant changes should be deferred until related policy work is concluded* (paragraphs 9 to 11 of this submission).
5	Do you think that updates to NZ ETS unit settings for 2024 and 2025 should occur if NZUs from the cost containment reserve are sold at the June NZ ETS auction? Note, the Commission recommends that settings for 2024 and 2025 are updated in this situation.	No.
6	Do you think the Commission's updated estimates of forestry emissions outside the NZ ETS are accurate?	N/A
7	Do you think that an update to calculations, and a corresponding reduction in auction volumes, should be made to reflect this updated estimate?	No. The ETS Review outcomes may fundamentally change the ETS contribution to the economics and financial decision making of post-89 forestry in the NZ ETS. Decisions by foresters on registration of additional land or to deregister land currently registered in the NZ ETS therefore remain highly uncertain. [The deregistration of land is seen as a highly probable outcome for foresters who have only recently entered the ETS, should NZU-F values be undermined through the ETS Review outcomes.

Question		Our response
8	Do you think that reductions in auction volumes and limits should occur to reflect the identified discrepancies between emissions reported in the Greenhouse Gas Inventory and the NZ ETS?	No – not until officials have identified the cause and appropriate solution. See *Technical adjustment to reflect discrepancies between the Greenhouse Gas Inventory and the ETS*
9	Do you think the status quo approach to stockpile reduction should be retained?	Yes. See *Stockpile reduction* (paragraphs 15 to 19 in this submission)*.*.
10	Should a new sub-step be added this year to address projected impacts on surplus stockpile liquidity rather than addressing it through annual updates to estimates of surplus stockpile liquidity?	No. See *Stockpile reduction* (paragraphs 15 to 19 in this submission)*.*
11	Should adjustments to auction volumes be made to address historic actions?	No. See *Stockpile reduction* (paragraphs 15 to 19 in this submission)*.*.
12	What do you think of the methodology used to calculate auction volumes, including on each specific step?	We support the status quo.
13	To what extent do you believe that increasing the CCR trigger price would influence NZU prices? Do you think that this influence would remain if CCR trigger prices were increased more significantly?	We expect this would have a significant effect on NZU prices, given the observable 'magnet effect' of the CCC's advice and subsequent price moderation in response to the Government's differing decisions in late 2022. We are concerned there is a material risk this influence remains even if CCR trigger prices are set much higher.
14	What do you think of the approach of setting price controls with reference to prices required to deliver gross emissions reductions?	We do not support it. See *Setting price controls with reference to prices required to deliver gross emissions reductions* (paragraphs 20 to 22 in this submission)*.*
15	What do you think of the proposed auction price floor settings? What impacts do you think will result from different settings?	The options are presented in our order of preference – i.e., option one is most preferred and option four is least preferred. See *Price control settings* (paragraphs 20 to 32 in this submission)*.*
16	Do you think the cost containment reserve should be disabled by having no reserve volume?	No. See *Cost containment reserve structure and volume* (paragraphs 25 to 27 in this submission).

Question		Our response
17	If retained, do you think the cost containment reserve should consist of one or two tiers?	One. See *Cost containment reserve structure and volume* (paragraphs 25 to 27 in this submission).
18	If a technical adjustment is included as part of the stockpile reduction component of auction volumes, should this technical adjustment amount be included in the total cost containment reserve volume?	While we do not support this technical adjustment, if it is implemented, it makes logical sense to include this from the CCR volume.
19	If a multi-tier cost containment reserve is progressed, how should the volume of units in these tiers be decided on?	While we do not support a multi-tier CCR, we suggest a more straightforward approach would be to proportionally allocate these (e.g., half the CCR volume in each of the two tiers).
20	What do you think of the proposed cost containment reserve trigger price settings? What impacts do you think will result from different settings?	We strongly prefer option one (status quo) on the basis that any further significant change to trigger price settings should be deferred until a) there is a resolution of the ETS review, which could materially change the shape and role of the ETS, with consequences for prices; and b) the Government has in place its Equitable Transition Strategy (which we recommend includes a carbon dividend). See *Cost containment reserve trigger price* (paragraphs 28 to 32 in this submission).
21	Are there further impacts at these prices that should be considered?	N/A
22	What role should price controls play in containing the level of impacts, and what price control settings would be required for this?	We support an ongoing role for price controls in the ETS. This should maintain a stable, orderly increase in emissions prices consistent with a gradual price corridor. Well-designed complementary support measures – such as a carbon dividend – could strengthen the case for reducing the role of price controls within the ETS, but we expect this debate to be resolved through the ETS review and the Equitable Transition Strategy.

Question		Our response
23	If prices reached those presented in the cost containment reserve trigger price options above, do you feel that you have options to change behaviours or make new investments to address the impacts?	We expect that, while some change in consumer and business behaviour could be expected, a price spike (say, over $100) would impose a cost that many could not quickly respond to. A price spike is an unanticipated event. The market works best where there are gradual trajectories and participants are able to anticipate future prices and respond accordingly to reduce their emissions. It is a rational response for market participants to see spikes as temporary events. It's not simply that they cannot or would not respond, but that there can be a reasonable expectation that a rapid increase in prices will then be met by a rapid decrease in prices (a spike). Emissions reduction investments such as fuel-switching require stable long-term price signals and cannot typically be made quickly. See *Cost containment reserve trigger price* (paragraphs 28 to 32 in this submission).
24	Could you change behaviours or make new investments to mitigate the impact of higher prices on yourself?	N/A

Figure 1: Indicative analysis of impact of rising emissions prices on household bills

	No ETS	**NZU $60**	**NZU $100**	**NZU $150**	**NZU $170** *CCC Tier 1*
Electricity[8]					
Residential price (per kWh) without ETS	$0.282				
ETS component	-	$0.018	$0.030	$0.045	$0.051
ETS share of annual household bill	-	**$129**	**$215**	**$322**	**$365**
Total average annual household bill	$2,061	**$2,189**	**$2,275**	**$2,383**	**$2,426**
Gas[9]					
Residential gas (per kWh) without ETS	$0.167				
ETS component	-	$0.012	$0.020	$0.030	$0.034
ETS share of annual household bill	-	**$99**	**$164**	**$246**	**$279**
Total average annual household bill	$1,085	**$1,183**	**$1,249**	**$1,330**	**$1,364**
Petrol (regular)[10]					
Regular petrol (per litre) without ETS	$2.13				
ETS component	-	$0.16	$0.27	$0.40	$0.45
ETS share of annual household bill	-	**$199**	**$332**	**$497**	**$564**
Total average annual household cost[11]	$2,659	**$2,857**	**$2,990**	**$3,156**	**$3,222**

8 Assumes average household consumption of 7,155 kWh (year to December 2022). See https://www.mbie.govt.nz/assets/Data-Files/Energy/nz-energy-quarterly-and-energy-in-nz/qrss-august-2022.xlsx. Emissions price impact (c/kWh) is derived from the median of the 'low impact' and 'high impact' scenarios in the Ministry's consultation document (see Table 20). Note this indicative analysis does not reflect any reduction in the share of thermal generation over time which may moderate these cost impacts in the medium-long term.

9 2022 gas figures, including emissions price impact, are based on the Commerce Commission's Consumer Price Bill Model: https://comcom.govt.nz/__data/assets/excel_doc/0029/276536/Consumer-Price-Bill-Model1.xlsx. Emissions component includes GST. Note the average household gas bill is based on gas-connected households (not averaged across entire population) so is not directly comparable with electricity and petrol average bills. Gas-connected households will likely see a smaller than average electricity price impact as gas substitutes electricity for heating and cooking.

10 Discounted retail price of $2.29 as at week ending 19 May 2023 from https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/weekly-fuel-price-monitoring/ and assuming emissions price impacts (c/l) based on 2.31kg carbon emissions per litre. All figures are GST inclusive.

11 Assumes average household weekly regular petrol consumption of 24 litres.