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

**Position**
The Government sets a goal to reach net zero emissions by the second half of the century and the Climate Change Commission advises on the specific target for the Government to set later.

**Notes**
CCC needs to address current farming practices and help to encourage adoption of regenerative farming practices that will both improve farm productivity and create opportunities for our farmers to benefit from carbon sequestration to soil and the improvement of soil health, plant health and animal health that humus creation will make possible.

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

**Position**
Net Zero Long-Lived Gases and Stabilised Short-Lived Gases - Long-lived gases to net zero by 2050 while also stabilising short-lived gases.

**Notes**

### Clause 3. How should New Zealand meet its targets?

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

**Notes**
If we begin a programme of soil regeneration on all of our productive farm land we can quickly sequester enough carbon to soil to more than offset NZ's emissions.

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

**Position**
No

**Notes**
Would not be necessary if the government has bilateral agreement on our direction.

### 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**

### 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**
National is offering cross party or bilateral agreement on emissions targets therefore the ability to change is should not be necessary but it would help with ability to make brave but achievable targets if we were starting to find the targets were not practical or not optimistic enough.

### 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**
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
yes but also emphasis should be placed on the role that new technologies around land management will have on reaching targets and how quickly these (already well known) technologies can be rolled out to our primary industries.

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

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
The primary industries in New Zealand are the most important players that can quickly change NZ’s emission profile. Therefore MPI, Landcare, Ag Research and Massey and Lincoln all need to research the soil carbon sequestration opportunities that regenerative farming practices bring in conjunction with the improvements to soil management, water quality and farm profitability that will accrue as we manage our natural resources appropriately.

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
Yes advisory and monitoring should not be the sole responsibility of Govt.

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
It is however essential that there are experts included who understand the role of soil microbiology in soil health and ability of land to sustain profitable production while also sequestering carbon as long term stable soil carbon or humus.

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

Position
Yes

Notes
We are already seeing the impacts of climate change and my proposal to concentrate on soil regeneration will also provide resilience to the increasing frequency of extreme climatic events. It will do this on many levels. e.g. increased soil porosity and soil humus levels dramatically improves soil water holding capacity. Less impact from dry spells, less flooding in extreme rainfall events, better ability to cope with temperature extremes etc.
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

<table>
<thead>
<tr>
<th>Position</th>
<th>Yes</th>
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<tbody>
<tr>
<td>Notes</td>
<td>We need to change the way we think about resource management and farmland management in NZ. Our soil resources and the way we have changed them during the last 80 years of industrial chemical-based farming are part of the reason for the high levels of greenhouse gases in the atmosphere. Changes are required to the land management methods we use if we want to change the levels of CO2 in the atmosphere.</td>
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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?

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<th>Position</th>
<th>Yes</th>
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<td>Notes</td>
<td>We can only achieve big goals if all are focused in the same direction.</td>
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Clause
Do you have any other comments you'd like to make?

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<th>Notes</th>
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<td>Thanks for the opportunity to make a submission. Reducing NZ emissions is not hard but many simple changes are required to the way we use soils and this will meet stern resistance from our agricultural experts who have spent their lives working in the modern high tech agricultural production systems that ignore the need for healthy soil microbiology. The need to change the impact our production has on the water, atmosphere, our livelihood and our health is evident and many progressive farmers are already making big gains in soil health, water quality and soil carbon levels. They are doing this by ignoring the main stream advisors in the industrial farming businesses and instead are nourishing their soil microbial workforce to cycle nutrients, build humus and improve their productivity.</td>
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