16 July 2019

# Submission to the Environment Select Committee on the Climate Change Response (Zero Carbon) Amendment Bill

Ralph Chapman[1], Philippa Howden-Chapman[2], Ed Randal[3], and Jenny Ombler[3], for the New Zealand Centre for Sustainable Cities

To: https://www.parliament.nz/en/pb/sc/make-a-submission/document/52SCEN_SCF_BILL_87861/climate-change-response-zero-carbon-amendment-bill

**About the New Zealand Centre for Sustainable Cities**

1 The New Zealand Centre for Sustainable Cities is an interdisciplinary research centre dedicated to providing the research base for innovative solutions to the economic, social, environmental and cultural challenges facing our urban centres. We undertake a range of research, published as journal articles, policy papers, working papers, and blogs, as well as making submissions from time to time to central government and councils on a range of issues relevant to cities, from climate change policy to compact urban development. See http://sustainablecities.org.nz/ and http://resilienturbanfutures.org.nz/

**Introduction**

2 Almost exactly a year ago, we submitted to the Ministry for the Environment on the principles of a Zero Carbon Bill. In that submission we noted that successive New Zealand governments – often under pressure to 'go slowly' from the business sector and a poorly informed public -- have largely failed to deliver credible and adequate policy solutions to mitigate climate change. New Zealand has not been alone in this, but abrogating our commitments and ethical obligations cannot be excused by the inadequate actions of other nations. Even in the last year the odds have increased that, without policy action of an emergency nature, humankind looks to be in for a sustained phase of climate instability and associated social turmoil. This will affect not just the sustainability of cities in New Zealand,

[1] Associate Professor, School of Geography, Environment and Earth Sciences, Victoria University of Wellington
[2] Professor, Department of Public Health, University of Otago, Wellington; Director of the NZ Centre for Sustainable Cities.
[3] Research Fellow, Department of Public Health, University of Otago, Wellington

but the very sustainability of our way of life. Accordingly, New Zealand simply must play its part in concerted, equitable and well planned policy action to cut its GHG emissions to net zero by 2050.

3 We note that the Climate Change Commission and the government (in response to the recommendations of the Commission) will have to be forward looking, consistent, agile and equitable, for example as between generations. In terms of agility, we can expect major surprises -- changes in the scientific knowledge around climate change in the next 30 years or so, just as we saw in the last 30 years. Some of these will almost certainly be nasty surprises, such as faster ice melt than conventionally expected, or an acceleration of the rise in methane concentrations, necessitating a strengthening of actions to mitigate and adapt. This also means that policy will have to be adjusted incrementally as we go forward, and judgements made about urgent policy adjustment. Although the Commission and central and local government will contribute much to policy, it is ultimately a matter for a well-informed public to decide how much policy change, and responsibility for the quality of life of their descendants, they wish to accept. To this end, ensuring the public is kept very well-informed is a critical educational job for the wider public sector, including local government, working in conjunction with institutions such as the tertiary sector and the media.

4 On this basis we strongly support the intent of the Bill, and most of its provisions. We see it as providing a durable framework, as intended. We seek in this submission to reiterate our position on the central matter of emission targets, but recommend only a limited number of changes to the Bill that we believe would strengthen it, especially in regard to the target, use of international units (offshore mitigation), the role of local government, and reporting and compliance.

**The mitigation target**

5 We are comfortable that the Bill's target distinguishes in an appropriate manner between long-lived and short-lived gases, based on the IPCC's views. We note however the desirability of planning to reduce long-lived gas emissions (carbon dioxide and nitrous oxide) to zero ***before 2050*** (say by 2040); this would markedly increase confidence that catastrophic climate change (involving warming above 2C) would not occur. It would also recognise that New Zealand is in a relatively privileged position internationally, with the wealth and resources, including an educated populace, to understand the importance of making uncomfortable adjustments for the sake of the global community as a whole.

6 In addition, however, the target for ***gross*** emissions of long-lived gases should be set relatively **close to zero** by 2050, so that New Zealand does not repeat the mistake it has made since ratifying the Kyoto Protocol, and rely too much on forestry (Upton, 2019). As the Parliamentary Commissioner for the Environment notes, 'forest "sinks" are themselves vulnerable to the damage climate change is expected to inflict.' A better approach than the current one would be to 'allow access to forest sinks as offsets only for biological emissions.' Accordingly, attaining New Zealand's 'net zero' by 2050 position should not be reliant upon more than a small and highly sustainable sinks/forestry contribution.

7 It should be recalled that the policy to date of not incentivising or requiring reductions in (biogenic) **methane** has proved neither sustainable nor desirable. New Zealand is coming under increasing pressure, as will other countries with major proportions of methane in their inventories, to cut emissions of this gas. This pressure will intensify if carbon fails to be cut sufficiently quickly, domestically and/or globally, and given the climate system's likely lagged response to carbon cuts that are achieved.

8 The second consideration is that there is a strong logic in starting biogenic methane reductions relatively ***gently*** but very ***soon***, giving New Zealand's agricultural sector a learning opportunity while anticipating an accelerating rate of reduction to respond to the pressure for greater urgency of mitigation over time. It is likely that – given the need to buy time for carbon reductions and for adaptation by poorer nations – there may soon come a time when the international pressure to cut methane will become overwhelming, and New Zealand should be well prepared for this eventuality.

9 A third consideration is that it is vital that the track for emissions of biogenic methane is indeed a moderately downward trajectory, so that there is a (modest) net contribution to ***cooling*** from these agricultural emissions. We noted in our submission last year that the exact descent trajectory is a matter of political judgement. It is a trade-off between the desirability of wide acceptability of the pace of change in the agricultural sector on the one hand, and the benefit of New Zealand contributing to a greater sense of assurance that climate change will not get out of control, should the global community be faced with intensifying climate surprises, on the other. We reiterate that some experts (e.g. Ramanathan, Molina, & Zaelke, 2017) have argued for an active policy of reduction in short lived climate pollutants (SLCPs), such as methane. Ramanathan *et al.* argue for 'immediately mak[ing] maximum use of available technologies combined with regulations to reduce methane emissions by 50%...' (p.xi). This is a strong argument. They also point out that of the 3 Watts per square metre of greenhouse forcing, about 1.2 is from gases with atmospheric lifetimes of approximately one decade or less (methane, tropospheric ozone, and HFCs).(p.16). This implies that the contribution of methane is important, and that methane reductions – particularly from wealthy countries like New Zealand -- should make a material contribution.

10 Our view is that the Bill's proposed lower bound of 10% reductions (against a 2017 base) by 2030 is too modest. It implies asking little of the farming sector in terms of mitigation in the short term; i.e. a negligible stretch effort by the sector. Without detailed expertise in this area on which to base a more stringent figure, we simply note that this target appears on the face of it out of step with both needs and capabilities, and could be strengthened (increased) without imposing undue cost on the sector.

11 If the government chooses not to require active methane reductions, there will inevitably be more pressure to act strongly in areas of policy such as carbon emissions from transport (New Zealand's fastest growing emissions sector) and industrial use of energy. We see significant co-benefits from rapidly reducing carbon emissions in sectors such as transport; nevertheless very large reductions in these areas in the short term would be costly. The Government would need to explain to the public whether the target proposed for biogenic

methane represents an undue accommodation of inertia in the agriculture sector, against the costs of large GHG reduction imposed on other sectors.

**International units**

12 In section 5W the Bill proposes that 'Emissions budgets must be met, as far as possible, from domestic emissions reductions and domestic removals.' The explanatory note asserts that this 'does not preclude New Zealand's ability to count reductions sourced from overseas towards achievement of its nationally determined contributions, if required…'

13 In our view this thinking and the provision in 5W risk emasculating domestic policy action. This approach is likely to lead to undue uncertainty, with the potential for the transition to a new economic and social pathway (including the domestic price of emissions reductions) to be undermined by the unpredictable acquisition of significant quantities of international units. It could create policy instability, undermining the intent of the Bill to create a clear downward trajectory of greenhouse gas emissions. In other words, it could undermine 'strong, early mitigation action' which, as the Regulatory Impact Statement for the Bill points out, 'has the potential to place New Zealand at a comparative global advantage', with 'upsides or "cobenefits" to be expected, including improved environmental, health and social outcomes.'[4]

14 Our reasoning is based not only on domestic considerations – uncertainty created for the domestic market – but also based on the importance of what New Zealand is ***seen*** internationally to be doing (the 'optics'). The optics are effectively as important as what New Zealand actually does, given that the logic of New Zealand's position is fundamentally one of demonstrating good global citizenship and influencing the international community through our actions and a credible and predictable plan of action.

15 It is notable that in the UK, the CCC has recommended that the limit on international units should be 0%, but that the UK may purchase international credits to contribute to global mitigation efforts, as long as this is additional to domestic progress. We understand the UK government has opted for a limit for the 2013-17 and 2018-22 budgets which equates to 1.9% and 2.2% margins. We believe a similar logic applies to the New Zealand situation.

16 In our view the target should not allow for more than a small buffering contribution from international units, say 1% of the target emissions reduction quantity. This very limited amount would be mandated by the Commission.

**Role of local government**

17 Local government has the potential to contribute substantially to both adaptation and mitigation of climate change. However, there is little in the Bill which appears to relate to the responsibility of local government to design and implement mitigation measures, and report to the Commission on these actions. For example, local government will need to play an important role in designing policies and regulation that can contribute to mitigation, through mechanisms such as spatial plans and transport policies that can significantly

[4] https://treasury.govt.nz/sites/default/files/2019-05/ria-mfe-zcb-may19.pdf , p.2

influence carbon emissions from the building and transport sectors over time. We would like to see explicit attention being given to these matters in the Bill.

**Reporting and noncompliance**

18 We see it as important that the Commission be seen as independent of the government of the day. The Commission needs to be seen as able to hold the government to account. Accordingly, we believe the Commission should report to ***Parliament***, not to the Minister.

19 If a budget under the Act is not expected to be met, it is imperative that the government of the day be obliged to report in detail to the House on why it is not likely to meet the budget, and should provide an account in detail as to the balance of responsibility between the role of unexpected eventualities, and measures that the Commission has recommended but the government has failed to introduce. The report should also set out the measures the government intends to take to remedy the expected shortfall. The imperative is to make it as easy as possible for the public to understand why a policy shortfall is taking place, and the remedies proposed.

20 The Bill currently does not clearly set out what is to happen if sectors or organisations do not meet their emissions budgets. We recommend strengthening the provisions in the Bill to require sectors expected to fail to meet emissions budgets to explain how they plan to address any shortfall by the next reporting period and to provide for the Commission to recommend ministerial actions including the use of economic, or other, instruments to address expected noncompliance within sectors. For example the use of Government Policy Statements under the Land Transport Management Act 2003, or National Policy Statements under the Resource Management Act 1991, could provide clear guidance to sectors and ensure the alignment of central and local government policy.

**Speaking to this submission**

21 We would be happy to speak to this submission.

**References**

Ramanathan, V., Molina, M., & Zaelke, D. (2017). *Well Under 2 Degrees Celsius: Fast Action Policies to Protect People and the Planet from Extreme Climate Change. Report of the Committee to Prevent Extreme Climate Change*. Retrieved from San Diego: http://www.igsd.org/wp-content/uploads/2017/09/Well-Under-2-Degrees-Celsius-Report-2017.pdf

Upton, S. (2019). *Farms, forests and fossil fuels: The next great landscape transformation?* Retrieved from Wellington: https://www.pce.parliament.nz/publications/farms-forests-and-fossil-fuels-the-next-great-landscape-transformation