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Submission to Ministry for the Environment on 'Our Climate Your Say: Consultation on the Zero Carbon Bill'

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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 development. See http://sustainablecities.org.nz/ and http://resilienturbanfutures.org.nz/

Introduction

2 In the Minister's Introduction to this discussion document was the invitation: 'Cast your mind back 30 years, to 1988….' Doing that, one of us recalls working in London at HM Treasury on climate change policy in its early stages, around the time the IPCC was set up and climate scientist James Hansen appeared before the US Congress to warn of global warming. Since that time, not only has the internet developed dramatically, but climate change has become much more evident. Over the same period of 30 years, despite the urgings of many like us, 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 sadly not been an exception. Without very rapid and determined policy action now, we fear that humankind could be in for an increasingly difficult and destabilising next 30 years. This will affect not just the

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

3 However, we will not be able to eliminate uncertainty – scientific, economic or social. The desire to give business 'certainty' for its planning is not credible. But in reducing uncertainty, the government should be forward looking, consistent, agile and equitable, for example as between generations. We can expect major changes in the scientific knowledge around climate change in the next 30 years or so, just as we saw in the last 30 years. This also means that policy will have to be adjusted incrementally as we go forward, and although a Climate Commission can contribute much to policy, it is ultimately a matter for a well-informed public to decide how much policy stability, consistency and future orientation it wishes to have. To this end, ensuring the public is kept well informed is a critical educational job for the wider public sector, working in conjunction with institutions such as the tertiary sector and the media.

Which [net] target is the right one?

4 It is increasingly clear that it is helpful to distinguish targets for long-lived and short-lived gases. It is also evident that ***long***-lived gases should be reduced to net zero by 2050, to give a reasonable chance of limiting temperature increases to ***well below* 2C**, consistent with the Paris agreement. If it were possible to reduce long-lived gas emissions to zero before 2050 (say by 2040) this would increase confidence that catastrophic climate change (involving warming above 2C) would not occur.

5 Similarly, the potential for (and costs of attaining) ***negative*** emissions of long-lived gases by 2050, attained in part through afforestation, should be seriously explored. In addition, the target for ***gross*** emissions of long-lived gases should be set at zero or 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.

6 Attaining New Zealand's 'net zero' by 2050 position should not be reliant upon more than a small sinks/forestry contribution, or a small buffering contribution from international units. This is because what New Zealand is ***seen*** internationally to be doing (the 'optics') is almost as important as what New Zealand actually does.

7 By the same token, New Zealand's emissions of ***short***-lived gases, e.g. methane, should at least be on a moderately downward track, so that there is a (modest) net contribution to cooling from these agricultural emissions. The speed of descent is a matter of political judgement. It is a trade-off between the desirability of bipartisan acceptability of the pace of change in the agricultural sector on the one hand, and the benefit of giving greater assurance that climate change will not get out of control, should we be faced with climate surprises in the future, on the other. We note 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). 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).

8 Three related points should be noted. One is that the policy to date (now under review) of not incentivising or requiring reductions in methane has been neither sustainable nor desirable. New Zealand will come under increasing pressure, as will other countries with increasing proportions of methane in their inventories, to cut methane. 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 any carbon cuts that are made.

9 The second is that, as we consider the future methane track, the option of stabilisation is not acceptable. There is some logic in starting methane reductions gently but very soon, giving New Zealand's agricultural sector the learning opportunity to be able to accelerate the rate of reduction if in future climate developments point to greater urgency of mitigation. It is possible 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.

10 A third point is that, if the government chooses not to place methane reductions on a rapid reduction track, there may well be corresponding pressure to act more 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 reducing carbon emissions in sectors such as transport. The government will need to explain to the public with considerable care the issues around the track it is proposing, and the potential for, and costs ***and*** benefits, of GHG reduction in the various sectors.

Role of Climate Commission in setting the target

11 There are very strong arguments for the government of the day, not the Commission, to set the overall target. Technical and scientific expert advice is necessary, but the ultimate decision must and will (in our current democratic system) remain a political one.

12 We agree with the list of considerations, set out in the Discussion document, that the Government and the Commission should take into account when setting or advising on budgets.

Duration of each budget, how far in advance we set them, whether they can be revised and what happens if they are not met

13 We understand the logic of the Parliamentary Commissioner for the Environment, Hon Simon Upton, that each budget period should be six years, to correspond broadly to Parliamentary terms. However, in practice, there is also a strong case for the simplicity of five year terms.

14 We support the notion that three budgets should be in place at any one time, to increase certainty, while we underline our early point that certainty in this policy area is an illusion. For such reasons, there will always need to be capacity for budgets to be amended, including – potentially – for economic reasons such as another financial crisis. The key here is to ensure that the government of the day must report to the House on exactly ***why*** it intends to amend any given budget, and what it intends to do to get back 'on track'.

15 If a budget is not met, it is imperative that the government of the day report in detail to the House on why it has not been possible 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 Climate Commission recommended but the government failed to introduce. The report should also set out the measures the government intends to take to remedy the shortfall. The imperative is to make it as easy as possible for the public to understand why a policy shortfall has taken place, and the remedies proposed.

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. San Diego: Scripps Institution of Oceanography, University of California.