

Ashleigh Watson

From: Jay Forlong <Jay.Forlong@mfe.govt.nz>
Sent: Wednesday, 1 May 2024 12:21 pm
To: James Coombes [EXTERNAL] (PARLIAMENT); Jamie Molea [EXTERNAL] (Parliament)
Cc: Kate Whitwell; Charlotte Berg; Mark Vink; Janine Foon; Arwen Norrish; Scott Gulliver; Katharina Achterberg; John Scott [EXTERNAL] (DPMC); matt.burgess@parliament.govt.nz; Phillip Mellor; Becky Prebble; David Mead; Ministerials; Sam Buckle; Davinia Gazzard-Steele; OCE.Inbox
Subject: CAB-386 - Revised Cabinet Paper for NZ ETS Unit Settings and Annual Regulatory Updates 2024
Attachments: CAB-386 Cabinet Paper.docx; CAB-386 compare version.docx; CAB-386 last lodged version.docx

Kia ora koutou,

Please see attached for the latest version of the Cabinet paper on NZ ETS Unit Settings and Annual Regulatory Updates 2024. Substantive changes have been made in response to feedback from, among others, Matt Burgess and John Scott, to support the sub-committee and Cabinet discussion to understand the subject matter and remain focused on the key decision to approve consultation (rather than decide on the substance of options). As part of this process, some changes have also been made to the two consultation documents, though these are comparatively minor, and will be provided later this afternoon.

Regarding substantive changes to the Cabinet paper itself:

- Reworking some of the language in the executive summary to simplify the concepts introduced and focus the discussion on the decision to consult and the mandatory steps to making these updates;
- Avoid redundancy by removing the background section – all of this material is either covered in the executive summary, or subsequently under the headings for the two sets of proposals;
- Shift the majority of the analytical content to appendices 1–3 (included at the end of the main paper), to maintain the focus of the paper on building understanding around the NZ ETS and regulatory update process, rather than the complexity of the options;
- Updated the proposals around delegating minor items (not including any settings items) to the Minister, to reflect the key purpose of taking pressure off the main drafting window for settings;
- Significantly streamlining the standard Cabinet paper sections (e.g. cost-of-living, financial, legislative, Tiriti, etc. implications), as these only need to reflect that approving consultation has no or minor impacts in these areas, and that full analysis on the options proposed will be included in the subsequent policy decisions Cabinet paper that follows the consultation period;
- The legal implications section was amended to reflect Crown Law advice;
- A more condensed regulatory impact analysis statement was sought for unit settings, to reduce the length of this section;
- Recommendations were re-focused around the process and decision to consult, with a number of noting recs on the technical detail removed;
- Fiscal implications section focuses only on implications of consultation. Potential implications of future decisions will be provided as talking points;
- Re-focused the analysis presented on the other technical updates (now Appendix 3) to focus on why each update is needed now, including commentary on the anticipated responses from stakeholders (as many of these updates originated with or are expected by market participants).

There is also a key decision to be made on the level of detail presented in the new appendices to the Cabinet paper. These were developed to present the analysis in a more accessible way, and without adding to the length and complexity of the core paper. They also provide some additional information on context, risks, and impacts for Cabinet's information that is not explicitly present in the respective discussion documents.

- John Scott's recommendation is to remove all three appendices, instead only pointing to the consultation documents for more information, and potentially providing the additional information from the appendices to the Minister as back-pocket if questions are raised on these matters – this would significantly streamline

the paper and retain the sole focus on approving consultation, not substantive policy decisions that will come down the track;

- The other option is to retain all three appendices, which gives the Ministers the fuller picture and context, at the risk of distracting the conversation;
- We advise against including only some of the appendices, as this could disrupt the even focus of the paper between the two sets of proposals for consultation.

In the interest of getting this to you as soon as possible, we will make formatting corrections to the numbered recommendations for the final version to be lodged.

(For MfE records, the live version hasn't moved, and is located here: [CAB-386](#))

Thank you,

Jay Forlong ([he/him](#))

Senior Policy Analyst | Kaitātari Kaupapa Here Matua

NZ ETS Policy Team, Markets Unit, Climate Change Mitigation & Resource Efficiency

I am working reduced hours at the moment, and do not work Fridays. Apologies if I cannot respond to your email right away.

Ministry for the Environment | Manatū Mō Te Taiao

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reanga katoa.



Sensitive

Office of the Minister of Climate Change

ECO – Cabinet Economic Policy Committee

Approval to Consult: NZ ETS Settings and Annual Regulatory Updates 2024

Proposal

1. I seek Cabinet approval for the Ministry for the Environment to publicly consult during May and June of this year on options for updates to the New Zealand Emissions Trading Scheme (NZ ETS) regulations, under the Climate Change Response Act 2002 (the Act). This includes:
 - 1.1 annual updates to limits and price control settings for units (unit settings), affecting the total amount of units supplied via auction and consequently affecting the price of carbon;
 - 1.2 routine updates to other regulations that govern the NZ ETS.

Relation to government priorities

2. The Government has recently set out its strategic priorities for addressing climate change through Target 9: to be on track to meet New Zealand’s 2050 net zero climate change targets, with total net carbon dioxide equivalent emissions of no more than 290 megatonnes from 2022 to 2025, and 305 megatonnes from 2026 to 2030. These volumes align to the first and second emissions budgets set under the Act.
3. The NZ ETS puts a price on carbon and is the main tool for achieving Target 9. The NZ ETS supports a least-cost strategy by allowing participants to determine the most cost-effective way to reduce net emissions. The Act requires annual review of unit settings to ensure alignment of settings with New Zealand’s climate change targets.
4. The proposals in this paper support the coalition agreements between the National Party and our coalition partners – restoring confidence and certainty in the NZ ETS, and strengthening and streamlining Government regulation.

Executive Summary

5. The NZ ETS is a cap-and-trade scheme, which supports emissions reductions by requiring businesses to surrender one ‘emissions unit’ (NZU) to the Government for each tonne of emissions they are responsible for. Participants must surrender units, which they obtain by (1) buying them, either at government-run auctions or from other participants in the scheme (including participants who receive units for forestry), and/or (2) receiving an industrial allocation of units from the government.
6. The NZ ETS unit settings affect the number of NZUs supplied into the scheme through auctioning. Consequently, the settings are a key lever through which the government limits the total volume of net emissions that can be emitted by participants in the scheme, and therefore the pace and scale of progress toward meeting our net emissions reduction targets.

Annual updates to unit settings

7. Section 30GB of the Act requires the Government to update regulations for NZ ETS unit settings each year to ensure these are in place for the next five years. This annual process is our opportunity to ensure that unit settings are supporting our overall net emissions reduction goals. The Act requires that when I update the regulations I must be satisfied that settings are in accordance with New Zealand's emissions budgets and targets.
8. The Act sets out a process for updating the regulations:
 - 8.1 Section 30GC of the Act requires that I consider the recommendations of the Climate Change Commission (the Commission);
 - 8.1 Section 3B of the Act requires consultation before updating NZ ETS regulations.
9. NZ ETS market participants are familiar with the update process and expect consultation to begin soon. For this year's update, a core issue is likely to be how the settings take account of units that are held in private accounts, known as the "surplus". A large surplus potentially poses a risk to achieving emissions budgets. The Commission has recalculated the number of these units, and judges that the surplus is larger than previously thought.
10. I seek Cabinet approval to release a consultation document with options that include continuing with status quo unit settings, changes to unit settings in line with the Commission's recommendations, and other options, including relaxing the settings around price. These options all affect the total number of units in different ways, and a core judgement in making a final decision will likely be the extent to which we wish to proactively manage the risk posed by the surplus units. I have not indicated preferred options in the consultation document.

Technical updates to other NZ ETS regulations

11. A series of other technical and operational updates have been identified by officials and participants in the NZ ETS. These updates are important for maintaining the efficiency and accuracy of the NZ ETS. Many are standard annual updates and are expected by market participants.
12. I seek Cabinet approval to release a second consultation document on these updates. I also seek Cabinet delegation to issue drafting instructions directly on the minor of updates on this list to me, in order to reduce pressure on the key drafting window for unit settings. I will still seek Cabinet approval on any of these other regulatory updates that are significant, and the draft amendment regulations will still return to Cabinet for final approval.

Next steps

13. I propose that the Ministry for the Environment publicly consult on the appended consultation documents from early May to mid-June 2024. Consultation needs to begin shortly so that decisions on NZ ETS unit settings can be made in early August (at the latest) to ensure they can be drafted as regulations and approved by the 30 September 2024 deadline required by section 30H of the Act.
14. I will return to Cabinet following consultation to seek approval on policy decisions.
15. s 9(2)(f)(iv)

s 9(2)(f)(iv)

Updates to unit settings

16. NZ ETS unit settings are set in the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 for five years in advance, as required by section 30GB of the Act. Annual amendments need to be made to these regulations.
17. Unit settings comprise:
 - 17.1 Unit limits, which set the volume of new units that the Government can provide to the market annually, other than for removal activities (mostly for forestry).
 - 17.2 Price controls settings, which help to keep the NZ ETS auction price within a corridor that supports achieving emissions budgets and targets.
18. Appendix 1 presents options for unit limits and price control settings, including the options proposed by the Commission, the status quo and alternatives. I will return to Cabinet with final proposed unit limits and price control settings for the next five years, following consultation. Updated information that may be available will be considered at the time of final decisions.
19. A summary of the impact of the Commission's recommended options compared to the status quo is provided in Appendix 2.

Unit limits

20. The methodology for determining unit limits that accord with climate change targets involves a calculation consisting of a series of seven steps. Consultation feedback is sought on each of the steps as detailed in Appendix 1.
21. NZUs can be used at any time, including across different budget periods. This allows participants to hedge against future obligations, provides liquidity to the market and reduces price volatility. However, this uncertainty over when NZUs will be used does create a risk that emissions within a budget period may exceed that emissions budget.
22. A key issue for this year's settings, likely to generate substantial consultation feedback, is the number of NZUs in private accounts assessed to be 'surplus.' These are units considered surplus to the hedging requirements of emitters and upcoming liabilities for forestry, and therefore most likely to be made available to the market.
23. The Commission has increased its estimate of the surplus is 68 million (as at the end of September 2023), which is an increase of 19 million from the previous estimate. As a result of this increase, the Commission recommended reducing the number of units auctioned for all years between 2025–2029.¹
24. Consultation feedback will inform officials' analysis on the estimate of the surplus and the approach to reducing it.

Price control settings

25. There are three components to price control settings:

¹ For example, a reduction of the current 2025 auction volume 6.7 million NZUs, compared to the current NZ ETS cap on net emissions from NZ ETS participants of 27.1 million NZUs.

- 25.1 The auction price floor is the price below which the Government will not sell units at auction;
 - 25.2 The cost containment reserve (CCR) trigger price(s) is the price or prices at which additional NZUs will be released if an auction's interim clearing price reaches or exceeds this level; and,
 - 25.3 The CCR volume(s) are the number of NZUs that will be released if the trigger price is reached. The CCR volume needs to be sufficient to perform its function of increasing supply enough to mitigate against prices that are too high.
26. The consultation document seeks feedback on the price level of the auction price floor and the CCR, and the volume for the CCR. This is described further in Appendix 1.

Updates to other NZ ETS regulations

27. In 2023, only updates mandated in legislation occurred. Other important updates were deferred due to Cabinet priorities at the time. This means that a number of the regulations are out of date with current industry data and contexts, and are actively anticipated by market participants and other stakeholders.
28. In addition to the updates to the NZ ETS settings described above, I am proposing a range of routine updates to other regulations that govern the NZ ETS. These are not mandated on an annual basis by legislation, but are needed to ensure that the NZ ETS is efficient, accurate, and fit for purpose, as well as to provide certainty to participants.
29. NZ ETS participants expect the government to regularly assess and consult on these kinds of routine updates, especially revising default and unique emissions factors, so that the emissions that they report and pay for are accurate. Some updates proposed have been identified by participants, or developed in discussion with them. I anticipate that consultation on these matters will be welcomed by market participants.
30. The majority of these updates are purely technical and operational, in that they involve no decisions on policy intent and/or have no or only minor impacts on the wider economy, though they are important to the relevant sectors. A small number are more significant and require decisions on policy intent. The proposed updates are described in Appendix 3, with full details and analysis set out in the consultation document.
31. I also seek delegation to directly issue drafting instructions following consultation on updates that are purely technical and operational. I consider that these updates meet the exemption set out in clause 7.95(d) of the Cabinet Manual: "If the secondary legislation is routine and does not require new policy decisions, the Minister may authorise drafting without reference to Cabinet." They comprise entirely of numerical calculations and/or clarifications to wording to give effect to existing policy intent.
32. As a standing delegation, this approach would streamline future updates to the NZ ETS and align with existing processes to issue drafting instructions for other technical matters. In particular, the price of carbon (used by the Synthetic Greenhouse Gas Levy) must be updated annually but requires no policy decisions, so a standing delegation exists for this.
33. This delegation still gives Cabinet the opportunity to review amended regulations, as I will return to you in September 2024 to approve the regulations for gazettal.
34. Further analysis on these updates, including which items are recommended for delegation, is provided in Appendix 3.

Impacts on emissions reductions

35. Detail on emissions reductions expected at different price points and in response to different packages of options will be provided in the post-consultation report back to Cabinet when I seek policy decisions. This will draw from analysis carried out by officials, the Commission's modelling, and other sources.

Impacts on other work programmes

36. s 9(2)(f)(iv) 

37. These will be further described when I seek policy decisions post-consultation.

Timing pressures in delivering these updates

38. There is a legal requirement to publish unit settings updates before the end of September 2024. The timeframe allows for less than the standard six weeks of public consultation (currently proposed for just over four weeks).
39. The other regulatory updates proposed can be progressed to the same deadlines as unit settings, and including these has no further timeframe implications.

Proposal to consult

40. I have appended two consultation documents that describe options for updates to NZ ETS unit settings and to other regulations that govern the NZ ETS respectively:
- 40.1 *Annual Updates to the New Zealand Emissions Trading Scheme Limits and Price Control Settings for Units 2024;*
 - 40.2 *Proposed Changes to New Zealand Emissions Trading Scheme Regulations 2024.*
41. I propose to consult on these papers from mid-May to mid-June 2024.

Cost-of-living implications

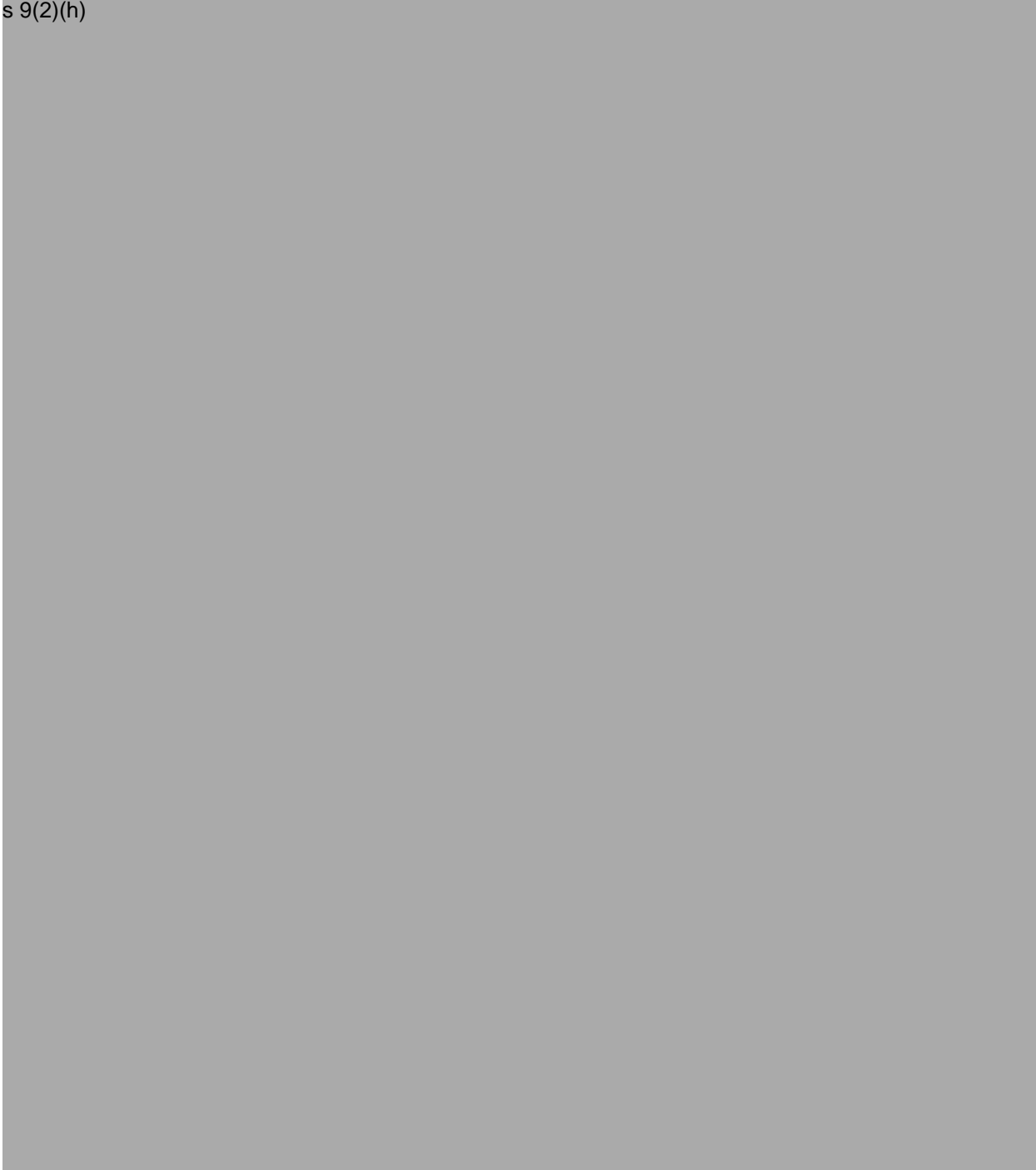
42. There are no cost-of-living implications of approving consultation. Cost-of-living implications of any updates proposed will be provided in the post-consultation Cabinet paper seeking policy decisions.

Financial implications

43. There are no financial implications of approving consultation. Financial implications of proposed updates will be provided post-consultation when I seek policy decisions. Potential fiscal implications of the Commission's options are included in Appendix 2.

Legal implications [legally privileged]

s 9(2)(h)



Legislative implications

51. Amendments to a number of regulations under the Act may be required. Drafting approval for these would be sought at the time of policy decisions mid-year.
52. I seek Cabinet's delegation to issue drafting instructions for some of the technical updates (not including any unit settings). These drafting instructions would be issued in June and July 2024, allowing the Parliamentary Counsel Office (PCO) to draft purely

² Settings must always be in strict accordance with achieving the 2050 target.

technical amendments sooner, reducing pressure on the key drafting period for unit settings, to support their busy drafting schedule.

Impact analysis

Regulatory Impact Statement (RIS)

53. Regarding regulatory impact analysis of proposals relating to **unit settings**:

*A quality assurance panel comprising members from the Ministry for the Environment has reviewed this consultation document and considers it **partially meets** the Treasury's quality assurance criteria. The NZ ETS unit settings objectives are well explained, and the consultation document clearly articulates its options, including by reference to the Commission's role and recommendations, while still leaving scope for submitters to call for alternatives.* s 9(2)(g)(i)

54. For **other proposals** for NZ ETS regulations, requirements varied across updates:

54.1 The majority of updates proposed in the consultation document on other regulatory updates are purely technical and operational. Officials at the Ministry for the Environment and the Treasury have agreed that a set of these proposals are **exempt** from regulatory impact analysis requirements.

54.2 Three updates presented in this consultation document are likely to have more-than-minor impacts or involve decisions on policy intent. Regarding impact analysis of these three updates:

*A quality assurance panel with members from the Ministry for the Environment has reviewed the consultation document for the above regulatory proposals. The panel considers that it **meets** the Quality Assurance criteria. The consultation document clearly sets out the context for the issues. The language used in the document is appropriate for the technicality and the audience of the consultation document. Due to the nature of the document, the consultation criterion has not been taken into consideration as part of the quality assurance process. Overall, the quality assurance panel considers it to be convincing, and will support informed and effective consultation.*

54.3 Appendix 2 summarises the details of these other proposals, including listing which are exempt and which have been assessed.

Climate Implications of Policy Assessment (CIPA)

55. Regarding CIPA requirements for proposals relating to **unit settings**:

*The CIPA team has been consulted and confirms that the CIPA requirements **do not apply** to this proposal as the threshold for significance is not met. However, it is expected that there will be emissions impacts as a result of further decisions required following consultation. Any emissions impacts will be reassessed and disclosed to Cabinet as appropriate.*

56. Regarding CIPA requirements for **other proposals** to NZ ETS regulations:

*The CIPA team has been consulted and confirms that the CIPA requirements **do not apply** to this proposal as the impacts are indirect. This proposal is not able to be meaningfully quantified and it is unclear if it would have any impact on emissions; however, it is expected*

S E N S I T I V E

to improve the functioning of the NZ ETS and therefore to lead to improved emissions reductions outcomes over time. Likely emissions impacts will be reassessed and disclosed to Cabinet as further decisions are required following consultation.

Population implications

57. There are no population implications for approving consultation. Population implications of any updates proposed will be provided in the post-consultation Cabinet paper seeking policy decisions.

Te Tiriti o Waitangi implications

58. There are no Te Tiriti implications for approving consultation. The Act requires the Minister to consult with representatives of iwi and Māori likely to have an interest in proposed changes to NZ ETS regulations.
59. Māori have a significant interest in climate change action. Consultation allows me to seek feedback on specific impacts on Māori from the proposals.

Human Rights

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

Use of external resources

61. No external resources were contracted for the development of this paper.

Consultation

62. The Treasury, the Ministry of Foreign Affairs and Trade (MFAT), the Ministry for Primary Industries, the Ministry of Business, Innovation and Employment, the Environmental Protection Authority, the Ministry of Transport, the Ministry of Social Development, Waka Kotahi New Zealand Transport Agency, Te Arawhiti, and Te Puni Kōkiri were consulted on this paper. The Department of Prime Minister and Cabinet was informed.
63. Where I received feedback, it has been considered and incorporated as appropriate.

Communications

64. Notification of consultation will be sent to NZ ETS stakeholders the day before the consultation is launched. Consultation documents will then be published on the MfE website prior to market opening the following day.
65. A range of stakeholders that are specifically affected by routine technical regulatory updates have been engaged throughout the development of those proposals. These stakeholders are generally aware that public consultation will form part of the ongoing regulatory update process prior to Cabinet approving amendments.

Proactive release

66. I propose to proactively release this paper on the MfE website in the first week of consultation, subject to appropriate redactions under the Official Information Act 1982.

Recommendations

The Minister of Climate Change recommends that the Committee:

67. **note** that the Minister of Climate Change must be satisfied that consultation has occurred before Cabinet makes policy decisions on updates to New Zealand Emissions Trading Scheme (NZ ETS) regulations, including the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020;

Updates to NZ ETS unit settings

68. **note** that the Minister of Climate Change proposes that the consultation includes options for unit limit and auction price control setting, incorporating the advice provided by the Climate Change Commission (the Commission), as well as other options including the status quo;

Updates to other NZ ETS regulations

69. **note** that the regulations that govern the NZ ETS require regular updates to maintain the integrity of the scheme, and that such updates are expected by NZ ETS participants;
70. **note** that the majority of updates proposed are technical and operational, requiring no policy decisions other than whether or not to progress the update;
71. **note** that items not considered minor or technical will return to Cabinet for policy decisions alongside unit settings following consultation;

Delegation of technical updates

72. **agree** that the Minister of Climate Change is authorised to make post-consultation decisions on the purely technical matters, including to issue drafting instructions under clause 7.95(d) of the Cabinet Manual, this year and in future years;
73. **agree** that 'purely technical matters' refer to: routinely updating default and unique emissions factors where there is no change to how participants report their emissions; or, clarifying previous drafting to better align with existing policy decisions;
74. **note** that the Minister of Climate Change will seek Cabinet approval in September 2024 for the amended regulations for all updates, including any updates where the authority to issue drafting instructions is delegated to me, once they have been drafted;

Consultation

75. **approve** the Minister of Climate Change to direct officials to carry out public consultation of the two sets of updates proposed to NZ ETS regulations;
76. **agree** to release the attached documents to support consultation on these updates:
- 76.1 *Annual Updates to the New Zealand Emissions Trading Scheme Limits and Price Control Settings for Units 2024;*
- 76.2 *Proposed Changes to New Zealand Emissions Trading Scheme Regulations 2024;*
77. **note** that the consultation period will start before the end of the week in which Cabinet approves the release of these documents, and run for a minimum of 4 weeks;

S E N S I T I V E

78. **agree** that the Minister of Climate Change can make minor design, editorial, and technical changes to the consultation documents as needed prior to their release;
79. **note** that the Minister of Climate Change will seek policy decisions and Cabinet approval to issue drafting instructions for amendment regulations in July 2024.

Authorised for lodgement

Hon Simon Watts

Minister of Climate Change

Appendix 1: Summary of Options for NZ ETS Unit Settings

		Options (Commission advice marked with *)	Questions
Unit limits			
Step i) Align with climate change targets	The step sets how the NZ ETS should align with emissions budgets, the 2050 target and the NDC. Feedback is sought on three options considering whether and how to adjust the NZ ETS cap (through lowering auction volumes) to “lock in” emissions reductions from non-NZ ETS policies.	Option 1: status quo, align with emissions budgets	1. What do you think of each of the options presented for step 1? What is your preferred option? Is there any other option that you think we should consider? 2. If option 3 for step 1 was proposed, what criteria could be used to identify eligible reductions and removals?
		* Option 2: minimum adjustment, updating for Inventory methodological changes	
		Option 3: further adjustment, update for Inventory methodological changes and manage the impact of non-NZ ETS policies	
Step ii) Allocate the emissions budgets to NZ ETS and non-NZ ETS sectors	This step estimates, within the overall limit set by emissions budgets, how many emissions will take place inside vs outside the NZ ETS over the 5-year period. In its advice, the Commission has used the split set out in the first emissions reduction plan. Consulting on this step allows us to test whether this is appropriate, or whether there are better approaches. From next year, these decisions can be informed by the second emissions reduction plan which will reflect this Government’s policy approach to achieving the second emissions budget.	* Option 1: status quo, volume is allocated to NZ ETS and non-NZ ETS sectors based on the first emissions reduction plan	3. Do you agree with the calculation for step 2? If not, why not? Do you have any evidence or information to suggest a different share of the emissions budget?
Step iii) Make technical adjustments	This step accounts for discrepancies between the Inventory and the NZ ETS.	* Option 1: status quo, account for discrepancies between the Inventory and the NZ ETS	4. Do you agree with the calculation for step 3? If not, why not? Do you have any evidence or information to support a different option?
Step iv) Account for industrial allocation volumes	This step accounts for NZUs expected to be provided for industrial allocation.	* Option 1: status quo, updated industrial allocation projections	5. Do you agree with the calculation for step 4? If not, why not? Do you have any evidence or information to support a different option?

S E N S I T I V E

Step v) Set the reduction volume to address the unit surplus	The consultation document seeks feedback on the Commission's surplus estimate and how the surplus is reduced over time.	Option 1: status quo, no update to surplus reduction despite the updated surplus estimate	6. Do you agree with the Commission's surplus methodology and estimate? If not, why not? 7. What is your preferred option for step 5? Is there any other option that you think we should consider? 8. We are interested in your views on the Commission's interpretation of increased transfers of pre-1990 units. Do you think the sale of pre-1990 units have increased? If so, what factors are influencing this?
		Option 2: update surplus reductions for 2027–28 for the updated surplus estimate	
		*Option 3: update surplus reductions for 2025–2028 to reflect the updated surplus estimate	
Step vi) Set approved overseas unit limit	This step sets the overseas unit limit. There are currently no overseas units, therefore the limit is set at zero.	N/A	N/A
Price control settings			
Set the price control trigger prices for the auction floor price and CCR (the price corridor)	This sets the price at which the auction floor price and the CCR are triggered. The consultation document presents two options for the price corridor; maintain the status quo or lower the price corridor. The option to lower the price corridor does not preclude adjustment to only the auction floor, or only the CCR. Presenting both together recognises that the price corridor was set in relation to the first emissions reduction plan, including supporting modelling.	*Option 1: status quo extended, current price corridor is maintained (triggers increase by 3 per cent each year and are adjusted for forecast inflation)	9. What is your preferred option for the price control corridor? Is there any other option that you think we should consider? What factors should inform the price these are set? 10. Do you consider a price corridor (i.e. an auction floor price and a CCR), to be important? Why or why not?
		Option 2: lower price corridor	
CCR volume	This sets the number of units available in the CCR, if it is triggered.	*Option 1: status quo, maintain current volume in the CCR	11. What is your preferred option for the CCR volume? Is there any other option that you think we should consider?
		Option 2: increase CCR volume to reflect the surplus reduction	
Impacts			
Impact analysis	The consultation document presents impact assessment of the options presented could have on different sectors.	N/A	12. Do you agree with our impact analysis? Are there any further impacts that should be considered, which we have not captured in our analysis?

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Appendix 2: Summary of impacts of the Commission’s recommendations compared to the status quo

Table 1: Possible annual auction volumes proposed by the Commission compared to auction volumes currently prescribed in regulations

	Auction volume (million NZUs)				
	2025	2026	2027	2028	2029
Currently prescribed auction volumes	12.6	10.7	9.2	6.9	–
The Commission’s recommended auction volumes	5.9	5.0	4.9	3.9	3.0
Difference	–6.7	–5.7	–4.3	–3.0	–

Table 2: Possible auction price floor and CCR trigger price for the next five years proposed by the Commission (same as status quo)

	Maintain the status quo		Adjust for new inflation forecasts		New
	2025	2026	2027	2028	2029
Auction price floor	\$68	\$72	\$76	\$79	\$83
CCR Tier 1	\$194	\$205	\$216	\$227	\$238
CCR Tier 2	\$243	\$256	\$270	\$283	\$298

Table 3: Possible CCR volume proposed by the Commission (status quo) compared with alternative option to increase volume

	CCR volume (million NZUs)				
	2025	2026	2027	2028	2029 (new)
Tier 1 volume (same for both options)	2.6	2.3	2.1	1.9	1.7
Tier 2 volume (option 1)	4.5	4.2	3.8	3.4	3.0
Tier 2 volume (option 2)	10.1	9.4	8.6	7.6	6.9
Total CCR volume – option 1	7.1	6.5	5.9	5.3	4.7
Total CCR volume – option 2	12.7	11.7	10.7	9.5	8.6

Appendix 3: Summary of Proposals for Other Technical Updates

No.	Update	Impact Analysis status	Proposed for delegation?	Context & analysis	Anticipated response
1	Updating DEFs & UEF methodologies for geothermal activities	Meets	No	Technical update to emissions factors based on data from the sector. Further proposals to simplify participant interaction with the NZ ETS, reduce their compliance costs, and better recognise mitigations.	Actively expected by the sector, who have provided input and support for these proposals to date.
2	Updating DEFs for natural gas activities	Exempt	Yes	Technical update to emissions factors based on data from the sector. No change to emissions obligations, as voluntary participants would be required to source this data anyway. The impact will be to reduce cost for participants.	Expected by the sector. Unlikely to be much response, but any response is expected to be positive.
3	Updating DEFs for liquid fossil fuel activities	Meets	No	<p>Technical update to emissions factors based on data from the sector. Responds to the closure of Refinery NZ's Marsden Point Oil Refinery, as all liquid fossil fuels in New Zealand are now imported.</p> <p>Could lead to minor increases and decreases in costs to consumers, with overall minor impact on cost of living. The greatest increase in DEF is heavy fuel oil, of about +3.5%. However, as the NZ ETS cost only makes up a proportion of fuel prices, this translates to about +0.7% impact on the price of heavy fuel oil.</p> <p>For consumer-facing fuels, this is much smaller, and also includes some reductions:</p> <p>Diesel DEF +0.04% is approx +0.003% to price. Regular petrol DEF +0.26% is approx +0.015% to price. Premium petrol DEF -1.98% is approx -0.107% to price.</p>	Unlikely to be much response, based on previous experience. Participants' business and price models adapt quickly to any changes given sufficient warning (which is already designed in the timing of the annual update process), and resulting costs are typically passed on not internalised.
<i>Improving accuracy for the waste sector:</i>					
4	(4a) Aligning values in DEF & UEF regulations	Exempt	Yes	Addressing cross-referencing errors from a past update.	Will require participants to re-apply for their UEFs, which some may not have needed to do next year. There may be some additional compliance costs for these participants, although participants are likely to be expecting this change.
	(4b) Clarifying data used to calculate UEFs	Exempt	Yes	Resolving a lack of clarity that complicates participant interaction in the system.	Unlikely to be much response, participants have sought clarity on this.

SENSITIVE

	(4c) Offsite destruction of landfill gas	Exempt	Yes	Addressing a gap in regulations that prevents NZUs being awarded for offsite destruction of landfill gas.	Positive response expected as this will increase flexibility and have a net-positive impact for participants.
5	Clarifying how the destruction of synthetic GHGs is recognised	Exempt	Yes	Addressing ambiguity that potentially prevents NZUs being awarded for onshore destruction of synthetic GHGs.	Positive response expected as this will increase flexibility and have a net-positive impact for participants.
6	Clarifying the definition of qualified person	Exempt	Yes	Resolving a potential loophole that would allow unsuitable individuals to manage NZU holding accounts.	Unlikely to be much response. Should only impact EPA, which identified this change. If anyone else is impacted, they would be individuals benefiting from authority that is not intended and poses risks.
7	<i>Improving auctioning regulations:</i>				
	s 9(2)(f)(iv)				
	(7b) Auctioning collateral methodology	Exempt	Yes	Technical update to reduce collateral needed to bid for units at auction, the level of which is currently unnecessary.	Any response expected to be positive.

Sensitive

Office of the Minister of Climate Change

ECO – Cabinet Economic Policy Committee

Approval to Consult: NZ ETS Settings and Annual Regulatory Updates 2024

Proposal

1. I seek Cabinet approval for the Ministry for the Environment to publicly consult during May and June of this year on options for ~~mandatory and routine~~ updates to the New Zealand Emissions Trading Scheme (NZ ETS) regulations, under the Climate Change Response Act 2002 (the Act). This includes:
 - 1.1 ~~mandatory~~ annual updates to “limits and price control settings for units” (unit settings); affecting the total amount of units supplied via auction and consequently affecting the price of carbon;
 - 1.2 routine updates to other regulations that govern the NZ ETS.

Relation to government priorities

2. The Government has recently set out its strategic priorities for addressing climate change through Target 9: to be on track to meet New Zealand’s 2050 net zero climate change targets, with total net carbon dioxide equivalent emissions of no more than 290 megatonnes from 2022 to 2025, and 305 megatonnes from 2026 to 2030. These volumes align to the first and second emissions budgets set under the Act.
3. The NZ ETS puts a price on carbon and is the main tool for achieving Target 9. The NZ ETS ~~regulations~~ undersupports a least-cost strategy by allowing participants to determine the most cost-effective way to reduce net emissions. The Act ~~need~~ requires annual adjustment review of unit settings to ensure alignment of settings with New Zealand’s climate change targets.
4. The proposals in this paper support the coalition agreements between the National Party and our coalition partners – restoring confidence and certainty in the NZ ETS, and strengthening and streamlining Government regulation.

Executive Summary

5. The NZ ETS is a ~~form-of~~ cap-and-trade scheme, which supports emissions reductions by requiring businesses to surrender one ‘emissions ~~unit~~’ (NZU) to the Government for each tonne of emissions they are responsible for. Participants must surrender units, which they obtain by (1) buying them, either at government-run auctions or from other participants in the scheme (including participants who receive units for forestry), and/or (2) receiving an industrial allocation of units from the government.
- ~~1.~~ The Government limits NZ ETS unit settings affect the number of NZUs supplied into the scheme through auctioning ~~and industrial allocation. This limits. Consequently,~~ the settings are a key lever through which the government limits the total volume of net emissions that can be emitted by participants in the scheme.
- ~~2-6.~~ Businesses that participate in the NZ ETS can buy, and therefore the price and sell NZUs from each other. The price for NZUs reflects supply and demand in the scheme.

~~This price signal allows businesses to make economically efficient choices about how to reduce scale of progress toward meeting our net emissions and increase removals/reduction targets.~~

~~Mandatory Annual updates to unit settings~~

~~3.7. Section 30GB of the Act requires the Government to update regulations for NZ ETS unit settings each year to ensure settingsthese are in place for the next five years. This annual process is our opportunity to ensure that unit settings are supporting our overall net emissions reduction goals. The Act requires that when I update the regulations I must be satisfied that these settings are in accordance with New Zealand's emissions budgets and targets.~~

~~8. As part of the The Act sets out a process for making decisions on these updating the regulations.~~

~~8.1 Section 30GC of the Act requires that I consider the advice and recommendations of the Climate Change Commission (the Commission).~~

~~3.18.1 Section 3B of the Act also requires that consultation occurs before updating NZ ETS regulations are updated.~~

~~4.9. NZ ETS market participants are familiar with the update process and expect consultation to begin soon. The Commission has identified new information that has become available since the last For this year's update, a core issue is likely to NZ ETS unit be how the settings, which may influence these settings. In particular, the Commission have recalculated the number of NZUs take account of units that are held in private accounts that they consider, known as the "surplus," and pose". A large surplus potentially poses a risk to achievement of achieving emissions budgets. The Commission has recalculated the number of these units, and judges that the surplus is larger than previously thought.~~

~~5.10. I seek Cabinet's Cabinet approval to release a consultation document that includes with options to continue that include continuing with status quo unit settings, changes to unit settings in line with the Commission's recommendations, along with and other options, including relaxing the settings around price. These options all affect the total number of units in different ways, and a core judgement in making a final decision will likely be the extent to which we wish to proactively manage the risk posed by the surplus units. I have not indicated preferred options in the consultation document.~~

~~Routine Technical updates to other NZ ETS regulations~~

~~6. I also seek Cabinet's approval to release a second consultation document on A series of other routine regulatory updates to the NZ ETS that are technical and operational matters, the majority of which I recommend are delegated to me to issue drafting instructions directly. updates have been identified by officials and participants in the NZ ETS. These updates are well overdue, and important to for maintaining the efficiency and accuracy of the NZ ETS for specific sectors or groups of participants.~~

~~Relation to wider strategic discussions on climate change~~

~~7.11. Many are standard annual updates to unit settings for the NZ ETS must support achievement of emissions budgets and other climate change targets. Decisions on NZ ETS settings need to be made in August (at the latest) to ensure they can be drafted as regulations by the 30 September 2024 deadline required by section 30H of the Act and are expected by market participants.~~

8. s 9(2)(f)(iv)

9.

12. I seek Cabinet approval to release a second consultation document on these updates. I also seek Cabinet delegation to issue drafting instructions directly on the minor of updates on this list to me, in order to reduce pressure on the key drafting window for unit settings. I will still seek Cabinet approval on any of these other regulatory updates that are significant, and the draft amendment regulations will still return to Cabinet for final approval.

Next steps

~~10-13.~~ I propose that the Ministry for the Environment publicly consult on the appended consultation documents from early May to mid-June 2024. Consultation needs to begin shortly for so that decisions on NZ ETS unit settings can be made in early August (at the latest) to ensure they can be drafted as regulations to be updated and approved by the 30 September 2024, as deadline required by section 30H of the Act.

~~11.~~ ~~NZ ETS regulatory updates are a well-established process. NZ ETS market participants are familiar with the update process and expect consultation to begin soon. Publicly releasing the attached discussion documents supports market stability and certainty.~~

14. I will return to Cabinet following consultation to seek approval on policy decisions. ~~The consultation material is structured to present options and information. It does not commit~~

~~12-15.~~ s 9(2)(f)(iv)

Updates to unit settings

Background

~~13-16.~~ NZ ETS unit settings are set in the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 for five years in advance, as required by section 30GB of the Act. Annual amendments need to be made to these regulations.

17. Unit settings comprise:

17.1 Unit limits describe, which set the volume of new units that the Government can provide to the market annually, other than for removal activities— (mostly for forestry).

~~13-17.2~~ Price controls settings, which help to keep the NZ ETS auction price within a corridor that supports achieving emissions budgets and targets.

18. Appendix 1 presents options for unit limits and price control settings, including the options proposed by the Commission, the status quo and alternatives. I will return to Cabinet with final proposed unit limits and price control settings for the next five years.

following consultation. Updated information that may be available will be considered at the time of final decisions.

19. A summary of the impact of the Commission’s recommended options compared to the status quo is provided in Appendix 2.

Unit limits

- ~~14. Together, these unit settings affect supply and demand, and indirectly influence secondary market prices. The New Zealand Unit (NZU) price affects emission abatement and investment decisions, but also directly impacts the costs of electricity, petrol, and other energy sources; as well as land use change decisions. This is the fifth year of updates to unit settings since 2020. Previous amendments to these regulations came into force on 1 January of 2021–2024, respectively.~~
- ~~15. Section 5ZOA of the Act requires the Commission to provide recommendations on these unit settings. The Commission provided its advice to me on Thursday 29 February 2024. The advice was tabled in the House and made public on Tuesday 12 March 2024. Their advice is one matter that must be considered along with other matters, as required by the Act.~~
- ~~16. A series of other technical updates have been identified by the Ministry for the Environment (MfE), the Environmental Protection Authority (EPA) and participants in the NZ ETS. Many of these updates have historically been made on an annual basis, to ensure The methodology for determining unit limits that participants in the NZ ETS have a streamlined experience interacting with the scheme, and that the data they report is accurate and current.~~
- ~~17. In 2023, only updates mandated in legislation occurred. Other important updates were deferred due to Cabinet priorities at the time. This means that a number of the regulations are out of date with current industry data and contexts.~~
- ~~18. Amendment regulations for NZ ETS unit settings and other regulatory updates need to be made by 30 September 2024 to meet the requirements of the Act.~~

Updates to unit settings

19. Section 30GC of the Act requires that updates to unit settings must accord with:
- 19.1 The 2050 target, which is:
- Net zero emissions of all greenhouse gas emissions other than biogenic methane by 2050 (and each year after);
 - 24–47% reduction below 2017 biogenic methane emissions by 2050 (and each year after), including 10 per cent reduction below 2017 by 2030;
- 19.2 Emissions budgets, which are stepping stones to the 2050 target;
- 19.3 The nationally determined contribution (NDC) under the Paris Agreement, which sets a target of 50% reduction of net emissions below gross 2005 level by 2030.
20. If unit settings are not strictly in accordance with the emissions budgets and NDC, the discrepancy must be justified in line with criteria prescribed in the Act.

Unit limits

~~21. The climate change targets involves a calculation for unit limits, including auction volumes, follows a consisting of a series of seven steps.~~

- ~~i) Align with climate change targets~~
- ~~ii) Allocate the emissions budgets to NZ ETS and non-NZ ETS sectors~~
- ~~iii) Make technical adjustments~~
- ~~iv) Account for industrial allocation volumes~~
- ~~v) Set the reduction volume to address the unit surplus~~
- ~~vi) Set approved overseas unit limit~~
- ~~vii) Calculate the auction volume~~

~~22-20. Consultation feedback is sought on the status quo calculations for all steps. A summary of the options and questions in the consultation document is provided in Appendix One. Alternative options are presented for steps i) aligning with climate change targets and v) the reductional volume for the surplus of units banked in private accounts. Those alternative options are discussed below. Further information is also provided on step ii) allocating the emissions budget to NZ ETS and non-NZ ETS sectors each of the steps as detailed in Appendix 1.~~

~~23. I have drawn Cabinet's attention to these three steps because of new information that could have an impact on how existing settings accord with budgets and targets. They include updates to New Zealand's Greenhouse Gas Inventory (the Inventory), and information about the estimated number of surplus units banked in private accounts.~~

~~Options for step i): align with climate change targets~~

~~24. The Government has options on how NZ ETS unit limits should respond to some non-NZ ETS emissions reduction policies. Non-NZ ETS policies that reduce emissions by NZ ETS covered sectors can reduce demand for NZUs. Other things being equal, this can lead to lower emission costs, but also a risk of increased NZU use by other NZ ETS participants and no decrease in overall emissions. This is known as the waterbed effect.~~

~~25. The Government has choices about how it manages this effect. Feedback is sought on whether and how to adjust the NZ ETS cap (through lowering auction volumes) to "lock in" those reductions. I propose to consult on if and how to treat non-NZ ETS policies when calculating auction volumes and will return to Cabinet with more detail on such impacts when I seek final policy decisions, following consultation.~~

~~Options for step ii): allocate emissions budgets to NZ ETS and non-NZ ETS (mainly agriculture) sectors~~

~~26. To date, unit limits have been based on the share of the emissions budget allocated to NZ ETS and non-NZ ETS (mainly agriculture) sectors, derived from the first emissions reduction plan. This separation means that under-achievement in one area, informed by new projections, would not force over-achievement in the other. That is, under-achievement in reducing agricultural emissions does not force a reduction in the number of units that could be auctioned. This provides stability and confidence to the NZ ETS sectors.~~

27. ~~s 9(2)(f)(iv)~~

~~Options for step v): set the reduction volume to reduce unit surplus~~

~~28-21. It is a feature of emissions trading schemes that units can be banked by budget periods. This allows participants to hedge against future obligations. This can provide, provides liquidity to the market and reduce/reduces price volatility. As with all units in the NZ ETS, banked units. However, this uncertainty over when NZUs will be held or sold depending on market participant's needs and expectations of future prices, used does create a risk that emissions within a budget period may exceed that emissions budget.~~

~~29-22. Since 2020, there has been on-going analysis on how many units are needed in the market to meet. A key issue for this year's settings, likely to generate substantial consultation feedback, is the number of NZUs in private accounts assessed to be 'surplus.' These are units considered surplus to the hedging requirements of emitters, and upcoming liabilities for forestry. This assessment shows that a large portion of these banked units are 'surplus' to hedging needs. The use of these units can allow emissions to exceed emissions budgets, and therefore most likely to be made available to the market.~~

~~30-23. Previous decisions have aimed to reduce the surplus to zero by 2030, through a reduction in auction volumes. The Commission has made a new/increased its estimate of the surplus, using the same methodology. The new estimate is 68 million surplus units (as at the end of September 2023). This, which is an increase of 19 million surplus units since from the last/previous estimate in 2022. As a result of this increase, the Commission recommended reducing the number of units auctioned for all years between 2025–2029.¹~~

~~31. I propose that the consultation document presents options on the surplus estimate and how this could be reduced, including those informed by the Commission's recommendation, which have a high probability of meeting emission budgets.~~

~~Summary of options for calculating unit limits~~

~~32. The unit settings consultation document includes options informed by officials' analysis of the Commission's recommendations. I am required to consider the Commission's recommendations, and consulting on these is an important part of this. The Government is not required to agree with the Commission's recommendations.~~

~~33. If decisions on this year's settings depart from the recommendations of the Commission, I will be required to prepare a report of the reasons for the difference and publish the report (including presenting the report to the House).~~

~~34. Table 1 presents the possible changes proposed by the Commission, compared to last year's auction volumes.~~

¹ For example, a reduction of the current 2025 auction volume 6.7 million NZUs, compared to the current NZ ETS cap on net emissions from NZ ETS participants of 27.1 million NZUs.

Table 1: Possible annual auction volumes proposed by the Commission compared to last year's auction volumes

24. Consultation feedback will inform officials' analysis on the estimate of the surplus and the approach to reducing it.

	2025	2026	2027	2028	2029
Currently prescribed auction volumes	12.6	10.7	9.2	6.0	-
The Commission's recommended auction volumes	5.9	5.0	4.9	3.9	3.0
Difference	-6.7	-5.7	-4.3	-2.0	-

Price control settings

35.25. There are three components to price control settings:

35.125.1 The auction price floor is the price below which the Government will not sell units at auction;

35.225.2 The cost containment reserve (CCR) trigger price(s) is the price or prices at which additional NZUs will be released if an auction's interim clearing price reaches or exceeds this level; and,

35.325.3 The CCR volume(s) ~~are~~ the number of NZUs that will be released if the trigger price is reached. The CCR volume needs to be sufficient to perform its function of increasing supply enough to mitigate against prices that are too high.

~~36. The consultation presents two options for the auction price floor and the CCR price triggers. Maintaining the status quo with adjustment to inflation from 2027 is the first option, and this is consistent with the Commission's recommendation (outlined in Table 2). The second option is a lower trigger price for the auction floor and the CCR.~~

~~37. Setting lower price triggers controls could risk increasing the surplus if other NZU holders sell units, further risking the achievement of emission budgets. It could also mean units are sold at auction at a lower price than other forecast international emissions prices.~~

~~26. The option to lower price controls does not preclude adjustment to only the auction floor, or only the CCR. Presenting both together recognises that the price corridor was set in relation to the first emissions reduction plan, including supporting modelling. Therefore, consideration should be given to both settings if any changes are to be made for final policy decisions. The consultation document seeks feedback on the price level of the auction price floor and the CCR, and the volume for the CCR. This is described further in Appendix 1.~~

Table 2: Possible auction price floor and CCR trigger price for the next five years proposed by the Commission	Maintain the status quo		Adjust for new inflation forecasts		New
	2025	2026	2027	2028	2029
Auction price floor	\$68	\$72	\$76	\$79	\$83
CCR Tier 1	\$194	\$205	\$216	\$227	\$238
CCR Tier 2	\$243	\$256	\$270	\$283	\$298

~~The consultation document presents two options for CCR volume: maintain the current CCR volume and extend it to 2029 (option 1); or increase the CCR volume to reflect surplus reduction (option 2). Table 3 outlines the CCR volumes proposed and presented in the consultation document for the next five years.~~

~~Table 3: Options for CCR volumes~~

	CCR volume (million NZUs)				
	2025	2026	2027	2028	2029 (new)
Tier 1 volume (same for both options)	2.6	2.3	2.1	1.9	1.7
Tier 2 volume (option 1)	4.5	4.2	3.8	3.4	3.0
Tier 2 volume (option 2)	10.1	9.4	8.6	7.6	6.9
Total CCR volume option 1	7.1	6.5	5.9	5.3	4.7
Total CCR volume option 2	12.7	11.7	10.7	9.5	8.6

~~38. I will return to Cabinet with final proposed unit limits and price control settings for the next five years, following consultation. The government will consider updated information that may be available at the time of final decisions.~~

Updates to other NZ ETS regulations

~~27. In 2023, only updates mandated in legislation occurred. Other important updates were deferred due to Cabinet priorities at the time. This means that a number of the regulations are out of date with current industry data and contexts, and are actively anticipated by market participants and other stakeholders.~~

~~39-28. In addition to the updates to the NZ ETS settings described above, I am proposing a range of routine updates to other regulations that govern the NZ ETS. These are not mandated on an annual basis by legislation, but are needed to ensure that the NZ ETS is efficient, accurate, and fit for purpose, as well as to provide certainty to participants.~~

~~29. NZ ETS participants expect the government to regularly assess and consult on these kinds of routine updates, especially revising default and unique emissions factors, so that the emissions that they report and pay for are accurate. Some updates proposed have been identified by participants, or developed in discussion with them. I anticipate that consultation on these matters will be welcomed by market participants.~~

~~40-30. The majority of these updates are purely technical and operational, in that they involve no decisions on policy intent and/or have no or only minor impacts. on the wider economy, though they are important to the relevant sectors. A small number are more significant and require decisions on policy intent, ~~as discussed from para. The proposed updates are described in 54-Appendix 3, with full details and analysis set out in the consultation document.~~~~

~~41-31. I also seek delegation to directly issue drafting instructions following consultation on updates that have been identified as purely technical and operational ~~(noted in the list below, starting at para 54). This is because~~. I consider that these updates meet the exemption set out in clause 7.95(d) of the Cabinet Manual: "If the secondary legislation is routine and does not require new policy decisions, the Minister may authorise drafting without reference to Cabinet." They comprise entirely of numerical calculations and/or clarifications to wording to give effect to existing policy intent.~~

~~42.32. As a standing delegation, this approach would streamline future updates to the NZ ETS and align with existing processes to issue drafting instructions for other technical matters. In particular, the price of carbon (used by the Synthetic Greenhouse Gas Levy) must be updated annually but requires no policy decisions, so each year the drafting instructions for this update are issued under this clause of the Cabinet Manual a standing delegation exists for this.~~

~~43.33. This delegation still gives Cabinet the opportunity to review amended regulations, as I will return to you in August/September 2024 to approve the regulations for gazettal.~~

~~44. Further analysis on these updates are summarised below. Full details of the updates are provided in the consultation document itself.~~

~~45. Updates to default emissions factors (DEFs) and unique emissions factors (UEFs) across three key sectors: geothermal, natural gas, and liquid fossil fuels. This update is intended to bring the emissions factors used in emissions reporting into line with the latest sectoral data on their production:~~

~~45.1 The geothermal and liquid fossil fuel updates are considered non-minor, primarily because these proposals may have a moderate impact on participants' emissions costs, despite the calculations being technical in nature;~~

~~45.2 The natural gas update is considered minor and technical, and I therefore recommend this item for delegation to the Minister of Climate Change to issue drafting instructions.~~

~~46. A range of improvements and clarifications are needed to ensure that waste regulations and UEF regulations for waste activities are aligned. These updates are considered minor and technical, and, including which items are recommended for delegation.~~

~~47. Clarification is required to ensure that synthetic greenhouse gases can be destroyed domestically in New Zealand and receive units as a removal activity. This is considered minor/technical and recommended for delegation.~~

~~48. Clarification is required to ensure that only suitable individuals can become primary representatives for holding accounts on the NZ ETS Register. This is considered minor/technical and recommended for delegation.~~

~~49. Two updates are proposed for auctioning regulations (but not in scope of unit settings):~~

~~s 9(2)(f)(iv)~~

~~50.34. The second makes a small change to how collateral for auctions is calculated, ensuring that participants are not submitting more collateral than necessary for their bids. This is considered minor/technical and recommended for delegation, is provided in Appendix 3.~~

Impacts on emissions reductions

~~51.35. Detail on emissions reductions expected at different price points and in response to different packages of options will be provided in the post-consultation report back to~~

Cabinet when I seek policy decisions. This will draw from analysis carried out by officials, the Commission's modelling, and other sources.

Impacts on other work programmes

~~52-37.~~ s 9(2)(f)(iv)

~~53-37.~~ These will be further described when I seek policy decisions post-consultation.

Timing pressures in delivering these updates

~~54-38.~~ There ~~are timing pressures in meeting the~~ is a legal requirement to publish unit settings updates before the end of September 2024. The timeframe allows for ~~five~~ less than the standard six weeks of public consultation. ~~(currently proposed for just over four weeks).~~

~~55-39.~~ The other regulatory updates proposed can be progressed to the same deadlines as unit settings, and including these has no further timeframe implications.

Proposal to consult

~~56-40.~~ I have appended two consultation documents that describe options for updates to NZ ETS unit settings and to other regulations that govern the NZ ETS respectively:

~~56-140.1~~ Annual Updates to the New Zealand Emissions Trading Scheme Limits and Price Control Settings for Units 2024;

~~56-240.2~~ Proposed Changes to New Zealand Emissions Trading Scheme Regulations 2024.

~~57-41.~~ I propose to consult on these papers from ~~early~~ mid-May to mid-June 2024.

Cost-of-living implications

~~58-42.~~ There are no cost-of-living implications of approving consultation. Cost-of-living implications of any updates proposed will be provided in the post-consultation Cabinet paper seeking policy decisions.

~~59.~~ ~~Amendments to unit settings may have cost-of-living implications, as they can influence the cost of commodities such as fuel and electricity; however, cash proceeds from the scheme have been identified as a potential way of providing tax relief for households.~~

Financial implications

~~60.43.~~ There are no financial implications of approving consultation. Financial implications of proposed updates will be provided post-consultation when I seek policy decisions. Potential fiscal implications of the Commission's options are included in Appendix 2.

~~61.~~ NZ ETS auctions provide revenue neutral cash inflow. Cash inflow from auctions are matched by a liability on the Crown's balance sheet. This means that NZ ETS auctions do not generate revenue (and therefore do not impact the operating balance) but do have an impact on net debt as they raise cash.

~~62.~~ At current secondary market prices², NZ ETS auction cash proceeds would decline by approximately \$55.5 million for every 1 million units that auction volume is decreased, all else being equal. There are likely to be interactions with price that could mediate these impacts as a reduction in auction volume would also indirectly affect NZU prices by reducing the number of units supplied to market.

~~63.~~ I estimate that accepting the Commission's recommendations for unit settings could reduce cash receipts from NZ ETS auctions by \$1.00B, from \$2.38B to \$1.38B (based on secondary market price of \$55.50 as at 22 April 2024).³ I will return to Cabinet with an updated estimate of any changes when I seek final policy decisions.


~~64.~~ I will present the fiscal impact of proposed updates to unit settings when I return to Cabinet seeking final agreement in July, following consideration of consultation feedback.

~~65.~~ s 9(2)(f)(iv)




Legal implications [legally privileged]

s 9(2)(h)



s 9(2)(h)



Legislative implications

~~70-51.~~ Amendments to a number of regulations under the Act may be required. Drafting approval for these would be sought at the time of policy decisions mid-year.

~~71-52.~~ I seek ~~approval from Cabinet~~Cabinet's delegation to issue drafting instructions for some of the technical updates (not including any ~~of the updates relating to~~ unit settings). These drafting instructions would be issued ~~between May in June~~ and July 2024, allowing the Parliamentary Counsel Office (PCO) to draft ~~amendment regulations in tranches, supporting purely technical amendments sooner, reducing pressure on the key drafting period for unit settings, to support~~ their busy drafting schedule.

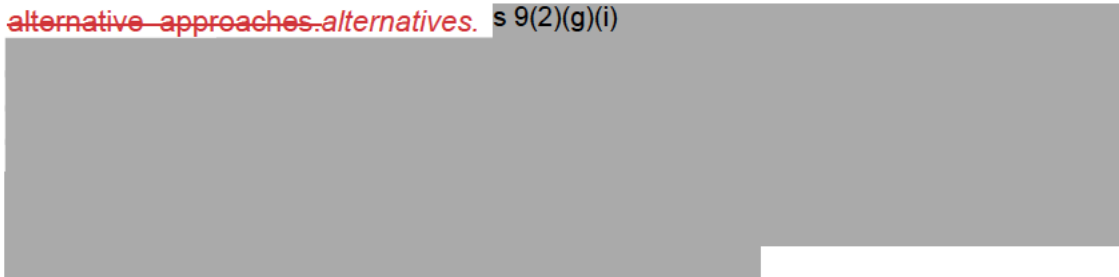
Impact analysis

Regulatory Impact Statement (RIS)

~~72-53.~~ Regarding regulatory impact ~~assessment~~analysis of proposals relating to **unit settings**:

~~The Regulatory Impact Analysis~~ A quality assurance panel has reviewed this discussion document as prepared by comprising members from the Ministry for the Environment has reviewed this consultation document and considerconsiders it **partially meets** the Treasury's quality assurance criteria. The NZ ETS unit settings ~~process and its objectives are well explained, and the discussion~~consultation document ~~logically sets out the methodology used to develop~~clearly articulates its options, including by reference to the Commission's role and recommendations. ~~The discussion document's options are clearly articulated,~~ while still leaving scope for submitters to call for

~~alternative approaches.alternatives.~~ s 9(2)(g)(i)



73.54. For other proposals for NZ ETS regulations, requirements varied across updates:

73.154.1 The majority of updates proposed in the consultation document on other regulatory updates are purely technical and operational, ~~and have no or only minor impacts. As a result, they are exempt from the impact assessment requirements.~~ Officials at the Ministry for the Environment and the Treasury have agreed that the following purely technical updates a set of these proposals are exempt from regulatory impact analysis requirements:

- ~~○ Updating DEFs for natural gas activities;~~
- ~~○ Improving accuracy for the waste sector;~~
- ~~○ Clarifying how destruction of synthetic greenhouse gases is recognised;~~
- ~~○ Clarifying the definition of qualified person;~~
- ~~○ Improving auctioning regulations: Auctioning collateral methodology.~~

73.2 Three updates presented in this consultation document are likely to have more-than-minor impacts or involve decisions on policy intent. ~~These include:~~

- ~~○ Updating DEFs and UEF methodologies for geothermal activities;~~
- ~~○ Updating DEFs for liquid fossil fuel activities;~~
- ~~○ s 9(2)(f)(iv)~~

73.354.2 Regarding impact analysis of these three updates:

*A quality assurance panel with members from the Ministry for the Environment has reviewed the consultation document for the above regulatory proposals. The panel considers that it **meets** the Quality Assurance criteria. The consultation document clearly sets out the context for the issues. The language used in the document is appropriate for the technicality and the audience of the consultation document. Due to the nature of the document, the consultation criterion has not been taken into consideration as part of the quality assurance process. Overall, the quality assurance panel considers it to be convincing, and will support informed and effective consultation.*

54.3 Appendix 2 summarises the details of these other proposals, including listing which are exempt and which have been assessed.

Climate Implications of Policy Assessment (CIPA)

74.55. Regarding CIPA requirements for proposals relating to **unit settings**:

*The CIPA team has been consulted and confirms that the CIPA requirements **do not apply** to this proposal as the threshold for significance is not met. However, it is expected that*

there will be emissions impacts as a result of further decisions required following consultation. Any emissions impacts will be reassessed and disclosed to Cabinet as appropriate.

75-56. Regarding CIPA requirements for **other proposals** to NZ ETS regulations:

*The CIPA team has been consulted and confirms that the CIPA requirements **do not apply** to this proposal as the impacts are indirect. This proposal is not able to be meaningfully quantified and it is unclear if it would have any impact on emissions; however, it is expected to improve the functioning of the NZ ETS and therefore to lead to improved emissions reductions outcomes over time. Likely emissions impacts will be reassessed and disclosed to Cabinet as further decisions are required following consultation.*

Population implications

76-57. There are no population implications for approving consultation. Population implications of any updates proposed will be provided in the post-consultation Cabinet paper seeking policy decisions.

Te Tiriti o Waitangi implications

58. There are no Te Tiriti implications for approving consultation. The Act requires the Minister to consult with representatives of iwi and Māori likely to have an interest in proposed changes to NZ ETS regulations.

~~77.~~ Māori have a significant interest in climate change action ~~and the NZ ETS.~~

~~78.~~ Māori have an interest in the NZ ETS as rangatira, kaitiaki, land and forest owners, rural communities, workers, business owners, and whānau. The multiple interests in the NZ ETS mean that options could have positive, negative, and neutral impacts.

~~79.~~ For NZ ETS settings in particular, an increase in New Zealand Unit (NZU) price could benefit Māori forest owners or owners of land suitable for afforestation, due to possible increases in returns from carbon. This would provide particular benefit to those entered in the post-1989 permanent forest category, as well as to participants who are registered under averaging accounting (as they no longer face surrender obligations when they harvest).

~~80.~~ However, an increase to the cost of emissions will also have implications across the economy, with flow on effects for households and communities. Whānau Māori are disproportionately represented in lower income groups with the most limited ability to absorb cost increases.

~~81.~~ Therefore, I have analysed impact on different groups that may be impacted. I plan Consultation allows me to seek feedback on specific impacts ~~the proposed regulatory updates and options to update NZ ETS settings would have~~ on Māori.

82-59. Feedback will be included when I seek final policy decisions from Cabinet~~the proposals.~~

Human Rights

83-60. There are no inconsistencies between these proposals and the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993.

Use of external resources

~~84.61.~~ No external resources were contracted for the development of this paper. ~~Emissions factors for the geothermal and liquid fossil fuel sectors were built on two existing pieces of advice from sectoral experts, which were contracted in 2022.~~

Consultation

~~85.62.~~ The Treasury, the Ministry of Foreign Affairs and Trade (MFAT), the Ministry for Primary Industries, the Ministry of Business, Innovation and Employment, the Environmental Protection Authority, the Ministry of Transport, the Ministry of Social Development, Waka Kotahi New Zealand Transport Agency, Te Arawhiti, and Te Puni Kōkiri were consulted on this paper. The Department of Prime Minister and Cabinet was informed.

~~86.63.~~ Where I received feedback, it has been considered and incorporated as appropriate.

Communications

~~87.64.~~ Notification of consultation will be sent to NZ ETS stakeholders the day before the consultation is launched. Consultation documents will then be published on the MfE website prior to market opening the following day.

~~88.65.~~ A range of stakeholders that are specifically affected by routine technical regulatory updates have been engaged throughout the development of those proposals. These stakeholders are generally aware that public consultation will form part of the ongoing regulatory update process prior to Cabinet approving amendments.

Proactive release

~~89.66.~~ I propose to proactively release this paper on the MfE website in the first week of consultation, subject to ~~redactions as appropriate~~ redactions under the Official Information Act 1982.

Recommendations

The Minister of Climate Change recommends that the Committee:

~~90.67.~~ **note** that the Minister of Climate Change must be satisfied that consultation has occurred before Cabinet makes policy decisions on updates to New Zealand Emissions Trading Scheme (NZ ETS) regulations, including the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020;

Updates to NZ ETS unit settings

~~91.68.~~ **note** that ~~I propose to consult on~~ the Minister of Climate Change proposes that the consultation includes options for unit limit and auction price control setting ~~options~~, incorporating the advice provided by the Climate Change Commission (the Commission), as well as other options including the status quo;

~~92.~~ **note** that options include:

~~92.1~~ ~~— updating or maintaining auction volume for the first two years (2025 and 2026);~~

~~92.2~~ ~~— maintaining the current approach, or significantly reducing auction volume for 2025–2029 to reduce the increase in the surplus estimate;~~

~~92.3 — maintaining the current auction price triggers for 2025 and 2026, and adjust for inflation for 2027–2029, or lowering the auction price triggers;~~

~~92.4 — maintaining or increasing the current cost containment reserve volume;~~

~~93. — note that I propose to consult on how NZ ETS unit limits should respond to some non-NZ ETS emissions reduction policies;~~

~~94. — note that the option for *step ii*) for allocating the emissions budget is based on the share of the budget allocated to NZ ETS and non-NZ ETS sectors (mainly agriculture), derived from the first emissions reduction plan, meaning that this share does not respond to changing industry trends and agricultural emissions policy direction;~~

~~95. — s 9(2)(f)(iv)~~

Updates to other NZ ETS regulations

~~96-69. note that the regulations that govern the NZ ETS require regular updating updates to maintain the integrity of the scheme, and that such updates are expected by NZ ETS participants;~~

~~97-70. note that the majority of updates proposed are technical and operational, requiring no policy decisions other than whether or not to progress the update;~~

~~98. — note that the three proposed updates that involve policy decisions in addition to technical and operational matters are: Updating default emission factors (DEFs) and unique emission fractions (UEF) methodologies for geothermal activities; s 9(2)(f)(iv)~~

~~71. note that items not considered minor or technical will return to Cabinet for policy decisions alongside unit settings following consultation;~~

Delegation of technical updates

~~99. — agree that the Minister of Climate Change is authorised to make post-consultation decisions for this year on the purely technical matters proposed, including to issue drafting instructions under clause 7.95(d) of the Cabinet Manual. The items proposed for delegation are:~~

~~99.1 — Updating DEFs for natural gas activities;~~

~~99.2 — Improving accuracy for the waste sector;~~

~~99.3 — Clarifying how the destruction of synthetic greenhouse gases is recognised;~~

~~99.4 — Clarifying the definition of qualified person;~~

~~99.5 — Improving auctioning regulations: Auctioning collateral methodology;~~

~~100-72. agree that the Minister of Climate Change is authorised to make post-consultation decisions in future years on the purely technical matters, including to issue drafting instructions under clause 7.95(d) of the Cabinet Manual;-, this year and in future years;~~

~~401.73.~~ 401.73. **agree** that ~~for future years,~~ 'purely technical matters' refer to: routinely updating default and unique emissions factors where there is no change to how participants report their emissions; or, clarifying previous drafting to better align with existing policy decisions;

~~402.~~ **note** that ~~three remaining updates presented in the consultation document that involve policy consideration in addition to technical and operational matters, on which I propose to return to Cabinet to seek decisions. These include:~~

~~402.1~~ **Updating DEFs and UEFs methodologies for geothermal activities;**

~~402.2~~ **Updating DEFs for liquid fossil fuel activities;**

s 9(2)(f)(iv)

~~403.~~ **note** that ~~I will directly issue drafting instructions relating to updating the price of carbon (used by the Synthetic Greenhouse Gas Levy) under clause 7.95(d) of the Cabinet Manual, as occurs annually;~~

~~404.74.~~ 404.74. **note** that ~~note that the Minister of Climate Change~~ will seek Cabinet approval in September 2024 for the amended regulations for all updates, including any updates where the authority to issue drafting instructions is delegated to me, once they have been drafted;

Consultation

~~75.~~ 75. **approve** the Minister of Climate Change to direct officials to carry out public consultation of the two sets of updates proposed to NZ ETS regulations;

~~405.76.~~ 405.76. **agree** to release the attached documents to support consultation on these updates:

~~405.176.1~~ 405.176.1 *Annual Updates to the New Zealand Emissions Trading Scheme Limits and Price Control Settings for Units 2024;*

~~405.276.2~~ 405.276.2 *Proposed Changes to New Zealand Emissions Trading Scheme Regulations 2024;*

~~406.77.~~ 406.77. **note** that the consultation period will start before the end of the week in which Cabinet approves the release of these documents, and run for a minimum of ~~54~~ weeks;

~~407.78.~~ 407.78. **agree** that ~~the Minister of Climate Change~~ can make minor design, editorial, and technical changes to the consultation documents as needed prior to their release;

~~408.79.~~ 408.79. **note** that ~~the Minister of Climate Change~~ will seek policy decisions and Cabinet approval to issue drafting instructions for amendment regulations in July 2024.

Authorised for lodgement

Hon Simon Watts

Minister of Climate Change

Appendix 1: Summary of Options for NZ ETS Unit Settings

		Options (Commission advice marked with *)	Questions
Unit limits			
Step i) Align with climate change targets	<p>The step sets how the NZ ETS should align with emissions budgets, the 2050 target and the NDC. Feedback is sought on three options considering whether and how to adjust the NZ ETS cap (through lowering auction volumes) to “lock in” emissions reductions from non-NZ ETS policies.</p>	<p>Option 1: status quo, align with emissions budgets</p> <p>*Option 2: minimum adjustment, updating for Inventory methodological changes</p> <p>Option 3: further adjustment, update for Inventory methodological changes and manage the impact of non-NZ ETS policies</p>	<p>1. What do you think of each of the options presented for step 1? What is your preferred option? Is there any other option that you think we should consider?</p> <p>2. If option 3 for step 1 was proposed, what criteria could be used to identify eligible reductions and removals?</p>
Step ii) Allocate the emissions budgets to NZ ETS and non-NZ ETS sectors	<p>This step estimates, within the overall limit set by emissions budgets, how many emissions will take place inside vs outside the NZ ETS over the 5-year period.</p> <p>In its advice, the Commission has used the split set out in the first emissions reduction plan. Consulting on this step allows us to test whether this is appropriate, or whether there are better approaches.</p> <p>From next year, these decisions can be informed by the second emissions reduction plan which will reflect this Government’s policy approach to achieving the second emissions budget.</p>	<p>*Option 1: status quo, volume is allocated to NZ ETS and non-NZ ETS sectors based on the first emissions reduction plan</p>	<p>3. Do you agree with the calculation for step 2? If not, why not? Do you have any evidence or information to suggest a different share of the emissions budget?</p>
Step iii) Make technical adjustments	<p>This step accounts for discrepancies between the Inventory and the NZ ETS.</p>	<p>*Option 1: status quo, account for discrepancies between the Inventory and the NZ ETS</p>	<p>4. Do you agree with the calculation for step 3? If not, why not? Do you have any evidence or information to support a different option?</p>
Step iv) Account for industrial allocation volumes	<p>This step accounts for NZUs expected to be provided for industrial allocation.</p>	<p>*Option 1: status quo, updated industrial allocation projections</p>	<p>5. Do you agree with the calculation for step 4? If not, why not? Do you have any evidence or information to support a different option?</p>

SENSITIVE

<u>Step v) Set the reduction volume to address the unit surplus</u>	<u>The consultation document seeks feedback on the Commission's surplus estimate and how the surplus is reduced over time.</u>	<u>Option 1: status quo, no update to surplus reduction despite the updated surplus estimate</u>	<u>6. Do you agree with the Commission's surplus methodology and estimate? If not, why not?</u>
		<u>Option 2: update surplus reductions for 2027–28 for the updated surplus estimate</u>	<u>7. What is your preferred option for step 5? Is there any other option that you think we should consider?</u>
		<u>*Option 3: update surplus reductions for 2025–2028 to reflect the updated surplus estimate</u>	<u>8. We are interested in your views on the Commission's interpretation of increased transfers of pre-1990 units. Do you think the sale of pre-1990 units have increased? If so, what factors are influencing this?</u>
<u>Step vi) Set approved overseas unit limit</u>	<u>This step sets the overseas unit limit. There are currently no overseas units, therefore the limit is set at zero.</u>	<u>N/A</u>	<u>N/A</u>
<u>Price control settings</u>			
<u>Set the price control trigger prices for the auction floor price and CCR (the price corridor)</u>	<u>This sets the price at which the auction floor price and the CCR are triggered. The consultation document presents two options for the price corridor: maintain the status quo or lower the price corridor. The option to lower the price corridor does not preclude adjustment to only the auction floor, or only the CCR. Presenting both together recognises that the price corridor was set in relation to the first emissions reduction plan, including supporting modelling.</u>	<u>*Option 1: status quo extended, current price corridor is maintained (triggers increase by 3 per cent each year and are adjusted for forecast inflation)</u>	<u>9. What is your preferred option for the price control corridor? Is there any other option that you think we should consider? What factors should inform the price these are set?</u>
		<u>Option 2: lower price corridor</u>	<u>10. Do you consider a price corridor (i.e. an auction floor price and a CCR), to be important? Why or why not?</u>
<u>CCR volume</u>	<u>This sets the number of units available in the CCR, if it is triggered.</u>	<u>*Option 1: status quo, maintain current volume in the CCR</u>	<u>11. What is your preferred option for the CCR volume? Is there any other option that you think we should consider?</u>
		<u>Option 2: increase CCR volume to reflect the surplus reduction</u>	
<u>Impacts</u>			
<u>Impact analysis</u>	<u>The consultation document presents impact assessment of the options presented could have on different sectors.</u>	<u>N/A</u>	<u>12. Do you agree with our impact analysis? Are there any further impacts that should be considered, which we have not captured in our analysis?</u>

SENSITIVE

Appendix 2: Summary of impacts of the Commission’s recommendations compared to the status quo

Table 1: Possible annual auction volumes proposed by the Commission compared to auction volumes currently prescribed in regulations

	<u>Auction volume (million NZUs)</u>				
	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
<u>Currently prescribed auction volumes</u>	<u>12.6</u>	<u>10.7</u>	<u>9.2</u>	<u>6.9</u>	<u>=</u>
<u>The Commission’s recommended auction volumes</u>	<u>5.9</u>	<u>5.0</u>	<u>4.9</u>	<u>3.9</u>	<u>3.0</u>
<u>Difference</u>	<u>-6.7</u>	<u>-5.7</u>	<u>-4.3</u>	<u>-3.0</u>	<u>=</u>

Table 2: Possible auction price floor and CCR trigger price for the next five years proposed by the Commission (same as status quo)

	<u>Maintain the status quo</u>		<u>Adjust for new inflation forecasts</u>		<u>New</u>
	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>
<u>Auction price floor</u>	<u>\$68</u>	<u>\$72</u>	<u>\$76</u>	<u>\$79</u>	<u>\$83</u>
<u>CCR Tier 1</u>	<u>\$194</u>	<u>\$205</u>	<u>\$216</u>	<u>\$227</u>	<u>\$238</u>
<u>CCR Tier 2</u>	<u>\$243</u>	<u>\$256</u>	<u>\$270</u>	<u>\$283</u>	<u>\$298</u>

Table 3: Possible CCR volume proposed by the Commission (status quo) compared with alternative option to increase volume

	<u>CCR volume (million NZUs)</u>				
	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029 (new)</u>
<u>Tier 1 volume (same for both options)</u>	<u>2.6</u>	<u>2.3</u>	<u>2.1</u>	<u>1.9</u>	<u>1.7</u>
<u>Tier 2 volume (option 1)</u>	<u>4.5</u>	<u>4.2</u>	<u>3.8</u>	<u>3.4</u>	<u>3.0</u>
<u>Tier 2 volume (option 2)</u>	<u>10.1</u>	<u>9.4</u>	<u>8.6</u>	<u>7.6</u>	<u>6.9</u>
<u>Total CCR volume – option 1</u>	<u>7.1</u>	<u>6.5</u>	<u>5.9</u>	<u>5.3</u>	<u>4.7</u>
<u>Total CCR volume – option 2</u>	<u>12.7</u>	<u>11.7</u>	<u>10.7</u>	<u>9.5</u>	<u>8.6</u>

Appendix 3: Summary of Proposals for Other Technical Updates

No.	Update	Impact Analysis status	Proposed for delegation?	Context & analysis	Anticipated response
1	Updating DEFs & UEF methodologies for geothermal activities	Meets	No	Technical update to emissions factors based on data from the sector. Further proposals to simplify participant interaction with the NZ ETS, reduce their compliance costs, and better recognise mitigations.	Actively expected by the sector, who have provided input and support for these proposals to date.
2	Updating DEFs for natural gas activities	Exempt	Yes	Technical update to emissions factors based on data from the sector. No change to emissions obligations, as voluntary participants would be required to source this data anyway. The impact will be to reduce cost for participants.	Expected by the sector. Unlikely to be much response, but any response is expected to be positive.
3	Updating DEFs for liquid fossil fuel activities	Meets	No	<p>Technical update to emissions factors based on data from the sector. Responds to the closure of Refinery NZ's Marsden Point Oil Refinery, as all liquid fossil fuels in New Zealand are now imported.</p> <p>Could lead to minor increases and decreases in costs to consumers, with overall minor impact on cost of living. The greatest increase in DEF is heavy fuel oil, of about +3.5%. However, as the NZ ETS cost only makes up a proportion of fuel prices, this translates to about +0.7% impact on the price of heavy fuel oil.</p> <p>For consumer-facing fuels, this is much smaller, and also includes some reductions:</p> <p>Diesel DEF +0.04% is approx +0.003% to price. Regular petrol DEF +0.26% is approx +0.015% to price. Premium petrol DEF -1.98% is approx -0.107% to price.</p>	Unlikely to be much response, based on previous experience. Participants' business and price models adapt quickly to any changes given sufficient warning (which is already designed in the timing of the annual update process), and resulting costs are typically passed on not internalised.
<i>Improving accuracy for the waste sector:</i>					
4	(4a) Aligning values in DEF & UEF regulations	Exempt	Yes	Addressing cross-referencing errors from a past update.	Will require participants to re-apply for their UEFs, which some may not have needed to do next year. There may be some additional compliance costs for these participants, although participants are likely to be expecting this change.
	(4b) Clarifying data used to calculate UEFs	Exempt	Yes	Resolving a lack of clarity that complicates participant interaction in the system.	Unlikely to be much response, participants have sought clarity on this.

SENSITIVE

	<u>(4c) Offsite destruction of landfill gas</u>	<u>Exempt</u>	<u>Yes</u>	<u>Addressing a gap in regulations that prevents NZUs being awarded for offsite destruction of landfill gas.</u>	<u>Positive response expected as this will increase flexibility and have a net-positive impact for participants.</u>
5	<u>Clarifying how the destruction of synthetic GHGs is recognised</u>	<u>Exempt</u>	<u>Yes</u>	<u>Addressing ambiguity that potentially prevents NZUs being awarded for onshore destruction of synthetic GHGs.</u>	<u>Positive response expected as this will increase flexibility and have a net-positive impact for participants.</u>
6	<u>Clarifying the definition of qualified person</u>	<u>Exempt</u>	<u>Yes</u>	<u>Resolving a potential loophole that would allow unsuitable individuals to manage NZU holding accounts.</u>	<u>Unlikely to be much response. Should only impact EPA, which identified this change. If anyone else is impacted, they would be individuals benefiting from authority that is not intended and poses risks.</u>
7	<u>Improving auctioning regulations:</u>				
	s 9(2)(f)(iv)				
	<u>(7b) Auctioning collateral methodology</u>	<u>Exempt</u>	<u>Yes</u>	<u>Technical update to reduce collateral needed to bid for units at auction, the level of which is currently unnecessary.</u>	<u>Any response expected to be positive.</u>

Sensitive

Office of the Minister of Climate Change

ECO – Cabinet Economic Policy Committee

Approval to Consult: NZ ETS Settings and Annual Regulatory Updates 2024

Proposal

1. I seek Cabinet approval for the Ministry for the Environment to publicly consult during May and June of this year on options for mandatory and routine updates to the New Zealand Emissions Trading Scheme (NZ ETS) regulations, under the Climate Change Response Act 2002 (the Act). This includes:
 - 1.1 mandatory annual updates to “limits and price control settings for units” (unit settings);
 - 1.2 routine updates to other regulations that govern the NZ ETS.

Relation to government priorities

2. The Government has recently set out its strategic priorities for addressing climate change through Target 9: to be on track to meet New Zealand’s 2050 net zero climate change targets, with total net emissions of no more than 290 megatonnes from 2022 to 2025, and 305 megatonnes from 2026 to 2030. These volumes align to the first and second emissions budgets set under the Act.
3. The NZ ETS is the main tool for achieving Target 9. The NZ ETS regulations under the Act need annual adjustment to ensure alignment of settings with New Zealand’s climate change targets.
4. The proposals in this paper support the coalition agreements between the National Party and our coalition partners – restoring confidence and certainty in the NZ ETS, and strengthening and streamlining Government regulation.

Executive Summary

5. The NZ ETS is a form of cap-and-trade scheme, which supports emissions reductions by requiring businesses to surrender one ‘emissions unit’ (NZU) to the Government for each tonne of emissions they are responsible for.
6. The Government limits the number of NZUs supplied into the scheme through auctioning and industrial allocation. This limits the total volume of net emissions that can be emitted by participants in the scheme.
7. Businesses that participate in the NZ ETS can buy and sell NZUs from each other. The price for NZUs reflects supply and demand in the scheme. This price signal allows businesses to make economically efficient choices about how to reduce emissions and increase removals.

Mandatory annual updates to unit settings

8. Section 30GB of the Act requires the Government to update regulations for NZ ETS unit settings each year to ensure settings are in place for the next five years. I must be

satisfied that these settings are in accordance with New Zealand's emissions budgets and targets.

9. As part of the process for making decisions on these regulations, section 30GC of the Act requires that I consider the advice and recommendations of the Climate Change Commission (the Commission). Section 3B of the Act also requires that consultation occurs before regulations are updated.
10. The Commission has identified new information that has become available since the last update to NZ ETS unit settings, which may influence these settings. In particular, the Commission have recalculated the number of NZUs in private accounts that they consider 'surplus,' and pose a risk to achievement of emissions budgets.
11. I seek Cabinet's approval to release a consultation document that includes options to continue with status quo settings, changes to settings in line with the Commission's recommendations, along with other options, including relaxing the settings around price. I have not indicated preferred options in the consultation document.

Routine updates to other NZ ETS regulations

12. I also seek Cabinet's approval to release a second consultation document on other routine regulatory updates to the NZ ETS that are technical or operational matters, the majority of which I recommend are delegated to me to issue drafting instructions directly. These updates are well overdue, and important to maintaining the efficiency and accuracy of the NZ ETS for specific sectors or groups of participants.

Relation to wider strategic discussions on climate change

13. Annual updates to unit settings for the NZ ETS must support achievement of emissions budgets and other climate change targets. Decisions on NZ ETS settings need to be made in August (at the latest) to ensure they can be drafted as regulations by the 30 September 2024 deadline required by section 30H of the Act.

14. s 9(2)(f)(iv)

15.

Next steps

16. I propose that the Ministry for the Environment publicly consult on the appended consultation documents from early May to mid-June 2024. Consultation needs to begin shortly for regulations to be updated by 30 September 2024, as required by the Act.
17. NZ ETS regulatory updates are a well-established process. NZ ETS market participants are familiar with the update process and expect consultation to begin soon. Publicly releasing the attached discussion documents supports market stability and certainty.
18. I will return to Cabinet following consultation to seek approval on policy decisions. The consultation material is structured to present options and information. It does not commit the Government to any particular options.

Background

19. NZ ETS unit settings are set in the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020 for five years in advance, as required by section 30GB of the Act. Annual amendments need to be made to these regulations.
20. Unit limits describe the volume of new units that the Government can provide to the market annually other than for removal activities. Price controls help to keep the NZ ETS auction price within a corridor that supports achieving emissions budgets and targets.
21. Together, these unit settings affect supply and demand, and indirectly influence secondary market prices. The New Zealand Unit (NZU) price affects emission abatement and investment decisions, but also directly impacts the costs of electricity, petrol, and other energy sources; as well as land-use-change decisions. This is the fifth year of updates to unit settings since 2020. Previous amendments to these regulations came into force on 1 January of 2021–2024, respectively.
22. Section 5ZOA of the Act requires the Commission to provide recommendations on these unit settings. The Commission provided its advice to me on Thursday 29 February 2024. The advice was tabled in the House and made public on Tuesday 12 March 2024. Their advice is one matter that must be considered along with other matters, as required by the Act.
23. A series of other technical updates have been identified by the Ministry for the Environment (MfE), the Environmental Protection Authority (EPA) and participants in the NZ ETS. Many of these updates have historically been made on an annual basis, to ensure that participants in the NZ ETS have a streamlined experience interacting with the scheme, and that the data they report is accurate and current.
24. In 2023, only updates mandated in legislation occurred. Other important updates were deferred due to Cabinet priorities at the time. This means that a number of the regulations are out of date with current industry data and contexts.
25. Amendment regulations for NZ ETS unit settings and other regulatory updates need to be made by 30 September 2024 to meet the requirements of the Act.

Updates to unit settings

26. Section 30GC of the Act requires that updates to unit settings must accord with:
 - 26.1 The 2050 target, which is:
 - Net zero emissions of all greenhouse gas emissions other than biogenic methane by 2050 (and each year after);
 - 24–47% reduction below 2017 biogenic methane emissions by 2050 (and each year after), including 10 per cent reduction below 2017 by 2030;
 - 26.2 Emissions budgets, which are stepping stones to the 2050 target;
 - 26.3 The nationally determined contribution (NDC) under the Paris Agreement, which sets a target of 50% reduction of net emissions below gross 2005 level by 2030.
27. If unit settings are not strictly in accordance with the emissions budgets and NDC, the discrepancy must be justified in line with criteria prescribed in the Act.

Unit limits

28. The calculation for unit limits, including auction volumes, follows a series of seven steps.
- i) Align with climate change targets
 - ii) Allocate the emissions budgets to NZ ETS and non-NZ ETS sectors
 - iii) Make technical adjustments
 - iv) Account for industrial allocation volumes
 - v) Set the reduction volume to address the unit surplus
 - vi) Set approved overseas unit limit
 - vii) Calculate the auction volume
29. Consultation feedback is sought on the status quo calculations for all steps. A summary of the options and questions in the consultation document is provided in Appendix One. Alternative options are presented for steps i) *aligning with climate change targets* and v) *the reduction volume for the surplus of units banked in private accounts*. Those alternative options are discussed below. Further information is also provided on step ii) *allocating the emissions budget to NZ ETS and non-NZ ETS sectors*.
30. I have drawn Cabinet's attention to these three steps because of new information that could have an impact on how existing settings accord with budgets and targets. They include updates to New Zealand's Greenhouse Gas Inventory (the Inventory), and information about the estimated number of surplus units banked in private accounts.

Options for step i): align with climate change targets

31. The Government has options on how NZ ETS unit limits should respond to some non-NZ ETS emissions reduction policies. Non-NZ ETS policies that reduce emissions by NZ ETS-covered sectors can reduce demand for NZUs. Other things being equal, this can lead to lower emission costs, but also a risk of increased NZU use by other NZ ETS participants and no decrease in overall emissions. This is known as the waterbed effect.
32. The Government has choices about how it manages this effect. Feedback is sought on whether and how to adjust the NZ ETS cap (through lowering auction volumes) to "lock in" those reductions. I propose to consult on if and how to treat non-NZ ETS policies when calculating auction volumes and will return to Cabinet with more detail on such impacts when I seek final policy decisions, following consultation.

Options for step ii): allocate emissions budgets to NZ ETS and non-NZ ETS (mainly agriculture) sectors

33. To date, unit limits have been based on the share of the emissions budget allocated to NZ ETS and non-NZ ETS (mainly agriculture) sectors, derived from the first emissions reduction plan. This separation means that under-achievement in one area, informed by new projections, would not force over-achievement in the other. That is, under-achievement in reducing agricultural emissions does not force a reduction in the number of units that could be auctioned. This provides stability and confidence to the NZ ETS sectors.

34. s 9(2)(f)(iv)

Options for step v): set the reduction volume to reduce unit surplus

35. It is a feature of emissions trading schemes that units can be banked by participants to hedge against future obligations. This can provide liquidity to the market and reduce price volatility. As with all units in the NZ ETS, banked units will be held or sold depending on market participant’s needs and expectations of future prices.
36. Since 2020, there has been on-going analysis on how many units are needed in the market to meet the hedging requirements of emitters, and upcoming liabilities for forestry. This assessment shows that a large portion of these banked units are ‘surplus’ to hedging needs. The use of these units can allow emissions to exceed emissions budgets.
37. Previous decisions have aimed to reduce the surplus to zero by 2030, through a reduction in auction volumes. The Commission has made a new estimate of the surplus, using the same methodology. The new estimate is 68 million surplus units (as at the end of September 2023). This is an increase of 19 million surplus units since the last estimate in 2022. As a result of this increase, the Commission recommended reducing the number of units auctioned for all years between 2025–2029.
38. I propose that the consultation document presents options on the surplus estimate and how this could be reduced, including those informed by the Commission’s recommendation, which have a high probability of meeting emission budgets.

Summary of options for calculating unit limits

39. The unit settings consultation document includes options informed by officials’ analysis of the Commission’s recommendations. I am required to consider the Commission’s recommendations, and consulting on these is an important part of this. The Government is not required to agree with the Commission’s recommendations.
40. If decisions on this year’s settings depart from the recommendations of the Commission, I will be required to prepare a report of the reasons for the difference and publish the report (including presenting the report to the House).
41. Table 1 presents the possible changes proposed by the Commission, compared to last year’s auction volumes.

Table 1: Possible annual auction volumes proposed by the Commission compared to last year's auction volumes

	2025	2026	2027	2028	2029
Currently prescribed auction volumes	12.6	10.7	9.2	6.9	–
The Commission’s recommended auction volumes	5.9	5.0	4.9	3.9	3.0
Difference	–6.7	–5.7	–4.3	–3.0	–

S E N S I T I V E

Price control settings

42. There are three components to price control settings:
- 42.1 The auction price floor is the price below which the Government will not sell units at auction;
 - 42.2 The cost containment reserve (CCR) trigger price(s) is the price or prices at which additional NZUs will be released if an auction's interim clearing price reaches or exceeds this level; and,
 - 42.3 The CCR volume(s) – the number of NZUs that will be released if the trigger price is reached. The CCR volume needs to be sufficient to perform its function of increasing supply enough to mitigate against prices that are too high.
43. The consultation presents two options for the auction price floor and the CCR price triggers. Maintaining the status quo with adjustment to inflation from 2027 is the first option, and this is consistent with the Commission's recommendation (outlined in Table 2). The second option is a lower trigger price for the auction floor and the CCR.
44. Setting lower price triggers controls could risk increasing the surplus if other NZU holders sell units, further risking the achievement of emission budgets. It could also mean units are sold at auction at a lower price than other forecast international emissions prices.
45. The option to lower price controls does not preclude adjustment to only the auction floor, or only the CCR. Presenting both together recognises that the price corridor was set in relation to the first emissions reduction plan, including supporting modelling. Therefore, consideration should be given to both settings if any changes are to be made for final policy decisions.

Table 2: Possible auction price floor and CCR trigger price for the next five years proposed by the Commission

	Maintain the status quo		Adjust for new inflation forecasts		New
	2025	2026	2027	2028	2029
Auction price floor	\$68	\$72	\$76	\$79	\$83
CCR Tier 1	\$194	\$205	\$216	\$227	\$238
CCR Tier 2	\$243	\$256	\$270	\$283	\$298

46. The consultation document presents two options for CCR volume: maintain the current CCR volume and extend it to 2029 (option 1); or increase the CCR volume to reflect surplus reduction (option 2). Table 3 outlines the CCR volumes proposed and presented in the consultation document for the next five years.

Table 3: Options for CCR volumes

	CCR volume (million NZUs)				
	2025	2026	2027	2028	2029 (new)
Tier 1 volume (same for both options)	2.6	2.3	2.1	1.9	1.7
Tier 2 volume (option 1)	4.5	4.2	3.8	3.4	3.0

S E N S I T I V E

Tier 2 volume (option 2)	10.1	9.4	8.6	7.6	6.9
Total CCR volume – option 1	7.1	6.5	5.9	5.3	4.7
Total CCR volume – option 2	12.7	11.7	10.7	9.5	8.6

47. I will return to Cabinet with final proposed unit limits and price control settings for the next five years, following consultation. The government will consider updated information that may be available at the time of final decisions.

Updates to other NZ ETS regulations


48. In addition to the updates to the NZ ETS settings described above, I am proposing a range of routine updates to other regulations that govern the NZ ETS.

The majority of these updates are purely technical and operational, in that they involve no decisions on policy intent and have no or only minor impacts. A small number are more significant and require decisions on policy intent, as discussed from para 54.

49. I also seek delegation to directly issue drafting instructions following consultation on updates that have been identified as purely technical and operational (noted in the list below, starting at para 54). This is because I consider that these updates meet the exemption set out in clause 7.95(d) of the Cabinet Manual: “If the secondary legislation is routine and does not require new policy decisions, the Minister may authorise drafting without reference to Cabinet.” They comprise entirely of numerical calculations and/or clarifications to wording to give effect to existing policy intent.
50. This approach would streamline future updates to the NZ ETS and align with existing processes to issue drafting instructions for other technical matters. In particular, the price of carbon (used by the Synthetic Greenhouse Gas Levy) must be updated annually but requires no policy decisions, so each year the drafting instructions for this update are issued under this clause of the Cabinet Manual.
51. This delegation still gives Cabinet the opportunity to review amended regulations, as I will return to you in August/September 2024 to approve the regulations for gazettal.
52. These updates are summarised below. Full details of the updates are provided in the consultation document itself.
53. Updates to default emissions factors (DEFs) and unique emissions factors (UEFs) across three key sectors: geothermal, natural gas, and liquid fossil fuels. This update is intended to bring the emissions factors used in emissions reporting into line with the latest sectoral data on their production:
- 53.1 The geothermal and liquid fossil fuel updates are considered non-minor, primarily because these proposals may have a moderate impact on participants’ emissions costs, despite the calculations being technical in nature;
- 53.2 The natural gas update is considered minor and technical, and I therefore recommend this item for delegation to the Minister of Climate Change to issue drafting instructions.
54. A range of improvements and clarifications are needed to ensure that waste regulations and UEF regulations for waste activities are aligned. These updates are considered minor and technical, and are recommended for delegation.

- 55. Clarification is required to ensure that synthetic greenhouse gases can be destroyed domestically in New Zealand and receive units as a removal activity. This is considered minor/technical and recommended for delegation.
- 56. Clarification is required to ensure that only suitable individuals can become primary representatives for holding accounts on the NZ ETS Register. This is considered minor/technical and recommended for delegation.
- 57. Two updates are proposed for auctioning regulations (but not in scope of unit settings):

s 9(2)(f)(iv)



- 57.2 The second makes a small change to how collateral for auctions is calculated, ensuring that participants are not submitting more collateral than necessary for their bids. This is considered minor/technical and recommended for delegation.


Impacts on emissions reductions

- 58. Detail on emissions reductions expected at different price points and in response to different packages of options will be provided in the post-consultation report back to Cabinet when I seek policy decisions. This will draw from analysis carried out by officials, the Commission’s modelling, and other sources.

Impacts on other work programmes

- 59.

s 9(2)(f)(iv)



- 60. These will be further described when I seek policy decisions post-consultation.

Timing pressures in delivering these updates

- 61. There are timing pressures in meeting the legal requirement to publish unit settings updates before the end of September 2024. The timeframe allows for five weeks of public consultation.

62. The other regulatory updates proposed can be progressed to the same deadlines as unit settings, and including these has no further timeframe implications.

Proposal to consult

63. I have appended two consultation documents that describe options for updates to NZ ETS unit settings and to other regulations that govern the NZ ETS respectively:
- 63.1 Annual Updates to the New Zealand Emissions Trading Scheme Limits and Price Control Settings for Units 2024;
 - 63.2 Proposed Changes to New Zealand Emissions Trading Scheme Regulations 2024.
64. I propose to consult on these papers from early May to mid-June 2024.

Cost-of-living implications

65. There are no cost-of-living implications of approving consultation. Cost-of-living implications of any updates proposed will be provided in the post-consultation Cabinet paper seeking policy decisions.
66. Amendments to unit settings may have cost-of-living implications, as they can influence the cost of commodities such as fuel and electricity; however, cash proceeds from the scheme have been identified as a potential way of providing tax relief for households.

Financial implications

67. There are no financial implications of approving consultation. Financial implications of proposed updates will be provided post-consultation when I seek policy decisions.
68. NZ ETS auctions provide revenue-neutral cash inflow. Cash inflow from auctions are matched by a liability on the Crown's balance sheet. This means that NZ ETS auctions do not generate revenue (and therefore do not impact the operating balance) but do have an impact on net debt as they raise cash.
69. At current secondary market prices¹, NZ ETS auction cash proceeds would decline by approximately \$55.5 million for every 1 million units that auction volume is decreased, all else being equal. There are likely to be interactions with price that could mediate these impacts as a reduction in auction volume would also indirectly affect NZU prices by reducing the number of units supplied to market.
70. I estimate that accepting the Commission's recommendations for unit settings could reduce cash receipts from NZ ETS auctions by \$1.00B, from \$2.38B to \$1.38B (based on secondary market price of \$55.50 as at 22 April 2024).² I will return to Cabinet with an updated estimate of any changes when I seek final policy decisions.
71. I will present the fiscal impact of proposed updates to unit settings when I return to Cabinet seeking final agreement in July, following consideration of consultation feedback.
72. s 9(2)(f)(iv)

¹ NZU price of \$55.50 as at 22 April 2024 ([CommTrade](#))

² This assumes that all units available at auction are sold at the current secondary market price.

s 9(2)(f)(iv)

Legal implications [legally privileged]

s 9(2)(h)

Legislative implications

77. Amendments to a number of regulations under the Act may be required. Drafting approval for these would be sought at the time of policy decisions mid-year.
78. I seek approval from Cabinet delegation to issue drafting instructions for some of the technical updates (not including any of the updates relating to unit settings). These drafting instructions would be issued between May and July 2024, allowing the Parliamentary Counsel Office (PCO) to draft amendment regulations in tranches, supporting their busy drafting schedule.

Impact analysis

Regulatory Impact Statement (RIS)


79. Regarding regulatory impact assessment of proposals relating to **unit settings**:

*The Regulatory Impact Analysis panel has reviewed this discussion document as prepared by the Ministry for the Environment and consider it **partially meets** the Treasury's quality assurance criteria. The NZ ETS unit settings process and its*

³ Settings must always be in strict accordance with achieving the 2050 target

objectives are well explained, and the discussion document logically sets out the methodology used to develop its options, including by reference to the Commission's role and recommendations. The discussion document's options are clearly articulated while still leaving scope for submitters to call for alternative approaches.

§ 9(2)(f)(iv)




80. For **other proposals** for NZ ETS regulations, requirements varied across updates:

80.1 The majority of updates proposed in the consultation document on other regulatory updates are purely technical and operational, and have no or only minor impacts. As a result, they are exempt from the impact assessment requirements. Officials at the Ministry for the Environment and the Treasury have agreed that the following purely technical updates are **exempt** from regulatory impact analysis requirements:

- Updating DEFs for natural gas activities;
- Improving accuracy for the waste sector;
- Clarifying how destruction of synthetic greenhouse gases is recognised;
- Clarifying the definition of qualified person;
- Improving auctioning regulations: Auctioning collateral methodology.

80.2 Three updates presented in this consultation document are likely to have more-than-minor impacts or involve decisions on policy intent. These include:

- Updating DEFs and UEF methodologies for geothermal activities;
- Updating DEFs for liquid fossil fuel activities;
- § 9(2)(f)(iv)  .

80.3 Regarding impact analysis of these three updates:

*A quality assurance panel with members from the Ministry for the Environment has reviewed the consultation document for the above regulatory proposals. The panel considers that it **meets** the Quality Assurance criteria.*

The consultation document clearly sets out the context for the issues. The language used in the document is appropriate for the technicality and the audience of the consultation document. Due to the nature of the document, the consultation criterion has not been taken into consideration as part of the quality assurance process. Overall, the quality assurance panel considers it to be convincing, and will support informed and effective consultation.

Climate Implications of Policy Assessment (CIPA)

81. Regarding CIPA requirements for proposals relating to **unit settings**:

SENSITIVE

*The CIPA team has been consulted and confirms that the CIPA requirements **do not apply** to this proposal as the threshold for significance is not met. However, it is expected that there will be emissions impacts as a result of further decisions required following consultation. Any emissions impacts will be reassessed and disclosed to Cabinet as appropriate.*

82. Regarding CIPA requirements for **other proposals** to NZ ETS regulations:

*The CIPA team has been consulted and confirms that the CIPA requirements **do not apply** to this proposal as the impacts are indirect. This proposal is not able to be meaningfully quantified and it is unclear if it would have any impact on emissions; however, it is expected to improve the functioning of the NZ ETS and therefore to lead to improved emissions reductions outcomes over time. Likely emissions impacts will be reassessed and disclosed to Cabinet as further decisions are required following consultation.*

Population implications

83. There are no population implications for approving consultation. Population implications of any updates proposed will be provided in the post-consultation Cabinet paper seeking policy decisions.

Te Tiriti o Waitangi implications

84. Māori have a significant interest in climate change action and the NZ ETS.
85. Māori have an interest in the NZ ETS as rangatira, kaitiaki, land- and forest-owners, rural communities, workers, business owners, and whānau. The multiple interests in the NZ ETS mean that options could have positive, negative, and neutral impacts.
86. For NZ ETS settings in particular, an increase in New Zealand Unit (NZU) price could benefit Māori forest owners or owners of land suitable for afforestation, due to possible increases in returns from carbon. This would provide particular benefit to those entered in the post-1989 permanent forest category, as well as to participants who are registered under averaging accounting (as they no longer face surrender obligations when they harvest).
87. However, an increase to the cost of emissions will also have implications across the economy, with flow-on effects for households and communities. Whānau Māori are disproportionately represented in lower-income groups with the most limited ability to absorb cost increases.
88. Therefore, I have analysed impact on different groups that may be impacted. I plan to seek feedback on specific impacts the proposed regulatory updates and options to update NZ ETS settings would have on Māori.
89. Feedback will be included when I seek final policy decisions from Cabinet.

Human Rights

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

Use of external resources

91. No external resources were contracted for the development of this paper. Emissions factors for the geothermal and liquid fossil fuel sectors were built on two existing pieces of advice from sectoral experts, which were contracted in 2022.

Consultation

92. The Treasury, the Ministry of Foreign Affairs and Trade (MFAT), the Ministry for Primary Industries, the Ministry of Business, Innovation and Employment, the Environmental Protection Authority, the Ministry of Transport, the Ministry of Social Development, Waka Kotahi New Zealand Transport Agency, Te Arawhiti, and Te Puni Kōkiri were consulted on this paper. The Department of Prime Minister and Cabinet was informed.
93. Where I received feedback, it has been considered and incorporated as appropriate.

Communications

94. Notification of consultation will be sent to NZ ETS stakeholders the day before the consultation is launched. Consultation documents will then be published on the MfE website prior to market opening the following day.
95. A range of stakeholders that are specifically affected by routine technical regulatory updates have been engaged throughout the development of those proposals. These stakeholders are generally aware that public consultation will form part of the ongoing regulatory update process prior to Cabinet approving amendments.

Proactive release

96. I propose to proactively release this paper on the MfE website in the first week of consultation, subject to redactions as appropriate under the Official Information Act 1982.

Recommendations

The Minister of Climate Change recommends that the Committee:

1. **note** that the Minister of Climate Change must be satisfied that consultation has occurred before Cabinet makes policy decisions on updates to New Zealand Emissions Trading Scheme (NZ ETS) regulations, including the Climate Change (Auctions, Limits, and Price Controls for Units) Regulations 2020;

Updates to NZ ETS unit settings

2. **note** that I propose to consult on unit limit and auction price control setting options, incorporating the advice provided by the Climate Change Commission (the Commission), as well as other options;
3. **note** that options include:
 - 3.1 updating or maintaining auction volume for the first two years (2025 and 2026);
 - 3.2 maintaining the current approach, or significantly reducing auction volume for 2025–2029 to reduce the increase in the surplus estimate;

S E N S I T I V E

- 3.3 maintaining the current auction price triggers for 2025 and 2026, and adjust for inflation for 2027–2029, or lowering the auction price triggers;
- 3.4 maintaining or increasing the current cost containment reserve volume;
4. **note** that I propose to consult on how NZ ETS unit limits should respond to some non-NZ ETS emissions reduction policies;
5. **note** that the option for *step ii*) for allocating the emissions budget is based on the share of the budget allocated to NZ ETS and non-NZ ETS sectors (mainly agriculture), derived from the first emissions reduction plan, meaning that this share does not respond to changing industry trends and agricultural emissions policy direction;
6. s 9(2)(f)(iv)

Updates to other NZ ETS regulations

7. **note** that the regulations that govern the NZ ETS require regular updating to maintain the integrity of the scheme;
8. **note** that the majority of updates proposed are technical and operational, requiring no policy decisions other than whether or not to progress the update;
9. **note** that the three proposed updates that involve policy decisions in addition to technical and operational matters are: Updating default emission factors (DEFs) and unique emission factors (UEF) methodologies for geothermal activities; s 9(2)(f)(iv)

Delegation of technical updates

10. **agree** that the Minister of Climate Change is authorised to make post-consultation decisions for this year on the purely technical matters proposed, including to issue drafting instructions under clause 7.95(d) of the Cabinet Manual. The items proposed for delegation are:
 - 10.1 Updating DEFs for natural gas activities;
 - 10.2 Improving accuracy for the waste sector;
 - 10.3 Clarifying how the destruction of synthetic greenhouse gases is recognised;
 - 10.4 Clarifying the definition of qualified person;
 - 10.5 Improving auctioning regulations: Auctioning collateral methodology;
11. **agree** that the Minister of Climate Change is authorised to make post-consultation decisions in future years on purely technical matters, including to issue drafting instructions under clause 7.95(d) of the Cabinet Manual;
12. **agree** that for future years, 'purely technical matters' refer to: routinely updating default and unique emissions factors where there is no change to how participants report their emissions; or, clarifying previous drafting to better align with existing policy decisions;

S E N S I T I V E

13. **note** that three remaining updates presented in the consultation document that involve policy consideration in addition to technical and operational matters, on which I propose to return to Cabinet to seek decisions. These include:
 - 13.1 Updating DEFs and UEFs methodologies for geothermal activities;
 - 13.2 Updating DEFs for liquid fossil fuel activities;
 - 13.3 s 9(2)(f)(iv)
14. **note** that I will directly issue drafting instructions relating to updating the price of carbon (used by the Synthetic Greenhouse Gas Levy) under clause 7.95(d) of the Cabinet Manual, as occurs annually;
15. **note** that I will seek Cabinet approval in September 2024 for the amended regulations for all updates, including any updates where the authority to issue drafting instructions is delegated to me, once they have been drafted;

Consultation

16. **agree** to release the attached documents to support consultation on these updates:
 - 16.1 Annual Updates to the New Zealand Emissions Trading Scheme Limits and Price Control Settings for Units 2024;
 - 16.2 Proposed Changes to New Zealand Emissions Trading Scheme Regulations 2024;
17. **note** that the consultation period will start before the end of the week in which Cabinet approves the release of these documents, and run for a minimum of 5 weeks;
18. **agree** that I can make minor design, editorial, and technical changes to the consultation documents as needed prior to their release;
19. **note** that I will seek policy decisions and Cabinet approval to issue drafting instructions for amendment regulations in July 2024.

Authorised for lodgement

Hon Simon Watts

Minister of Climate Change

Ashleigh Watson

From: Sam Buckle <Sam.Buckle@mfe.govt.nz>
Sent: Monday, 27 May 2024 5:25 pm
To: matt.burgess@parliament.govt.nz
Subject: FW: Classification LUC policy proposal A3 for discussion with MB
Attachments: A3.pptx

Matt, doc prepared to support conversation tomorrow.
sam

Sam Buckle (he/him)

*Deputy Secretary | Tumuaki Tuarua
Climate Change Mitigation and Resource Efficiency*

EA: Davinia Gazzard-Steele – davinia.gazzard-steele@mfe.govt.nz

Ministry for the Environment | Manatū Mō Te Taiao

sam.buckle@mfe.govt.nz | mfe.govt.nz

From: Kara Lok <Kara.Lok@mfe.govt.nz>
Sent: Monday, May 27, 2024 5:15 PM
To: Sam Buckle <Sam.Buckle@mfe.govt.nz>
Cc: Susan Baas <Susan.Baas@mfe.govt.nz>; Charlotte Denny [EXTERNAL] (MPI) <charlotte.denny@mpi.govt.nz>; David Mead <David.Mead@mfe.govt.nz>; Stuart Malthus <Stuart.Malthus@mfe.govt.nz>; Beth Hampton <beth.hampton@mpi.govt.nz>; Isabella Zohrab <Isabella.Zohrab@mpi.govt.nz>
Subject: Classification LUC policy proposal A3 for discussion with MB

Kia ora Sam,

Attached is the A3 the team have prepared to discuss with Matt B tomorrow outlining the two LUC manifesto commitment policy proposals.

Nga mihi,

Kara

Kara Lok – Manager, Emissions Pricing Policy


Ministry for the Environment / Manatū mō te Taiao

Mobile/Waea pūkoro: s 9(2)(a)

Email/Īmēra: kara.lok@mfe.govt.nz -- Website/Pae tukutuku: www.mfe.govt.nz

Address/Wāhi mahi: Environment House, 23 Kate Sheppard Pl, PO Box 10362, Wellington 6143





**A flourishing environment
for every generation.**
He taiao tōnui mō ngā
reanga katoa.

Ashleigh Watson

From: Kate Whitwell <Kate.Whitwell@mfe.govt.nz>
Sent: Tuesday, 25 June 2024 8:17 am
To: Sam Buckle; Mark Vink; Scott Gulliver; David Mead; matt.burgess@parliament.govt.nz; James Coombes [EXTERNAL] (PARLIAMENT); John Scott [EXTERNAL] (DPMC); jack.boltar@parliament.govt.nz; Phillip Mellor
Cc: Jamie Molea [EXTERNAL] (Parliament); Charlotte Berg; Arwen Norrish
Subject: Classification ETS settings meeting today 2pm - supporting material attached
Attachments: 2024 0625 ETS Settings issues slides for discussion.pptx

Kia ora koutou,

Please find attached a slidepack to support today's discussion on ETS settings initial analysis. Note that the pack contains initial information on options being considered, so please treat this information as market-sensitive.

Thank you.

Kate
Cc Jamie, Charlotte, Arwen fyi

Kate Whitwell (she/her)

Manager – Kaiwhakahaere, ETS Policy

Markets Unit, Climate Change Mitigation and Resource Efficiency

Ministry for the Environment | Manatū Mō Te Taiao

s 9(2)(a) kate.whitwell@mfe.govt.nz | mfe.govt.nz



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[SEEMAIL]

2024 Update to ETS Unit and Price Control Settings

The purpose of this session is to:

- Highlight the legal framework for settings advice
- Discuss the key issues that impact the accordance assessment
- Discuss initial options

Key messages

- This slide pack provides preliminary, indicative analysis and options that will be incorporated into initial advice to the Minister later this week
- The role of the NZ ETS in ensuring accordancy is constrained by the share of economy it covers and the declining cap. This means other policy interventions will be needed to achieve EB3 and NDC1.
- Reducing the surplus stockpile to zero by 2030 (i.e. within EB2) is likely the minimum requirement for NZ ETS settings to meet the accordancy tests.
- Latest private holdings data (provided since the publication of the discussion document) show a substantial reduction in the overall stockpile and reduces our estimate of the surplus by 10M NZUs to 58M (which leads to 7.5M more NZUs available to auction over the 2025-29 settings period).
- Other recently released data has also been incorporated into our options analysis that was not available to the Commission when it provided its advice. These include:
 - Release of the 2024 Greenhouse Gas Inventory (+8M NZUs available to auction over 2025-29)
 - Changes in non-ETS sector emissions projections, mostly higher agriculture projections (-6M NZUs to auction)
 - Updated projections of industrial allocation (-3M NZUs to auction)
- As a result of these updated data, our preliminary options all include auction volumes that are higher than the Commission presented but lower than status quo volumes. This is primarily due to the smaller surplus estimate, with the other factors noted largely offsetting one another.

Legal framework for settings decisions

Each year, the Minister of Climate Change must recommend settings that enable New Zealand to meet its emissions budgets, the NDC, and the 2050 target. This is the ‘accordance test’ set out in the Climate Change Response Act (the Act).

The Minister must be satisfied of one of two things. Either:

- the settings must be “in accordance with” any emissions budget or NDC currently in place, and with the 2050 target (“strict accordance”); or
- the settings need not strictly accord with any emissions budget or NDC, but only if the Minister is satisfied that any discrepancy is justified with reference to the environmental, economic, and social matters set out in the Act (“general accordance”). The settings must always be in strict accordance with the 2050 target.

s 9(2)(h)

Assessing accordance

As the demonstration path, representing the emission budgets, reduces towards the 2050 target, this presses down on the ETS cap and auction volumes. For example, the Commission projected that industrial allocation will exceed the ETS cap by 2035.

Reducing the surplus is key to accordance with EB2.

Falling auction volumes mean further tightening of ETS will not significantly impact accordance for EB3 onwards. Therefore, both EB3 and the 2050 target will require additional and material policies outside the NZ ETS, especially for agriculture, to be achieved.

Previous Governments have committed to achieving NDC1 commitments through a mix of domestic abatement and offshore purchasing measures. The gap between EB2 and what is required to achieve NDC1 means that domestic measures alone cannot feasibly achieve NDC1. ^{s 9(2)(f)(iv)}

[Redacted text block]

Unit limits – Methodology

The methodology which underpins previous settings decisions, is volumetric – it aims to align the volumes of NZU supply within a given period to the total net emissions allowed by our targets, taking account of factors such as the split between ETS/non-ETS sectors and the importance of drawing down the surplus stockpile.

The 7 calculation steps are described below.

- 1 Aligning the climate change targets
- 2 Allocate the emissions budgets to NZ ETS and non-NZ ETS sectors
- 3 Make technical adjustments
- 4 Account for industrial allocation volumes
- 5 Set the reduction volume to address unit surplus
- 6 Set the approved overseas unit limit
- 7 Calculate the base auction volume

Key issue: assessing the surplus

We have tested the CCC's methodology for estimating the surplus with agencies and consider it to be the most appropriate based on the information currently available. Estimates of the surplus are impacted by the timing of auctions, surrenders and allocations. Recommendations this year will be made using the best available information.

New data is still being incorporated, which could change the surplus estimate. This includes incorporating consultation feedback and the analysis noted in the table below. In addition, sensitivity analysis of the size of the surplus and the liquidity of the total stockpile will be undertaken using the ETS market model.

	CCC Estimate (30 Sep 23)	MfE Estimate (1 June 24)	Analysis Underway
Total Privately Held Units	160.8 M	143.0 M	MPI indicate forestry registrations equivalent to about 1.5-3.0 M NZU still to be processed, which would increase the number held in private accounts
p89 forest harvest liability	58.0 M (51.0 – 65.0 M)	54.0 M (48.0 – 61.0 M)	Updated using the Commissions forestry model, same assumptions but using 2023 year estimate as closest to new total stockpile data. (Commission used 2022 year)
p90 units held long term	6.6 M (5.7 – 8.1 M)	3.7 M (1.4 – 5.0 M)	Updated analysis with additional datapoints indicates this is being transferred to other accounts faster than the Commission projected.
Units held for hedging	28.3 M (19.8 – 36.6 M)	27.7 M (19.4 – 35.7 M)	Updated for Commissions 2024 demo path run estimates of industry-level projections. Same hedge % used. Additional adjustment made for NZ Steel and NZAS IA revised estimates.
Total Surplus	68.0 M (51.1 – 84.3 M)	57.7 M (41.4 – 74.2 M)	

Key issues – auction price controls

Stable price settings are important to market and investment certainty. Auction price controls help manage the NZU prices from being too high or too low with reference to prices needed to meet emission targets.

The Commission recommended no changes to the price settings for the next five years (aside from adjusting to inflation and extending to 2029).

The existing price pathway uses modelling from ERP1. That is, those price settings assumed the policy mix in ERP1, with a price envelope intended to drive the gross emission reductions from sectors in various scenarios. This Government has a different policy approach.

We are using our modelling tools (NZ ETS Market model and ENZ model) to test the implications and adequacy of different price controls, based on different unit limit options. Initial analysis in the market model suggests the current auction floor price settings remain appropriate. Cost containment reserve trigger prices have only been reached in some of the more extreme sensitivity analysis of the different unit limit options.

We are unlikely to recommend lowering the auction reserve price as higher prices will drive the emission reductions needed for EB2 and EB3, and the removals needed for EB3. There could also be implications for stockpile drawdown and consistency with international emission unit prices. The trade-offs are economic and household costs, and auction cash proceeds.

Initial option sets for NZ ETS settings

We are developing an initial set of options. While there could be other combinations of options, we have picked these packages to demonstrate key trade-offs for feedback.

The numbers used are based on the most up to date information. These are likely to change as we receive newer information, test assumptions and include submissions analysis. This includes information on the surplus estimate.

The options were developed using this background:

- Option 1 is the status quo auction volumes extended to 2029
- Options 2 - 4 were developed through:
 - Updated net emissions targets, based on 2024 inventory recalculated demonstration path (different to Commission advice)
 - Auction volume based on a provisional estimate of the updated surplus (58M NZUs) based on the June 24 total stockpile.
 - Option 2 drew this down by 2035, options 3 & 4 by 2030
 - For option 4, an additional NZ Steel related adjustment was made to the net emission targets above (-1Mt from 2026)
- Option 5 reflects the Commission's recommendations
- Option 6 makes the maximum contribution from the ETS to net emissions reductions with zero auction volume

We are testing these options in the NZ ETS Market Model, which estimates supply and demand for NZUs in the NZ ETS under different conditions. The NZ ETS Market Model provides further insights and cross-checks whether a given combination of unit settings and price controls are in accordance with emissions budgets, NDCs, and the 2050 target.

ETS market modelling results indicate the likelihood of achieving emissions budgets and targets for given assumption regarding behaviour of market participants. However, the accordance assessment needs to consider several other factors (than modelling), and we will outline this in the final policy advice.

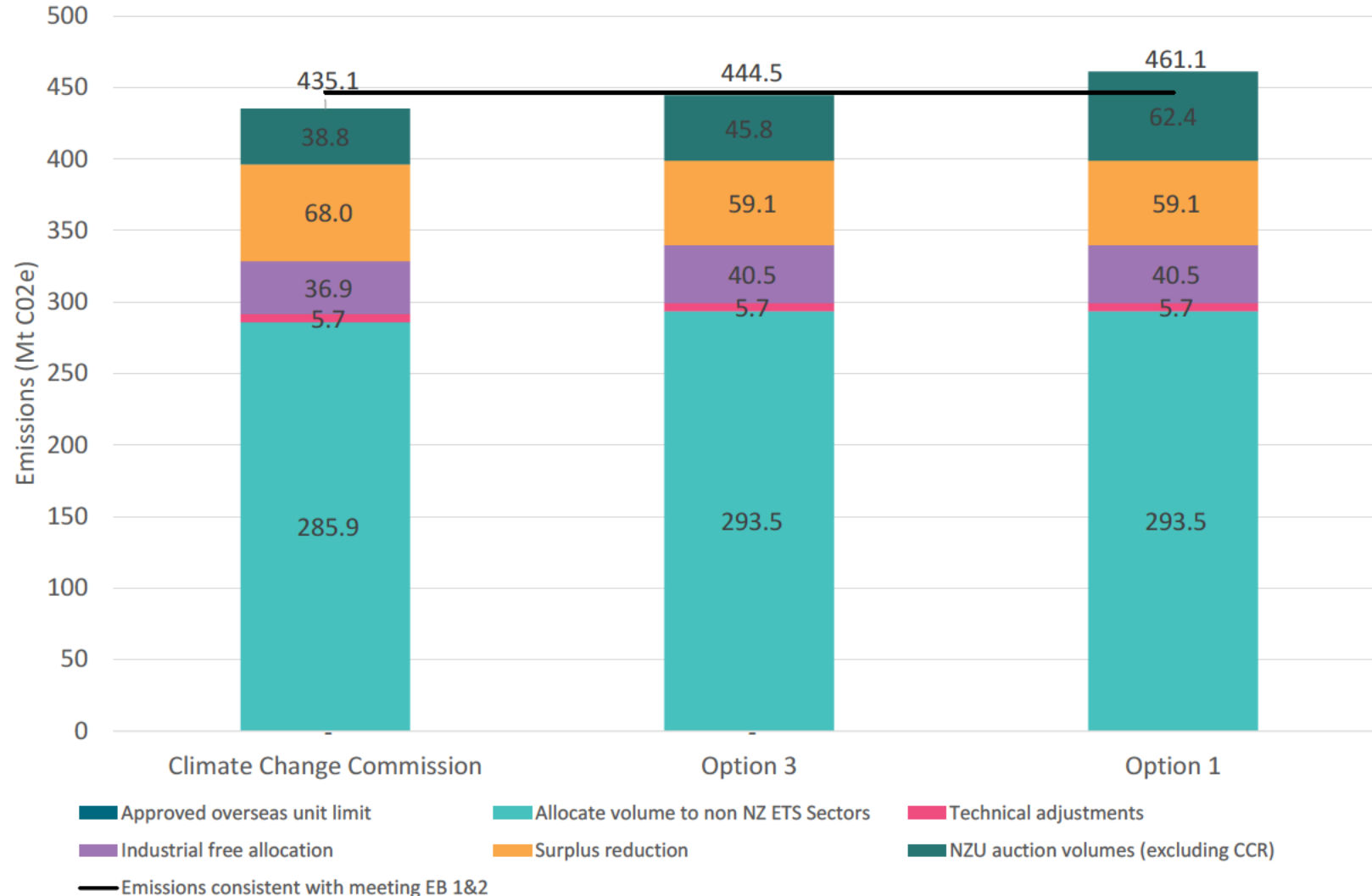
Initial option sets for NZ ETS settings

	Description	Total auction volumes 2025-29 (millions NZUs)	Initial modelling result
1. Status quo	Status quo volumes set out in regs, extended to 2029 (using the same rate of reduction)	45.1	EB2 is projected to be achieved only in certain circumstances but not all. Achieving EB3 would require additional policy instruments.
2. Slower surplus drawdown	Drawn down surplus by 2035. Update auction volume for all years.	39.5	
3. Surplus drawdown by 2030	Draw down surplus by 2030. Update auction volume for all years.	29.0	EB2 is projected to be achieved in most circumstances. Achieving EB3 would require additional policy instruments.
4. Low-risk approach	Option 3 and adjustment for waterbed effect (NZ Steel from 2026).	24.6	EB2 is projected to be achieved in most circumstances. Less emissions for EB3 than options 1-3, but EB3 would still require additional policy instruments.
5. CCC recommended auction volumes (as per consultation document)		22.7	
6. Maximum reduction in auction volume	Zero volumes from 2025 onwards	0	EB2 is projected to be highly likely to be achieved but at high ETS prices. This has the lowest projected emissions for EB3 of all scenarios, but EB3 would still require additional policy instruments.

Note: All options retain status quo price controls, extended to 2029

Initial option sets for NZ ETS settings

Total Net Emissions for 2024-2030



The chart shows the breakdown of volumes following the 7-step methodology, as calculated by the Commission (LHS) and by MfE. The 7-step methodology is described in slide 5. **Note the chart shows the period 2024-30 to illustrate surplus drawdown; settings decision apply to 2025-29.**

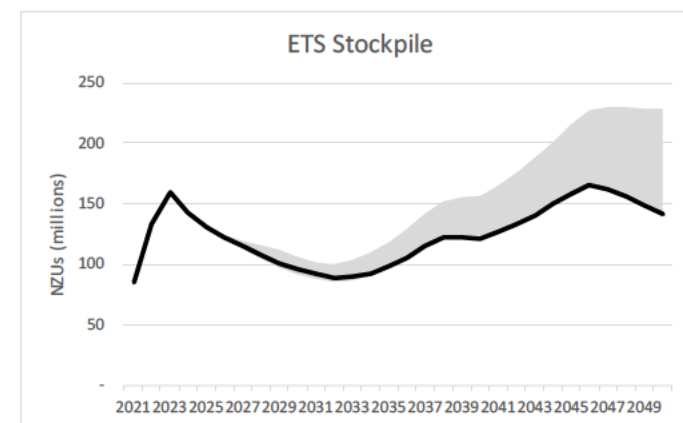
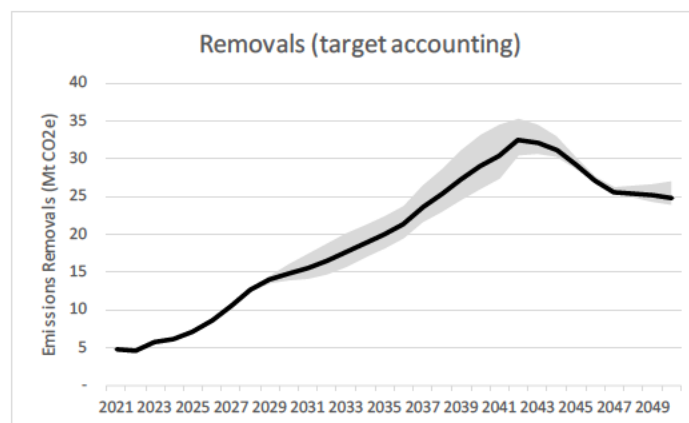
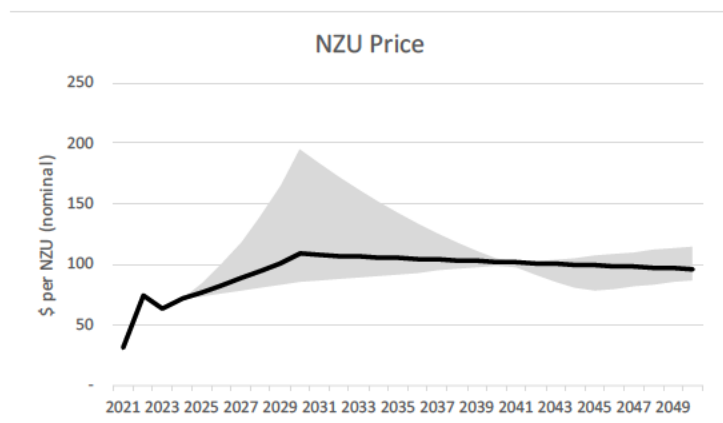
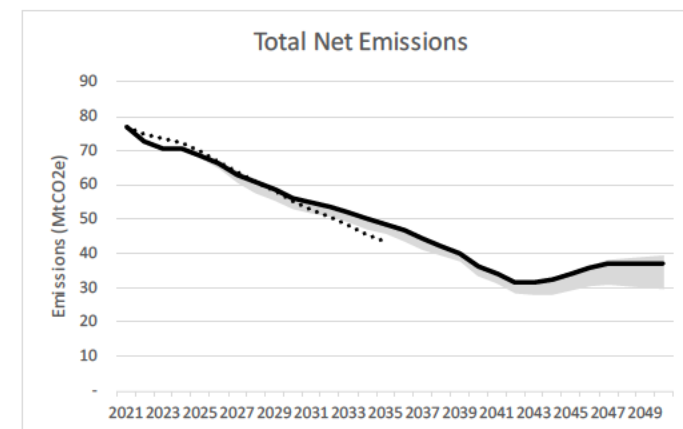
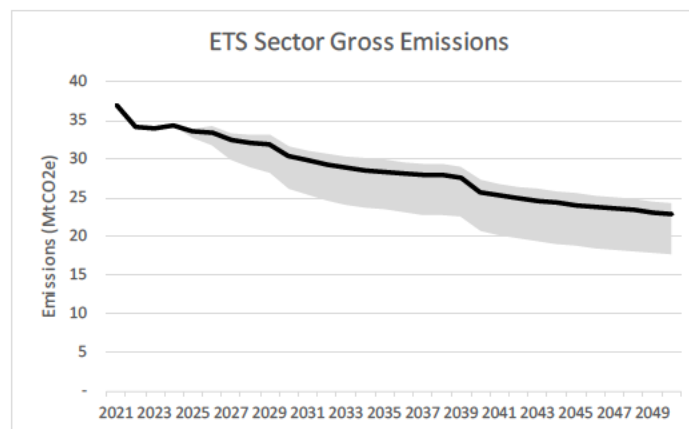
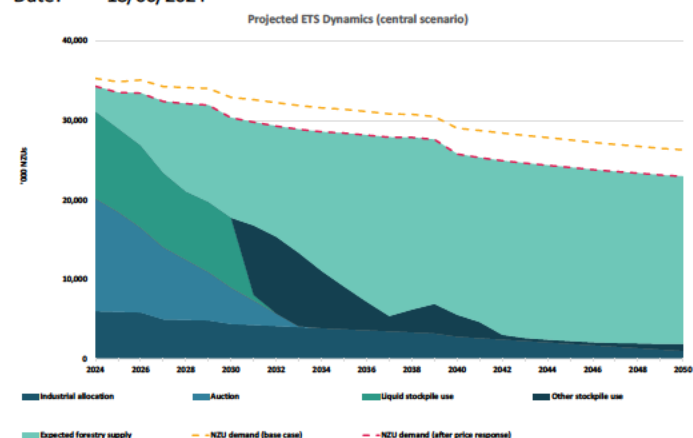
Differences between option 3 and the Commission calculation:

- Step 1 (height of bar) – updated for latest GHG inventory data (+9)
- Step 2 – updated non-ETS sector emissions (+8).
- Taken together, the inventory and non-ETS sector emission updates mean the ETS share of emission budgets is higher (+2)
- Step 4 – updates to volumes allocated to IA due to NZ Steel and NZAS (+4)
- Step 5 – updated lower surplus estimate means reduced surplus drawdown required (-9)
- Step 7 – the lower surplus drawdown and higher ETS share of budget partially offset by more IA means more units can be auctioned (+7)

Example model output dashboard

For this year's settings we are additionally using the NZ ETS Market Model. The NZ ETS Market Model estimates supply and demand for NZUs in the NZ ETS under different conditions, and can generate price projections based on supply and demand. The NZ ETS Market Model provides further insights and cross-check whether a given combination of unit settings and price controls are in accordance with emissions budgets, NDCs, and the 2050 target.

Scenario: Status Quo Volumes with slow cyclical price
Version: 1
Date: 18/06/2024



Advice and decision pathway/next steps

- Public consultation 15 May to 14 June
- Submissions analysis and continuing policy analysis
- **First round of advice with draft Cab paper to Minister of Climate Change 27 June**
- **Policy Cabinet paper approved by Minister mid-July, seeking lodgment 25 July (together with RIS) for ECO 31 July (CAB 5 August)**
- Drafting leg Cabinet paper early August
- Substantive PCO drafting through August
- Leg Cabinet paper approved by Minister late August, seeking lodgment 12 September for LEG 19 September (CAB 23 September)
- **Final regulations must be published by 30 September**



Ministry for the
Environment
Manatū Mō Te Taiao

Ashleigh Watson

From: Mark Vink <Mark.Vink@mfe.govt.nz>
Sent: Thursday, 1 August 2024 8:10 am
To: Matt Burgess; Sam Buckle
Subject: Classification Questions on settings

Good morning Matt,
Very happy to chat more about this is helpful. Just let me know.
Cheers
Mark

Mark Vink
General Manager - Markets, Climate Change Mitigation and Resource Efficiency

Mobile: s 9(2)(a)
PA – Janine Foon (Janine.foon@mfe.govt.nz) s 9(2)(a)
Ministry for the Environment – Manatū Mō Te Taiao
Website: www.mfe.govt.nz
8 Willis St, PO Box 10362, Wellington 6143

I only work during school hours on Tuesdays and Fridays. Please contact my PA, Janine.foon@mfe.govt.nz s 9(2)(a) if you need me outside of these times.



Ministry for the
Environment
Manatū Mō Te Taiao



From: Kate Whitwell <Kate.Whitwell@mfe.govt.nz>
Sent: Wednesday, July 31, 2024 5:43 PM
To: Jamie Molea [EXTERNAL] (Parliament) <Jamie.Molea@parliament.govt.nz>; James Coombes [EXTERNAL] (PARLIAMENT) <James.Coombes@parliament.govt.nz>; Jessie Algar [EXTERNAL] (PARLIAMENT) <Jessie.Algar@parliament.govt.nz>
Cc: Sam Buckle <Sam.Buckle@mfe.govt.nz>; Mark Vink <Mark.Vink@mfe.govt.nz>; Becky Prebble <Becky.Prebble@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; David Mead <David.Mead@mfe.govt.nz>; Phillip Mellor <Phillip.Mellor@mfe.govt.nz>; Arwen Norrish <Arwen.Norrish@mfe.govt.nz>; Charlotte Berg <Charlotte.Berg@mfe.govt.nz>; Jay Forlong <Jay.Forlong@mfe.govt.nz>; Katharina Achterberg <Katharina.Achterberg@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; Ministerials <ministerials@mfe.govt.nz>; Nicolette Butler <Nicolette.Butler@mfe.govt.nz>; Juliette Derry <Juliette.Derry@mfe.govt.nz>
Subject: RE: [REDACTED] FW: BRF-5085 NZ ETS settings and regulatory updates 2024 Cabinet paper for Ministerial consultation - with Appendix 4 this time

Hi Jamie,

Answers below (in blue). Apologies that this has taken some time today.

- How can 303.6 Mt in EB2 be unlikely to meet accordance but 302.9 is likely to meet accordance. The limit is 305.

Modelling central projections show that the status quo can achieve emissions budget 2, however the accordance assessment (see next question) also needs to consider risks and mitigations. Status quo auction volumes are now consistent with drawing 42 million NZUs from the stockpile by 2030 if net emissions reach the target level, while our estimate of the surplus stockpile has increased to 67.3 million NZUs. This poses a risk to the achievement of EB2 due the limited control the Government has over the timing of these units being surrendered. If all were used during EB2, this would allow emissions as high as 328Mt. This is the risk that the accordance test requires the Government to consider and manage.

This risk is mitigated if the full surplus is drawn down, only one surplus unit being surrendered that has not been managed out could cause emissions to exceed EB2.

What is the accordance test?

See para 17 – 22, and Appendix 2 of the ETS settings Cabinet paper. We've also summarised below:

The Minister must be satisfied that either:

- *the unit settings [strictly] accord with all extant emissions budgets, New Zealand's NDC(s), and the 2050 target (collectively 'emissions goals') (section 30GC(2)); or*
- *if the unit settings do not strictly accord with the emissions budgets or the NDC, that the discrepancy is justified after considering prescribed statutory matters (section 30GC(3)).^[1]*

Strict accordance will be demonstrated where the settings can be shown – to a very high probability – to equate with what is required to ensure the emissions generated by sectors covered by the ETS are constrained to the level necessary for those sectors to remain within their allocation of the budgets, NDC, and 2050 target. In cases where the Minister can justify settings that do not strictly accord, the Act still requires general accordance – settings must ensure a good probability of meeting the targets.

Determining strict accordance or general accordance is difficult and requires assessing the likelihood of achieving targets, including assessing the risks and mitigations.

We have therefore approached the assessment by using a combination of modelling results and the seven step methodology, which includes analysis of relevant information such as projections of emissions in the ETS and non-ETS sectors, surplus estimates, and broader climate change policies as proposed in the consultation document for the second emissions reduction plan.

- How did Labour comply with it but we can't except for drawing down the stock pile? Seems like inconsistent treatment.

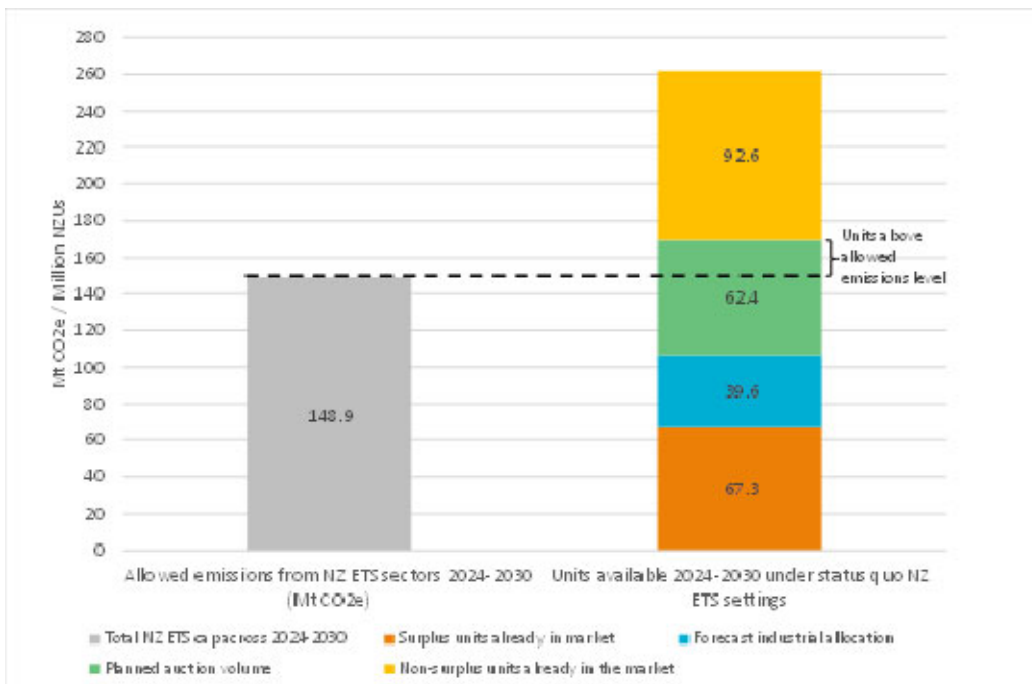
The previous government also agreed to reduce the surplus to zero by 2030, and status quo settings were designed to do so, based on the information available at that time. What has changed is that the surplus estimate has increased.

- Fiscal impact is unclear.

The fiscal impact is difficult to determine as a reduction in auction volumes is likely to increase prices and also the likelihood of auctions clearing (see para 10). Under the status quo settings there appears to be a low likelihood that the remaining auctions for this year will clear. However, there is a higher chance that auctions will clear under option 2, which would significantly reduce the impact on revenue.

- What is the stockpile with and without this change.

Status quo settings are shown in the chart below. The total stockpile as at December 2024 is 159.9 million. The surplus is estimated to be 67.3 million, with 92.6 million units that are not surplus.



The table below shows the estimated total surplus as at 2023 and 2030 for the three different options, noting the estimate surplus in 2030 assumes net emissions exactly match the emissions budget levels.

	Estimated Total Stockpile as at Dec 2023 (million NZUs)	Estimated Surplus as at Dec 2023 (million NZUs)	Estimated surplus in 2030 (million NZUs)
SQ	159.9	67.3	25.4
Option 1			6.7
Option 2			0

- There is an implicit assumption about surrenders before 2030 that this entire analysis hangs on, can this be explained. Should be explicit.
Assessing potential over-supply requires a judgement about how many stockpiled units might be available to emitters. This depends on understanding the liquidity of the stockpile, which is inherently uncertain. Any unit in the stockpile could come to market, under the right conditions.
For the purposes of this analysis, officials have developed categories of units least likely to come to market. These are:
 - Units held by foresters for post-1989 forest harvest liabilities
 - Units held for hedging purposes by non-forestry emitters
 - Units allocated to owners of pre-1990 forests, which are held as long-term investments
 The remainder of the stockpile is assumed to be the surplus stockpile. We have had this methodology tested by EY, who have agreed that it is a useful approach to assess risk. This methodology does not assume that those units will come to market before 2030, but aims to eliminate the risk it poses by providing the Government a way to manage the surplus to zero. If surrenders (net emissions) are lower than EB2 then a surplus would persist beyond 2030.
- What is the evidence there is an excess of units relative to 2050?
The accordance test requires that emission budgets, NDCs and the 2050 are achieved. A key reason for reducing the surplus is due to the risk it poses to achieving time-sensitive emission budgets, rather than the 2050 target (which we have assessed the settings to be in strict accordance with, due to accordance with emissions budgets). We take a point in time approach to the stockpile and assessing this would require further analysis.
- The MoF will want to know OBEGAL impact not just cash. If there is no excess to 2050 then all we are doing is shifting auction revenue from now into the 2030s. The paper should make clear to Cabinet how much is being spent and what we are getting in return.

The operating balance (OBEGAL) impact from the ETS is equal to surrender revenue minus allocation expenses. The other items do not have OBEGAL impacts. These changes do not have a direct impact on surrenders or allocations, however any NZU price increases are OBEGAL positive.

Happy to discuss.

Kate

From: Jamie Molea <Jamie.Molea@parliament.govt.nz>
Sent: Wednesday, July 31, 2024 11:20 AM
To: Kate Whitwell <Kate.Whitwell@mfe.govt.nz>; James Coombes [EXTERNAL] (PARLIAMENT) <James.Coombes@parliament.govt.nz>; Jessie Algar [EXTERNAL] (PARLIAMENT) <Jessie.Algar@parliament.govt.nz>
Cc: Sam Buckle <Sam.Buckle@mfe.govt.nz>; Mark Vink <Mark.Vink@mfe.govt.nz>; Becky Prebble <Becky.Prebble@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; David Mead <David.Mead@mfe.govt.nz>; Phillip Mellor <Phillip.Mellor@mfe.govt.nz>; Arwen Norrish <Arwen.Norrish@mfe.govt.nz>; Charlotte Berg <Charlotte.Berg@mfe.govt.nz>; Jay Forlong <Jay.Forlong@mfe.govt.nz>; Katharina Achterberg <Katharina.Achterberg@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; Ministerials <ministerials@mfe.govt.nz>; Nicolette Butler <Nicolette.Butler@mfe.govt.nz>; Juliette Derry <Juliette.Derry@mfe.govt.nz>
Subject: RE: [REDACTED] FW: BRF-5085 NZ ETS settings and regulatory updates 2024 Cabinet paper for Ministerial consultation - with Appendix 4 this time
Importance: High

Hi team

PMO have requested answers to the below:

- How can 303.6 Mt in EB2 be unlikely to meet accordance but 302.9 is likely to meet accordance. The limit is 305.
- What is the accordance test? How did Labour comply with it but we can't except for drawing down the stock pile? Seems like inconsistent treatment.
- Fiscal impact is unclear.
- What is the stockpile with and without this change.
- There is an implicit assumption about surrenders before 2030 that this entire analysis hangs on, can this be explained. Should be explicit.
- What is the evidence there is an excess of units relative to 2050?
- The MoF will want to know OBEGAL impact not just cash. If there is no excess to 2050 then all we are doing is shifting auction revenue from now into the 2030s. The paper should make clear to Cabinet how much is being spent and what we are getting in return.

Responses to this on email for now is fine. If changes to paper are required, we will have to manage during consultation.

Call if you need.

Jamie

From: Kate Whitwell <Kate.Whitwell@mfe.govt.nz>
Sent: Tuesday, July 30, 2024 5:29 PM
To: Jamie Molea <Jamie.Molea@parliament.govt.nz>; James Coombes <James.Coombes@parliament.govt.nz>; Helena Terry <Helena.Terry@parliament.govt.nz>
Cc: Sam Buckle <Sam.Buckle@mfe.govt.nz>; Mark Vink <Mark.Vink@mfe.govt.nz>; Becky Prebble <Becky.Prebble@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; David Mead <David.Mead@mfe.govt.nz>; Phillip Mellor <Phillip.Mellor@mfe.govt.nz>; Arwen Norrish

<Arwen.Norrish@mfe.govt.nz>; Charlotte Berg <Charlotte.Berg@mfe.govt.nz>; Jay Forlong <Jay.Forlong@mfe.govt.nz>; Katharina Achterberg <Katharina.Achterberg@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; Ministerials <ministerials@mfe.govt.nz>; Nicolette Butler <Nicolette.Butler@mfe.govt.nz>; Juliette Derry <Juliette.Derry@mfe.govt.nz>
Subject: RE: [REDACTED] FW: BRF-5085 NZ ETS settings and regulatory updates 2024 Cabinet paper for Ministerial consultation - with Appendix 4 this time

Hi Jamie,

Thank you for providing feedback on the version of the Cabinet paper that we send you last Friday, as per the tracked changes version attached titled 'ETS settings paper JACK 3007.docx.

We have now incorporated that feedback into the new attached version that is ready to be sent for Ministerial consultation. I have included a tracked and clean version as per the files attached:

"ETS settings paper for Min consultation – MfE edits 3007 – TRACKED" and
"ETS settings paper for Min consultation – MfE edits 3007 – CLEAN" and

Note: this paper includes an updated option 1 as per earlier email today.

We have also attached a new Cabinet paper on ETS regulations – with content drawn from the previous joint paper. Please send this one for Ministerial consultation alongside the Settings paper as they do need to be on the same timeline in order for regulations updates to also progress by 30 September 2024.

Both sets of policy decisions will feed into the same LEG paper.

Thank you and happy to discuss as needed.

On Appendices – as discussed, you already have Appendix 2 and 3 for the ETs settings paper and these have not changed. We will provide Appendix one as soon as possible – s 9(2)(h) [REDACTED]
[REDACTED]

Ngā mihi

Kate

From: Jamie Molea <Jamie.Molea@parliament.govt.nz>
Sent: Friday, July 26, 2024 3:19 PM
To: Kate Whitwell <Kate.Whitwell@mfe.govt.nz>; James Coombes [EXTERNAL] (PARLIAMENT) <James.Coombes@parliament.govt.nz>; Helena Terry <Helena.Terry@parliament.govt.nz>
Cc: Sam Buckle <Sam.Buckle@mfe.govt.nz>; Mark Vink <Mark.Vink@mfe.govt.nz>; Becky Prebble <Becky.Prebble@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; David Mead <David.Mead@mfe.govt.nz>; Phillip Mellor <Phillip.Mellor@mfe.govt.nz>; Arwen Norrish <Arwen.Norrish@mfe.govt.nz>; Charlotte Berg <Charlotte.Berg@mfe.govt.nz>; Jay Forlong <Jay.Forlong@mfe.govt.nz>; Katharina Achterberg <Katharina.Achterberg@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; Ministerials <ministerials@mfe.govt.nz>; Nicolette Butler <Nicolette.Butler@mfe.govt.nz>; Juliette Derry <Juliette.Derry@mfe.govt.nz>
Subject: RE: [REDACTED]]FW: BRF-5085 NZ ETS settings and regulatory updates 2024 Cabinet paper for Ministerial consultation - with Appendix 4 this time

Fantastic thank you Kate. Likewise!
Jamie

From: Kate Whitwell <Kate.Whitwell@mfe.govt.nz>

Sent: Friday, July 26, 2024 3:16 PM

To: Jamie Molea <Jamie.Molea@parliament.govt.nz>; James Coombes <James.Coombes@parliament.govt.nz>; Helena Terry <Helena.Terry@parliament.govt.nz>

Cc: Sam Buckle <Sam.Buckle@mfe.govt.nz>; Mark Vink <Mark.Vink@mfe.govt.nz>; Becky Prebble <Becky.Prebble@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; David Mead <David.Mead@mfe.govt.nz>; Phillip Mellor <Phillip.Mellor@mfe.govt.nz>; Arwen Norrish <Arwen.Norrish@mfe.govt.nz>; Charlotte Berg <Charlotte.Berg@mfe.govt.nz>; Jay Forlong <Jay.Forlong@mfe.govt.nz>; Kate Whitwell <Kate.Whitwell@mfe.govt.nz>; Katharina Achterberg <Katharina.Achterberg@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; Ministerials <ministerials@mfe.govt.nz>; Nicolette Butler <Nicolette.Butler@mfe.govt.nz>; Juliette Derry <Juliette.Derry@mfe.govt.nz>

Subject: [REDACTED] FW: BRF-5085 NZ ETS settings and regulatory updates 2024 Cabinet paper for Ministerial consultation - with Appendix 4 this time

Sending again – with s 9(2)(h) [REDACTED] attached this time.

Sorry about that.

Have a great weekend everyone.

Kate

From: Kate Whitwell

Sent: Friday, July 26, 2024 2:04 PM

To: Jamie Molea [EXTERNAL] (Parliament) <Jamie.Molea@parliament.govt.nz>; James Coombes [EXTERNAL] (PARLIAMENT) <James.Coombes@parliament.govt.nz>; 'helena.terry@parliament.govt.nz' <helena.terry@parliament.govt.nz>

Cc: Sam Buckle <Sam.Buckle@mfe.govt.nz>; Mark Vink <Mark.Vink@mfe.govt.nz>; Becky Prebble <Becky.Prebble@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; David Mead <David.Mead@mfe.govt.nz>; Phillip Mellor <Phillip.Mellor@mfe.govt.nz>; Arwen Norrish <Arwen.Norrish@mfe.govt.nz>; Charlotte Berg <Charlotte.Berg@mfe.govt.nz>; Jay Forlong <Jay.Forlong@mfe.govt.nz>; Kate Whitwell <Kate.Whitwell@mfe.govt.nz>; Katharina Achterberg <Katharina.Achterberg@mfe.govt.nz>; Scott Gulliver <Scott.Gulliver@mfe.govt.nz>; Ministerials <ministerials@mfe.govt.nz>; Nicolette Butler <Nicolette.Butler@mfe.govt.nz>; Juliette Derry <Juliette.Derry@mfe.govt.nz>

Subject: BRF-5085 NZ ETS settings and regulatory updates 2024 Cabinet paper for Ministerial consultation

Kia ora koutou,

Please find attached BRF-5085 NZ ETS Settings and Regulatory updates 2024 Cabinet paper for Ministerial consultation and Appendices as listed below:

Appendix 1: Draft Cabinet paper – tracked (separate attachment)

Appendix 2: Draft Cabinet paper – clean (separate attachment)

Appendix 3: Table of feedback addressed (in the Briefing note document)

s 9(2)(h) [REDACTED]

Please note the advice is highly market sensitive, therefore we have limited the usual distribution list.

For Ministerials' records, the link is here: [BRF-5085 - RegWorks](#)

Happy to discuss as always, and apologies for the delay getting this to you.

Kate

Kate Whitwell (she/her)

Manager – Kaiwhakahaere, ETS Policy

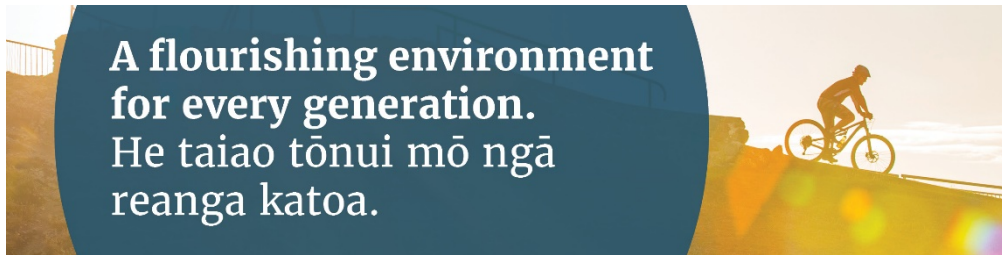
Markets Unit, Climate Change Mitigation and Resource Efficiency

Ministry for the Environment | Manatū Mō Te Taiao

s 9(2)(a) | kate.whitwell@mfe.govt.nz | mfe.govt.nz



Ministry for the
Environment
Manatū Mō Te Taiao



[SEEMAIL]

Ashleigh Watson

From: Becky Prebble <Becky.Prebble@mfe.govt.nz>
Sent: Wednesday, 31 July 2024 9:52 am
To: Sam Buckle; Jamie Kerr [EXTERNAL] (MBIE); Tim Denne; Hemi Smiler; David Mead; matt.burgess@parliament.govt.nz; Melanie Craxton [EXTERNAL] (Treasury); John Scott [EXTERNAL] (DPMC); Phillip Mellor
Subject: RE: Proposed discussion on decarbonisation in NZ context with Simon Sharpe
Attachments: How to achieve a cost-effective transition.pdf

Thanks so much for coming last night everyone. Simon sent me his slides, attached now, in case you want to study them further. There were certainly some graphs there that I did not quite understand in the moment. I like how he says "Becky's questions" in them, makes me feel famous!

Becky.
s 9(2)(a)

-----Original Appointment-----

From: Sam Buckle <Sam.Buckle@mfe.govt.nz>
Sent: Friday, May 17, 2024 8:48 AM
To: Sam Buckle; Becky Prebble; Simon Sharpe; James Palmer; Jamie Kerr [EXTERNAL] (MBIE); Tim Denne; Hemi Smiler; David Mead; matt.burgess@parliament.govt.nz; jack.boltar@parliament.govt.nz; Melanie Craxton [EXTERNAL] (Treasury); John Scott [EXTERNAL] (DPMC)
Cc: James Coombes [EXTERNAL] (PARLIAMENT); Phillip Mellor; Anna Louise Murphy
Subject: Proposed discussion on decarbonisation in NZ context with Simon Sharpe
When: Tuesday, 30 July 2024 7:00 pm-8:30 pm (UTC+12:00) Auckland, Wellington.
Where: Microsoft Teams Meeting

Proposed discussion on decarbonisation in NZ context

Microsoft Teams [Need help?](#)

[Join the meeting now](#)

Meeting ID: 464 409 026 00

Passcode: EWFpfk

Dial in by phone

[+64 4-889 8018,,789147973#](#) New Zealand, Wellington

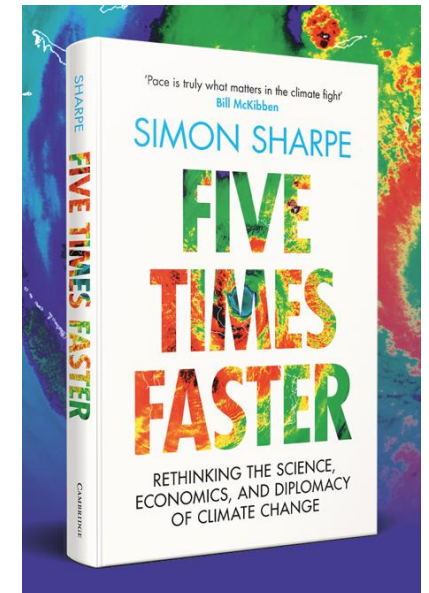
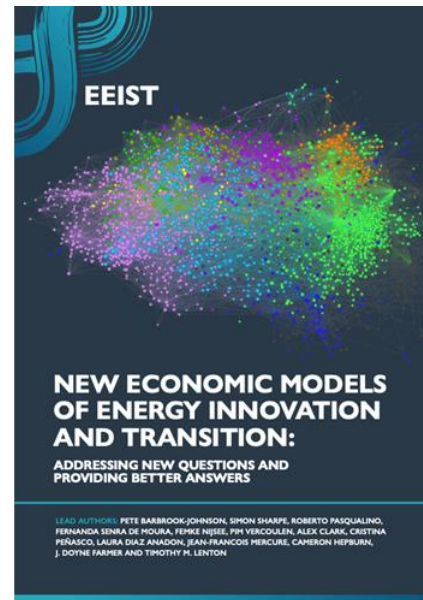
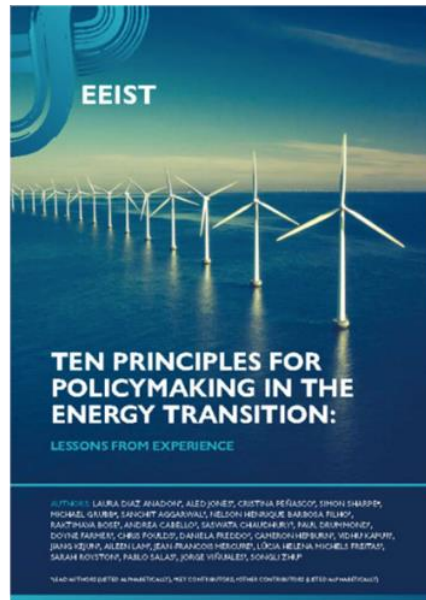
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How to achieve a cost-effective transition?

Different ways to come at the question



Simon Sharpe, Managing Director, S-Curve Economics
Slides for discussion with New Zealand government, July 2024

Part 1: strategy

Becky's question: "*Does thinking about decarbonisation at a strategic level – ie what is the level of transition we need to make and what are the big changes we need to get there – take us to a different place than policy by policy analysis relative to specific targets?*"

Key issue: marginal change vs structural change

Path dependence

The easiest next step doesn't necessarily lead along the easiest path to your destination



Least cost marginal change does not equal least cost structural change



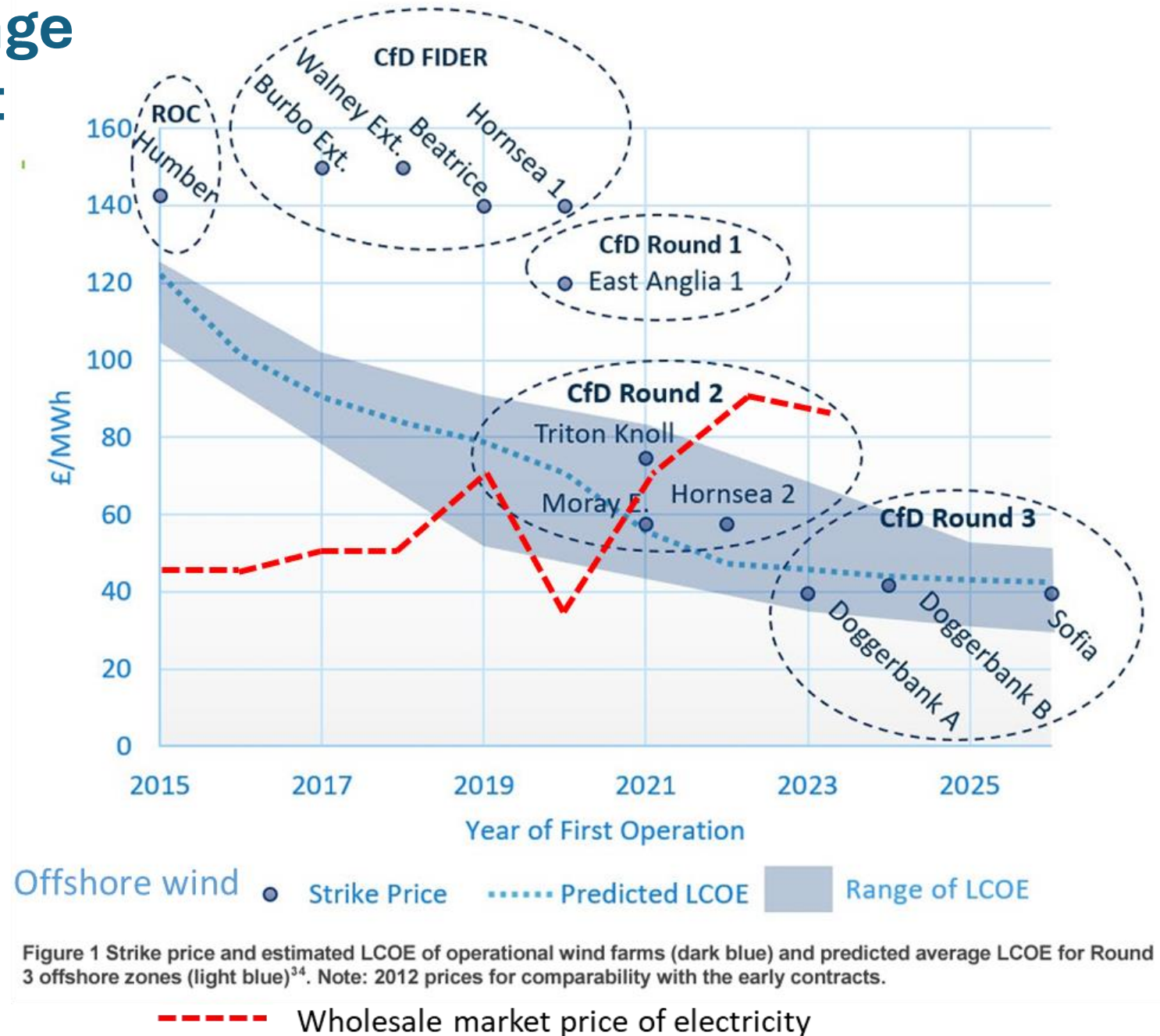
Relatively cheap at first; no cost reduction

Offshore wind: ***“among the most expensive ways of marginally reducing carbon emissions known to man”.***

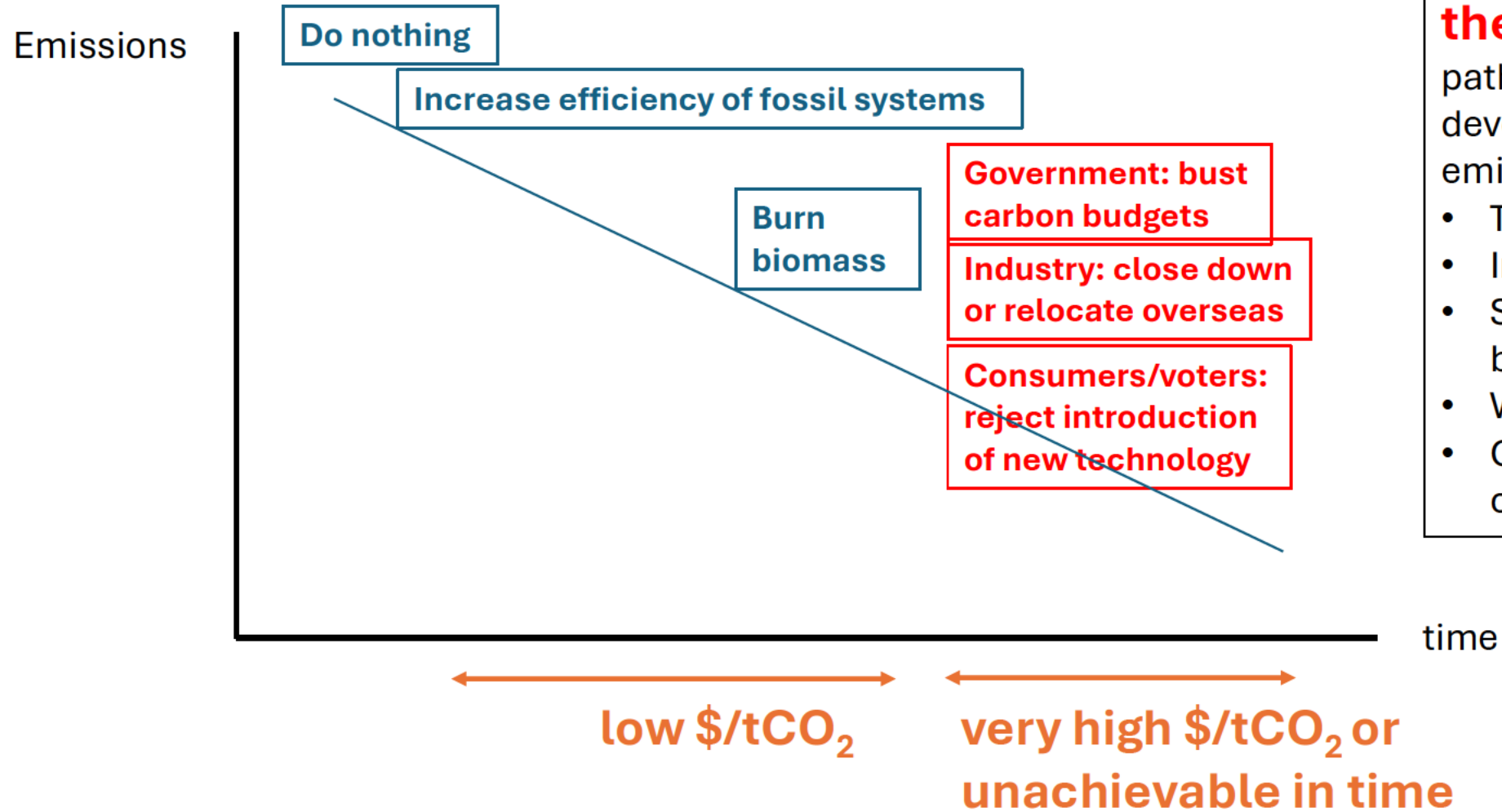
– Dieter Helm, 2014



Expensive at first; costs down by 70% in a decade



A focus on short-term emissions reduction can lead to the wrong results



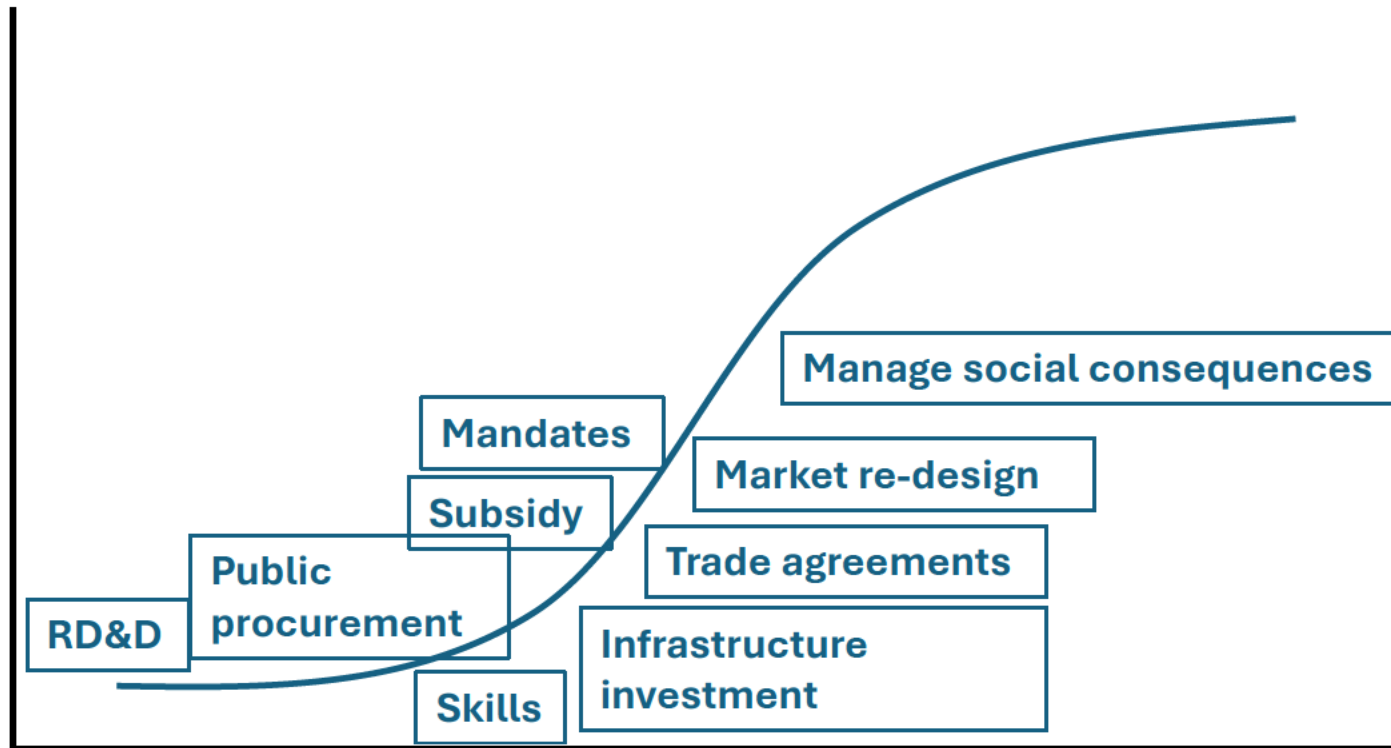
Each step delays the necessary

path-dependent development in zero-emission-related:

- Technologies
- Infrastructure systems
- Supply chains, and business models
- Workforce skills
- Consumer / investor confidence

Focus instead on deployment of zero-emission solutions

Zero emission solution market share



Each step enables the next

← high \$/tCO₂ ← low \$/tCO₂ ← high \$/tCO₂ →

time

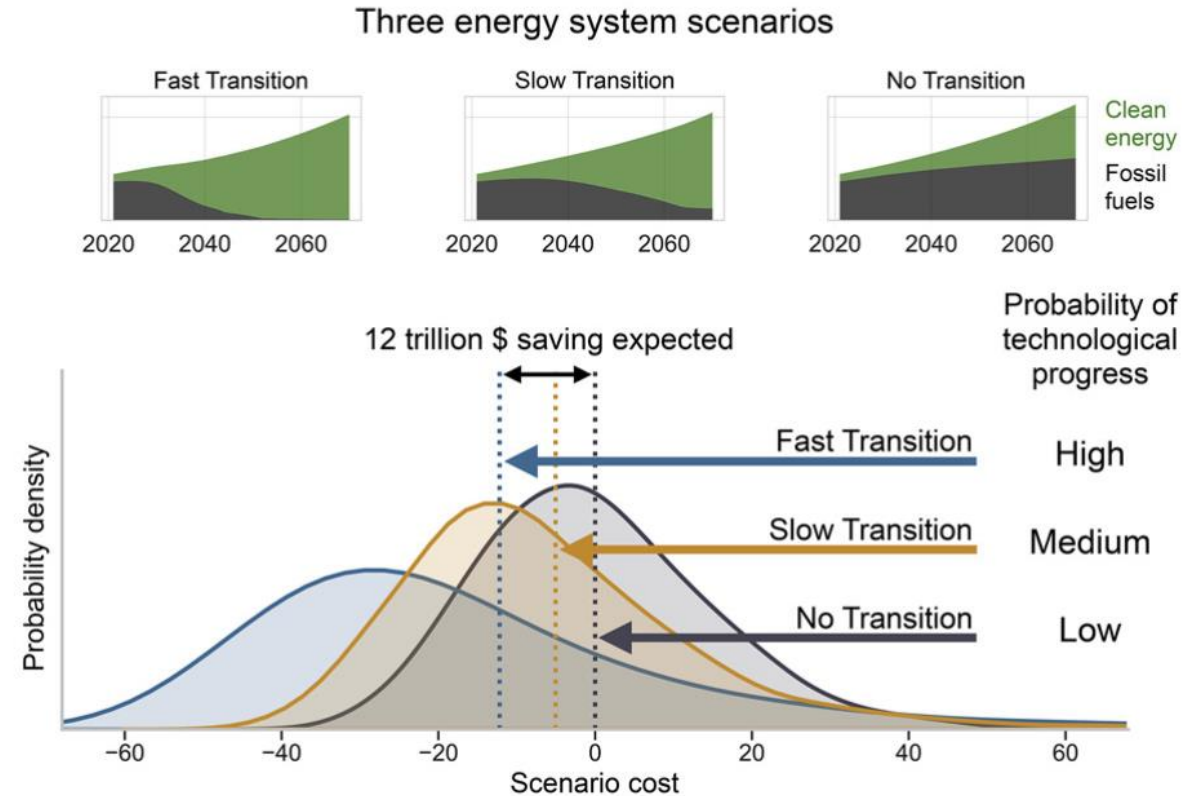
Part 2: national and international

Becky's question: *“A number of arguments for rapid decarbonisation seem to more naturally apply to large economies that might be expected to be leading the development of new technology, eg knowledge spillovers etc. To what extent do these arguments apply to a small open economy like NZ's? Another way of putting this is whether there is any downside to just adopting new technologies once others have developed them?”*

Key issue: footprint vs leverage

Time-dependence of costs

Cost component	Time dependence
Fossil fuel operational costs	The earlier the transition, the less you spend
Fossil fuel capital costs	The earlier the transition, the less investment is wasted
Clean tech operational costs	(Can be low or high, stable or falling over time/deployment).
Clean tech capital costs	Costs fall as function of cumulative global deployment. An individual country can lead or follow.
Adjustment costs (e.g. installation of supporting infrastructure)	To a first approximation, likely to be time-independent (e.g. extending power grids; insulating houses)



Source: Way, R. et al, 2022. *Empirically grounded technology forecasts and the energy transition*

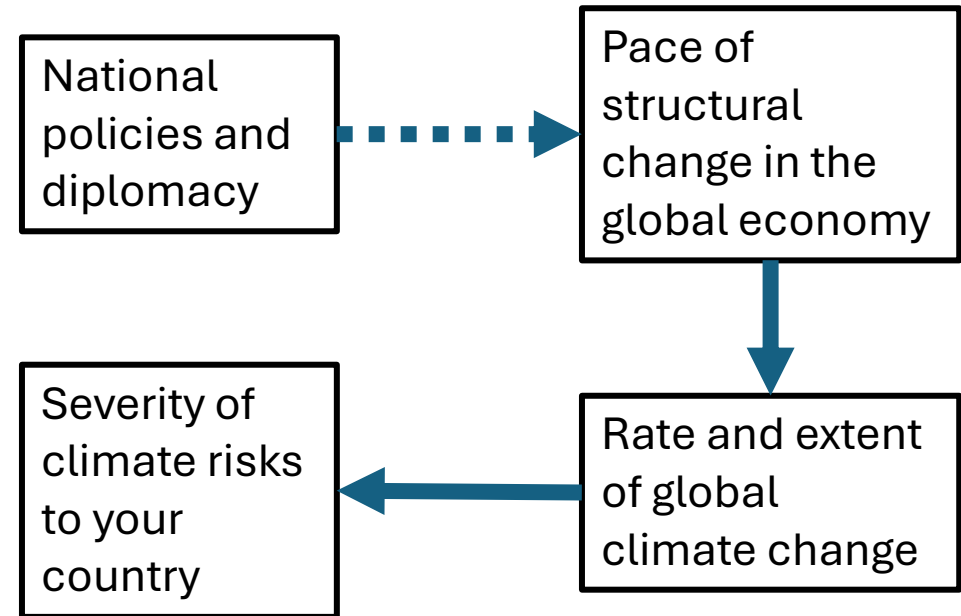
What is national decarbonisation for?

Tick the box of your choice

a. **Self-satisfaction** (achieve net zero by 2050 and give yourself a pat on the back)

b. **International legitimacy** (not be pilloried at the UNFCCC or elsewhere)

c. **Influencing the pace of global decarbonisation** (reducing risks to your own country and the world)



Footprint and leverage

Reduce your
carbon footprint.
But first, find
out what it is.



Call it your mark on the world. It's the amount of carbon dioxide emitted due to your daily activities— from mowing your lawn to vacuuming your home. Find out the size of your household's carbon footprint, learn how you can reduce it, and see how we're reducing ours at [bp.com/carbonfootprint](#). It's a start.

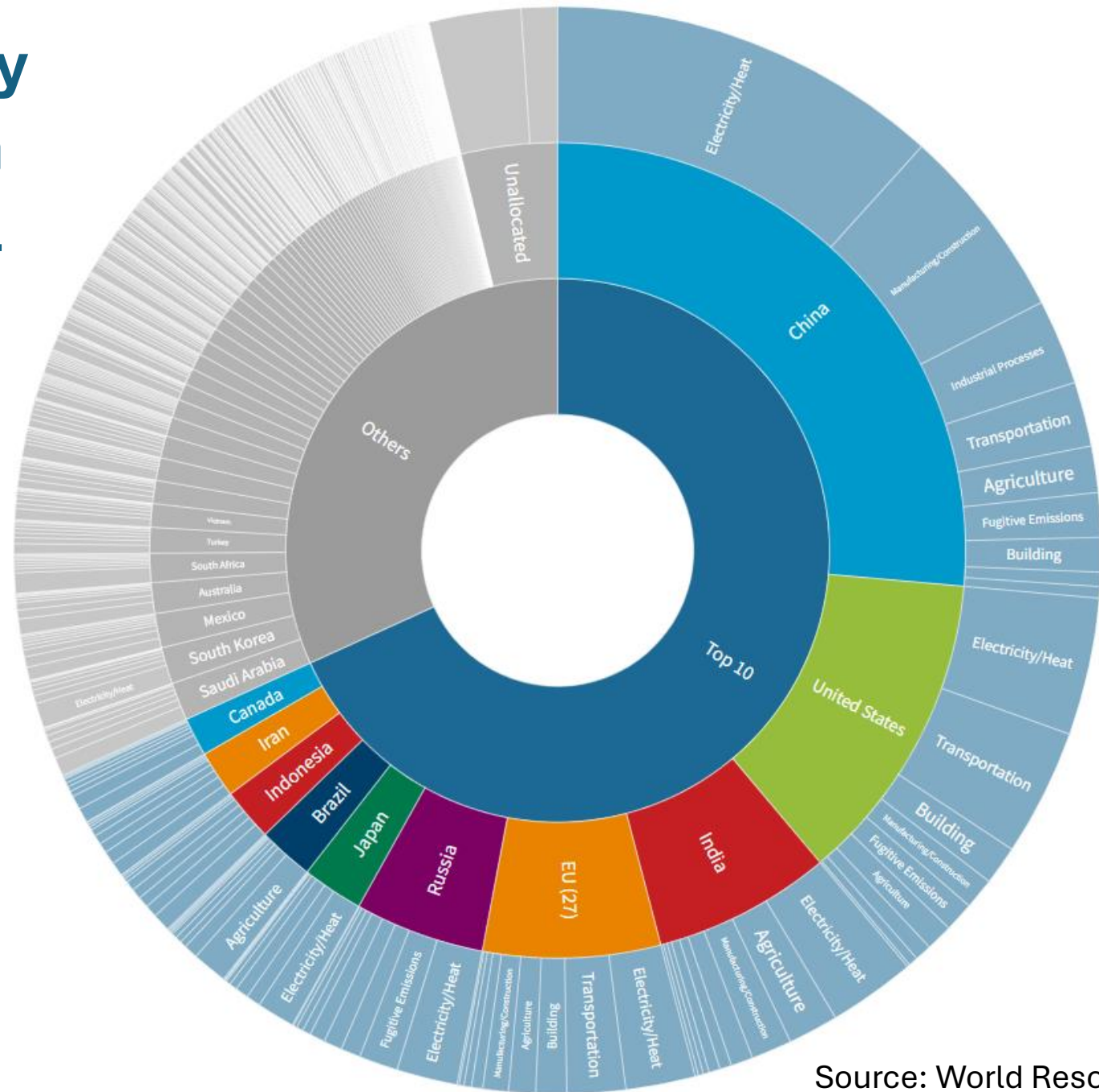


beyond petroleum™

What can you do, *better than most can do*, to bring about system change?

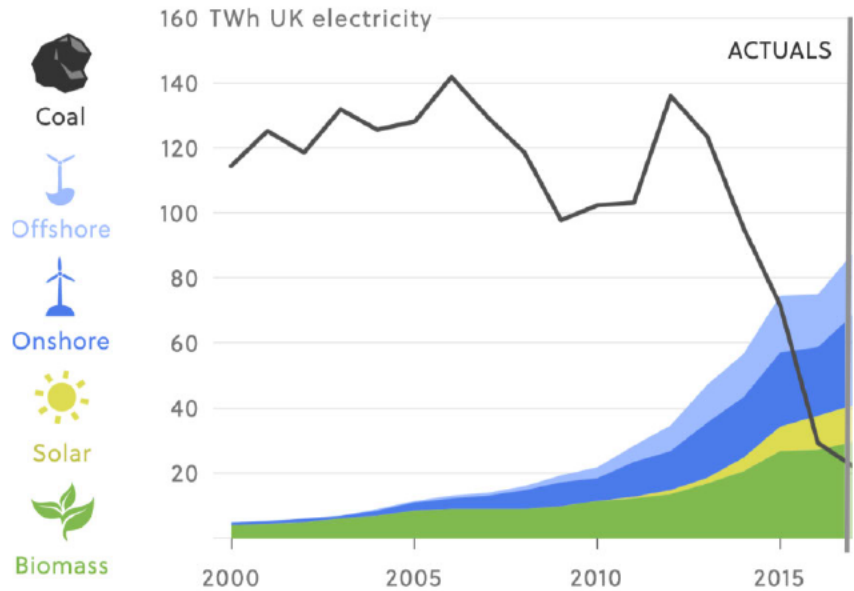


Almost every country is a small country, in the context of global emissions



Source: World Resources Institute

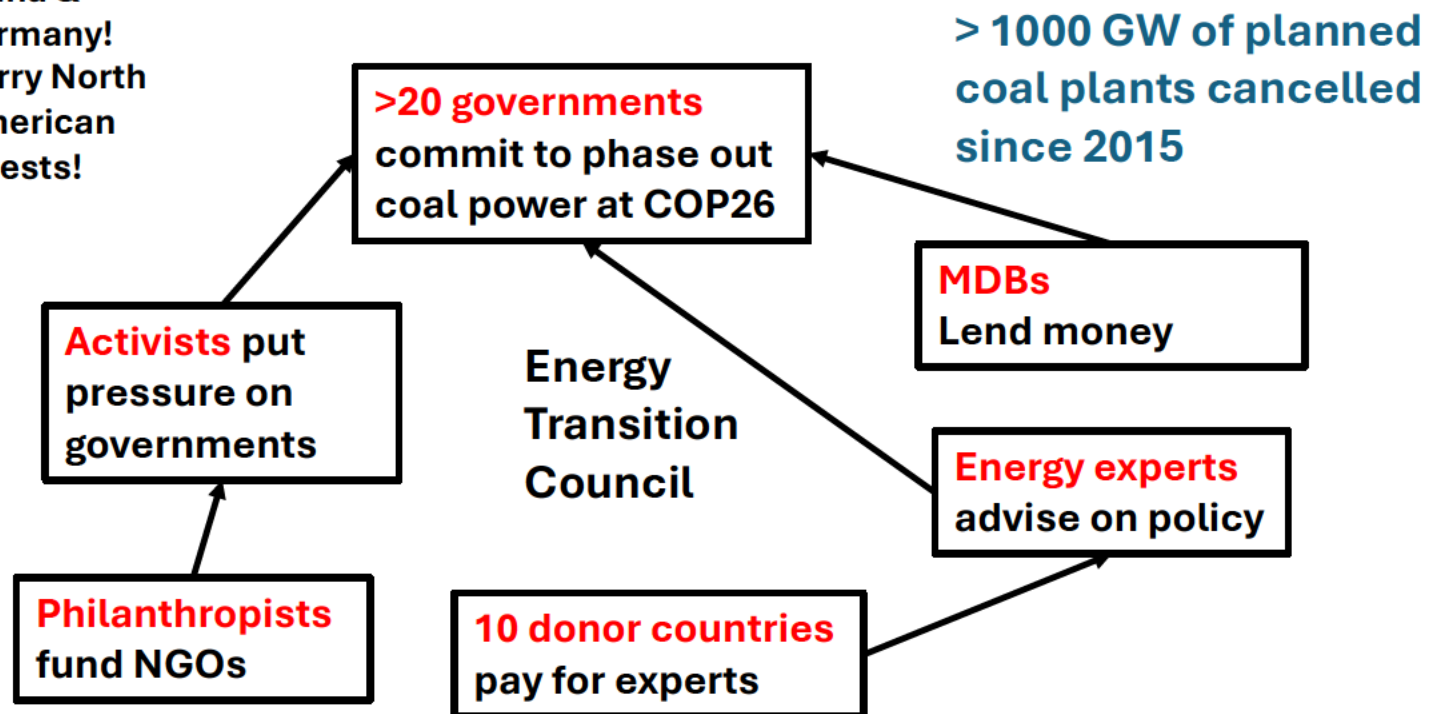
UK power sector decarbonization is enabled by actions of other countries




Thanks Denmark!


Thanks US, China & Germany!
Sorry North American forests!






UK power sector diplomacy aims to accelerate the global transition



What's cost got to do with it?

 Clean tech cheaper: move ahead with national policy

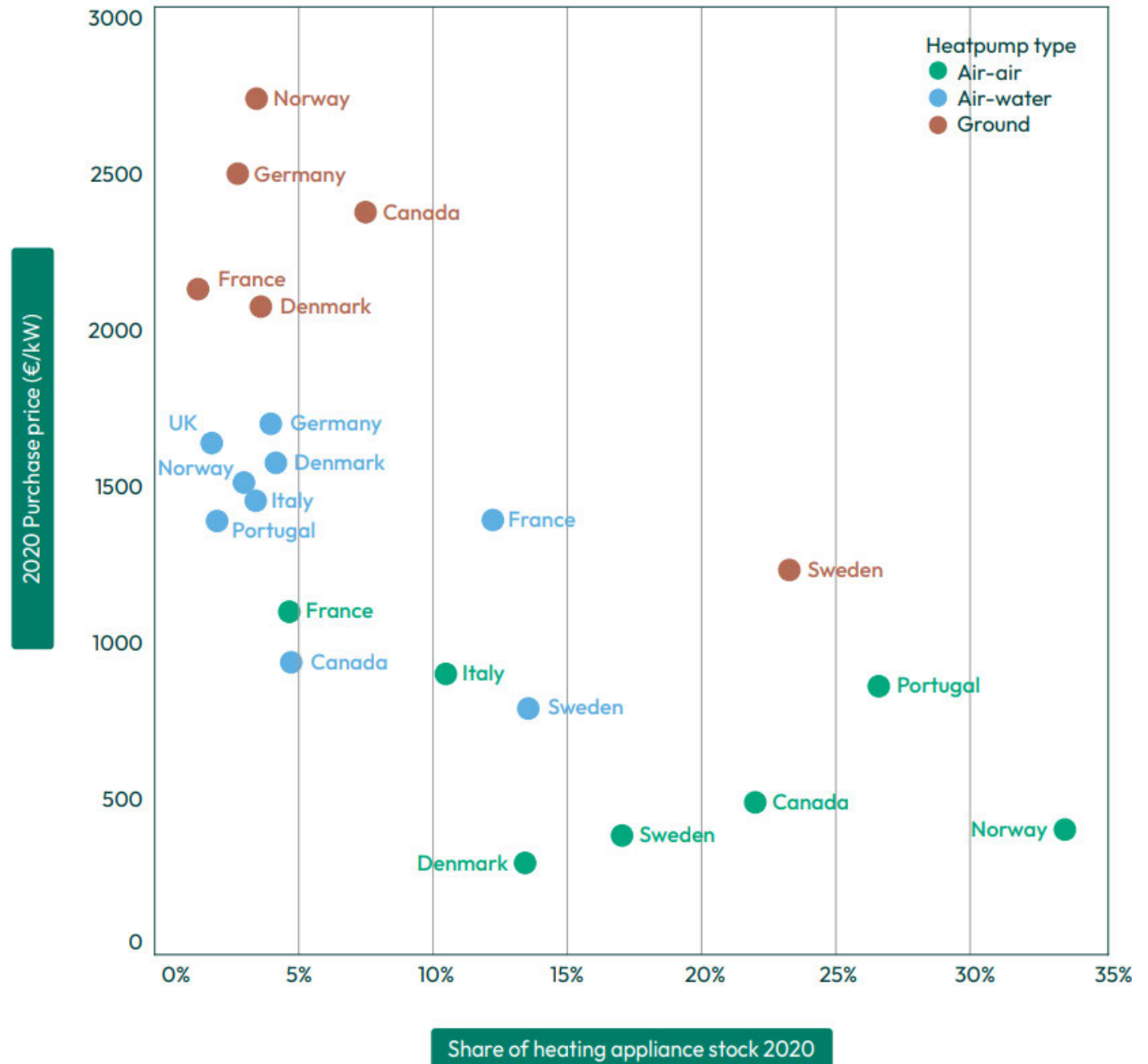
 Competitiveness a core concern. Prepare to be a first-mover and engage in diplomacy to shape global market

Sector	What's cheaper, fossil or clean?	What matters (national economic interests)?	What does it depend on?
Power	Solar and wind already cheaper than coal or gas in most of the world 	Cost of electricity to consumers	Efficiency of integration of new technologies into the national electricity system (grids & markets)
Road transport	Electric cars already cheaper to own than petrol cars in leading markets. Trucks are following. 	Cost of car ownership Cost of transport Competitiveness of industry	Rate of national uptake of electric vehicles (& further tech progress) Investment & innovation
Energy intensive industries, shipping and aviation	Fossil fuels cheaper than clean tech for foreseeable future 	Competitiveness of national industry. (Additional costs to end consumer are trivial – only a few percent extra*)	Short-term: not being ahead in the move to clean tech Long-term: not being behind in the move to clean tech
Buildings, heating and cooling	Heat pumps mostly more expensive than gas boilers, but cost can be more than offset by increasing building efficiency 	Cost of heating or cooling buildings	Effectiveness of national policies to improve building efficiency, & global progress in appliance & materials tech
Agriculture & land use	Sustainable farming practices likely to be more expensive? (variation across places / crops) 	Food security Food affordability Competitiveness of exports	Global food system resilience Global tech progress Being ahead of / behind the curve

Cheap globally does not necessarily mean cheap locally

- **Core technology cost can be global, but national/local elements of cost can include costs of:** transport/trade, installation, operations and maintenance, supporting infrastructure, land, and finance. National cost components depend on national actions.
- **Jobs are created throughout clean tech value chains**, not only in the manufacturing of core technologies.
- **Cost does not equal price.** A country may pay higher prices to import technology if it has no domestic production in a given sector.

Heat pump purchase prices in different countries



Part 3: policy

1. Becky's question: *“Thinking about specific enabling initiatives that have been effective in other countries, what features of those initiatives have led to their success and are there features that could equally work in the NZ context? We are particularly interested in initiatives that:*
 - (a) involve reducing regulatory barriers to decarbonising/regulatory incentives (less interested in direct financial incentives for firms and individuals), and*
 - (b) help our emissions trading scheme discover lower cost solutions and quickly and efficiently as possible.”*

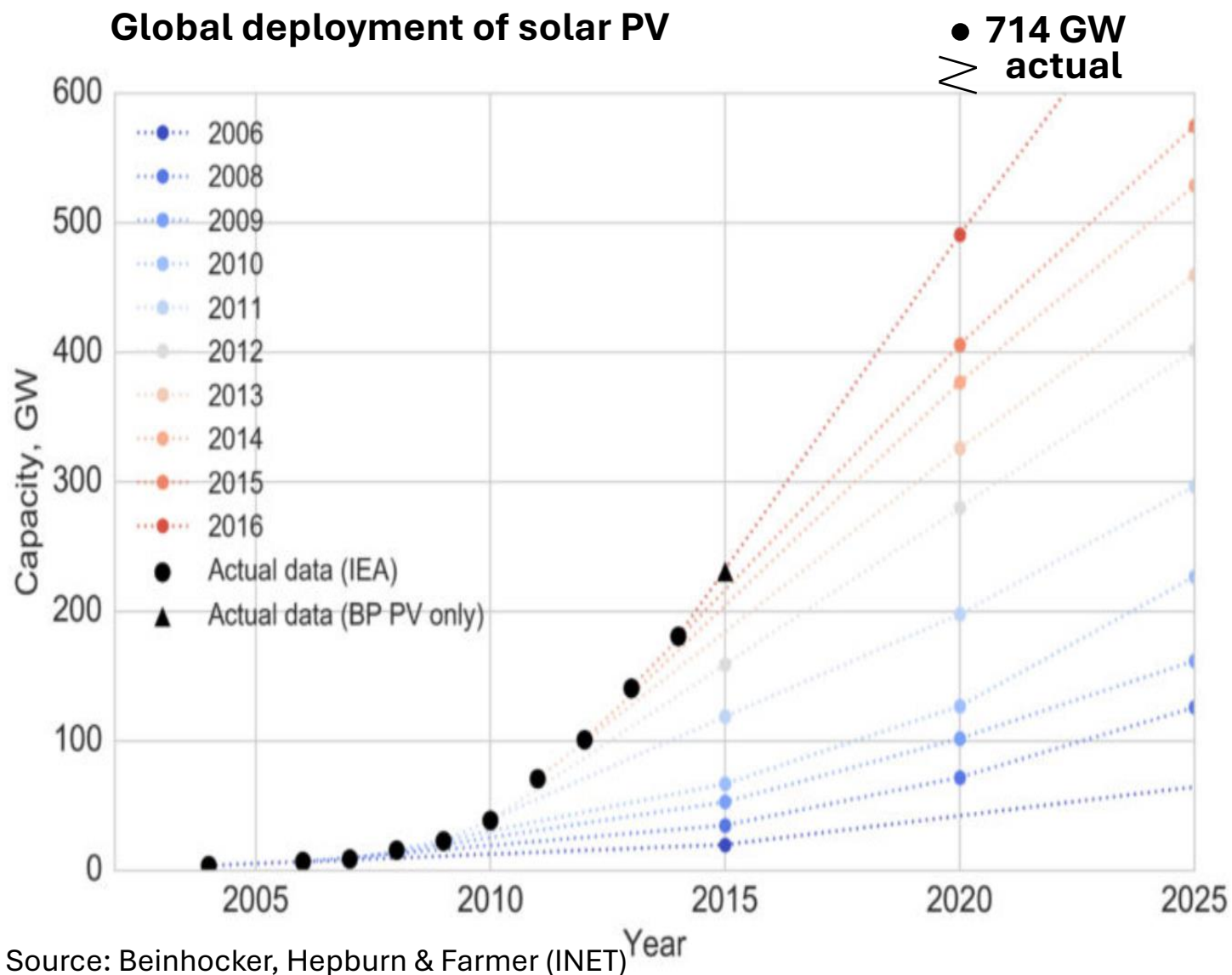
Key issue: allocative efficiency vs dynamic efficiency

Distinguishing between allocative and dynamic efficiency

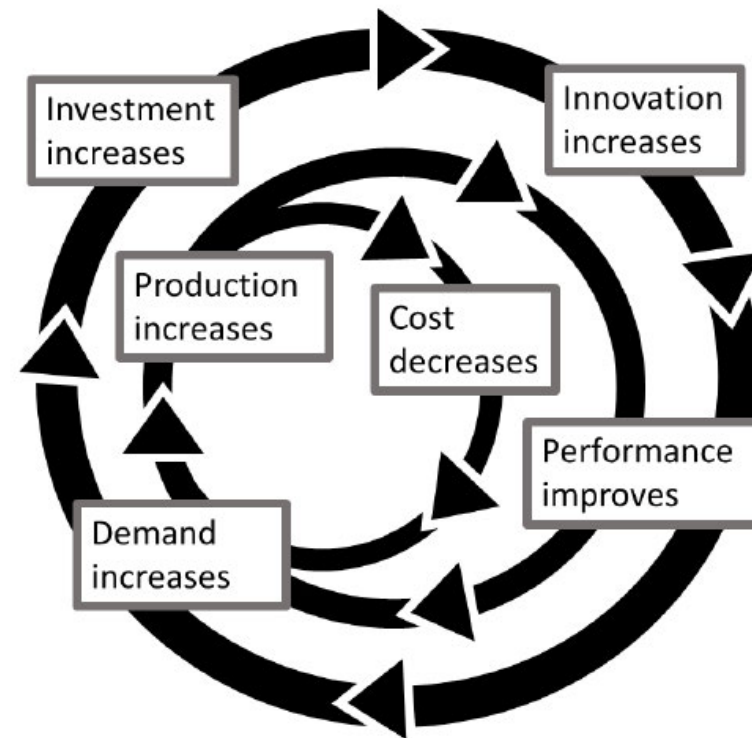
	Allocative efficiency	Dynamic efficiency
What it concerns	How existing resources are shared out in the economy	How new elements are created in the economy, and how structures are changed
Function of markets	Distributional power (trade, balancing supply and demand, competition in existing markets)	Creative power (enterprise, innovation, competition to lead in new markets)
Relevance for costs	Makes current products available at least cost	Develops new products, which may be cheaper (and better)
Role of government	Fix market failures so that the efficient sharing out of resources is not impeded	Shape markets to influence direction and rate of innovation and structural change

Meeting climate change goals requires ‘rapid and far-reaching system transitions’ in each of the emitting sectors (IPCC) – it is primarily a dynamic efficiency problem

Investing in the new is more efficient than taxing the old, early in the transition



Why? Investment in new solutions benefits from self-amplifying feedbacks (learning by doing, economies of scale, complementary technologies); taxing the incumbent system does not.



Carbon pricing alone tends to encourage improvement in efficiency in fossil fuel systems, or a shift to intermediate technologies

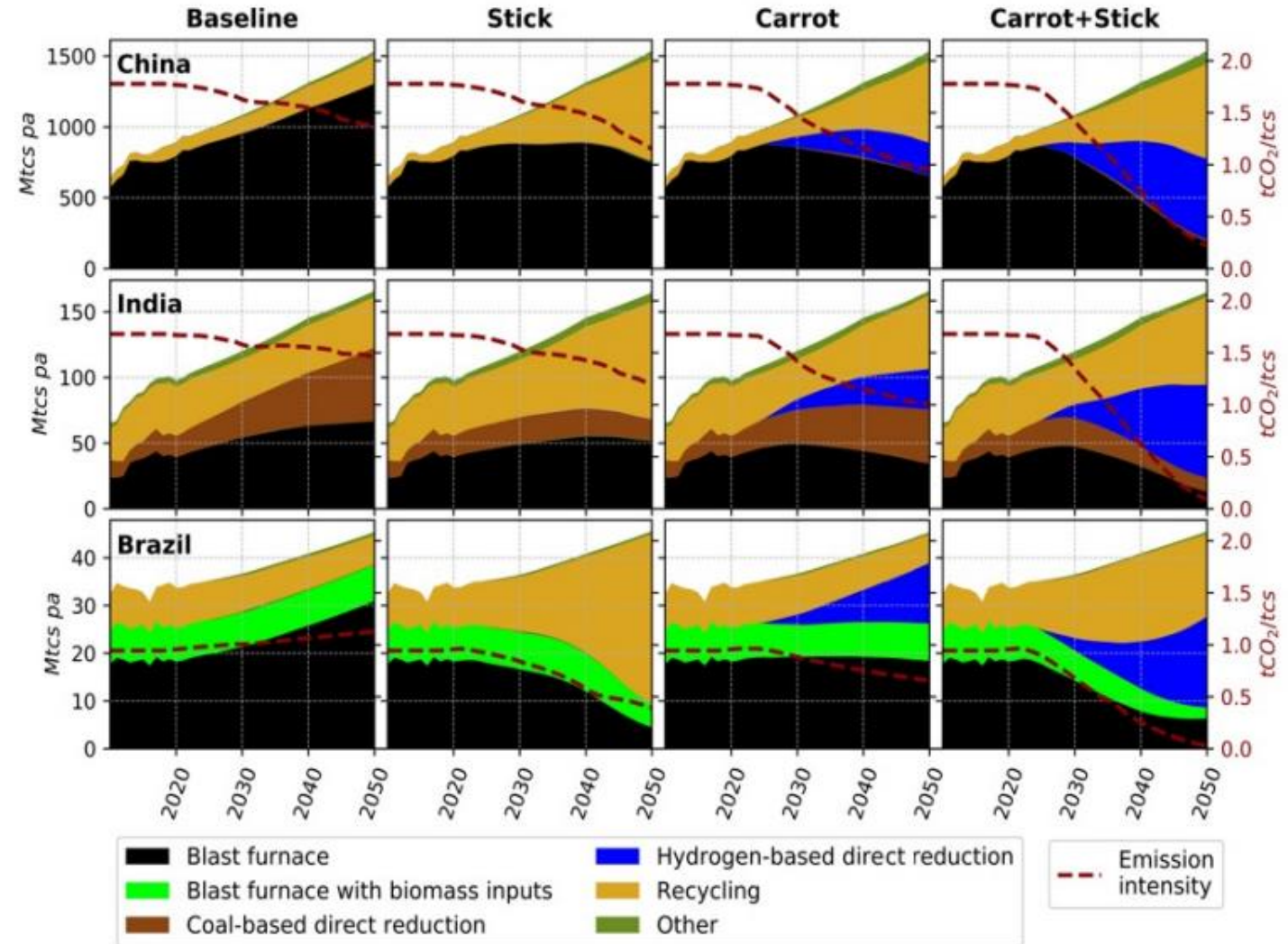
But it can be useful together with other policies.

The effect of policies in combination can be more (or less) than the sum of their parts.

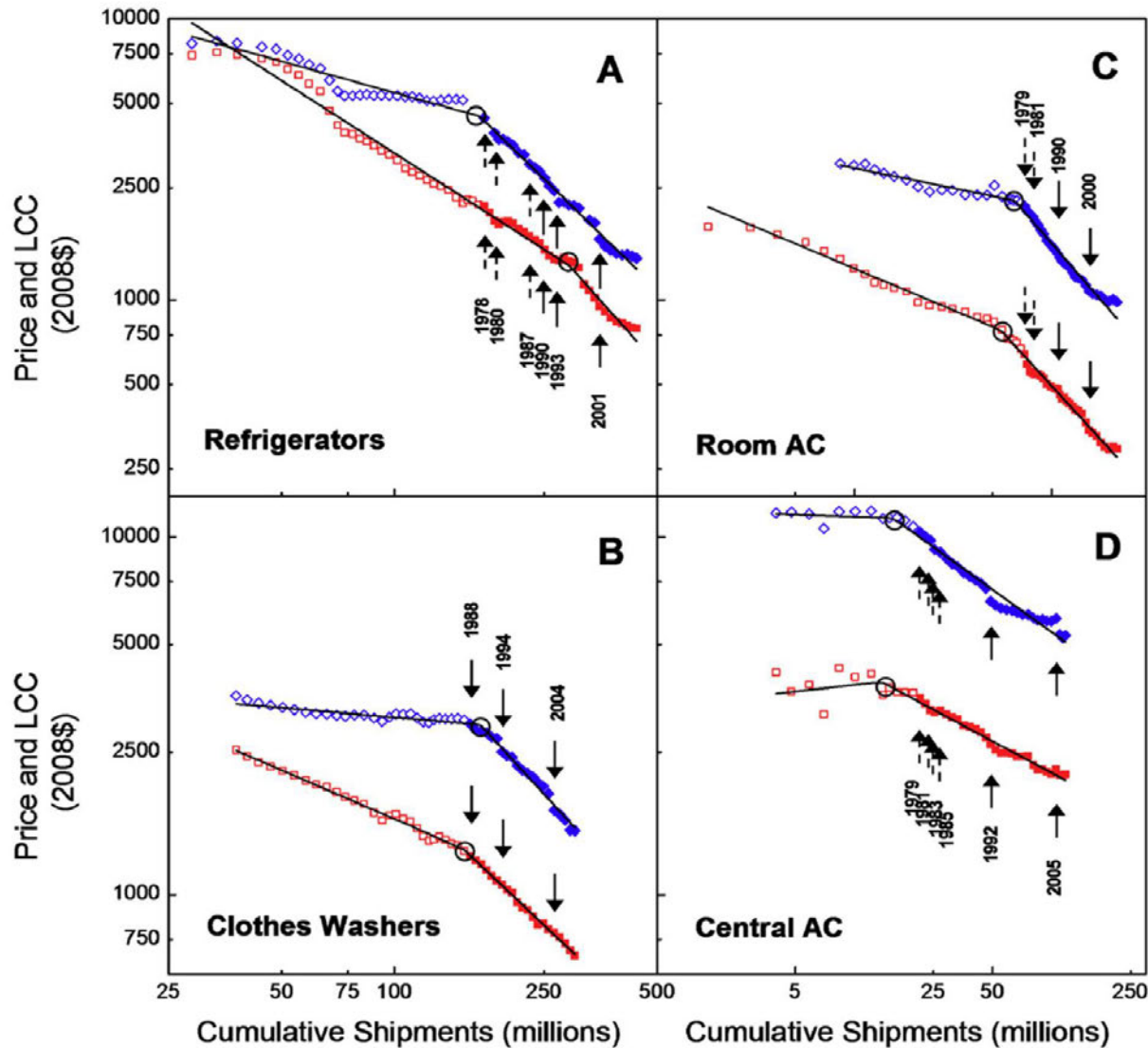
Modelling the steel transition with the FTI technology diffusion model

Source: Vercoulen, P. et al, Prospects and strategies for low carbon steel

<https://eeist.co.uk/wp-content/uploads/appendix5-423x600.png>



Regulation can reallocate finance and accelerate innovation



Why? Regulation can re-shape the fitness function of a part of the economy, prompting businesses to shift resources from exploitation to exploration.

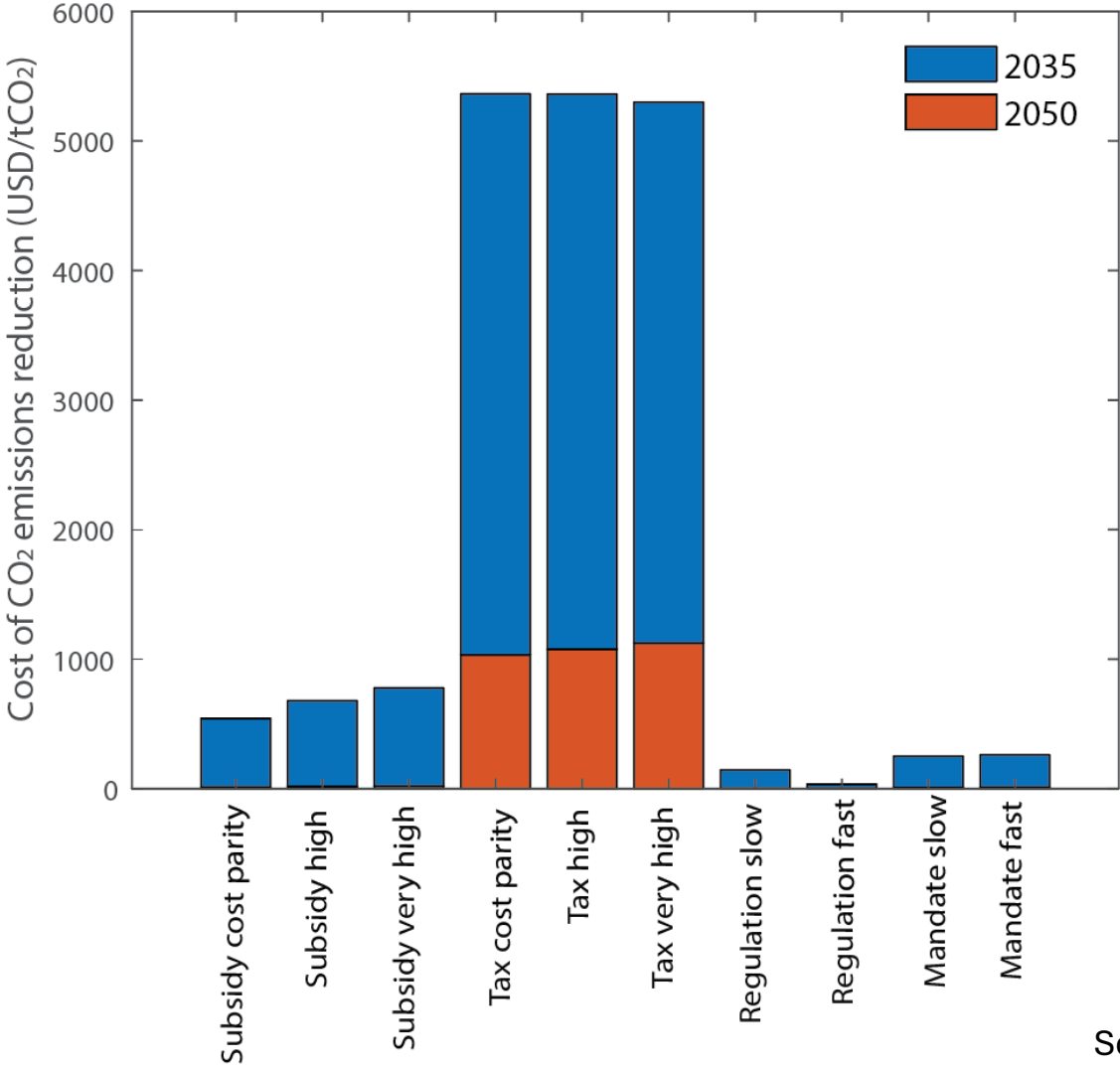
“In contrast to the classical picture of the impact of efficiency standards, the introduction and updating of appliance standards is not associated with a long-term increase in purchase price; rather, quality-adjusted prices undergo a continued or accelerated long-term decline.”

A retrospective investigation of energy efficiency standards: policies may have accelerated long term declines in appliance costs
R D Van Buskirk, C L S Kantner, B F Gerke and S Chu

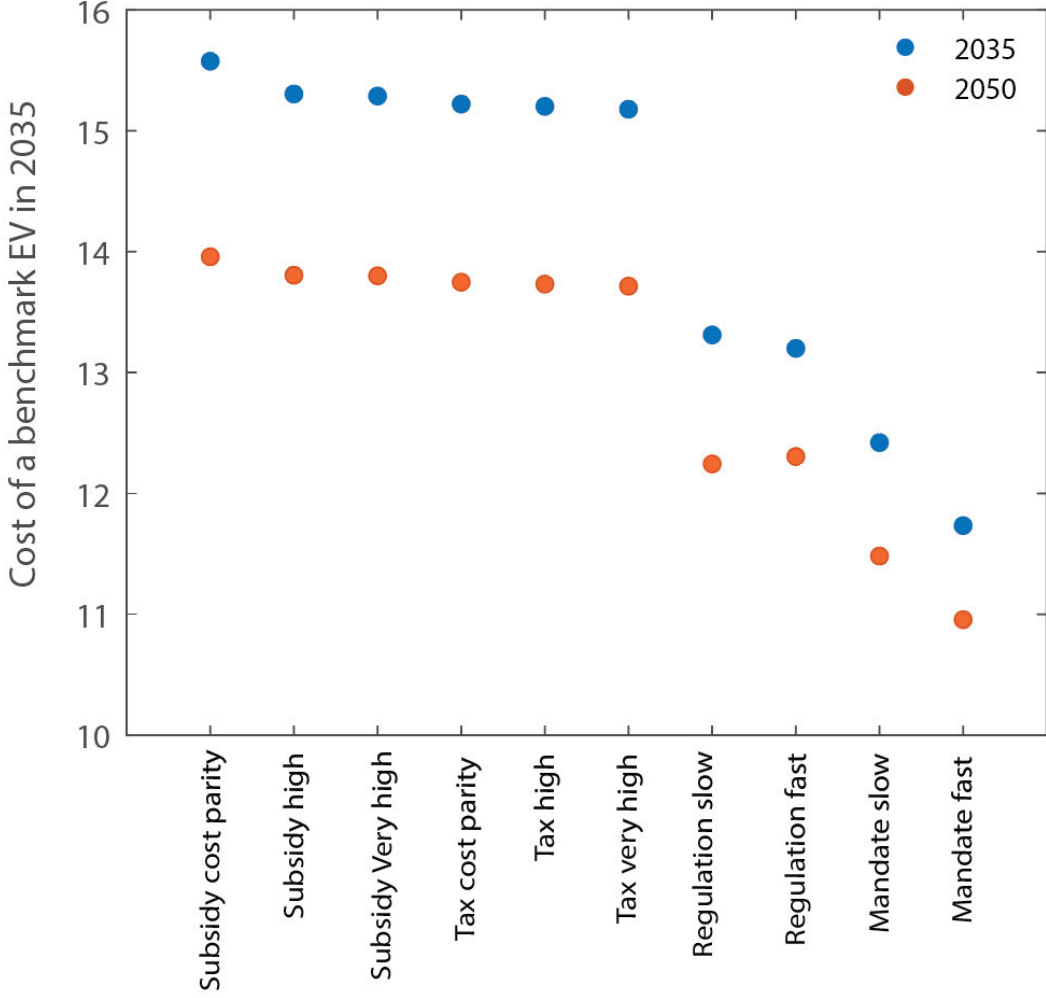
Regulation can be a cost-effective policy for deployment

Policy options to deploy electric vehicles in India

Cost per tonne of emissions reduction



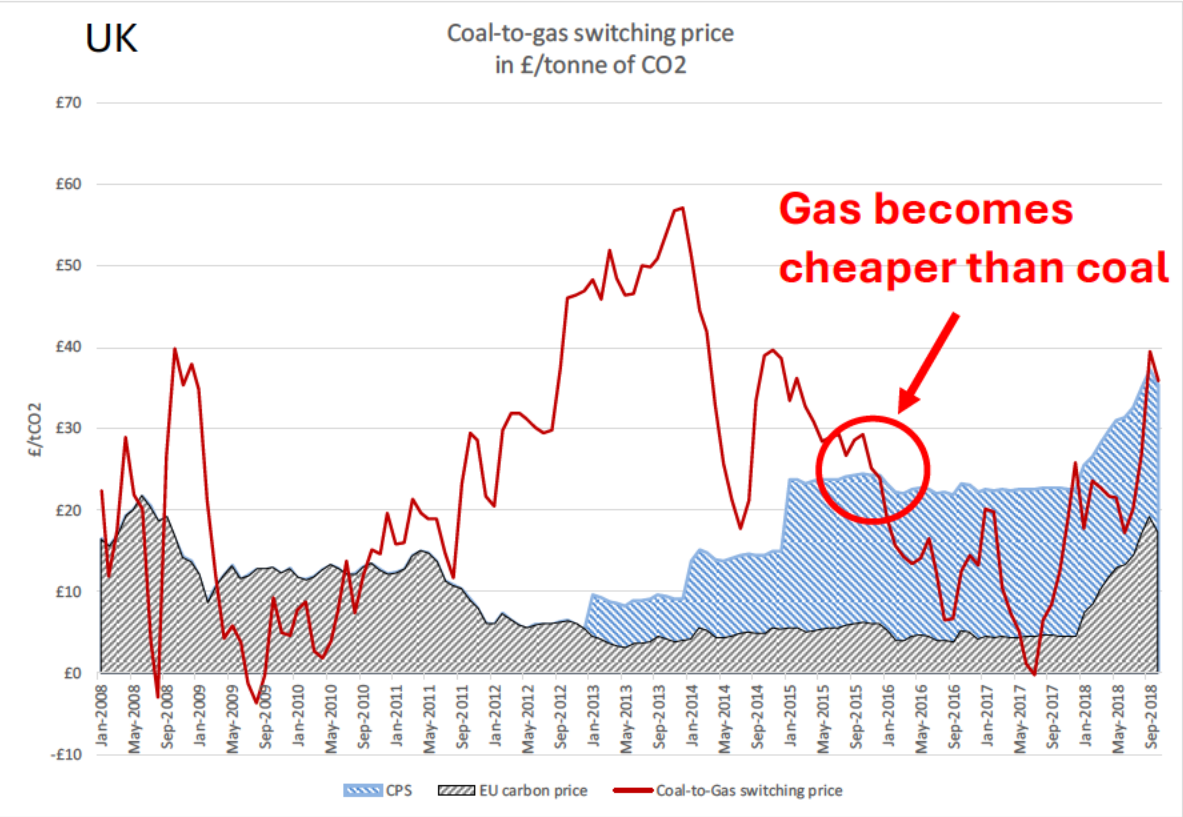
Cost of benchmark electric vehicle in 2035



Source: Lam & Mercure

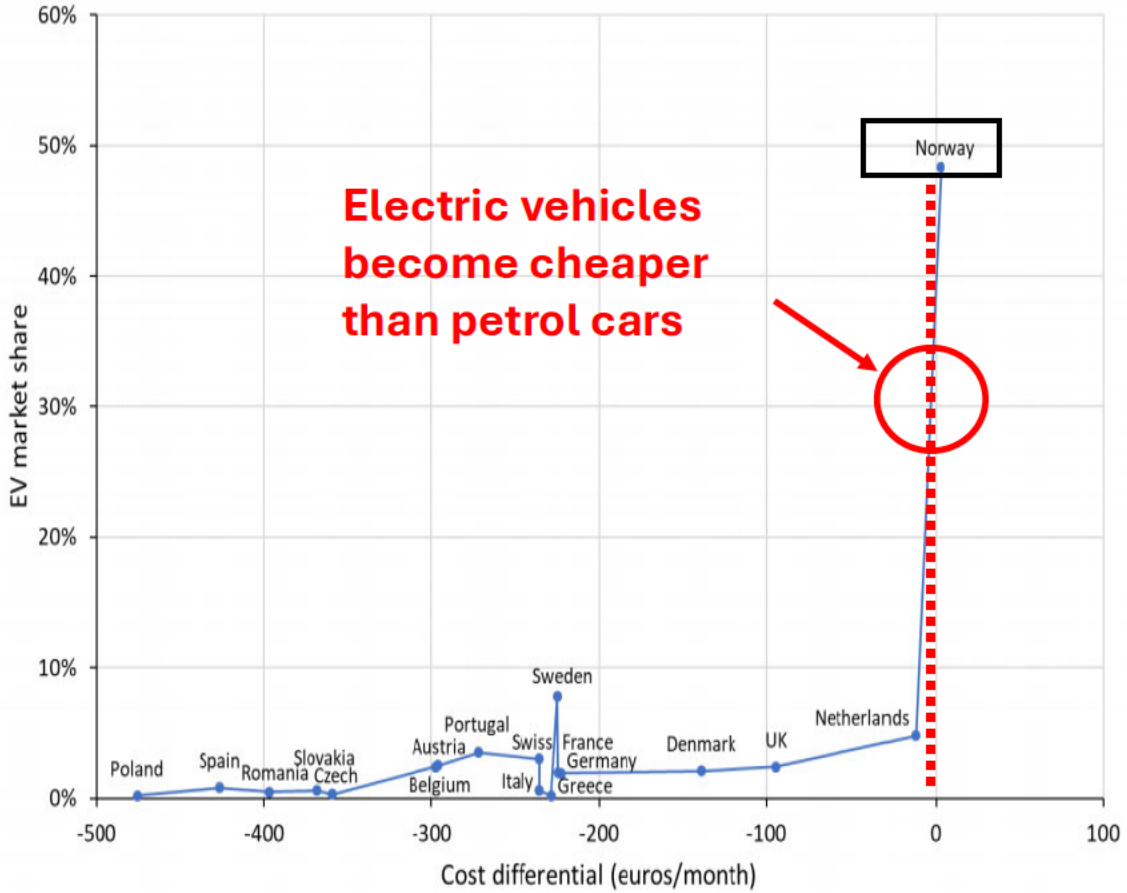
Tax is most useful when it targets tipping points

World's fastest power sector decarbonization

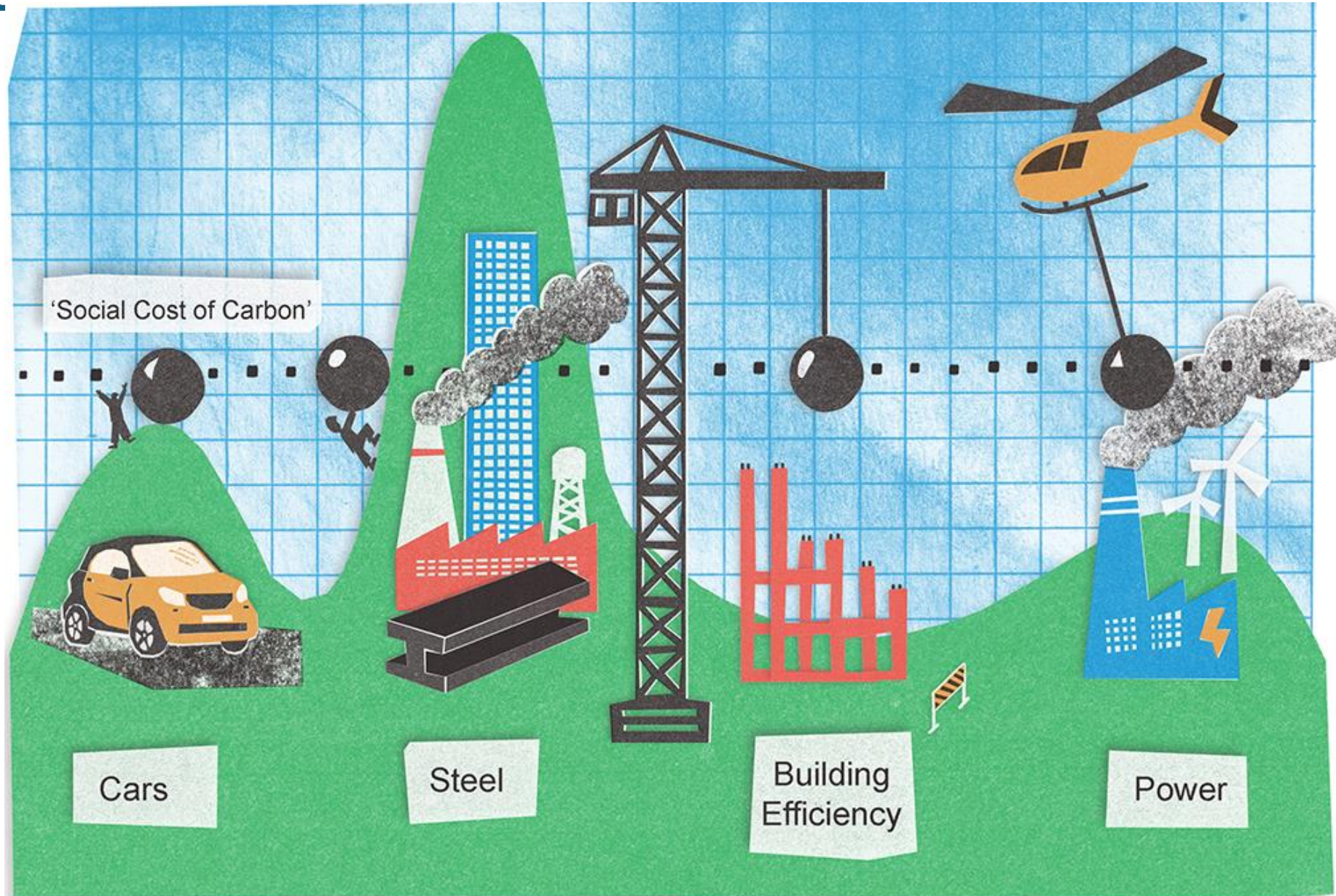


Grey shading: EU emissions trading carbon price
 Blue shading: UK carbon price floor
 Red line: coal-to-gas switching price

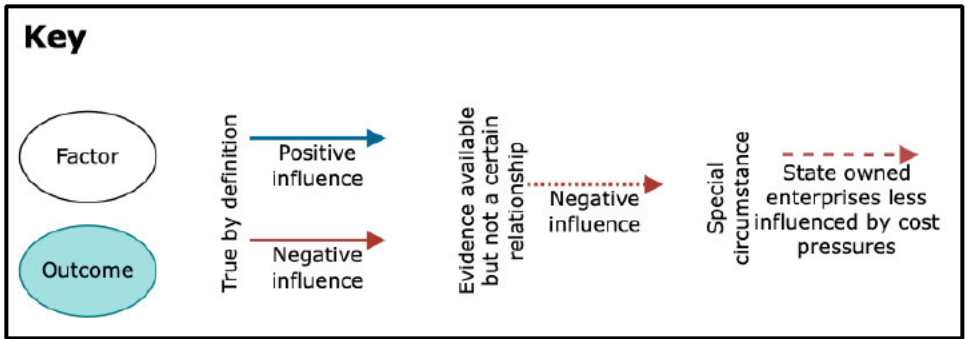
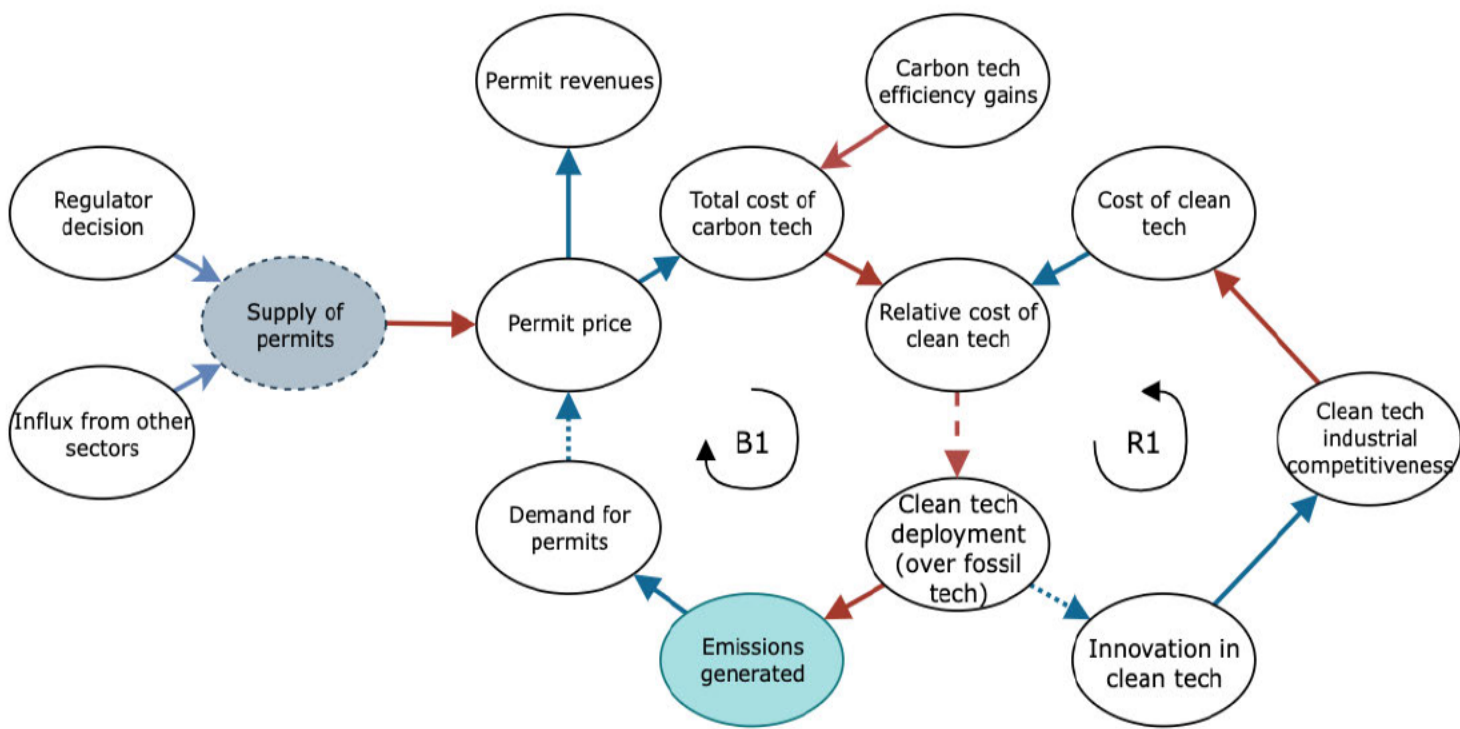
World's fastest transition to electric vehicles



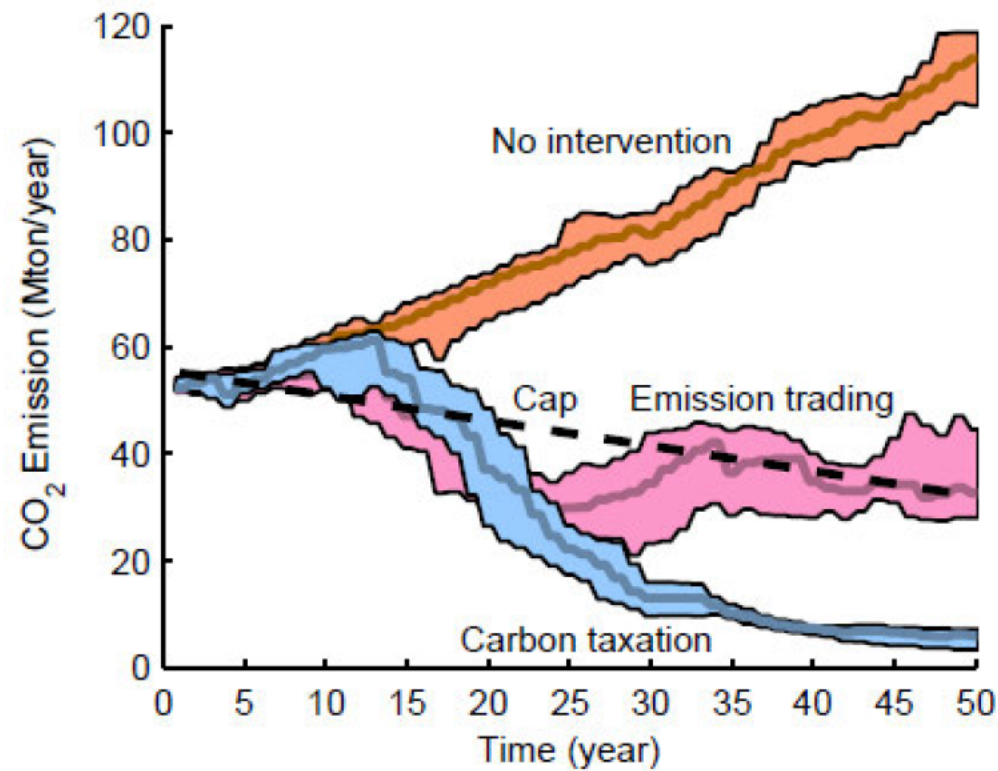
An equal carbon price across the whole economy is dynamically inefficient



An emissions trading scheme is less dynamically efficient than a fixed carbon tax



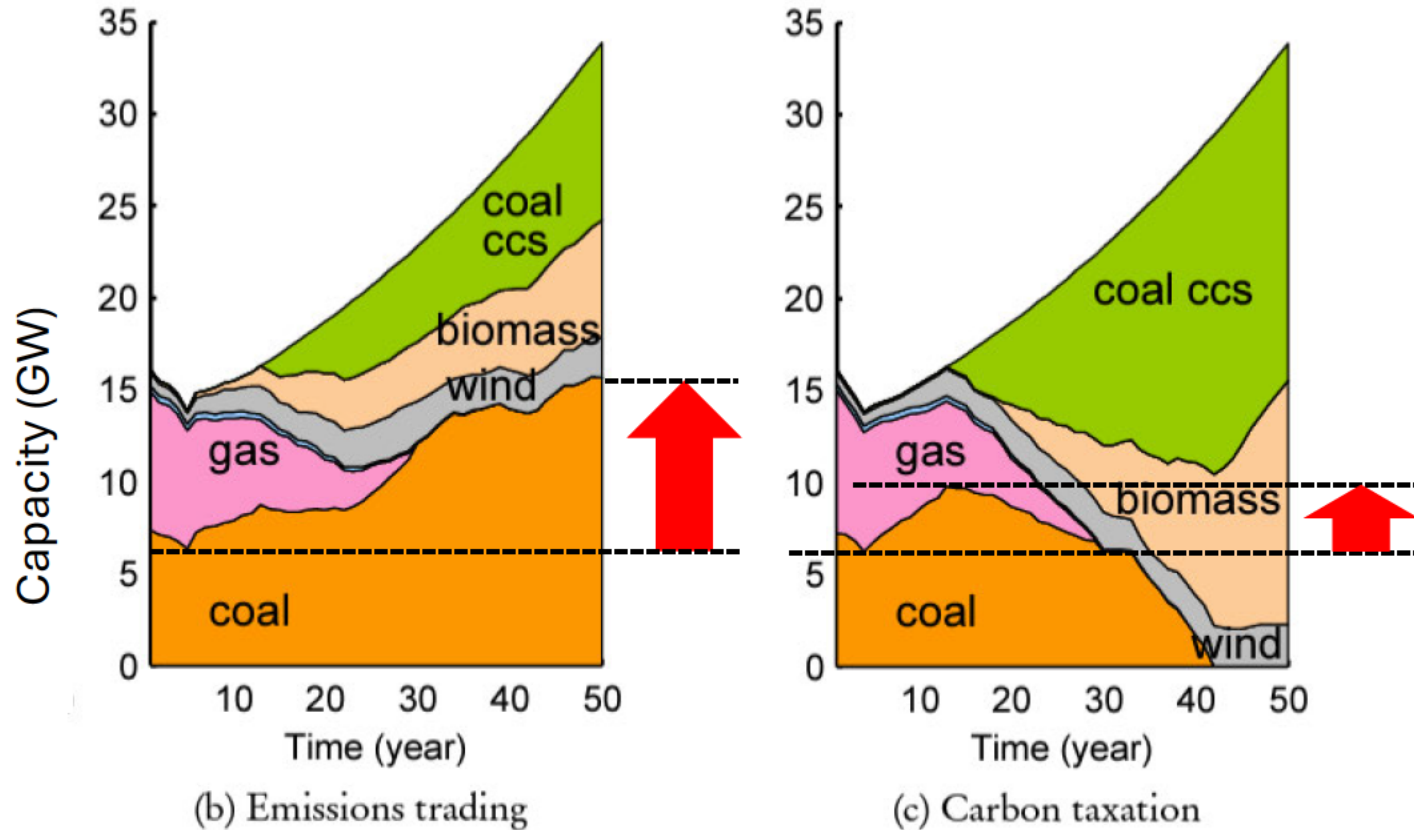
Comparison of carbon tax and ETS with same average carbon price, using an agent-based model




(b) CO₂ emission levels

Source: Chappin (2010): <http://chappin.com/ChappinEJL-PhDthesis.pdf>

Least cost marginal emissions reduction = maximum wasted investment

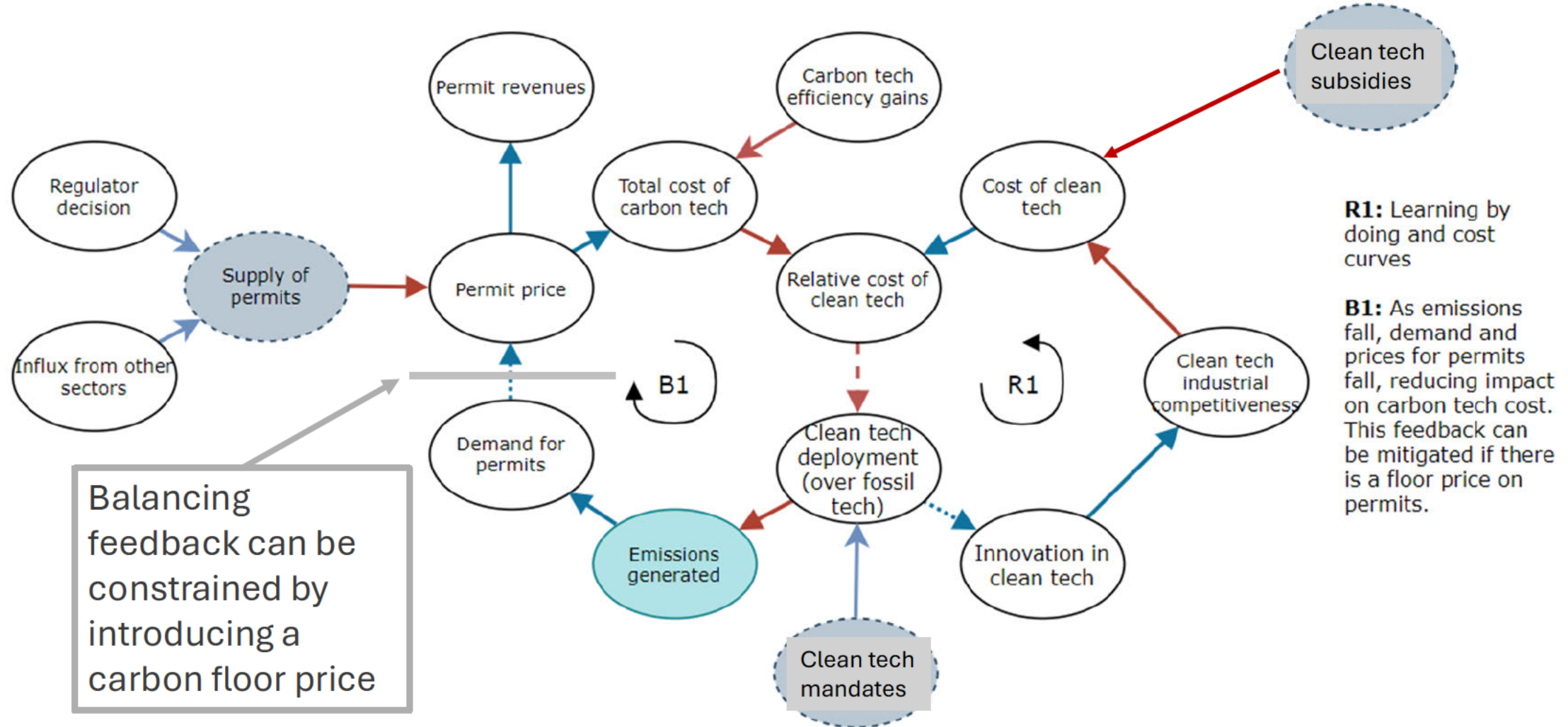


Evolution of the generation technology mix (averaged across model runs)


= potentially wasted investment in new power generation assets that need to be replaced before the end of the transition

How to make an ETS as dynamically efficient as possible

- Have a carbon floor price
- Don't allow trading of permits between different sectors
- Don't link to other countries' carbon markets
- Complement it with other policies (like subsidies and regulations / mandates)



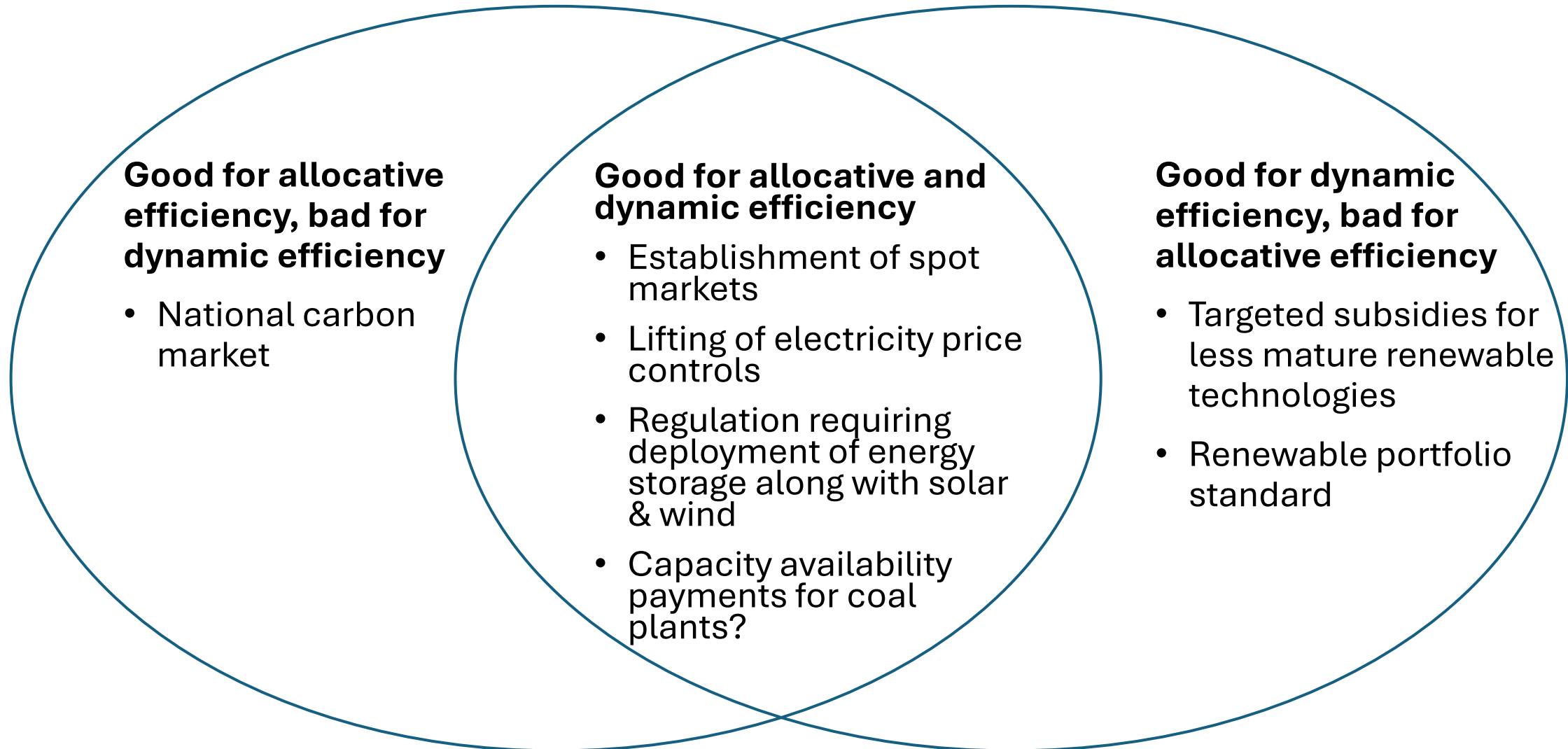
Carbon floor prices: options for implementation

- **Fixed carbon tax** that adds to ETS price (**UK**)
- **Top-up tax** added to ETS price when permit price falls below a floor level (**Netherlands, Norway**)
- **Auction reserve price** for sale of ETS permits (**California, Quebec**)
- **Ceiling on number of permits** in the ETS market (**EU**)



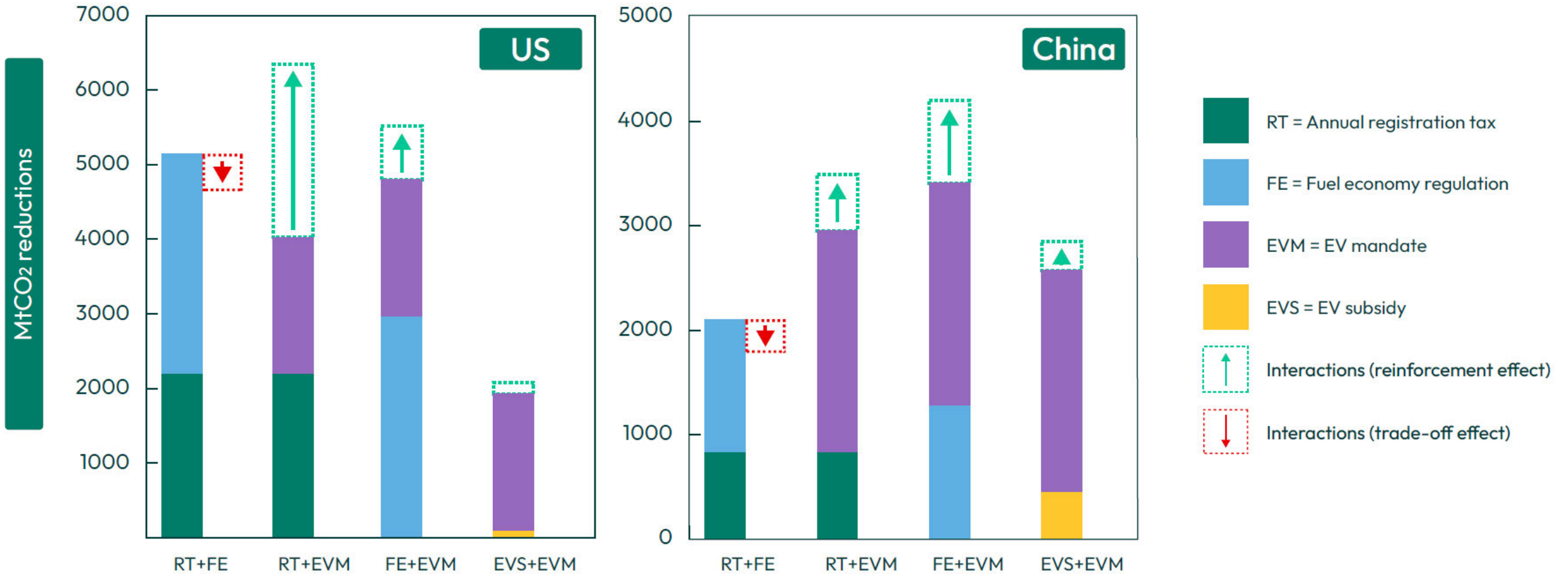
Allocative and dynamic efficiency are not mutually exclusive

Example of policies and market reforms in China's power sector



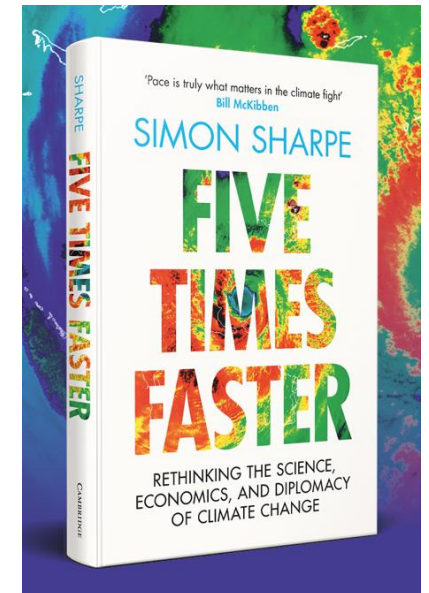
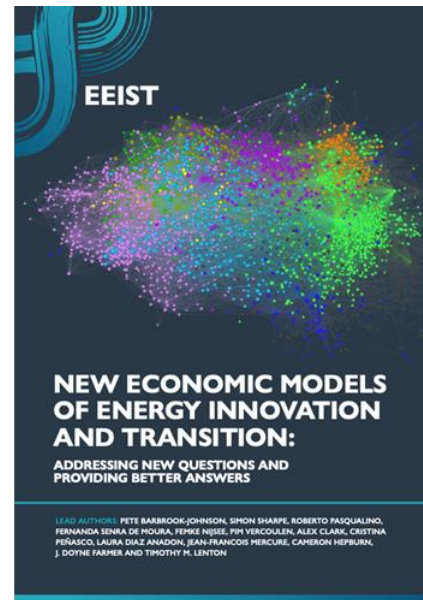
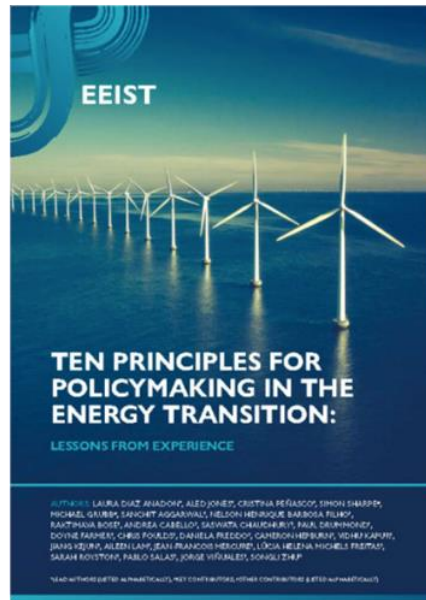
The right policy combinations can achieve significantly more than the sum of their parts

Emissions reductions from policy combinations in road transport (using the FTT model)



Source: Lam & Mercure, using the FTT model

More information at eeist.co.uk & fivetimesfaster.org



And forthcoming: scurveeconomics.org