CLIMATE CHANGE RESPONSE (ZERO CARBON) AMENDMENT BILL

Initial briefing to the Environment Committee

Ministry for the Environment

25 July 2019
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INTRODUCTION

1. The Climate Change Response (Zero Carbon) Amendment Bill (the Bill) will amend the Climate Change Response Act 2002. It will introduce the institutions and architecture needed to support New Zealand to reduce its greenhouse gas emissions and adapt to the effects of climate change, and transition to a low emissions and climate resilient New Zealand.

2. This briefing outlines the:
   - purpose of the Bill
   - key provisions
   - how the Bill will amend the Climate Change Response Act 2002.

PURPOSE OF THE BILL

3. The purpose of the Bill is to provide a framework by which New Zealand can develop and implement clear and stable climate change policies that contribute to the global effort under the Paris Agreement to limit global average temperature rise to 1.5 degrees Celsius above pre-industrial levels.

4. To help achieve this purpose, the Bill will establish a legislative framework that requires:
   - the establishment of a Climate Change Commission to provide expert independent advice to Government, and monitor progress towards implementing an adaptation plan, and achieving our emissions budgets and 2050 target
   - an emissions reduction target for 2050 to be set in primary legislation
   - Governments to set five-year emissions budgets to support the achievement of the 2050 target and emissions reduction plans to meet each emissions budget
   - Governments to introduce measures to help New Zealand adapt to the effects of climate change and increase the resilience of communities, businesses and industries.

OVERVIEW OF THE BILL

5. The Bill is organised as follows:
   - Part 1 – Preliminary provisions
   - Part 1A – Climate Change Commission
   - Part 1B – Emissions reduction target for 2050
   - Part 1B – Emissions budgets
   - Part 1C – Adaptation

6. The Bill will amend the Climate Change Response Act 2002, and will be added as a separate Part of the Act.

7. The Bill will come into force on the day after it receives the Royal assent. This will allow the Climate Change Commission (Commission) to be established as soon as possible, and for work on various aspects of the Bill, such as the first three emissions budgets, to commence immediately.

8. The following table summarises the key provisions in the Bill and provides cross references to the relevant sections of this briefing.
## KEY ELEMENTS

**Part 1 provides the purpose and definitional elements of the Bill (preliminary provisions)**

<table>
<thead>
<tr>
<th>Overview</th>
<th>This Bill will amend the Climate Change Response Act 2002.</th>
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<tr>
<td><strong>Purpose</strong></td>
<td>To provide a framework by which New Zealand can develop and implement clear and stable climate change policies that contribute to the global effort under the Paris Agreement to limit global average temperature rise to 1.5 degrees Celsius above pre-industrial levels.</td>
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| **Treaty of Waitangi/te Tiriti o Waitangi** | The Bill will give effect to te Tiriti o Waitangi by:  
- seeking nominations for members of the Climate Change Commission from iwi and Māori representative organisations  
- requiring the Minister to have regard to the need for the Commission to include members with skills, experience, expertise and innovative approaches relevant to te Tiriti  
- requiring the emissions reduction plan to include a strategy to recognise and mitigate the impacts on iwi and Māori and for the Minister to ensure that iwi and Māori have been adequately consulted  
- requiring the economic, social, health, environmental, ecological, and cultural effects of climate change on iwi and Māori to be taken into account when preparing the National Adaptation Plan. |
| **Definitions** | Key terms are defined, including:  
- 2050 target  
- biogenic methane  
- gross emissions  
- net emissions  
- offshore mitigation |

### Part 1A establishes a Climate Change Commission to provide expert independent advice

| Purposes of the Commission | The Commission will:  
- provide the Government with independent expert advice on reducing emissions and adapting to the effects of climate change  
- monitor and review the Government’s progress towards its emission reduction and adaptation goals |
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<td><strong>Form of the Commission</strong></td>
<td>The Commission will be a Crown entity.</td>
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| **Membership** | The Commission will comprise:  
- a chairperson  
- a deputy chairperson |
- five other members

Members will be appointed in line with the process set out in new sections 5E to 5I

<table>
<thead>
<tr>
<th>Functions, powers and duties of the Commission</th>
<th>The Commission must:</th>
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<tr>
<td><em>New section 5J-5L, paragraph 42</em></td>
<td>• report to Government</td>
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<td></td>
<td>• consider the matters in section 5L when performing its functions and duties</td>
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<td>• act independently of Government.</td>
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<td>The Commission may also consult when performing its functions and duties, and take specific matters into account.</td>
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<tr>
<th>Consultation</th>
<th>The Commission will have the ability to consult broadly, and must act independently in performing its functions and duties, and exercising its powers under the Act.</th>
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<tr>
<td><em>New sections 5M-5N, paragraphs 44 to 45</em></td>
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### Part 1B sets an emissions reduction target for 2050

<table>
<thead>
<tr>
<th>The 2050 target</th>
<th>The 2050 target requires that:</th>
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<tr>
<td><em>New section 5O, paragraphs 49 to 72</em></td>
<td>• net emissions of all greenhouse gases, except biogenic methane, reach net zero by 2050</td>
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<td>• gross emissions of biogenic methane are 10 per cent less than 2017 levels by 2030</td>
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<tr>
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<td>• gross emissions of biogenic methane are 24-47 per cent less than 2017 levels by 2050.</td>
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<td></td>
<td>New Zealand must achieve these reductions by 1 January 2050, and ensure that New Zealand’s emissions do not exceed these levels in each subsequent calendar year.</td>
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<tr>
<th>Reviewing the 2050 target</th>
<th>The Commission may review any or all aspects of the target:</th>
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<tr>
<td><em>New section 5P, paragraphs 73 to 74</em></td>
<td>• as part of its advice on the fourth, fifth and sixth emissions budgets (i.e. in 2024, 2029 and 2034), and every five years thereafter; and</td>
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<td>• at any other time at the request of Government.</td>
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<tr>
<th>Revising the 2050 target</th>
<th>The Commission may recommend that the time frame for achieving any part of the 2050 target or the level of reductions required be revised if certain criteria are met.</th>
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<tr>
<td><em>New sections 5Q-5R, paragraphs 75 to 79</em></td>
<td>The Minister will have 12 months to respond to the Commission’s recommendations on the 2050 target</td>
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### Part 1B also establishes a system of emissions budgets to support the achievement of the emissions reduction target and measure progress

<table>
<thead>
<tr>
<th>Purpose of emissions budgets</th>
<th>The Minister must set a series of emissions budgets that:</th>
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<tr>
<td><em>New section 5T, paragraphs 81 to 82</em></td>
<td>• are set with a view to meeting the 2050 target</td>
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<td></td>
<td>• provide greater predictability by providing early information about the emissions reductions and removals required.</td>
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| Ministerial duties | The Minister will have duties:  
* New section 5U, paragraphs 86 to 88 |
|-------------------|------------------------------------------------------------------|
|                   | • to set emissions budgets in accordance with the requirements stipulated in section 5U(2) and (3)  
|                   | • to ensure that net emissions for a budget period do not exceed the emissions budget. |
| Content of emissions budgets and how they will be met | Emissions budgets will state the quantity of greenhouse gas emissions that will be permitted over a five year period.  
* New sections 5V-5W, paragraphs 83 to 85 |
|                   | Emissions budgets will:  
|                   | • cover all greenhouse gases  
|                   | • be stated as a net quantity of CO₂ equivalent  
|                   | • as far as possible, emissions budgets must be met through domestic emissions reductions and domestic removals.  
|                   | The Commission and the Minister must consider how emissions budgets can realistically be met, including:  
|                   | • how much each greenhouse gas must reduce to meet the 2050 target  
|                   | • the amount of removals required  
|                   | • key opportunities for reducing emissions and increasing removals, as well as key risks and uncertainties. |
| Role of the Commission in setting emissions budgets | For each budget period, the Commission will provide expert advice on:  
* New section 5X, paragraphs 89 to 90 |
|                   | • the quantity of emissions permitted  
|                   | • the rules that will apply to measuring progress towards the target  
|                   | • how the emissions budgets and 2050 target could realistically be met  
|                   | • the reductions and removals required  
|                   | • a limit on the offshore mitigation that can be used, and the reasons for that limit.  
|                   | In providing its advice, the Commission must have regard to the matters in section 5Z. |
| Role of the Minister in setting emissions budgets | The Minister must respond to the Commission’s advice in writing, and set and notify an emissions budget in line with the process in sections 5Y-5ZA. This includes cross-party consultation and a Cabinet process.  
* New sections 5Y-5ZA, paragraphs 91 to 95 |
|                   | When making a decision on emissions budgets, the Minister must have regard to the matters in section 5Z. |
| Revising emissions budgets | A notified emissions budget can be revised if there have been:  
* New section 5ZB, paragraphs 98 to 102 |
| **Banking and borrowing**<br> *New section 5ZC, paragraphs 103 to 109* | “Banking” and “borrowing” may occur across adjacent budget periods.  
“Banking” will be unlimited.  
“Borrowing” will be limited to 1 per cent of the next emissions budget.  
As part of its review of the whole budget period, the Commission will provide advice on the amount of banking or borrowing that should occur (if any). The Minister will make the final decision. |
| --- | --- |
| **An emissions reduction plan will be established to meet emissions budgets**<br> *New sections 5ZD-5ZF, paragraphs 110 to 123* | Following advice from the Commission, the Minister must prepare and publish a plan for meeting an emissions budget that will include:  
- sector-specific policies  
- a multi-sector strategy  
- a strategy to recognise and mitigate the impacts that reducing emissions and increasing removals will have on workers, regions, iwi and Māori, and wider communities  
- any other policies or strategies the Minister considers necessary. |
| **Monitoring**<br> *New sections 5ZG-5ZI, paragraphs 124 to 125* | The Commission will monitor progress towards the emissions budgets and 2050 target through annual progress reports and a full review at the close of a budget period. |

**Part 1B stipulates the effect of the 2050 target and emissions budgets**

<p>| <strong>Effect of a failure to meet the 2050 target and/or emissions budgets</strong> | If New Zealand fails to achieve the 2050 target or an emissions budget, a court may make a declaration, together |</p>
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<tr>
<th><strong>New section 5ZJ, paragraphs 126 to 128</strong></th>
<th>with an award of costs. No other legal remedy or relief is available.</th>
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<tbody>
<tr>
<td><strong>The 2050 target and emissions budgets are permissive considerations</strong>&lt;br&gt;<strong>New section 5ZK, paragraphs 129 to 131</strong></td>
<td>The 2050 target and emissions budgets are permissive considerations, which a person or a body may take into account in the exercise or performance of a public function, power or duty conferred on that person or body. There is no mandatory requirement for persons or bodies to take the 2050 target or emissions budgets into account, and a failure to do so will not invalidate their actions. While relevant decision-makers do not have to take the 2050 target or emissions budgets into account, the Minister does have a duty to ensure that New Zealand meets its emissions budgets under section 5U(4).</td>
</tr>
<tr>
<td><strong>Guidance for departments</strong>&lt;br&gt;<strong>New section 5ZL, paragraph 132</strong></td>
<td>The Minister may issue guidance for departments on how the 2050 target or an emissions budget may be taken into account.</td>
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**Part 1C introduces a range of measures to identify risks and help New Zealand adapt to the impacts of climate change**

| **National climate change risk assessment**<br>**New sections 5ZM-5ZP, paragraphs 134 to 142** | The national climate change risk assessment will be published regularly and will:
- assess the risks that climate change has and will have on New Zealand’s economy, society, ecology and environment
- identify the most significant risks, based on their nature, severity, and the need for a coordinated response.

The Minister will prepare the first climate change risks assessment, following which it will be the Commission’s responsibility. |
| **National adaptation plan**<br>**New sections 5ZQ-5ZR, paragraphs 143 to 146** | The Minister must prepare a national adaptation plan in response to each national climate change risk assessment. This will set out the Government’s objectives, strategies, policies and proposals for adapting to the effects of climate change, as well as the measures and indicators needed to enable regular monitoring and reporting.

Section 5ZQ(2) sets out the required content of the plan, and section 5ZQ(4) details the matters that must be considered. Public consultation will be required. |
| **Progress reports**<br>**New sections 5ZS-5ZU, paragraphs 148 to 151** | The Commission will monitor and report on the implementation of the national adaptation plan. These reports will be published every two years and will cover the requirements outlined in section 5ZS(2). Each progress report will require a Government response. |
## Power to require the provision of information

**New sections S2V-S2W, paragraphs 152 to 159**

The Minister will have the ability to request in writing that reporting organisations provide any of the following information:

- effects (current and projected) of climate change on the organisation’s functions
- the organisation’s proposals and policies for addressing the effects of climate change, including targets, controls, and implementation timeframes
- an assessment of the organisation’s progress towards implementing their proposals and policies
- any matters specified in regulations.

This information must be provided to the Minister and shared with the Commission.

Eligible reporting organisations are described in section S2V(4).

### A NEW FRAMEWORK THAT SUPPORTS THE TRANSITION TO A LOW EMISSIONS AND CLIMATE RESILIENT NEW ZEALAND

9. The impacts of climate change are being increasing felt both in New Zealand and around the world.

10. In New Zealand alone, our average temperature is increasing. 2018 tied for the second highest average since records began, and four of the past six years were among the warmest on record.¹ Records also show that New Zealand’s annual average temperature has increased by 1 degree Celsius between 1909 and 2016.²

11. A recent report on the state of New Zealand’s environment found that all aspects of life in New Zealand will be impacted as a result of these changes. More specifically:³

- coastal flooding and erosion will increase
- the availability and demand for water resources will change
- the risk of extreme fire conditions will increase
- vulnerable species have, and will continue to be, affected
- risks resulting from unwanted pests and diseases will increase
- culturally significant sites, many of which are on or near the coast, may be lost
- marine ecosystems will be affected
- infrastructure and urban areas will be at risk
- New Zealand’s agriculture, horticulture and tourism are likely to be affected,
- New Zealanders may need to adapt and find new opportunities.

12. These impacts risk New Zealand’s economic, cultural, social and environmental prosperity. A report commissioned by The Treasury and based on international scientific peer reviewed evidence found that climate change related floods and droughts have cost the New Zealand...

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The world is beginning to make the transition to low-emissions

13. Globally, there is broad agreement that climate change is happening and that urgent action is required. As at 3 July 2019, 185 countries have signed and ratified the Paris Agreement, including New Zealand. Under this agreement, the world has committed to keep average global temperature rise well below 2°C above pre-industrial levels (while pursuing efforts to limit global temperature rise to 1.5°C) and to achieve net zero emissions (overall greenhouse gas neutrality – balancing global emissions and removals) by the second half of the century.

14. Under the Paris Agreement, Parties should also strive to formulate and communicate long-term low greenhouse gas emission development strategies.

15. There is also a strong scientific consensus. The Intergovernmental Panel on Climate Change’s (IPCC) Special Report on Global Warming of 1.5°C (2018) notes that anthropogenic global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate. This scenario poses climate-related risks to natural and human systems – including sea-level rise, ocean acidification, biodiversity loss and species extinction, extreme heat and increased probability of drought and precipitation. The Special Report highlights that pathways limiting global warming to 1.5°C (with limited or no overshoot) would require rapid and far-reaching transitions in energy, land, urban and infrastructure, including transport and buildings, and industrial systems.

16. The commitments that 185 governments have made under the Paris Agreement, together with the building scientific consensus, show that the world is beginning to transition to low emissions. New Zealand must play its part too.

New Zealand’s existing climate change framework

17. The Climate Change Response Act 2002 (CCRA) establishes the New Zealand Emissions Trading Scheme (NZ ETS). The NZ ETS puts a price on greenhouse gas emissions, and is intended to create a financial incentive for businesses that emit greenhouse gases to invest in technologies and practices that reduce emissions. The NZ ETS puts a price on emissions from the industrial processes, synthetic gases, waste, liquid fossil fuels, and stationary energy sectors, by requiring the surrender of New Zealand Units (NZUs) or payment of a levy. It also requires reporting of agricultural emissions, but without imposing a price.

18. The NZ ETS also encourages forestry planting by allowing eligible foresters to earn NZUs as their trees grow and absorb carbon dioxide, and puts a price on emissions from deforestation and from harvesting of forest that is registered in the NZ ETS.

19. The CCRA also enables the delivery of the New Zealand Greenhouse Gas Inventory. This is the official annual estimate of all human-generated greenhouse gas emissions and removals that

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6 Paris Agreement, Article 4, paragraph 19

7 IPCC. 2018. Released 8 October 2018.

8 Climate Change Response Act, s 32(1)(b)
have occurred in New Zealand since 1990. The coverage of emissions and their subdivision into categories (broadly energy, industry, agriculture, land use/forestry, and waste) needs to comply with guidelines agreed by Parties and issued by the United Nations Climate Change Secretariat. Coverage is more comprehensive than the NZ ETS, which faces practical limitations in covering small emission sources.

20. New Zealand also has an existing 2050 emissions reduction target that was notified in the New Zealand Gazette in 2011.10

The framework needs strengthening

21. New Zealand’s greenhouse gas emissions have increased substantially since 1990. If we are to reduce our domestic emissions and contribute to the temperature goals enshrined in the Paris Agreement, our legislative framework needs to be strengthened. To transition, New Zealand requires a stable and credible policy environment that sets clear goals, and enables long-term planning, decision-making, and investment by the private sector and civil society.

22. Public consultation highlighted that there is strong support for taking stronger action on climate change. The public consultation undertaken in June and July 2018 involved 16 meetings and hui across the country, and resulted in over 15,000 submissions. Strong public interest has continued since then. For example, there have been demonstrations calling for action on climate change, including by school children and groups such as Generation Zero, sustained media attention, and continued engagement with key stakeholders.

23. In addition to the Zero Carbon Amendment Bill, the Government is progressing other amendments to the Climate Change Response Act 2002. These include improvements to the New Zealand Emissions Trading Scheme (NZ ETS) that will complement the framework established by the Bill, enabling the NZ ETS to better support New Zealand’s transition to a low emissions economy and meet the 2050 target.

24. The Zero Carbon Amendment Bill and the Climate Change Response Amendment Bill will both amend the CCRA, resulting in a single Act of Parliament that houses New Zealand’s principal climate change laws, and provides greater ease of use.

KEY PROVISIONS

25. The purpose of the Zero Carbon Amendment Bill is to establish a framework under which New Zealand can develop and implement clear and stable climate change policies that contribute to global efforts to limit temperature rise to 1.5°C above pre-industrial levels.

26. To support its purpose, the Bill will establish:

- an independent **Climate Change Commission** (Commission) to provide expert advice to Government and hold Government to account. More specifically –
  - the Commission will advise on the 2050 target (see paragraphs 73-75), emissions budgets (see paragraphs 89-90, 98-101, 109) and emission reduction plans (see paragraphs 110-113, 120-123)
  - the Commission will undertake the national climate change risk assessment (see paragraphs 134-138)

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10 To reduce greenhouse gas emissions to 50 per cent below 1990 levels by 2050.
IN-CONFIDENCE

- the Commission will monitor progress towards the emissions budgets (see paragraphs 124-125), and monitor the implementation of the national adaptation plan (see paragraphs 148-151)

- an emissions reduction target for 2050 that requires –
  - net emissions of all greenhouse gases, except biogenic methane, to reach zero by 2050
  - gross emissions of biogenic methane to reduce to 10 per cent below 2017 levels by 2030
  - gross emissions of biogenic methane to reduce to at least 24 to 47 per cent below 2017 levels by 2050

- a requirement to set a system of emissions budgets that step progressively towards the 2050 target

- a requirement to prepare and publish successive emissions reduction plans that set out the policies and strategies to achieve the reductions and removals required to meet emissions budgets and, ultimately, the 2050 target

- adaptation measures that help New Zealand identify the risks associated with climate change and adapt to its effects.

27. Each of these elements is described in detail below.

A Climate Change Commission will provide expert advice to the Government and holds Government to account (Part 1A)

The Commission will provide independent expert advice and monitor progress towards the Government’s emissions reduction and adaptation goals

28. The Commission’s purpose is twofold. It will:

- provide independent expert advice to the Government in relation to both emissions reductions and adaptation measures
- keep the Government accountable by monitoring and reviewing the Government’s progress towards its emissions reduction and adaptation goals.

29. The Commission will have a range of functions in relation to the 2050 target, emissions budgets, and adaptation. At the request of Government, the Commission will also be able to provide reports and advice on matters related to emissions reduction and climate resilience. These functions are described throughout this paper.

30. The Commission will be an advisory body, and does not have decision-making powers. Under the Bill, the Government will continue to make decisions about New Zealand’s responses to climate change within the legislative framework. This will make sure that the elected Government remains responsible and accountable for policy choices.

The Commission will be an independent Crown entity

31. The Commission will be established as an independent Crown entity for the purposes of the Crown Entities Act 2004, and will operate independently of Government. This will establish the Commission as a neutral body capable of providing independent expert advice and monitoring the Government’s progress towards its mitigation and adaptation goals.
The Commission will operate independently of Government policy, with two exceptions

32. As is the case for all independent Crown entities, the Minister will generally not be able to direct the Commission to have regard to Government policy, except as the Crown Entities Act specifically provides (for instance, for whole-of-Government directions). The Bill provides two further exceptions to this rule, explicitly allowing the responsible Minister to direct the Commission to have regard to Government policy:

- when the Commission gives its regular advice about the settings that apply to the New Zealand Emissions Trading Scheme (NZ ETS)
- if the Commission is asked for advice about New Zealand’s nationally determined contribution (NDC) under the Paris Agreement.

33. In the exercise of these functions, the ability for the Commission to consider other policy commitments will allow the Commission’s advice to be more relevant and therefore effective. For example, the Commission might need to consider the Government’s other intended policies to reduce emissions when it advises on the NZ ETS, and to take into account foreign policy objectives when it advises on an NDC. The NDC exception also recognises that legal and reputational risks might otherwise arise from Commission advice that contradicts an established Government position in an international setting.

The Commission will be governed by a board

34. The institutional form of the Commission will be similar to other Crown entities, including a board that will be the Commission’s governing body. The board will have the authority to exercise the powers and perform the functions of the Commission. Commissioners will be accountable to the responsible Minister for performing their duties as members of the board.

35. The board’s responsibilities under the Crown Entities Act will include ensuring that the Commission performs its functions efficiently and effectively, in a manner consistent with the spirit of public service, and in collaboration with other public entities where practicable.

The Governor-General will appoint commissioners on the recommendation of the Minister

36. The Commission will comprise seven commissioners, including one chairperson and one deputy chairperson.

37. The Crown Entities Act governs the appointment and removal of members of Crown entities including independent Crown entities. Under that Act:

- the Governor-General will appoint commissioners on the recommendation of the responsible Minister, for terms of up to five years
- the Minister may only appoint or recommend a person who, in the Minister’s opinion, has the appropriate knowledge, skills and experience to assist in achieving the objectives of the Commission and fulfilling its functions
- some usual disqualifications from membership will apply.

38. Given the far-reaching impacts of climate change, the Commission will have an important role in shaping New Zealand’s economic future. In recognition of this role, the Bill requires some additional measures to make sure that appointments are robust and transparent, and help to maintain trust in the Commission’s independence.

39. The commissioners will be experts who have significant experience in relevant fields, and will not represent particular sectors or stakeholders. Section 5H sets out a number of matters that the Minister must consider when recommending the appointment of individuals to the Commission, in order to promote a broad and balanced mix of expertise. This includes expertise
in te Tiriti o Waitangi and te ao Māori, which captures tikanga Māori, te reo Māori, mātauranga Māori, and Māori economic activity.

40. An experienced nominating committee will be responsible for identifying candidates for commissioner roles when they become vacant. The Minister can then recommend appointments from the pool of candidates that are nominated (sections 5E, 5G).

41. It is important that successive Governments, and Members of Parliament across the House, can have confidence in the Commission and its advice. Before making each recommendation to the Governor-General, the Minister must consult with representatives of other political parties in Parliament (section 5E(1)(c)).

The Commission must consider a broad range of matters in performing its functions

42. The Bill requires the Commission to consider the following matters when performing its functions. Together, these considerations will promote analysis that is robust, fair, and reflects the wide ranging impacts that climate change policy will have on society and the economy. These matters are:

- current available scientific knowledge
- technology that could be efficiently adopted and the likelihood of any advantages arising from early adoption of the technology
- the likely economic effects
- social, cultural, environmental and ecological circumstances, including differences between sectors and regions
- the distribution of benefits, costs and risks between generations
- responses taken or planned by Parties to the Paris Agreement or to the United Nations Framework Convention on Climate Change.

43. The Bill requires the Commission to consider additional matters in relation to some particular functions (for example, advice on emissions budgets).

The Commission will be able to access relevant expertise and information, and consult broadly

44. As a Crown entity, the Commission will be an employer in its own right. It will be able to appoint subcommittees and generally arrange its own processes. For example, it is likely to engage technical staff and might appoint a scientific or economic advisory panel, or engage advisors or consultants.

45. The Commission will be able to consult broadly (section 5M) and, where relevant, statutory provisions will allow it to access information that it might not otherwise be able to gain (for example, information about the New Zealand Emissions Trading Scheme, which is protected under the Climate Change Response Act 2002 (section 10)).

The Commission has an obligation to maintain confidentiality

46. In order to protect commercially sensitive information, some material obtained by agencies under the CCRA is protected by obligations of confidentiality. It was intended that the Bill:

- give the Commission the same access to information as agencies under section 99 of the CCRA, and
- require the Commission to maintain the confidentiality of any information disclosed to the Commission. This would effectively extend the confidentiality requirements in section 99 to the Commission.

47. Due to an oversight, clause 10(1) goes beyond this intent. Rather than limit confidentiality to specific information, it applies to information obtained by the Commission in the performance
of any and all of its functions. This goes beyond the scope of decisions made in December 2018 and would restrict what can be made available, including under the Official Information Act 1982.

48. It is suggested that the scope of clause 10(1) is amended before the Bill is reported back to the House.

An emissions reduction target for 2050 will be set in primary legislation, and will include an interim 2030 requirement for biogenic methane (Part 1B)

The 2050 target will prescribe the reductions that are required in emissions of biogenic methane and all other greenhouse gases

49. The Bill will legislate a 2050 target that will seek to achieve emissions reductions across all greenhouse gases. The target (section 50) requires New Zealand to:

- reach net zero emissions for all greenhouse gases, except biogenic methane, by 2050, and for emissions to remain net zero in each subsequent calendar year
- reduce gross emissions of biogenic methane to 10 per cent below 2017 levels by 2030
- reduce gross emissions of biogenic methane to at least 24 to 47 per cent below 2017 levels by 2050, and for gross emissions of biogenic methane to remain at least 24 to 47 below 2017 levels in each subsequent calendar year.

The 2050 target will distinguish between biogenic methane and all other greenhouse gases

50. The Intergovernmental Panel on Climate Change (IPCC) special report on 1.5 degrees also recognised the value of different pathways for different greenhouse gases. It concluded that in scenarios consistent with staying within 1.5°C of warming with limited or no overshoot:

- global emissions of carbon dioxide reduce to net zero around 2050, and below zero (negative) thereafter
- global emissions of agricultural methane reduce by 24–47 per cent from 2010 levels by 2050
- expressed together using the GWP100 equivalence metric, global greenhouse gas emissions are cut by 81–93 per cent from 2010 levels by 2050.

51. The different requirements for the reduction of carbon dioxide and biogenic methane are due to their different atmospheric lifetimes, potency as greenhouse gases, and consequently their different impacts on the climate.

52. Methane is a short-lived greenhouse gas. More than half of the methane in the atmosphere decays after 12 years, and after 50 years about 98 per cent is gone. In contrast, about half of

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12 Article 2,1,(a) of the Paris Agreement sets out the aims of the Agreement, which include “Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change”.
14 This is the central (interquartile) range, as provided in Figure SPM.3b of the Summary for Policy Makers, IPCC Special Report on Global Warming of 1.5 °C. See: Intergovernmental Panel on Climate Change (2018) Special Report on Global Warming of 1.5 °C: Summary for Policy Makers, p 14
15 This metric assigns each greenhouse gas a ‘global warming potential’ based on its impact on the climate over a period of 100 years relative to the equivalent impact the same amount of carbon dioxide would have. It has been adopted by the UNFCCC as an internationally accepted method of comparing greenhouse gases.
the carbon dioxide released into the atmosphere is removed within a few decades, but the remainder remains for much longer (e.g. around 15 to 40 per cent stays in the atmosphere after 1000 years). To limit warming, emissions of long-lived gases must be reduced to net zero, and emissions of short-lived GHGs must stabilise at a ‘sustainable’ level. There is no consensus on what that ‘sustainable’ level for short-lived GHGs is. However, as described above, scenarios consistent with the Paris Agreement temperature goals entail significant reductions in methane emissions.

53. In New Zealand, there is a further case for separating biogenic methane from all other short-lived gases, as it is our primary source of short-lived emissions. Biogenic methane can also be distinguished from fossil methane because it results from biological processes associated with the agriculture and waste sectors.

The 2050 target will require emissions of all greenhouse gases, except biogenic methane, to reduce to net zero

54. Requiring emissions of all greenhouse gases (except biogenic methane) to reach net zero by 2050 aligns with New Zealand’s commitments under the Paris Agreement, under which Parties commit to keeping global average temperature rise to well below 2 degrees above pre-industrial levels, while pursuing efforts to keep it to 1.5 degrees.

55. The net zero target also reflects the IPCC findings that, in scenarios consistent with the 1.5 degree temperature goal, global emissions of carbon dioxide reduce to net zero around 2050 (see paragraph 50). It aims for carbon neutrality (i.e. no net release of carbon dioxide into the atmosphere), and is also consistent with the findings of the Productivity Commission in 2018.

The biogenic methane component of the 2050 target requires gross emissions of biogenic methane to reduce to at least 24-47 per cent below 2017 levels

56. The 2050 target will require gross emissions of biogenic methane to reduce by at least 24-47 per cent below 2017 levels by 2050. The requirement for gross reductions recognises that there are no ‘offsets’ available for mitigating methane, compared with the all other greenhouse gases component of the 2050 target which allows emissions to be offset by carbon sequestration or carbon capture.

57. The inclusion of a range, rather than a fixed reduction, reflects the uncertainty that currently surrounds the global reductions required to meet the temperature goal of the Paris Agreement, and the technological developments that may be available to reduce biogenic methane emissions over the next three decades.

58. Requiring reductions of between 24-47 per cent reflects a strong commitment to limiting global warming to 1.5 degrees, and sends a strong signal to New Zealand’s waste and agricultural sectors. This will in turn encourage innovation and investment, and potentially position New Zealand at the forefront of technological developments.

59. Evidence and analysis shows that reducing biogenic methane emissions by between 24 and 47 per cent will be challenging, but achievable. For example:

- Analysis commissioned by the Biological Emissions Reference Group (BERG), and summarised in its December 2018 report, found that if all currently available (e.g. farm management practices) and future mitigation options assessed (e.g. methane vaccines and inhibitors) were developed and adopted at high rates, overall biological emissions

16 Note: The IPCC uses 2010 as a baseline year from which global emissions reductions are required. For New Zealand, the 2017 baseline year is comparable with the scale of reductions required from 2010 as a baseline year, but 2017 reflects our most recent emissions inventory data.
could potentially reduce by 10 to 21 per cent by 2030, and 22 to 48 per cent by 2050, relative to the Ministry of Primary Industry’s emissions projections. However, some of the mitigation options identified by BERG included forestry offsets, which could not be used to meet the gross reduction requirements.

- Providing production levels remain constant, reducing biogenic methane emissions by 24-47 per cent aligns with New Zealand’s past efficiency improvements, which have, on average, seen greenhouse gas emissions per unit of meat and milk produced on New Zealand farms drop by around 1 per cent per year for at least the past 20 years.
- Some members of the agricultural sector are already taking steps to reduce emissions. For instance, Synlait committed to a set of sustainability targets and actions across on-farm and off-farm emissions in June 2018. These include a pledge to reduce its emissions intensity (per kilogram of milk solids) by 35 per cent on-farm by 2028.
- Since 2002, the waste sector has reduced its methane emissions by 15 per cent, and there are opportunities for further reductions (e.g. via landfill gas recovery and the diversion of organic waste).

There will be an interim requirement to reduce biogenic methane to 10 per cent below 2017 levels by 2030.

60. The 2050 target will include an interim requirement to reduce gross emissions of biogenic methane to 10 per cent below 2017 levels by 2030. This means that New Zealand’s emissions of biogenic methane must reduce from 33.1 Mt carbon dioxide equivalent (CO₂e) in 2017 to 29.8 Mt CO₂e in 2030. As indicated by the evidence outlined below, this goal is also achievable.

61. The BERG reported that total biological emissions from agriculture could reduce by 10-21 per cent by 2030 relative to baseline projections if a range of mitigation options is implemented in packages.

62. The report discussed the potential to reduce emissions through measures that are currently available.

- BERG suggests that there is potential to increase the uptake of on-farm mitigation measures. In a survey of 68 farmers, 64 per cent of respondents believed that New Zealand’s agricultural emissions should be reduced, but 42 per cent were unaware of available mitigation strategies (other than planting trees).
- Modelling suggested that widespread adoption of currently available mitigation options (primarily farm management practices) could result in reductions of total (all-gases) emissions of up to 10 per cent.

63. The report also referenced work by the New Zealand Agricultural Greenhouse Gas Research Centre (NZAGRC), which assessed the likelihood of new technologies reducing agricultural methane specifically. These included:

- a methane vaccine. NZAGRC indicated a low confidence that a methane vaccine would be available and could deliver a 30 per cent reduction by 2030 (but medium-high confidence that it would be available by 2050); and
- a grazing system methane inhibitor. NZAGRC indicated a medium-high confidence that a grazing system methane inhibitor would be available by 2030.

64. Despite the efficiency improvements described above, emissions have continued to increase due to increased production. While it is expected that emissions per unit of production will

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17 Note: This relates to all biological emissions from agriculture, including methane, nitrous oxide and carbon dioxide.
continue to decrease, to achieve real emissions reductions and meet the 2030 target, leaders in the agricultural sector will need to set goals to improve the efficiency of their operations and reduce their overall emissions.

*International aviation and shipping will not be included*

65. International aviation and shipping will not be included in 2050 target. This approach is consistent with the methods that are currently prescribed in the CCRA and used in the Kyoto Protocol, the Paris Agreement, and for New Zealand’s first NDC as well as for greenhouse gas inventory reporting by New Zealand and other countries. Emissions from international aviation and shipping need to be addressed, however the International Civil Aviation Organisation and International Maritime Organisation are internationally recognised as the appropriate organisations to do this.

*Economic modelling has limitations, but suggests that the 2050 target is achievable*

66. The Bill requires the transition to 2050 to be just.\(^{18}\) It is important to note that the target itself does not determine how the transition will be managed, and that the Government has levers to help control the pace of the transition to ensure that it is as just and as fair as possible. Policy choices and actions by Government, businesses and households will all play a part in how this transition evolves. There is therefore no immediate impact from these decisions on the cost of living, and the Government will have a number of tools to manage the distributional impacts of higher price paths.

67. A suite of economic analyses, including qualitative research and quantitative modelling, have been used to examine the potential impact of different pathways to meet the domestic emissions reduction targets that were considered during the policy development of the Bill. Depending on the transition pathway adopted, the new 2050 target, with its three key components, could have wide ranging impacts across the economy.

68. Appendix 3 of the Regulatory Impact Statement summarises the findings of the full suite of economic analysis undertaken. No single underlying report, read in isolation, is a complete representation of the potential impacts of an economy-wide transition. Instead, each report contains different types of information and assesses different elements of the challenges and opportunities presented by the transition. As a result, the reports need to be read as a package.

69. Broadly, the analysis undertaken finds that the economy can continue to grow and meet the new target at emissions prices that appear moderate by international standards.

70. The analysis indicates that:

- the costs and benefits of transition cannot be known with any precision
- the transition is achievable with three main changes: transition from fossil fuels to electricity and other low emissions fuels, substantial afforestation, and changes to the structure and methods of agricultural production. Some emitting sectors could decline or change, and new sectors will emerge. The Government may need to support substantial innovation and afforestation.

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\(^{18}\) The Ministry of Business, Innovation and Employment’s Just Transition Unit defines a “just transition” as being about a partnering between government, Māori, business, the workforce, and communities to (a) build an understanding of the potential pathways to transform our economy (to one that is low emissions), (b) identify, create, and support new opportunities, new jobs, new skills, and new investments that will emerge from the transition, and (c) better understand how the transition might impact on different communities, regions or sectors and make choices about how we manage these impacts in a just and inclusive way.
• the economy could grow under this target, but at a slightly slower rate (e.g. by around 0.1 - 0.2 percentage points per annum) compared to meeting the current domestic emissions target.¹⁹
• the proposed target is expected to have less concentrated distributional effects than net zero emissions
• to achieve the transition at the emissions prices modelled by one study (CMV2⁰), one million hectares of sheep and beef land could convert to forestry, compared to 0.8 million hectares under the current 2050 target
• the average dairy farm of about 400 cows could face a cost of approximately 0.3 per cent of current gross revenue ($2500) per year by 2025²¹
• there could be substantial upsides for wider environmental outcomes, health and congestion
• household impacts, if left unmanaged, could fall on lower income households. As a result, the Government will need to take action to ensure a just transition
• the effect of emission pricing on petrol could see an increase of 2 cents per litre by 2025 (assuming all emissions prices are passed through to consumers), although total petrol costs could decline if transport energy demands are met more through electricity.

71. It is not possible to know the costs and benefits of the transition with any precision or distil the impacts down to any one number. The quantitative modelling described above looks solely at costs, and it is therefore likely that these reported figures overstate the cost of the transition. It is also important to note that the modelling and the resulting findings were heavily dependent on a number of assumptions, and should be viewed as possible scenarios and not a precise forecast of expected impacts.

72. Critically, the modelled impacts do not incorporate the potential upsides - identified in the qualitative studies - of potentially substantial benefits to the economy. These include the benefits that a new, stronger target can be expected to have, such as incentivising innovation, creating innovation spill-overs and co-benefits to wider health and environmental outcomes. Domestic and international evidence indicates that climate action stimulates faster innovation in low-emissions technologies that are of high economic value, and may sharply reduce the cost of the transition.

The Commission will review the 2050 target every five years and on the request of Government, and can be revised if certain criteria are met

73. The Bill allows the Commission to review the level and the timeframe for achieving any or all aspects of the 2050 target, including the interim requirement to reduce gross emissions of biogenic methane to 10 per cent below 2017 levels by 2030.

74. The Commission will review the 2050 target (and the interim requirement) and provide its advice in conjunction with its recommendations on the fourth, fifth, sixth and any subsequent emissions budgets (e.g. in 2024, 2029, 2034), or at any other time at the request of Government.

75. The Commission may recommend that the Government revise or amend the target if there have been significant changes in one or more of the following areas:

¹⁹ New Zealand Institute of Economic Research (NZIER) (November 2018) Economic impact of meeting 2050 emissions targets: Stage 2 modelling
²⁰ Concept; Motu Economic and Public Policy Research; Vivid Economics (April 2018) Modelling the transition to a lower net emissions New Zealand: Interim results (CMV Stage 1); Concept; Motu Economic and Public Policy Research; Vivid Economics (July 2018) Modelling the transition to a lower net emissions New Zealand: Uncertainty analysis (CMV Stage 2)
²¹Assuming a price of $6/kg of milk solids, and agricultural biological emissions face obligations under the New Zealand Emissions Trading Scheme with 95 per cent free allocation and an emissions price of $32 per tonne of carbon dioxide equivalent (please note that final decisions on this matter have not been made yet.).
76. If the Government accepts a recommendation to revise the 2050 target, the legislation will need to be amended. While this process is not set out in the Bill, it is assumed that the Government would introduce an amendment bill to revise the target.

77. The ability to revise the target is an attempt to balance policy predictability and flexibility. This approach recognises that circumstances may change and that the ambition of the target may need to be revised accordingly. An example would be where greater reductions are required to contribute to efforts to limit global average temperature increase to 1.5 degrees above pre-industrial levels.

78. As indicated above, the Commission may review the level of reductions required by any or all aspects of the 2050 target. This will include the range within which gross emissions of biogenic methane must reduce by 2050, and provides scope for this to be recast as a specific reduction if this is deemed appropriate in the future.

79. Consideration will also need to be given to the implications that a revised target will have for existing emissions budgets and the associated emissions reduction plan.

**Emissions budgets will be established to support achievement of the 2050 target (Part 1B)**

80. Emissions budgets will state the quantity of emissions permitted over each five year budget period, and will step progressively towards the 2050 target.

**Emissions budgets will be established to meet the 2050 target and provide greater predictability for those affected, including households, businesses and investors**

81. The purpose of emissions budgets is twofold. As per section 5T(a), they will be set with a view to meeting the 2050 target, and will step progressively towards the emissions reductions that are required by 2050 (i.e. the quantity of emissions permitted in each emissions budget will decrease over time). In this way, emissions budgets will act as a series of interim targets – or stepping stones – that will help New Zealand transition to a low emissions future.

82. Emissions budgets are also designed to strike a balance between flexibility and policy predictability (section 5T(b)). They will do this by signalling the reductions that will be required in the short-medium term, while providing the flexibility to respond to changing circumstances (e.g. the emergence of new technologies). The mechanisms that provide this balance, such as the ability to revise emissions budgets and update the emissions reduction plan, are detailed below.
Each emissions budget will set the quantity of emissions across a five year budget period

83. Each emissions budget will state the quantity of emissions that will be permitted over a five year period as an amount of CO₂e, and will apply to all greenhouse gases.

84. Emissions budgets will cover all greenhouse gases, as defined in the Bill, and the total emissions permitted across a budget period will be a net number. This means that emissions can be offset by removals (for example, from forestry) and, as a last resort, the purchase of offshore mitigation (i.e. international reductions sourced from overseas). As indicated below, the Commission will provide advice on the amount by which emissions of each greenhouse gas should reduce, and will measure these reductions on a regular basis, tracking progress towards both the emissions budgets and each component of the 2050 target.

85. Three emissions budgets must be in place at any given time. This will mean that emissions budgets will be set at least ten years in advance, and will provide individuals, households, businesses and investors with greater certainty around the changes that will be needed.

The Minister has a duty to set emissions budgets

86. The Minister will be required to set a series of emissions budgets between 2022 and 2050 with a view to meeting the 2050 target (section 5U(1)). These must be set in accordance with the other sections in this part of the Bill, including:

- setting and notifying emissions budgets by the specified dates (section 5U(2)-(3))
- having regard to the Commission’s advice (section 5X)
- having regard to a range of matters (section 5Z) and
- complying with consultation requirements (section 5Y(2)).

The Minister will also have a duty to ensure that New Zealand does not exceed the quantity of emissions permitted in a budget period

87. Under section 5U(4), the Minister must also ensure compliance with emissions budgets. This means that the Minister must ensure that the net emissions for an emissions budget period do not exceed the quantity of emissions permitted in the emissions budget. This will involve ensuring that an emissions reduction plan is prepared on time, and that it includes policies and strategies that achieve the emissions reductions and removals required.
88. If New Zealand fails to meet an emissions budget, the Minister must provide the reasons for this failure in the written response to the Commission’s review of an entire budget period.

**The Commission and the Minister will both have roles in setting emissions budgets**

89. Emissions budgets will be set by the Government following advice from the Climate Change Commission. The Commission’s advice must include the matters set out in the table below.

<table>
<thead>
<tr>
<th>The Commission must advise on:</th>
<th>Rationale/explanation</th>
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</thead>
<tbody>
<tr>
<td>The quantity of emissions that should be permitted in a budget period</td>
<td>The Commission will provide advice on the level of the emissions budget.</td>
</tr>
<tr>
<td>The rules that will apply to measuring progress against the emissions budgets and the 2050 target</td>
<td>The rules that apply to measuring emissions can change, and new best practice can emerge. Requiring the Commission to provide advice on the rules that should apply to emissions budgets will ensure that the institutional architecture established under the Bill is responsive to the latest developments and can remain current.</td>
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| Realistic means of meeting the emissions budget and the 2050 target, including price and policy pathways | Emissions budgets chart the course to the 2050 target. This subsection not only requires the Commission to consider how a single emissions budget can be met, but to look at the broader transition to the 2050 target and how this can be achieved.  
As per section 5W(2), this will require the Commission to advise on the amount by which each greenhouse gas must be reduced to meet an emissions budget and the 2050 target and the amount of removals that will be required. The Commission must also identify the key opportunities to reduce and remove emissions, and the principal risks and uncertainties involved. |
| The proportion of an emissions budget that will be met by greenhouse gas reductions, removals, and offshore mitigation (see below) | The Commission will indicate the level of greenhouse gas emissions and removals that are likely to make up the emissions budget, by gas. This will signal the amount by which each greenhouse gas is expected to reduce (e.g. as a result of the policies and strategies that will be put in place). This analysis will be indicative only, providing flexibility in how New Zealand achieves an emissions budget. |
| The appropriate limit on the amount of offshore mitigation that may be used to meet the emissions budget, including reasons for the proposed limit and how it meets the requirement of s 5W(1) | The definition of offshore mitigation ensures that any offshore mitigation used in New Zealand represents real emission reductions and are not double counted.  
Emissions budgets should be met primarily through reductions and removals achieved domestically. This is designed to place primary reliance on reducing emissions at home, while retaining flexibility to manage the uncertainty of making long-term projections.  
The requirement that the Commission will advise on the limit on offshore mitigation that should be used to meet an emissions budget reinforces this provision. |

90. In coming to its recommendations, the Commission must publicly consult and provide its advice to the responsible Minister at least twelve months before the relevant emissions budget is notified. This will be extended to fifteen months in an election year. The Commission’s report
must be presented in the House, and made publicly available. This is intended to increase public confidence in the level of an emissions budget, and how it can be met.

91. The Government will be the final decision-maker, and must respond in writing to the Commission’s advice. This must provide the reasons for any departure from the Commission’s advice and recommendations.

92. In making a determination, the Minister must consult with the appropriate representatives of each of the political parties represented in Parliament, and provides an opportunity for the Government to gain support for the level of the emissions budgets.

93. The Minister must also consider the adequacy of the consultation undertaken by the Commission, and has the discretion to consult further. The Minister must then progress his or her proposed emissions budget through a Cabinet process, following which a copy of the notified emissions budget will be presented in the House of Representatives.

94. The proposed process is robust, and is the most time-effective means of setting and notifying emissions budgets. It avoids the risks associated with debating each emissions budget in the House of Representatives, which would be time consuming (e.g. matters of urgency can take around six months to be debated in the House) and may lead to further delays if an emissions budget is rejected. Presenting a copy of the notified emissions budget in the House presents an opportunity for the House to debate the emissions budget, but does not guarantee debate and removes the ability of the House to stall progress or reject the emissions budget.

95. To make this process as transparent as possible, the Minister is required to respond to the Commission’s advice and recommendations in writing, and include an explanation if the Minister departs from the Commission’s recommended budget. This report will be tabled in the House and made publicly available.

Emissions budgets will be notified in the New Zealand Gazette

96. Emissions budgets will be notified in the New Zealand Gazette, and will not be disallowable instruments for the purpose of the Legislation Act 1982.

97. Emissions budgets will state the quantity of emissions that will be permitted in a five-year budget period as a quantity of CO2e. As a result of their simplicity, they do not require the involvement of the Parliamentary Counsel Office, and can instead be drafted by officials. This is the most time and cost effective means of notifying emissions budgets and also allows them to be easily amended (see paragraphs 98 to 102).

Emissions budgets may be revised in limited circumstances

98. The Bill will allow emissions budgets to be revised if there have been significant changes that affect the basis on which the emissions budgets were originally set (ss 5ZB(1)(b) and 5Z(2)).

99. Notified emissions budgets may also be revised in light of methodological improvements to the way that emissions are measured and reported. Such improvements could have a significant impact on the ambition of emissions budgets and the effort needed to achieve them, and allows the level of an emissions budget to be amended accordingly.

100. An emissions budget for a period that has already commenced can only be revised in exceptional circumstances, however, and an emissions budget for a period that has already concluded may not be revised under any circumstances.

101. The Commission must provide advice on whether or not an emissions budget should be revised in conjunction with their advice on future emissions budgets, and will also be required to provide recommendations on the revised emissions budget.
102. Allowing notified emissions budgets to be revised will provide flexibility for the Government to respond to changing circumstances, and manage the transition to a low-emissions future in a way that is just and fair. Placing restrictions around when an emissions budget can be revised, and requiring the Commission to provide advice and recommendations, guards against this ability being misused, and is designed to strike the right balance between flexibility and policy predictability.

**Banking and borrowing may occur across adjacent budget periods, subject to advice from the Commission**

**Banking is potentially unlimited, but will not occur automatically**

103. Banking describes the ability to count excess emissions reductions achieved during one budget period towards the emissions reductions required for the next. In effect, this would make the next emissions budget easier to meet. The Bill allows for unlimited banking across immediately adjacent budget periods.

104. Allowing banking across adjacent budget periods provides an incentive for over-performing in a budget period (i.e. achieving more emissions reductions than those required by the emissions budget), as additional reductions can count against the next emissions budget, making it easier to meet. As a result, banking can mean that emissions of greenhouse gases are reduced sooner, resulting in improved environmental outcomes. Reducing emissions at a faster rate than is strictly required by an emissions budget would also demonstrate global leadership.

**Borrowing will be capped at 1 per cent**

105. Borrowing is the opposite of banking, and will be used if the total greenhouse gas emissions for the budget period exceed those permitted in the emissions budget. In this case, up to 1 per cent of the emissions permitted in the immediately adjacent budget period can be brought forward to meet the shortfall. This will make the next budget period harder to meet, as additional reductions will be required.

106. Limiting borrowing to 1 per cent renders it an administrative “washing up” or “true-up” mechanism that provides the ability to absorb short-run shocks, such as volatility in emissions (e.g. increased emissions in the energy sector due to a dry winter), or accounting errors or adjustments.

107. This approach also prevents the Government from relying on borrowing as a way of meeting emissions budgets, and mitigates a number of risks, namely:

- potential costs associated with decreasing predictability around the level of reductions required in a given budget period, reducing the certainty provided by the framework and
- the ability of the Government to meet emissions budgets in the medium-long term and, in particular, the risk of deviating from the pathway necessary to achieve the overarching target. This also risks the delivery of a just transition.

108. A failure to meet an emissions budget would mean that the next emissions budget is more difficult to meet, due to the fact that emissions need to reduce by a greater amount to get back to the optimal pathway to the 2050 target.

**The Commission will provide advice on banking and borrowing at the end of each budget period**

109. In their final review of the budget period, the Climate Change Commission will provide advice on the amount of banking or borrowing, if any, that should occur. The Minister will make a final decision after the advice has been received and reviewed, and it is clear whether New Zealand has met, over-achieved or under-achieved the emissions budget.
An emissions reduction plan will be prepared to support the achievement of each emissions budget

110. Emissions budgets will be supported by a plan that sets out the Government’s policies and strategies for meeting the emissions budget. This must be developed and published prior to the relevant budget period, and will be informed by advice from the Commission. This plan must include:

- sector-specific policies to lower emissions and/or increase afforestation
- a cross-sector strategy to support the transitional shift to lower emissions and climate resilience
- a strategy to recognise and mitigate policy impacts on workers, regions, iwi and Māori, and wider communities, including how any action can be funded and
- any other policies and strategies that the Minister considers necessary.

111. The Commission may consult broadly in carrying out its functions, including providing advice on the emissions reduction plan. The requirement set out in section 5ZE(3) specifically requires consultation with relevant sector representatives and affected communities. In preparing the plan, the Minister must be satisfied that adequate consultation has taken place (including with sector representatives, affected communities, iwi and Māori), and may undertake further consultation if deemed necessary (s 5ZF(1)(b)).

112. While the plan, together with its supporting policies and strategies, will be developed ahead of each budget period, it may be updated to reflect the changing context (for example, changes in the technologies available to reduce emissions).

113. This plan will work alongside the New Zealand Emissions Trading Scheme to deliver the emissions reductions and removals needed to meet emissions budgets and, ultimately, the 2050 target.

Sector-specific policies and a cross-sector strategy to support the transitional shift to lower emissions and climate resilience

114. As meeting the 2050 target will require an economy-wide shift to low-emissions, this plan must include sector-specific policies and a cross-sector strategy.

115. Sector-specific policies will identify abatement opportunities and drive emissions reductions within each major sector of the New Zealand economy (e.g. agriculture, energy, transport). These strategies would be tailored to each sector and should be developed in consultation with relevant sector representatives to ensure that they are fit-for-purpose, realistic and capable of effective implementation.

116. Sector-specific policies will send a strong signal to individual sectors of the economy and, in doing so, drive innovation, diversification and the uptake of new technologies. Given agriculture is the most significant emitter at the sector level, these policies also provide an opportunity for New Zealand to take particular leadership in this area.

117. The cross-sector strategy to support the transitional shift to lower emissions and climate resilience will identify ways that different sectors can work together to integrate and succeed in shifting to low-emissions.
A strategy to recognise and mitigate the impacts that reducing emissions and increasing removals will have on workers, regions, iwi and Māori, and wider communities, including the funding for any mitigation action

118. Climate change, and the changes that the transition to low emissions will require, will also affect communities and the impacts are more likely to be felt by already disadvantaged communities. The proposed strategy to recognise and mitigate impacts on workers, regions, iwi and Māori, and wider communities is critical to ensuring that these groups are supported in the transition to a low emissions and climate resilient economy. This is especially important given one of the cornerstones of the Government’s climate change framework is to ensure a just transition.

119. Funding is a critical part of the strategy to recognise and mitigate the impact of the transition on New Zealanders. The strategy will therefore identify means of funding the initiatives developed.

The plan must be prepared and published before the budget period begins

120. The Commission will identify key opportunities to reduce emissions and increase removals when identifying realistic means of meeting emissions budgets and the overarching 2050 target (section 5Z(2). This forms part of the Commission’s advice on the level of emissions budgets, and is likely to broadly indicate the policies and strategies needed to meet an emissions budget at least 10 years in advance. The Minister must also comment on these opportunities in his/her written response to the Commission’s advice (section 5Y).

121. The emissions reduction plan will be formally prepared and published after the emissions budget has been published, and before the relevant budget period begins (section 5ZD). This provides scope for a plan to be prepared well in advance, if it is deemed desirable to do so.

122. More specific dates also apply, however, and will ensure that there is adequate time to prepare the plan ahead of the budget period beginning. For instance, section 5ZE requires the Commission must provide high level advice on the plan (i.e. its policy direction) at least 12 months ahead of the budget period. The Minister must prepare and publish an emissions reduction plan before the relevant budget period begins (section 5ZF).

123. The drafting of the Bill allows for the emissions reduction plan to be prepared and published well before the beginning of the relevant budget period. The Commission may, for example, provide its advice two or more years before the budget period begins and/or the Government may start preparing the plan prior to receiving the Commission’s advice. In practice, it is also likely that emissions reduction plans build on the policies and strategies developed for the previous budget period, folding in new elements as required. This flexibility, together with the ability for plans to be updated throughout the budget period, will enable the plan to be up-to-date and relevant at the beginning of the budget period, rather than being fixed five or ten years in advance.

The Commission will monitor New Zealand’s progress towards its emissions budgets and 2050 target

124. The Commission will also have a role in measuring New Zealand’s progress towards meeting its emissions budgets and the overarching 2050 target. It will do this through annual progress reports and a full review at the end of each budget period. These reports will include actual emissions and removals, projected emissions and removals, assess the implementation and success of the plan to meet emissions budgets and, where relevant, suggest other opportunities to reduce emissions. In the case of the full review, the Commission’s report will also provide recommendations on banking and borrowing, and the use of offshore mitigation.

125. These progress reports, and the Government’s written response, will be presented in the House of Representatives and made publicly available. This will ensure transparency and provide New
Zealanders with improved access to information around the level of New Zealand’s emissions and removals, and whether we are on track to meet our emissions budgets and, ultimately, the 2050 target. These progress reports, provided by an independent expert body, will promote public trust in the monitoring reports produced, and will help hold the Government to account.

The Bill sets out the legal effect of the 2050 target and emissions budgets

A court may issue a declaration of non-compliance with the 2050 target or emissions budgets (section 5ZJ)

126. If New Zealand fails to meet an emissions budget, or any or all aspects of the 2050 target, a court may issue a declaration of non-compliance and award costs. The Minister will be required to bring a declaration of non-compliance to the attention of the House, and provide a written response on behalf of the Government. This will be the only court remedy available.

127. While the available remedies and relief are limited in relation to a failure to meet the target or an emissions budget, avenues for legal challenge remain open. The Bill imposes a number of prescriptive requirements on Government (for example, procedural requirements and mandatory considerations when determining emissions budgets) and a failure to comply with these would expose the Government (or the Commission) to challenge.

128. Judicial challenge is another means by which the public can hold the Government to account. This is evidenced by the United Kingdom’s experience, where NGO ClientEarth indicated that they would take legal action over the Government’s delay in preparing and publishing the plan to meet the fifth carbon budget.\(^2\)

The 2050 target and emissions budgets will be permissive considerations (section 5ZK)

129. Section 5ZK enables the 2050 target and emissions budgets to influence broader Government decision-making, where relevant. Subject to other requirements, the decision-maker may take the 2050 target and emissions budgets into account.

130. More specifically, this provision provides that a person or body may, if they think fit, take the 2050 target or an emissions budget into account in the exercise or performance of a public function, power or duty conferred by or under law. For example, local authorities and infrastructure providers could choose to take emissions budgets into account in their decision making (subject to other specific legislative requirements).

131. The policy intent is that the 2050 target and emissions budgets are a permissive consideration, rather than a mandatory requirement.

The Minister may issue guidance on how departments can take the 2050 target or emissions budgets into account (section 5ZL)

132. Section 5ZL allows the Minister to issue guidance to Government departments that suggests how they can take the 2050 target and emissions budgets into account in their decision-making. The intent is that this guidance provides practical assistance to decision-makers, ensuring that, where relevant, Government decision-making considers the target and emissions budgets.

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A range of measures to help New Zealand adapt to climate change will be introduced (Part 1C)

133. While the Bill will establish an emissions reduction target and a system of emissions budgets, the climate will continue to change as a result of historic and continuing global emissions. Part 1C of the Bill will address this by introducing measures that will help New Zealand understand, respond and adapt to these climate change impacts.

A National Climate Change Risk Assessment will provide a better understanding of the climate change risks facing New Zealand

134. The National Climate Change Risk Assessment will provide nationally consistent information on a broad range of climate change impacts, including our vulnerability to those impacts.

135. The Commission will undertake a National Climate Change Risk Assessment at least every six years, and will be required to take the following matters into account during its preparation:

- the economic, social, health, environmental, ecological, and cultural effects of climate change
- the distribution of the effects of climate change across society, taking particular account of vulnerable groups or sectors
- New Zealand’s relevant obligations under international agreements
- how the assessment aligns or links with any other relevant national risk assessments produced by central Government entities
- long-term climate change trends
- any information received as a result of requests made using the Minister’s adaptation information gathering power (SZV)
- scientific and technical advice.

136. In addition, the Commission may take into account:

- emerging opportunities for New Zealand’s economy, society, and environment as a result of the effects of climate change
- any other factors that the Commission considers relevant or appropriate.

137. The Commission must provide the Minister with a copy of the National Climate Change Risk Assessment and make it publicly available, alongside any evidence commissioned in the development of the Assessment. Once the Minister has received the Assessment, the Minister will be required to present a copy to the House of Representatives as soon as practicable (this must be within twelve weeks).

138. The Bill provides for the Government to undertake the first National Climate Change Risk Assessment. This first Assessment must be presented to the House of Representatives no later than 1 year after the commencement of the Bill.

Continuous adaptation risk assessment and planning will have multiple benefits

139. Undertaking regular National Climate Change Risk Assessments has a number of benefits. It will:

- provide a reproducible, point-in-time assessment of the most significant risks arising from climate change that need to be addressed
- take account of new information about potential risks to New Zealand as a result of climate change
- improve New Zealand’s understanding of the nature and severity of the risks and how urgently a response is required to the most significant risks.

140. The Bill provides for a continuous approach to adaptation risk assessment and planning. The impacts of climate change are likely to become increasingly evident over time and how they
may unfold in the future will never be entirely certain. For these reasons, it is sensible to take
an iterative approach, whereby New Zealand’s risk assessments and adaptation responses are
continually reviewed and updated as better information becomes available. This will ensure
that adaptation planning and action will remain relevant.

141. The Bill requires a new National Climate Change Risk Assessment to be published no later than
six years after the previous National Climate Change Risk Assessment was published. The six
yearly cycle will align with the national land transport programme’s funding timeframes and
local government investment and funding timeframes under the Local Government Act 2002,
which are both on three year cycles. However, the Commission will have the flexibility to
prepare a subsequent National Climate Change Risk Assessment early if it considers the risks to
have changed significantly since the previous National Climate Change Risk Assessment was
published. This will help to ensure the Government has access to the most up-to-date and
relevant information, and that the National Adaptation Plan is able to be updated to respond
to a changing risk profile in a timely manner.

142. While the Minister will prepare the first National Climate Change Risk Assessment to ensure the
work on adaptation begins as soon as possible, the preparation of these Assessments will be a
key part of the Commission’s work thereafter. As an independent body with relevant expertise
across a range of disciplines, the Commission will be best placed to undertake a credible and
objective, technical, and independent assessment of the risks to New Zealand.

A National Adaptation Plan will outline the Government’s planned approach to improving New Zealand’s
resilience to the effects of climate change

143. The National Adaptation Plan will be prepared by the Minister and will include the
Government’s objectives, strategies, policies, and proposals for adapting to the effects of
climate change. The National Adaptation Plan is the Government’s response to the National
Climate Change Risk Assessment, and will be published no later than two years after the most
recent National Climate Change Risk Assessment is published.

144. When preparing the National Adaptation Plan, the Minister must take into account a number
of matters, including:
- economic, social, health, environmental, ecological, and cultural effects of climate
  change, including effects on iwi and Māori
- the distribution of the effects of climate change across society, taking particular account
  of vulnerable groups or sectors
- New Zealand’s relevant obligations under international agreements
- any information received as a result of requests made using the Minister’s adaptation
  information gathering power (S2V)
- any relevant advice or reports received from the Commission
- the ability of communities or organisations to undertake adaptation action, including
  how any action may be funded
- scientific and technical advice.

145. The Minister will be required to publicly consult on the draft National Adaptation Plan. As a
result, the Plan will be informed by input from iwi and Māori, local government, and key
stakeholders, and will enable New Zealand’s coordinated response to climate risks to be
discussed publicly over time.

146. The National Adaptation Plan, like the National Climate Change Risk Assessment, will establish
national priorities. However, it is recognised that local government, businesses and/or sectors
will still need to undertake more detailed local assessments of the risks that they are facing as
a result of climate change, and determine their own priorities and actions for adapting to the effects of climate change.

147. Like national adaptation plans and programmes overseas, the National Adaptation Plan established under this Bill is not intended to have direct statutory effect. It will be a coordinating document that sets out the Government’s policy and strategic direction, and will be implemented in the same way that other Government policies and strategies are implemented. Regular progress reporting by the Commission is intended to publicly hold the Government (and other actors identified in the Plan) to account.

The Commission will monitor and report on the success of the National Adaptation Plan

148. The Commission will regularly monitor and report on the implementation of the National Adaptation Plan. These progress reports will outline the implementation of the National Adaptation Plan and the extent to which it has been effective in achieving its objectives. It will also identify any barriers to the Plan’s effective implementation, and provide recommendations for overcoming these barriers.

149. The Commission will provide its reports to the Minister no later than two years after the most recent National Adaptation Plan has been made publicly available, and every two years thereafter, until a new plan is published. The Minister will be required to table these reports in Parliament, and provide a written response within six months of receiving the report.

150. The regular preparation of progress reports will ensure climate change adaptation action remains on the agenda, and that there is an incentive to continue to implement the National Adaptation Plan over time. Monitoring and reporting on the implementation of the National Adaptation Plan will drive action and to publicly hold the Government to account. Without regular reporting on the plan’s implementation and effectiveness, adaptation action could be de-prioritised or ignored. Progress reporting supports the overarching policy intent, which is to address the most significant climate risks facing New Zealand.

151. The independence of the Commission will enable it to undertake a fair and unbiased assessment of the Government’s progress, and will ensure transparency and accountability. As an independent crown entity, the Commission will also be in a good place to observe and identify barriers to implementation and to suggest strategies for overcoming those barriers.

An adaptation information gathering power will enable the Minister to request certain organisations to provide information on adaptation

152. The Bill also contains an information gathering power that will allow the Minister to request that specific central and local government organisations (including Crown entities), and lifeline utility providers, produce information on how they are adapting to climate change. Lifeline utility providers are those that provide essential services to the community, and include water, wastewater, transport, energy and telecommunication services. An exhaustive list of reporting organisations is included in section 5ZV(4).

153. Under section 5ZV(1), the Minister may request, in writing, that a reporting organisation provide any or all of the following information:

- an assessment of the current and future effects of climate change in relation to the organisation’s functions, including any metrics and costs used to understand and benchmark the effects of climate change
- a statement of the organisation’s proposals and policies for addressing the effects that climate change will have on the organisation’s functions, including
  - targets set by the organisation to address the effects of climate change
controls that the organisation has put in place to address the effects of climate change
the timeframes for implementing those proposals, policies, targets, and controls.
• an assessment of the organisation’s progress in implementing these proposals, policies, and controls, and achieving its targets
• any matters specified in regulations.

154. The Bill requires organisations to comply with Ministerial requests and, once the information has been received, the Minister must share it with the Commission as soon as practicable.

155. The Minister for Climate Change is considered to be the most appropriate person to administer the information gathering provisions. This is due to the need for a political check and balance to prevent the new reporting requirements from becoming burdensome or onerous for reporting organisations.

156. Section 5ZW also includes a regulation making power. This will allow the development of regulations that specify any or all of the following:
• requirements that relate to information provided in response to a request under section 5ZV(1), including different requirements for different sectors, classes of activity, or geographical areas
• a date by which or time within which requested information must be provided to the Minister
• ongoing or recurring reporting requirements (for example, requiring the provision of further information at regular intervals following a request)
• any administrative matters relating to responses to requests.

157. The regulation-making provisions are not procedural requirements, and it will be possible for information to be requested without necessarily making regulations. Including the regulation-making power in the Bill will enable greater flexibility so that additional information, methodologies or sector-specific requirements can be added in future.

158. The information gathering provisions will ensure that both the Minister and the Commission have access to the information needed to prepare the documents required by the Bill. The intent is not to check organisational compliance with any requirement for organisations to have undertaken risk assessments or adaptation planning, as there is no such requirement. The adaptation reporting power will result in the receipt of adaptation information from a range of organisations, and will have a number of benefits. For instance, the information will:
• support the preparation of the National Climate Change Risk Assessment and the National Adaptation Plan
• make information available to both the public and Government decision-makers
• encourage reporting organisations to better integrate the assessment and management of climate change impacts into their functions
• allow the Government to better coordinate adaptation efforts through the National Adaptation Plan, due to an enhanced understanding of the actions individual organisations are taking to adapt to the effects of climate change and reduce any risks
• allow the Commission to monitor the National Adaptation Plan’s implementation progress more easily.

159. While the adaptation reporting power is available to the Minister, there will be no obligation on the Minister to use the power, and information can still be requested on a voluntary basis at any stage.
FIT WITH THE EXISTING LEGISLATIVE FRAMEWORK

160. The Bill will add to the existing legislative framework pertaining to climate change. Its most significant interaction will be with the existing provisions in the CCRA, and the planned improvements to the New Zealand Emissions Trading Scheme. However, a number of other legislative and policy instruments are also relevant, including the Resource Management Act 1991 (RMA), Local Government Act 2002 (LGA), and the New Zealand Coastal Policy Statement 2010.

Amending the Climate Change Response Act 2002

161. The Bill will amend the CCRA, and result in a single piece of climate change legislation.

162. The Bill will amend the purpose of the Act and the provision relating to the Treaty of Waitangi (te Tiriti o Waitangi), but the other provisions outlined above will be added as a new part of the legislation.

163. As far as possible, the definitions contained in the Bill have been drafted to align with those already contained in the CCRA. Where existing definitions differ from the Bill’s intended effect, a new definition has been added strictly for the purposes of the Bill (for example, removals is defined in the context of emissions budgets).

164. Institutions established under and enabled by the CCRA will interact with the Bill in a number of ways. The key points of interaction will be with the New Zealand Emissions Trading Scheme and the inventory agency (that is responsible for compiling New Zealand’s greenhouse gas inventory data).

The New Zealand Emissions Trading Scheme will be a key tool in achieving emissions budgets and the 2050 target

165. The Climate Change Response Amendment Bill (CCRAB) will be introduced later this year, and will include a number of improvements to the NZ ETS. The key improvement will be to provide the NZ ETS with a framework to ensure that its unit supply settings align with the emissions budgets and ultimately with the 2050 target. These interactions are illustrated in the diagram below.

Section 5N(2)(b) of the Climate Change Response (Zero Carbon) Amendment Bill refers to the intended role that the Commission will have in recommending the unit supply settings of the
The operational detail for this function will be included in the CCRAB. This will allow the Committee to consider the Commission’s role in the context of the substantive improvements to the NZ ETS.

*The Commission will use New Zealand Greenhouse Gas Inventory data to monitor progress towards emissions budgets and the 2050 target*

167. The Climate Change Response Act 2002 also enables the delivery of New Zealand’s Greenhouse Gas Inventory. The data contained in each Inventory report will be the same data that the Commission uses to track New Zealand’s progress towards its emissions budgets and 2050 target.

*A number of other statutes and policy instruments are also relevant to climate change adaptation*

168. Under the RMA and LGA, councils are responsible for preparing communities for climate change, and managing risks. In practice, however, these statutes are inconsistently implemented.

169. Councils appear to have a good understanding of their responsibilities, but many have noted that the lack of alignment across legislative and policy instruments leads to confusion around what is expected in terms of adaptation measures. For example, a council noted that the Housing Accords and Special Housing Areas Act 2013 appeared to prioritise housing supply over natural hazard management considerations under the RMA.

170. There is some misalignment in the way that climate change measures are incorporated across legislation and policy instruments. For example, while the Building Act 2004 focuses on a 50 year design life, the New Zealand Coastal Policy Statement requires local authorities to look forward ‘at least 100 years’, and the LGA requires 30 year infrastructure plans. As a result, the national response to the effects of climate change is not coordinated, and the lack of alignment and prioritisation impedes a planned approach to adaptation.

171. One consequence of not having a planned approach is that adaptation is not consistently factored into decision-making. This creates a risk that new Government initiatives are not able to deliver the planned benefits, because they could increase New Zealand’s exposure to climate risk.

172. While the Zero Carbon Amendment Bill will not immediately solve the misalignment across existing legislation or implementation issues, it will provide national leadership and direction through the National Adaptation Plan.

173. The following table details the legislative and policy requirements that currently exist in respect of climate change adaptation.

<table>
<thead>
<tr>
<th>Statute/policy instrument</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Management Act 1991 (RMA)</td>
<td>Requires councils to control the use of land in order to manage the risks of natural hazards and have particular regard to the effects of climate change.</td>
</tr>
<tr>
<td>New Zealand Coastal Policy Statement 2010 (NZCPS)</td>
<td>Includes policies which must be given effect to by councils for managing coastal hazards and climate change under the RMA, including sea-level rise, storm surge and wave height under storm conditions over at least a 100 year timeframe.</td>
</tr>
</tbody>
</table>
National Policy Statement for Freshwater Management 2011

Regional councils must have regard to the reasonably foreseeable impacts of climate change when setting freshwater quality limits and environmental flows under the RMA.

Local Government Act 2002 (LGA)

Outlines the administrative and management responsibilities of regional and district councils for matters such as land management, utility services (three waters) and the provision of services.

Civil Defence Emergency Management Act 2002 (CDEMA)

It provides a framework for local government to plan and coordinate hazard management. A risk management approach must be taken when dealing with hazards. It also requires lifeline utilities to be resilient.

Building Act 2004

A consent authority must refuse to grant building consent if the land on which the building work is being carried out is subject to or expected to be subject to natural hazard. It requires consideration of a 50-year design life, however it is silent on providing for climate change.

Soil Conservation and Rivers Control Act 1941

Requires the prevention and mitigation of soil erosion, and the prevention of damage by floods.

The UK Climate Change Act 2008 was used as the model for the Zero Carbon Amendment Bill

174. In 2008, the United Kingdom enacted the Climate Change Act, which formalised the way that it tackles climate change and provided a clear strategic direction, while allowing for flexibility and innovation. This Act has influenced the development of the Bill.

175. The Climate Change Act established:

- an independent Committee on Climate Change
- an emissions reduction target for 2050
- a system of carbon budgets; and
- a range of adaptation measures.

Since the Climate Change Act 2008 was introduced, the UK’s emissions have reduced significantly

176. Since enactment of the Climate Change Act, greenhouse gas emissions in the United Kingdom have consistently fallen. In 2017, its greenhouse gas emissions were 43 per cent below 1990 levels. Over the same period, the UK economy has increased by two-thirds. The UK met its first two carbon budgets (2008-2012 and 2013-2017) and is now on track to meeting its third (2018-2022).

177. A key part of the Act’s success is the Committee on Climate Change. This Committee has become a trusted advisory body, with reports that are regularly cited by members of Parliament, including members of the opposition. It has also helped to ensure that the UK has remained focussed on achieving the long-term target, despite political fluctuations.

The Zero Carbon Amendment Bill departs from the UK Climate Change Act in a number of ways

178. The UK Act is widely considered to be the best model for climate change legislation, and has been the model for climate change legislation that has since been developed in Sweden,
Denmark, Ireland, and Finland. It has also influenced the development of the Zero Carbon Amendment Bill.

179. The Zero Carbon Amendment Bill is closely modelled on the UK Climate Change Act too. However, there are a number of key differences. These are set out in the table below.

<table>
<thead>
<tr>
<th>Element</th>
<th>Difference</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2050 Target – Consistency with 1.5 °C</strong></td>
<td><strong>UK</strong> The existing 2050 target does not explicitly reference the Paris Agreement, but is at least consistent with the 2°C temperature goal.</td>
<td>• The 2050 target in the Bill is consistent with the global effort under the Paris Agreement to limit global average temperature rise to 1.5°C • The 2050 target recognises the findings of the IPCC special report and the importance of staying within 1.5 °C • NOTE: Proposed amendments to the Climate Change Act 2008 (UK) include a net zero target for 2050.</td>
</tr>
<tr>
<td></td>
<td><strong>NZ</strong> The 2050 target aligns with limiting global average temperature increase to 1.5 °C</td>
<td></td>
</tr>
<tr>
<td><strong>2050 Target – A split gas target</strong></td>
<td><strong>UK</strong> The 2050 target does not distinguish between greenhouse gases</td>
<td>• The target is consistent with the IPCC special report, which recognised the value of different pathways for different greenhouse gases • Distinguishing between biogenic methane and all other gases responds to calls from the agriculture sector to treat greenhouse gases differently according to their short or long-lived characters, and recognises the need to manage the economic impacts of emissions reductions on the agriculture sector. It is also consistent with the scientific differences between short and long-lived greenhouse gases.</td>
</tr>
<tr>
<td></td>
<td><strong>NZ</strong> The 2050 target distinguishes between biogenic methane and all other greenhouse gases</td>
<td></td>
</tr>
<tr>
<td><strong>Emissions budgets – Setting emissions budgets</strong></td>
<td><strong>UK</strong> Carbon budgets are debated in Parliament and subject to an affirmative resolution procedure. This means that carbon budgets must be actively approved by both Houses of Parliament.</td>
<td>• Requiring House approval also has significant timing risks. • High-level policy trade-offs that have multiple impacts on Government policies will be required when setting emissions budgets. It is appropriate for the Government to make these decisions. • Emissions budgets will be the result of complex and detailed analysis. Requiring House approval is likely to result in a highly engineered process, whereby MPs seek independent advice and/or a subcommittee is created • There are other means of achieving cross-party input and support that involve fewer risks and may be more effective (e.g. consultation with a House committee or other party leaders before making a decision on an emissions budget) • The model chosen will allow the final budget to be tabled in the House.</td>
</tr>
<tr>
<td></td>
<td><strong>NZ</strong> Emissions budgets will be set by the Government following consultation with representatives of the other political parties represented in Parliament, and will be notified in the New Zealand Gazette. A copy of the notified emissions budget will be presented in the House.</td>
<td></td>
</tr>
</tbody>
</table>
Parliament and provide the opportunity for debate.

<table>
<thead>
<tr>
<th>Adaptation – Consideration of adaptation by the Commission</th>
<th>UK</th>
<th>NZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Committee on Climate Change delegates adaptation to a sub-committee.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptation and mitigation will both be considered by the Commission.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- In the UK Act, adaptation was considered to be less important due to it having its home in a sub-committee, as such it received three times less funding than mitigation.
- In the UK, the coordination of adaptation and mitigation advice was lacking as a result of this decision.

<table>
<thead>
<tr>
<th>Adaptation</th>
<th>UK</th>
<th>NZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is a 5 yearly cycle for refreshing adaptation instruments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There will be a 6 yearly cycle for refreshing the risk assessment and the adaptation plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The 6 yearly cycle will enable easier implementation as it aligns with local government and land transport funding cycles which take place every 3 years.