

Your submission to Zero Carbon Bill

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Reference no: 9528

Submitter Type: Individual

Clause

1. What process should the Government use to set a new emissions reduction target in legislation?

Position

The Government sets a 2050 target in legislation now

Notes

I support a 2050 target with the majority of cuts occurring over the next decade.

Clause

2. If the Government sets a 2050 target now, which is the best target for New Zealand?

Position

Net Zero Emissions - Net zero emissions across all greenhouse gases by 2050

Notes

I support all greenhouse gases being included in the Zero Carbon Act, consistent with international climate frameworks including the Paris Agreement and SDG 13 to "take urgent action to combat climate change and its impacts".

Clause

3. How should New Zealand meet its targets?

Position

Domestic emissions reductions only (including from new forest planting)

Notes

I support the 'firewall' principle, that New Zealand's targets must be achieved by actual cuts in our own emissions, and not through the purchase of overseas carbon credits or an over-reliance on forests as carbon sinks.

Clause

4. Should the Zero Carbon Bill allow the 2050 target to be revised if circumstances change?

Position

Yes

Notes

Only in a more ambitious direction (i.e. bring the target forward) under stated provisions such as scientific advances, changes in international law or unforeseen climate changes (tipping points reached). Any revision should require input from the Climate Commission and Parliamentary approval.

Clause

5. The Government proposes that three emissions budgets of five years each (i.e. covering the next 15 years) be in place at any given time. Do you agree with this proposal?

Position

Yes

Notes

I don't know whether five-yearly or six-yearly budgets would be better. Alignment with the electoral cycle may be the better option.

Clause

6. Should the Government be able to alter the last emissions budget (i.e. furthest into the future)?

Position

Yes - the third emissions budget should be able to be changed but only when the subsequent budget is set

Notes

The Government can introduce policies and strategies to meet the third budget, but should not alter the budget itself unless there is good reason. For example, if the emissions cap during the first or second budget was found to be too generous, or if CO2 uptake by forestry was found to be overestimated, there could be provision in the Act for revising the third budget and setting a tighter cap for that period to meet the 2050 target, if so advised by the Climate Change Commission. There would also need to be a clause prohibiting budget amendment to a less stringent cap.

Clause

7. Should the Government have the ability to review and adjust the second emissions budget within a specific range under

exceptional circumstances? See p36 Our Climate Your Say

Position

Yes

Notes

Only in exceptional circumstances, such as a major earthquake, if so advised by the Climate Change Commission, and only with Parliamentary approval.

Clause

8. Do you agree with the considerations we propose that the Government and the Climate Change Commission take into account when advising on and setting budgets? See p44 Our Climate Your Say

Position

Yes

Notes

Clause

9. Should the Zero Carbon Bill require Governments to set out plans within a certain timeframe to achieve the emissions budgets?

Position

Yes

Notes

After each emission budget has been decided, there should be a statutory set timeframe within which the Government must publish a detailed report on the pathways and policies it intends to implement to meet that budget. The timeframe should be no longer than three months.

Clause

10. What are the most important issues for the Government to consider in setting plans to meet budgets? For example, who do we need to work with, what else needs to be considered?

Notes

How goods and materials are produced, packaged, transported, and disposed of has implications for emissions reduction. The Zero Carbon Bill needs to be aligned with the circular economy and legislation relating to biogas production and waste treatment, particularly the Waste Minimisation Act 2008 and the New Zealand Waste Strategy 2010.

Clause

11. The Government has proposed that the Climate Change Commission advises on and monitors New Zealand's progress towards its goals. Do you agree with these functions? See p42 Our Climate Your Say

Position

Yes

Notes

Clause

12. What role do you think the Climate Change Commission should have in relation to the New Zealand Emissions Trading Scheme (NZ ETS)?

Position

Advising the Government on policy settings in the NZ ETS

Notes

Clause

13. The Government has proposed that Climate Change Commissioners need to have a range of essential and desirable expertise. Do you agree with the proposed expertise? See p45 Our Climate Your Say

Position

Yes

Notes

Clause

14. Do you think the Zero Carbon Bill should cover adapting to climate change?

Position

Yes

Notes

We should not think of ourselves as a small player or focus primarily on the local effects of climate change. We can hardly imagine what the world will be like with 1.5°C or 2°C of warming. NZ's net zero goal must reflect our responsibility to devise and implement mitigation and adaptation strategies not just for ourselves but for Pasifika nations too.

Clause

15. The Government has proposed a number of new functions to help us adapt to climate change. Do you agree with the proposed

functions? See p47 Our Climate Your Say

Position

Yes

Notes

The Government needs to prepare a national climate risk assessment and produce an adaptation programme to address the identified climate risks.

Clause

16. Should we explore setting up a targeted adaptation reporting power that could see some organisations share information on their exposure to climate change risks?

Position

Yes

Notes

Clause

Do you have any other comments you'd like to make?

Notes

Please see "Additional notes" attached.

Supporting documents from your Submission

Additional_notes.pdf

Uploaded on 07/18/2018 at 05:30PM

Additional notes

The Zero Carbon Act needs to set pathways to rapid reduction of emissions in the short term. The statement in the preamble that the transition will be "gradual" is too timid. Many sectors of the economy, including agriculture, want positive change and have been waiting a long time for clear guidance. NZ needs to make big cuts now.

The critical need is to decarbonise our electricity, energy and transport systems. The emphasis on offsetting by tree planting could disguise failures to reduce long-lived emissions. For example, a company could rely on fossil-fuel energy combined with offsetting if that option is still cheaper than moving to renewable energy.

In addition to a net-zero target combined with carbon sink offsets, I would like a *gross* emissions reduction target to be set. Both gross and net targets could be included in planning, strategy, and emission budgets. This would allow greater transparency and better monitoring and reporting. It would give businesses a fiscal imperative to choose low-carbon alternatives.

Nitrous oxide

The intensification of dairy farming since the 1990s was achieved by a massive increase in use of phosphate and nitrogen fertiliser, almost all from synthetic nitrogen, at huge environmental costs. There is evidence that substantially reducing cow numbers need not impact profits (see Dr. Mike Joy *Squandered: The Degradation of New Zealand's Freshwaters*).

I support a levy on nitrogen fertilisers to encourage less intensive farming and a shift to more organic or regenerative systems, with the money going into assistance for the farming transition. Reducing input costs of fertiliser, feed and pharmaceuticals can increase profitability for farmers.

Methane

Reduction of methane emissions is critical. Methane produced by ruminant livestock accounts for 35% of NZ's emissions and comprises 45% of all emissions in terms of global warming potential (GWP).

The discussion document views methane as a short-lived, flow gas within a steady-state, closed cycle in pastoral farming. This seems simplistic because it considers only the CO₂ component of decayed atmospheric methane and not the GWP of the methane itself. Also, the amount of methane emitted by cattle, and the amount of carbon absorbed by the pasture grass they eat, is dependent on the total number of animals, stocking rates, pasture management, season and weather, soil status, etc.

I do not support technological fixes. Methane vaccines do not address unsustainable farming practices and their environmental impacts. The future of food is plant protein, not modified dairying. NZ farmers need to innovate and get ahead.

Bio-based methane and fossil-based methane differ in their carbon-13 content, but not in GWP. Methane has a 20-year GWP of 84-87. This is the metric that should be considered in discussing atmospheric methane, not the 100-year GWP of 28-36.

Reducing CH₄ emissions in the short term will therefore have a far greater impact than delaying mitigation or stabilising emissions at only slightly lower levels. As Prof. Robert McLachlan commented: "Cutting methane emissions provide an immediate decrease in temperature; cutting carbon dioxide emissions does not."

Many studies conclude that early and permanent cuts in CH₄ emissions would:

- increase the likelihood of keeping global warming below 1.5°C
- reduce global temperatures by over 0.5°C by mid-century
- lower the risk of reaching tipping points in the short term
- buy time for low-carbon transition in the energy and transport sectors.

References:

<http://iopscience.iop.org/article/10.1088/1748-9326/aab89c/meta>

http://climate.org/archive/topics/international-action/Mitigation_of_Short-Lived_Greenhouse_Gases.html

<https://www.nature.com/articles/nclimate2998>

<http://news.cornell.edu/stories/2016/06/howarth-alerts-white-house-growing-methane-danger>

There may be an argument for treating fossil methane (from fracking in Taranaki, old oil wells and natural gas leaks) separately from agricultural methane. This is something the Climate Change Commission could look at.

The Zero Carbon Bill needs to give an actual figure for the level at which methane will be stabilised. If no figure is given, the farming lobby will likely campaign for a 5% reduction or less. The only clue in the discussion document is a note on page 28, in relation to an NZIER graph, referring to a reduction of 45% from 1990 levels by 2050.

The Zero Carbon Bill must present a definite figure and the rationale behind it. The stabilisation level should be ambitious and make a serious dent in agricultural methane emissions over the next 10 years.