



The Zero Carbon Bill

New Institutional Architecture and New Challenges

Submission in response to the Climate Change Response (Zero Carbon) Bill

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Introduction

The Sustainability Council fully supports the establishment of a Climate Commission and carbon budgeting process. The Bill provides the new institutional architecture, but important amendments are needed for it to deliver on the purpose of the reform and provide a sound carbon budgeting framework. This submission focuses on those key areas. We appreciate the opportunity to contribute and wish to be heard in support of this submission.

The Council has taken a strong interest in mechanisms to decarbonise New Zealand. In 2012, it published “The Carbon Budget Deficit” to provide a detailed analysis of New Zealand’s past lack of action and identified required reforms.¹ Key conclusions were that:

- New Zealand needed a long-term plan for cutting emissions and that a carbon budgeting framework was an essential institutional reform for generating and sustaining such a plan.
- A Climate Commission is needed to run the nation’s carbon budgeting process, in order to bring independence, transparency and a non-political centre for publicly exploring options.

Since the Sustainability Council first proposed a UK-style carbon budgeting framework and a Climate Commission for New Zealand, the concept has progressively gained wider endorsement in New Zealand.² By September 2014, it was supported by the Green party, the Labour Party, Generation Zero, New Zealand First and the Maori party, and was recommended by the Parliamentary Commissioner for the Environment in 2017.

¹ Sustainability Council. *The Carbon Budget Deficit*, September 2012. This followed up on the Council’s 2008 publication, “The Carbon Challenge”, an appraisal of the ETS that was later published in book form by BWB.

² Sustainability Council. *Carbon Budgeting – Integrated Planning for Climate Action*, August 2013.

1. The Case for Changing the 2030 Target

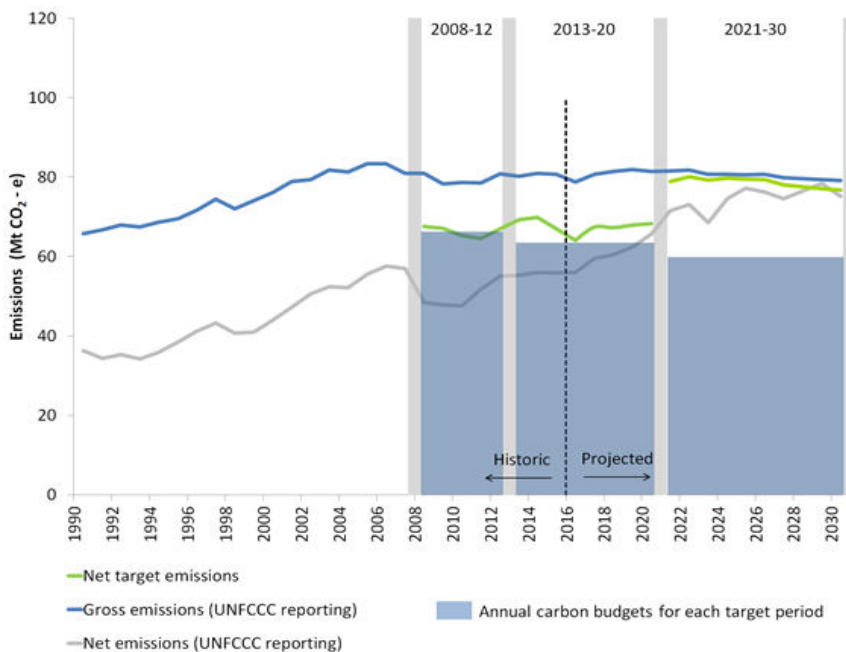
1.1 The 2020s Carbon Budget and the NDC

A key focus of the Bill is to establish a mechanism for setting carbon budgets. An important question is how it engages with New Zealand’s default carbon budget for the decade to 2030. This was set through New Zealand’s pledge under the Paris Agreement – its Nationally Determined Contribution (NDC).³

- New Zealand has pledged to make an 11% cut on 1990 emissions (the base year).
- This is also expressed as a 30% cut on 2005 emissions by 2030.

Gross emissions rose 21% from 1990 to 2005 and have since been essentially at that level. Under present policy settings they are projected to decline only a little between now and 2030, so additional measures will be needed to deliver a roughly 30% cut on that ‘business as usual’ projection. The Ministry for the Environment (MFE) graphic below shows recent emission trends and the progressively stronger targets New Zealand has adopted over three periods of accounting: from 1990 levels, to minus 5% of 1990 levels, and to minus 11% for the NDC.

New Zealand’s Emissions and Targets



³ The following abbreviations are commonly used through this submission:

NDC - Nationally Determined Contribution

Mt – Megatonne of carbon dioxide equivalent

UNFCCC – The United Nation Framework Convention on Climate Change, under which the Paris Agreement sits

MFE – Ministry for the Environment

The Bill makes no specific reference to the NDC target. It also sets no equivalent target for all emissions in 2030. Instead, the Bill proposes a target for a single gas.

It proposes simply a 10% reduction in methane from biological emissions by 2030.⁴ As agricultural methane accounts for over a third (36%) of New Zealand's total emissions, if they are targeted to be cut by only 10%, then **non-agricultural emitters would need to cut at a much faster rate** than 10% over a decade in order to deliver an overall 30% cut.

In carbon budgeting terms, the key measure is the volume of emissions to be cut and the distribution of responsibility for that. Under the Bill's proposed 2030 target:

- **Farms face only a 5% cut on the total quantity of methane** they would otherwise emit over the decade.⁵
- **This leaves all other types of emitters with a much bigger share of the responsibility for cutting or offsetting emissions** to meet the overall NDC budget.

We will provide a supplementary submission on this distribution of responsibility for cutting emissions.

1.2 Context: The Converging Challenges Agriculture Faces

Before further considering the implications of the 2030 target as currently framed, it is important to step back and look at the strategic landscape for pastoral agriculture.⁶ It faces two converging challenges:

- Increasing awareness of the impacts of meat and dairy production on the environment, and
- Direct competition from plant-based foods that provide an alternative to animal protein products and have much lower environmental footprints.

Climate change impacts are an important part of the environmental pressures being felt and are a key marketing tool for plant-based competitors. In the last year, there has been a wave of international studies calling for major reductions in pastoral agriculture, including:

- In September 2018, a respected think tank concluded that Europe's dairy and meat production needs to be roughly halved by 2050 because it has exceeded safe bounds for greenhouse gas emissions, nutrient flows and biodiversity loss.⁷

⁴ Pastoral agriculture accounts for 88% of those emissions, and waste essentially the remainder.

⁵ This assumes a straight-line reduction in emissions to 2030.

⁶ Much of the following was first set out in: Sustainability Council and Envirostrat, *Market Pressures for Pastoral Products to go Carbon Neutral, and the 2050 Climate Target*, 2019.

⁷ http://www.risefoundation.eu/images/files/2018/2018_RISE_LIVESTOCK_FULL.pdf

- Early this year, the EAT Lancet Commission set out a planetary health diet, which recommends that North American consumption of meat drop by 84% and European consumption by 77%.⁸ A subsequent Lancet Commission review of the confluence of human health pandemics and climate change stated that: “Unhealthy and unsustainably produced food poses a global risk to people and the planet. ... Achieving healthy diets from sustainable food systems for everyone will require substantial shifts towards healthy dietary patterns, large reductions in food losses and waste, and major improvements in food production practices”.⁹

One environmental performance standard that will be critical is emissions neutrality.

The strategic outlook is that zero net emissions is not a luxury positioning but will increasingly be a necessity for the pastoral sector. This will be driven by markets, and the private standards for measuring carbon footprints will be at least as important for pastoral producers as regulatory decisions on agricultural gases. Regulation will be needed to ensure fairness in the national response to climate change, and will be important to setting sectors on the path to emissions neutrality before market pressures fully take hold.

But **market pressures are increasingly aligning in the West to set a pathway for emissions neutrality to become a market requirement.**¹⁰ It is unclear how quickly the impacts of this will be felt and shape global standards but a climate target that requires producers to take very limited responsibility for methane by 2030, and for only a minority by 2050, could soon be significantly out of step with private sector policies and international markets. Global value chains and brands are already making emissions neutrality commitments for 2050 (for example Danone). In New Zealand, Synlait has a net zero emissions target for 2050.

Governments have little ability to protect farms against major shifts of this form in international markets. Pastoral farms will increasingly need to reduce their emissions and offset the remainder in order to access premium returns and, ultimately, to gain market access. So rather than viewing the agriculture greenhouse gas challenge as a question of how much protection from regulation should be given, **it is vital to shift the focus onto how to help the pastoral sector attain emissions neutrality for its products and be rewarded in the marketplace for this.**

⁸ <https://eatforum.org/eat-lancet-commission/eat-lancet-commission-summary-report/>

⁹ [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(18\)31788-4.pdf?utm_campaign=tleat19&utm_source=HubPage](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(18)31788-4.pdf?utm_campaign=tleat19&utm_source=HubPage)

¹⁰ While the threat to traditional milk sales is very clear in the West, there could be a split response globally, at least initially, as China for example is currently expected to triple its demand for dairy products within the next three decades. <https://edairynews.com/en/chinas-growing-milk-consumption-a-global-concern-says-study-58608/>

1.3 Unequal Share of Emissions Reduction Burden

The 2030 target is framed as a discipline on agricultural emissions - that there will be progress by the end of the decade.¹¹ But in the context of the NDC, **the target also acts as a protection against more than a 10% cut** - as further detailed below.

On current information, other emitters would need to take responsibility for cutting multiple times the volume that methane emissions from farms has to be cut.

The inequality arises from targeting particular emitters of a single gas, instead of emissions in total. No principled basis is offered for this in the Regulatory Impact Statement (RIS) and related documents, nor are the distributional impacts of this target assessed.¹² In particular, no case is advanced to show that it would be better to abate other gases than methane once a 10% cut in methane has been achieved. Neither is any scientific case made for treating methane differently with respect to the 2030 target (although this does feature in the 2050 target setting and is discussed below in that context).

The expert group report (cited by the relevant cabinet paper) states that “biological emissions can be reduced by 10–21% in 2030, and by 22–48% in 2050”.¹³ It further notes that higher adoption rates than those assumed would deliver greater levels of savings. As a proportion of the savings will be from nitrous oxide, the amount of methane that could confidently be cut by 2030 is unclear. However, the feasible reduction is clearly more than 10%, especially if adoption rates are high. So the proposed protection against cuts in biological methane of more than 10% works directly against relieving constraints on the carbon budget that look set to force other emitters to pick up a greater share of the budget responsibility.

Such inequality is corrosive of public trust and trust is important for acceptance of a decarbonisation project that requires adjustment by all sectors of the community.

1.4 Target Interferes with Commission’s Independence

This unequal responsibility for emissions cuts, based on the type of gas, is not something the Commission has discretion to override. The Commission must first have “particular regard to” how the 2050 (and so 2030) target can be met, and only then look at other considerations (clause 5Z(2)(a)). In examining how the target can be met, the Commission must consider “the amount by which *each greenhouse gas* must be reduced to meet the emissions budget and the 2050 target” (clause 5W(2)(2), emphasis added). It is the combination of these requirements and the particular wording of the 2030 target that sets the straightjacket.

¹¹ “The 2050 target will also stipulate the reductions in biogenic methane that are required by 2030 as an interim step”. Cabinet paper, *Biogenic methane reductions required under the climate change Bill*, May 2019.

¹² The RIS also highlights elsewhere the importance of having the flexibility of cuts in one gas to offset another. MFE, *Regulatory Impact Statement Zero Carbon Bill*, 2019.

¹³ BERG, *Report of the Biological Emissions Reference Group*, December 2018, p 27.

This is because the form of 2030 target is different to that of the 2050 target. While the 2050 target for biogenic methane emissions requires that they “**are at least 24% to 47% less than 2017**”, the 2030 target requires that they are “**are 10% less than 2017 emissions**” (clause 50(1), emphasis added). The former sets a minimum requirement on what must be delivered. The 2030 target sets both a minimum and a maximum.

This constraint interferes with the independence of the Commission:

- It would be forced to privilege certain types of emitters above all others, regardless of the impacts.
- On the information currently available, the wording appears to compel the Commission to cast emissions budgets in the 2020s that would artificially constrain the allocation of responsibility for reducing methane emissions.¹⁴
- In particular, it would appear to override the Commission’s duty to otherwise consider “the distribution of those impacts across the regions and communities of New Zealand, and from generation to generation” (clause 5Z(2) b (vii)).

One of the two most important reasons for establishing the Commission is **to provide a transparent and trusted process for developing decarbonisation plans** that the community as a whole can support. The 2030 target would undermine the independence that the Commission requires for that role.

The Environment Select Committee noted when reporting on its visit to study the UK carbon budgeting process and its equivalent to the Commission that: “The [UK Committee’s] success is in large part due to its reputation for independence, objectivity and producing highly credible advice”.¹⁵

1.5 Lack of Consistent Basis for Assistance

“A just and inclusive society (ensuring a careful transition)” is one of the three pillars for the government’s framework for climate policy.¹⁶ Pastoral farms should be eligible for the assistance the government contemplates, alongside all other emitters. However, to be fair, such assistance should be based on a clear and consistent set of principles and policies. There is no evidence in the official documentation of any assessment of the proposed assistance to farms via the 2030 target, and how this would compare with other assistance under consideration.

Other emitters have a direct stake in the level of assistance given to pastoral farms. Around 70% of total agricultural emissions would be protected under the 2030

¹⁴ While the Bill’s text appears to give this result, it is acknowledged that there are a number of interlocking clauses that make it complex and legal interpretation may be needed to fully test the meaning.

¹⁵ Environment Select Committee, *International exchange 2018: Climate change legislation and policies*, Report of the Environment Committee, November 2018.

¹⁶ Cabinet Minute, May 2018, CAB-18-MIN-0218.

target. **To the extent that protection is delivered through higher emissions prices that are uncompensated, unprotected emitters (notably households and SMEs) would disproportionately fund the protection.** In that case, the 2030 target would act as the root driver of a significant unquantified cross-subsidy to farms.

1.6 Inconsistent with Paris Agreement

Because the 2030 target limits the extent to which the Commission and the Minister can consider cuts to biological emissions (clause 5z(1)), and deeper cuts are clearly feasible, the clause would not be consistent with New Zealand's obligations under the Paris Agreement.

New Zealand is soon to consider whether it will strengthen its NDC (as a part of UNFCCC processes). Article 4.3 of the Paris Agreement requires that "Each Party's successive nationally determined contribution will ... reflect its highest possible ambition". New Zealand would not be free to consider its "highest possible ambition" should the Bill continue to prescribe a limit below which plans for cutting methane emissions cannot go.

1.7 Target Fails a Key Stress Test

An overarching reason for altering the 2030 target is that it fails a key stress test: what happens if the emissions projections for agriculture turn out to be wide of the mark?

A reason to address this question is the risk that demand for pastoral products shrinks as a result of the environmental and market pressures outlined above. For the purpose of the stress test, it is not necessary to fully understand how fast such change could take place. The question for legislators is simply: what happens if pastoral farming contracts in New Zealand?

Business as usual emissions are no longer projected to grow – stasis is the official baseline for agriculture in New Zealand. And if the pressures identified above look set to cause just a 5% contraction in sales over the 2020s, that is all the 2030 target can absorb.

If new projections show more than a 5% contraction, both the Commission and the Minister would be staring at statutory wording that obliges them to plan for ways to hold methane emissions up – to not let them fall more than 10% by 2030. The same straightjacket that would prevent them planning for deeper methane cuts would perversely be telling them they need to look at tools to incentivise methane producers to keep emitting.¹⁷

¹⁷ A significant change in projected emissions before 2026 should trigger a budget review under 5ZB(1)(b) and if the first budget is already running, it would likely concentrate effort on holding to the target in the five years from 2026. If the degree of change qualified as "exceptional", then the budget could be revised at most times (clause 5ZB(6)). Anyone doubting that there would be people keen to see the legal position adhered to even if it drove perverse outcomes would benefit from studying the history of the ETS in operation.

A 5% change over a decade is a minor variation for a projection and the contraction could be a good deal more if consumer preferences follow headlines such as “Avoiding meat and dairy is ‘single biggest way’ to reduce your impact on Earth”.¹⁸ Something more than a 5% contraction could also arise from other circumstances, such as an economic downturn or series of droughts, and in a perfect storm there could be some combination of all of these along with the waste sector continuing to reduce its emissions.¹⁹

A change in the legislated target is the probable end game. Given the time required to get an amended target through Parliament, the lag times and (intended) restrictions placed on recasting emissions budgets, the interlocking forward planning required for the ETS, the wheels could turn very slowly. In the meantime, other emitters would need to cut more or pay more for the budget to be met.

8 Recommended Amendments

The 2030 target was a late addition to the Bill and the Bill was not structured to accept such protection for farms.²⁰ The provision fails to pass a series of basic tests and is not sustainable.

A key reason for establishing the Commission is to remedy New Zealand’s lack of planning for how to decarbonise the economy. Work on high-level pathways has been completed in recent years, but not the detail that allows sector plans and timetables to be developed with any confidence. The setting of a strong yet achievable target should proceed from such work already being in place.

That order of business can still be met as New Zealand has already set an interim 2030 target in the form of the NDC commitment to 30% below 2005 emission levels. It is interim as the government has committed to review whether it will be strengthened as a part of UNFCCC processes.

In order to assess if it will upgrade the target, New Zealand will need to undertake the sort of detailed work that the Commission is charged with completing to develop emissions budgets for the 2020s. **If the Commission were at the same time required to report on what it saw as a strong and achievable 2030 target, then the NDC target could serve as the placeholder and agreed minimum meanwhile.** Providing the Bill specifies the interim target is to be “at least 30% below 2005” levels, then if the Commission recommends a new and stronger target, and the Minister agrees, then the emissions budgets for the 2020s can be based on the more stringent target without having to change the statute.

¹⁸ <https://www.theguardian.com/environment/2018/may/31/avoiding-meat-and-dairy-is-single-biggest-way-to-reduce-your-impact-on-earth>

¹⁹ The waste sector is responsible for 11% of biogenic methane and its emissions fall, this impacts just the same as if agricultural emissions fall – and they have fallen 15% since 2002. Cabinet paper, *Biogenic methane reductions required under the climate change Bill*, May 2019.

²⁰ The Cabinet met to first consider a new 2030 target on 2 May 2019, and the Bill was introduced on 8 May 2019. The main content of the Bill was set by Cabinet on 19 December 2018.

We therefore recommend the following changes with respect to the 2030 target (noting that further changes to these clauses are proposed in the next section of this submission dealing with the 2050 target):²¹

5O Targets ~~for 2050~~

(1) The 2050 target for emissions reduction (the **2050 target**) requires that—
(a) net emissions of greenhouse gases in a calendar year, other than biogenic methane, are zero by the calendar year beginning on 1 January 2050 and for each subsequent calendar year; and

(b) gross emissions of biogenic methane in a calendar year—

~~(i) are 10% less than 2017 emissions by the calendar year beginning 10 on 1 January 2030; and~~

~~(ii) are at least 24% to 47% less than 2017 emissions by the calendar year beginning on 1 January 2050 and for each subsequent calendar year.~~

(2) The 2030 target for emissions reduction (the **2030 target**) requires that net emissions of greenhouse gases in calendar year 2030 are at least 30% less than emissions in the 2005 calendar year. In this section, **2017 emissions** means the gross emissions of biogenic methane for the calendar year beginning on 1 January 2017.

(3) In this section, **2017 emissions** means the gross emissions of biogenic methane for the calendar year beginning on 1 January 2017.

5P Target reviews

(1) The Commission must review ~~the 2050 target~~ —

(a) the 2050 target when preparing advice under section 5X on setting an emissions budget for an emissions budget period beginning on or after 2036; and

(aa) the 2030 target when preparing advice under section 5X on setting an emissions budget for the emissions budget period beginning on 2021;

(b) a target at any other time the Minister requests a review.

5R Government response to target review recommendations

(1) If the Minister receives a 2050-target review recommendation under section 5Q, the Minister must advise the Commission in writing of the Government's response to the recommendations within ~~12~~ 4 months of receiving the recommendation.

²¹ At this point no change is recommended to 5Q as there does not need to be a test of changed conditions.

2. The 2050 Target

2.1 An Interim Target

Background work accompanying the Bill has generated additional analysis to assist the framing of a 2050 target. Following on from the Vivid Economics report commissioned by a cross-Parliamentary committee²² the new reports have further charted pathways to 2050 for emissions reductions. However **New Zealand does not yet have a level of detailed analysis available that allows for the type of information base that is desirable for long-term target setting.** In particular, the studies prepared in connection with the Bill generally do not reveal the marginal cost of abatement by sector and sub-sector, or the timelines required for implementation of specific abatement technologies.²³ “The key message from the economic analysis is one of uncertainty and a wide range of possible impacts” the RIS states, noting that it is technically feasible to meet a 2050 target for zero net emissions.²⁴

At the same time, long-term target setting has to grapple with important climate science uncertainties and the issues they raise. The ‘favourable uncertainties’ are principally technology-related: how much more economic certain devices for emissions saving and carbon capture will be in future. Each gain is useful, but this is not so important in determining the pace of emissions reduction as the economics of rapid abatement are already convincing, based on estimates of the value of harm avoided.

It is the ‘worrying uncertainties’ that dominate the equation: the possibility that harm from rising temperatures will turn out to be more costly and damaging than currently assumed. These include:

- Feedback effects will be more serious than currently allowed for in the climate models relied on, leading to a faster than projected rise in the atmospheric concentrations of greenhouse gases.
- Sea levels will rise faster than projected, and or tipping points will be crossed before temperatures can be stabilised.
- Populations affected by climate change will be more destabilised than assumed and conflict will be grater than so far factored in.

These and other climate-linked uncertainties are all essentially one-way in their nature: for the question generally is how much more damaging could the outcome

²² Vivid Economics, *Net Zero in New Zealand: Scenarios to achieve domestic emissions neutrality in the second half of the century*, Report prepared for GLOBE-NZ, March 2017.

²³ The NZIER report projects only net emissions (including forestry) and the tabled results (released under the OIA) are not disaggregated by GHG gas or sector. Vivid Economics et al employs a sector by sector approach but it reports changes in emissions for only some sectors.

²⁴ RIS, p 63. It continues: “It may be technically feasible to meet the proposed target options (including the most stringent), but it depends on significant innovation and afforestation, starting early with strong price signals, a strong signal for domestic transition, accessing least-cost abatement across all sectors and cross-cutting levers in the economy. It also relies on the social and political will to push ahead”.

be than is already assumed. There is little prospect of results that would suggest a cooling overall. Thus, what is an appropriate target for humanity, and New Zealand in turn, depends a good deal on how much risk is considered tolerable and ethical, particularly in the face of uncertainty, and the fair distribution of the resulting costs and burdens.

Against this backdrop, the Bill's provision for reviews of the target is perhaps more important than any current target, providing it is sufficiently ambitious to galvanise planning. The first phase of New Zealand's work to decarbonise will involve a lot of investment in simply assembling the 'machinery' required to make and implement ambitious plans. Having failed to initiate any serious effort to generate a plan in the past, even when it was an obligation New Zealand committed to in 2010 under UNFCCC processes, there is a great deal of systems building to do.²⁵ Once such machinery is up and running, and deeper sector specific studies have been completed, New Zealand will have a much better ability to assess what the country is capable of achieving and what tradeoffs it is prepared to make.

On that basis, a target of greenhouse gas emissions neutrality by 2050²⁶ is a reasonable interim objective to await a full assessment by the Commission, providing there is a review as soon as the Commission has completed its priority task of preparing proposed emissions budgets for the 2020s. We suggest the review be completed not later than July 2022.

We have suggested the target be amended to zero net emissions as the Bill's proposal to treat biogenic methane differently in this context lacks justification. The Bill's proposal does not however constrain the Commission in the way the 2030 target does. In the end it expresses a potential limitation on the government's willingness to accept an emissions budget that is as stringent as zero net emissions, but does not foreclose that option.

2.2 Target Reviews

In line with the Paris Agreement's requirement for each new commitment to reduce emissions to be stronger than the last, it seems appropriate that the Bill also adopt this principle. At the same time, the Bill could provide a mechanism to alter the target by Order in Council, provided the adjustment was a strengthening. Together this would **set up a deliberate asymmetry, where targets can be strengthened relatively simply** but any weakening of a target for would require Parliamentary process.

²⁵ At the December 2010 United Nations Framework Convention on Climate Change (UNFCCC) meeting in Cancun, all parties agreed that, "developed countries should develop low-carbon development strategies or plans." The Ministry for the Environment however told WWF NZ that: "The decision by the Conference of the Parties at the 16th Conference of the Parties to the UNFCCC in Cancun that developed countries should develop low-carbon development strategies or plans is not a mandatory requirement and New Zealand does not have such a strategy."

²⁶ As overwhelmingly favoured when options were consulted on.

We recommend the following changes (in addition to those suggested for the 2030 target):

5O Targets ~~for 2050~~

- (1) The 2050 target for emissions reduction (the **2050 target**) requires that—
- ~~(a) net emissions of greenhouse gases in a calendar year, other than biogenic methane, are zero by the calendar year beginning on 1 January 2050 and for each subsequent calendar year; and~~
 - ~~(b) gross emissions of biogenic methane in a calendar year—~~
 - ~~(i) are 10% less than 2017 emissions by the calendar year beginning 10 on 1 January 2030; and~~
 - ~~(ii) are at least 24% to 47% less than 2017 emissions by the calendar year beginning on 1 January 2050 and for each subsequent calendar year.~~

5P Target reviews

- (1) The Commission must review the 2050 target—
- (a) when preparing advice under section 5X on setting an emissions budget for an emissions budget period beginning on or after 2036; (aa) not later than July 2022; and
 - (b) at any other time the Minister requests a review.

5R Government response to target review recommendations

- (1) If the Minister receives a 2050 target review recommendation under section 5Q, the Minister must advise the Commission in writing of the Government's response to the recommendations within 12 months of receiving the recommendation.
- (2) The Minister must present a copy of the Government's response to the target review recommendation to the House of Representatives as soon as practicable after it has been provided to the Commission
- (3) If the Commission's review of a target results in a recommendation to strengthen it, the Minister may alter the target to a stronger one by Order in Council.

3. Emissions Budgets, Plans and Offsets

3.1 Early Access to Reduction Plans

The Bill provides for emissions budgets to be set well in advance, enabling clear signalling of the necessary degree of change ahead for emitters at any point in time. However it provides inadequate time requirements on government to deliver the matching emissions reduction plan.

The emissions budgets will certainly provide a useful first approximation of what emitters need to consider when planning ahead. There is also a limit to how far ahead the publication of an emissions reduction plan will be useful if its implementation is beyond the term of a government.

In order to overcome the constraints, we recommend that a two part approach be taken:

- A provision that mirrors the UK requirement for emissions reduction plans to be published as soon as is reasonably practicable; and
- A provision that **requires draft plans to be published on an ongoing basis ahead of a final plan.**

The second allows a dialogue to begin well in advance of budget periods commencing. In particular, it forces governments to think ahead and show potential implications of decisions being taken that may otherwise not be worked through or made public. The following amendments are suggested.

5ZD Requirement for emissions reduction plan

(1) The Minister must prepare and publish a plan setting out the policies and strategies ~~for capable of~~ meeting an emissions budget.

(2) The plan must be prepared and published— 5

(a) after the relevant emissions budget has been published under section

5ZA; ~~but~~and

(b) as soon as reasonably practicable before the commencement of the relevant emissions budget period.

(c) draft emission reduction plans are to be published on an ongoing basis ahead of a final plan, with initial drafts provided within two years of a relevant emissions budget being set.

3.2 Carbon Credit Offsets

The opening principle set out in section 5W is an important starting point: “Emissions budgets must be met, as far as possible, through domestic emissions reductions and domestic removals”. But three other principles approved by cabinet for regulating the use of carbon credits have not been incorporated into the Bill.²⁷ The following proposes changes to pick up these additional principles:

²⁷ These are identified in the RIS, along with a fourth that is broadly incorporated in the definition of offshore mitigation (“the credits/units are genuine and have environmental integrity”).

5W How emissions budgets to be met

(1) Emissions budgets must be met, as far as possible, through domestic emissions reductions and domestic removals, and offshore mitigation may only be used provided that:

(a) the government maintains progress towards its transition to a net zero target;

(b) it makes economic sense to do so; and

(c) the government maintains a steadily rising domestic carbon price, to maintain incentives for domestic abatement.

A further important gap is that the key issue of the environmental integrity of any foreign carbon credits is inadequately addressed. Given New Zealand's recent experience with credits that are entirely lacking in environmental integrity, and its potential reliance on credits in future, this is a significant concern.

New Zealand allowed a slew of carbon credits without integrity to be used in its ETS and will be relying on these for a significant portion of its pledged emissions savings for the period to 2020 (based on the units showing in New Zealand's registry). The RIS states that: "There is widespread (officials and the public in consultation) concern that the experience with fraudulent units in the Kyoto Protocol period not be repeated. New Zealand is leading internationally to ensure that it is able to identify, and have access to, units with environmental integrity".

Under the Bill's definition of what it terms "offshore mitigation", carbon credits can be included in an emissions budget if they are either the qualifying product of a particular project overseas, or are qualifying units from an approved emission trading scheme in another country.

The main criteria that project credits must meet are that they are "robustly accounted for" and "represent an actual additional, measurable, and verifiable reduction". However, these criteria are not of themselves sufficient to ensure integrity.

The requirement for credits to be accepted from another country's ETS is that this "triggers the reduction of carbon dioxide equivalent". Given the extent to which the integrity of ETS schemes can be readily debased, this is an inadequate test.

We submit that in order to set an objective standard for the integrity of carbon credits:

- **The Commission should be charged with defining the criteria for a credit to qualify for inclusion in a budget;**
- This responsibility be recorded in the Bill's definition of offshore mitigation; and
- Any credits from another country's ETS proposed for use here must also meet the same criteria, as follows:

offshore mitigation means emissions reductions and removals, or allowances from emissions trading schemes,—

- (a) that originate from outside New Zealand; and
- (b) that are expressed as a quantity of carbon dioxide equivalent; and
- (c) that are robustly accounted for to ensure that, among other things, double counting is avoided; and
- (d) that either—
 - (i) represent an actual additional, measurable, and verifiable reduction of an amount of carbon dioxide equivalent – as determined by specific criteria set by the Commission; or
 - (ii) are an emissions trading scheme allowance that triggers the reduction of carbon dioxide equivalent, and meet the criteria set by the Commission for (d)(i).

3.3 Scope of Commission’s Considerations

The scope of issues the Commission must consider is generally good but would benefit from a clear requirement for distributional effects to be considered in general – and not limited to intergenerational effects in 5L(e). This appears to have been the intention in as it is an issue the Commission needs to consider when framing emissions budgets under (5Z(2)(b)(vii).

Both of these sections would also benefit from an additional requirement **to consider the risks and uncertainties associated with acting and not acting**. As projections of future impacts resulting from any given level of warming carrying significant uncertainty, and the precise impacts of many human actions will be uncertain, it is important to explicitly distinguish the levels and nature of the uncertainties, risks and unknowns as a part of the decision making process.

At present, the Commission is not obliged to consider uncertainty – which is different to risk – and is obliged to consider risk only in the context of its distribution (5L(e)).

Risk can be calculated where there are known impacts and known probabilities. Uncertainty is present when there are known impacts, but unknown probabilities. Ignorance arises if there are unknown impacts and unknown probabilities.

A key approach developed to assist in responding to uncertainty and lack of knowledge is the precautionary principle. “The precautionary principle is an overarching framework of thinking that governs the use of foresight in situations characterised by uncertainty and ignorance and where there are potentially large costs to both regulatory action and inaction”.²⁸ We submit that **it is important for the Commission to also be required to adopt a precautionary approach** when considering responses to climate change.

The following amendments are suggested:

²⁸ European Environment Agency, *The Precautionary Principle in the 20th Century*, March 2002, p 187.

5L Matters Commission must consider

In performing its functions and duties and exercising its powers under this Act, the Commission must consider, where relevant,—

- (a) current available scientific knowledge; and
 - (b) technology that could be efficiently adopted and the likelihood of any advantages arising from early adoption of the technology; and
 - (c) the likely economic effects; and
 - (d) social, cultural, environmental, and ecological circumstances, including differences between sectors and regions; and
 - (e) the distribution of benefits, costs, and risks – including between generations; and
 - (f) responses to climate change taken or planned by parties to the Paris Agreement ~~or and~~ to the Convention.
- (g) the level and nature of risks, uncertainties and unknowns associated with acting and not acting;

5Z Matters relevant to advising on, and setting, emissions budgets

(2) The Commission and the Minister must—

- (a) have particular regard to how the emissions budget and 2050 target may realistically be met, including consideration of the matters set out in section 5W(2); and
- (b) have regard to the following matters:
 - (i) the emission and removal of greenhouse gases projected for the emissions budget period:
 - (ii) a broad range of domestic and international scientific advice:
 - (iii) existing technology and anticipated technological developments, including the costs and benefits of early adoption of these in New Zealand:
 - (iv) the need for emissions budgets that are ambitious but technically and economically feasible:
 - (v) the results of public consultation on an emissions budget:
 - (vi) the impact of the actions already taken and proposed to achieve the 2050 target:
 - (vii) the distribution of those impacts across the regions and communities of New Zealand, and from generation to generation:
 - (viii) the implications of that distribution for mitigating, and adapting to, climate change:
 - (ix) economic circumstances and the likely impact of the Minister’s decision on taxation, public spending, and public borrowing:
 - (x) the responses to the threat of climate change by all parties to the Paris Agreement ~~or and~~ to the Convention:
 - (xi) New Zealand’s relevant obligations under international agreements.

(g) the level and nature of risks, uncertainties and unknowns associated with acting and not acting;

5N Commission must act independently and follow precautionary principle

(1) The Commission must act independently and follow the precautionary principle in performing its functions and duties and exercising its powers under this Act.

(2) However, the Minister may direct the Commission to have regard to Government policy for the purposes of the Commission—

- (a) recommending unit supply settings of the New Zealand emissions trading scheme; and
- (b) providing advice about New Zealand’s nationally determined contributions under the Paris Agreement (in a report requested under section 5K).

4. Accountability

4.1 Purpose Statement

The proposed purpose clause is an addition to a weak purpose section in the parent legislation, the focus of which is simply to “enable New Zealand to meet its international obligations” (s3(a) of the Act). A purpose statement sets the intent of a law and the Bill provides an opportunity to strengthen that intent, both with respect to process and objective.

The Bill however proposes little additional substance to the purpose section and appears to provide little additional direction or accountability. It reads:

4 Section 3 amended (Purpose)

Before section 3(1)(a), insert:

- (aa) 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 the global average temperature increase to 1.5° Celsius above pre-industrial levels; and

Reduced to its essence, the Bill simply “provide[s] a framework” for “policies that contribute to the global effort”. It does not set any standards for that process, nor does it articulate an objective that performance can be tested against clearly.

To do its job, the purpose should define objectives for the Commission and the carbon budgeting process, including that it produce plans for New Zealand’s transition to zero net emissions. Most importantly, however, it should set out a goal for the new focus the Bill brings to the climate change legislation. When announcing the Bill’s introduction to Parliament, the government stated its intent in clear and committed language. “The critical thing is to do everything we can over the next 30 years to limit global warming to no more than 1.5 degrees Celsius and the Zero Carbon Bill makes that a legally binding objective”.²⁹

Yet the Bill merely commits to “policies that contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius”. The wording appears to allow for any level of contribution to satisfy the purpose – rather than an effort that is a fair and proportionate share for New Zealand to make.

²⁹ Media Statement, *Landmark climate change bill goes to Parliament*, Prime Minister and Climate Change Minister, 8 May 2019.

As there are complex and interlocking legal issues to be considered, we do not offer a particular change of wording in this case but urge the committee to **request advice on options for framing a purpose that carries meaningful accountability and to pick up on the government’s pledge to “do everything we can over the next 30 years to limit global warming no more than 1.5 degrees Celsius”**.

4.2 Accountability and Interaction with other Legislation

The purpose of having an emission reduction plan is to decarbonise the economy faster than would otherwise occur. Although the government has indicated that the price mechanism (via the ETS) will be the primary instrument it uses to drive change, it is widely acknowledged that if other mechanisms are used in conjunction, the overall performance is stronger.³⁰ It follows that in preparing an emissions reduction plan, the government should at least take into account the opportunities for coordination between state agencies and between relevant government policies.

Yet clause 5ZK makes such coordination simply something that is expressly permitted, while 5ZJ sets a statutory bar to legal action that challenge whether the government has done enough. The combined effect is to make it discretionary to take account or not of whether any other government actions and policies are in support of the emissions reduction plan, or antagonistic to it.

While the government will naturally be wary of decisions taken in other portfolios being challenged in court on account of a failure to take account of the climate change impacts, we submit that the best way to address this is to in some way make it a duty to take climate change impacts into account, so that the consideration at very least is given, and then determine limits on the expectations flowing from the findings of that consideration. This can be at least in part achieved through making mandatory the “guidance for departments” (clause 5ZL) that is at present simply permissive.

We also submit that 5ZK is too sweeping and that its goal of limiting the court’s power to judicially review decisions of government is inappropriate. **If protection against review is thought to be needed, then precise protections should take the form of limitations stated as a part of the obligations the Bill establishes.**

Our suggested amendments are:

~~5ZJ Effect of failure to meet 2050 target and emissions budgets~~

~~(1) No remedy or relief is available for failure to meet the 2050 target or an emissions budget, and the 2050 target and emissions budgets are not enforceable in a court of law, except as set out in this section. 5~~

~~(2) If the 2050 target or an emissions budget is not met, a court may make a declaration to that effect, together with an award of costs.~~

~~(3) If a declaration is made and becomes final after all appeals or rights of appeal expire or are disposed of, the Minister must, as soon as practicable, present to the House of Representatives a document that —~~

³⁰ Alternatively, the price does not need to be as high to get the same result.

- ~~(a) brings the declaration to the attention of the House of Representatives;~~
~~and~~
~~(b) contains advice on the Government's response to the declaration.~~

5ZL Guidance for departments

(1) The responsible Minister ~~may~~shall issue guidance for departments on how to take the 2050 target or an emissions budget into account in the performance of their functions, powers, and duties (or classes of those functions, powers, and duties).

5 Carbon Accounting

The Bill implicitly takes as its reference point an international accounting conventions perspective. In particular, rather than setting out an accounting framework that encompasses all emissions related to New Zealand, it covers those specified under UNFCCC agreements. This is set out in the Bill's definition of gross emissions:

gross emissions means New Zealand's total emissions from the agriculture, energy, industrial processes and product use, and waste sectors (as those sectors are defined in the New Zealand Greenhouse Gas Inventory)

As rising atmospheric temperatures are a global commons problem and can only be successfully addressed through global cooperation, there is good reason to maintain a set of accounts that reflect UNFCCC rules. But it also needs to be clearly recognised that those rules leave important gaps in the scope of coverage and some of the rules that are not consistent with high standards for atmospheric protection.³¹

Setting aside the issue of what would be a correct set of global accounting rules, it is sufficient to observe that the rules are vulnerable to change, especially if efforts intensify to reduce risks from climate change. In particular, emissions currently outside the scope of the Bill could be brought into UNFCCC agreements in future. For New Zealand, an important issue is international aviation and shipping emissions that are currently left to industry self-regulation. As these constitute around 5% of global emissions and aviation's are forecast to continue to grow significantly, their formal regulation will need to be part of any global emissions reduction effort in the future. This would have significant implications for New Zealand's tourism industry and the economy in turn.

New Zealand therefore needs an emissions reduction plan that is at least robust to the international aviation and shipping emissions being accounted for. Meanwhile,

³¹ For example, the exclusion of accounting liability for forest fires above a certain threshold and the certifying in the past of carbon credits that lacked environmental integrity.

New Zealand needs to recognise these emissions when assessing its fair share of the global effort and framing future emission targets and future international obligations.

Another set of accounting rules that has significant implications for New Zealand are those involving forests – including the measurement of carbon stored and the responsibility for carbon subsequently lost from forests through fire or disease. Basic assumptions about the production accounting framework are also important.³²

We submit that the Commission needs to monitor and consider all emissions associated with New Zealand, including those outside the scope of UNFCCC agreements. It appears that clauses 5Z(2)(b)(i) and 5ZG do provide for this but it will be important that the Select Committee obtain advice to ensure that these functions are incorporated.

³² These issues are discussed in: Geoff Bertram and Simon Terry, *The Carbon Challenge*, BWB, 2010, chapter 10.