Clause 3. How should New Zealand meet its targets?

Position
Domestic emissions reductions only (including from new forest planting)

Notes
I was recently asked by a small company running ten computers how many trees it needed to plant to offset their employees leaving their computers and printers on overnight. I was shocked at how little impact is made by planting trees. The American government advises a tree absorbs 48lbs CO2 a year per tree. [http://www.americanforests.org/explore-forests/forest-facts/] In New Zealand, we emit 3.76 pounds of carbon dioxide per kWh (calculated from [https://www.energywise.govt.nz/tools/running-costs-calculator/#/]). Since each kWh costs 16 cents, we can back-calculate that switching off ten computers and ten little printers saves 2234.145 pounds, which is more-or-less a ton, of carbon dioxide per year. To offset the great labour of leaning over and pressing a switch on the wall, the company needs to plant and maintain 47 mature trees. If they want to keep ten computers and ten big printers on, their needless nearly-five tons of carbon dioxide emissions amount to the company needing to plant and maintain 189 trees.

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

Notes
If our goal is to avoid catastrophe, 2050 is far too late to have achieved zero carbon emissions. We need to pay attention to scientists like James Hansen, Kevin Anderson, and Peter Wadhams. They are at the top of the field of climate research and their opinions outweigh those of any other person. Business, including farming and tourism, may suggest that incomes are jeopardised by a drastic and immediate cessation of the use of fossil fuels, but all business is wholly jeopardised by the global collapse that prevarication will entail.

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?

Notes
No-one with a grasp of human frailty fails to realise how difficult it will be to persuade a reluctant population to give up a materialistic life. If five year targets help Government to get people to address the problem, so be it.

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

Notes
Parliament is sovereign, and every parliament is entitled to alter previous legislation.

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

Notes
If we persist in believing we have till 2050 to fix the problem, exceptional circumstances are inevitable.

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
Provided science takes precedence over all other matters. We are already 30 years too late: science has long been warning us, and the consequences predicted by science have been shown to be anything but an exaggeration.

Clause 13. The Government has proposed that Climate Change Commissioners need to have a range of essential and desirable expertise.
Scientific advice does not seem to be sufficiently strong in the expertise outlined. This whole proposal does not appear to grasp the consequences of inaction. We really need this issue to be on a war footing. The difficulty is that we are at war with ourselves - with our inertia, with our reluctance to scale back our material wants, and above all our unwillingness to examine our own normalcy bias.

**Clause**

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

**Notes**
If our goal is only to stretch to 2050, adaptation will be forced on us, Zero Carbon Bill or not.

**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?

**Notes**

Above all we should be aware that climate change is one symptom of a global problem caused by unlimited growth, both of population and of standards of material well-being. The mantra of 'growth' which continues to be unquestioned, should alert us to the terrible danger we have allowed ourselves to have been led into by listening to economists rather than to scientists. There needs to be a very real appraisal of the value of these two disciplines. We would do well to observe that when economists make predictions, they are usually wrong, while the predictions made by top scientists like James Hansen have proven to be accurate.