



19 February 2016

To the Ministry for the Environment

Submission on the ETS review 2016

This submission is a joint note prepared by Assoc Prof Ralph Chapman, Prof. James Renwick, and PhD student Nadine Dodge, all of Victoria University of Wellington¹

Context and drivers for the review

1. Do you agree with the drivers for the review?

The Government has said it sees four key drivers for the review:

- improving performance of the NZ ETS against its objectives
- preparing for a more carbon-constrained future
- increasing certainty about future policy settings
- managing banked emissions units.

We do not address here the 4th bullet, but the first bullet makes sense insofar as any ETS should be effective and efficient in advancing its own objectives. That cannot be said of the ETS as it stands. The more important questions relate to the second and third bullets.

We see the critical issue as being to ensure that the Government has a credible and active strategy to move to net zero carbon emissions by around 2050, that this is communicated to New Zealand society including business in a way which reduces uncertainty about the future, and does not leave room for postponing action to reduce emissions on the grounds of policy uncertainty. We argue that the strategy should be centred on net zero emissions by 2050 for the following reasons.

First, the UNFCCC's "Report on the structured expert dialogue on the 2013–2015 review" (May 2015) sets out this finding²:

"limiting global warming to below 2 °C implies the following: a large reduction in global greenhouse gas emissions in the short to medium term, global carbon dioxide neutrality **early in the second half of this century**, and negative global greenhouse gas emissions towards the end of the twenty-first century." (emphasis added)

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² Message 2; p11 at <http://unfccc.int/resource/docs/2015/sb/eng/inf01.pdf>

Second, that assessment assumes that bio energy with carbon capture and storage (BECCS) will be readily available and cost-effective towards the end of the century, whereas there is substantial uncertainty about this.³

Third, the Paris agreement is clear on the target of ensuring that the world does not go beyond 2 degrees C and if possible does not go beyond 1.5C. In other words, Paris produced a goal more stringent than that envisaged in the UNFCCC report quoted above. Given this, and New Zealand's concurrence with the Paris agreement, it would be foolish to base policy on reaching carbon neutrality significantly *beyond* 2050. Any discussion of a neutrality (net zero) goal significantly beyond 2050 is not consistent with the Paris agreement. This must inform New Zealand's policy thinking.

2. What other factors should the Government be considering in this NZ ETS review?

Following on from the argument above, while the current ETS review is set within the context of meeting New Zealand's 2030 target, it should also be set within a wider context of further emissions reductions beyond 2030. New Zealand will almost inevitably have international obligations for 2050 and beyond that are much more ambitious than the 2030 target. Current policies are essential to an emissions pathway that is compatible with achieving these longer term goals. For details on such a pathway, please see the Royal Society submission on New Zealand's INDC.⁴

Moving to full surrender obligations

3. Should the NZ ETS move to a full surrender obligation for the liquid fossil fuels, industrial processes, stationary energy and waste sectors?

Yes, we consider that a full surrender obligation is vital for the integrity of the ETS and its consistency with a credible emissions trajectory that will take New Zealand to net zero emissions not later than about 2050.

The '2 for 1' arrangement has fulfilled any purpose it may have had as a transitional policy to ease adjustment for sectors which may have perceived emission reduction as difficult or costly. Any further concession to such emitters cannot be justified given the 5-6 years that have elapsed since the provisions of the ETS came into force for relevant sectors. The liquid fossil fuels, industrial processes, stationary energy and waste sectors have had more than sufficient time to adapt their business practices to prepare for business under a fully operative emissions trading scheme. Treatment of emissions from all sources equally will both increase equity and ensure that these sectors, which have relatively high emissions, will be motivated to reduce their emissions.

³ Anderson, K. (2015) Duality in Climate Science. *Nature Geoscience*, 8, December, 898-900.

⁴ Setting New Zealand's Post-2020 Climate Change Target.

<https://www.mfe.govt.nz/sites/default/files/media/Royal%20Society%20of%20New%20Zealand%2004698.pdf>

4. What impact will moving to full surrender obligations have on you or your business?

NA.

5. If full surrender obligations are applied, when should this be implemented?

We consider implementation should be as soon as possible, e.g. 2017, taking into account that this policy has been under discussion for some months, enabling business to consider its implications.

Managing the costs of moving to full surrender obligations

6. If the NZ ETS moves to full surrender obligations, should potential price shocks be managed?

This question is not credible, considering the low current price of ETS units. Businesses affected should be able to manage the minor price impacts involved. Businesses are accustomed to price changes of a much larger scale than that which is currently imposed through the ETS, e.g. the price of oil fluctuating by more than 100 percent over the past ten years.

7. If potential price shocks associated with moving to full surrender obligations should be managed, how should this be done?

We consider that a phase-in or price path is not necessary, given the low ETS price currently, but, to limit uncertainty, a \$25 price floor and an interim \$100 price cap could be provided for 2 years or so. Other than this, prices need to reflect supply and demand. The price floor needs to take into account that the social cost of carbon is in reality likely to be more than \$100 per tonne, and could be as high as several hundred dollars per tonne.⁵

8. If the \$25 fixed price surrender option value should change, what should it change to and why?

See answer to Q7.

Other issues: business response to the NZ ETS

9. Do you consider the future cost of emissions in your business planning?

NA

⁵ Moore, F. C., & Diaz, D. B. (2015). Temperature impacts on economic growth warrant stringent mitigation policy. *Nature Climate Change*