
The Climate Change Response (Zero Carbon) Amendment Act — A Critical Analysis of New Zealand’s Response to Climate Change

Philipp Semmelmayr*

At the end of 2019, New Zealand passed a new law to counteract climate change: the Climate Change Response (Zero Carbon) Amendment Act 2019 (the Act). The Act is New Zealand’s answer to the Paris Agreement, under which 196 states committed themselves to undertake and communicate ambitious efforts against climate change, as nationally determined contributions (NDCs).¹ New Zealand already submitted its NDCs on an international level in October 2015,² and only recently the Act was launched, as a domestic response. The Act is mainly modelled on the United Kingdom’s Climate Change Act 2008 (the CCA) and seeks to provide a framework by which New Zealand can develop and implement clear and stable climate change policies.³ The fact that the New Zealand Government finally took action was largely welcomed by the public. However, despite its popularity, the Climate Change Response (Zero Carbon) Amendment Bill (the Bill) faced massive criticism from a political, legal, economic and social standpoint. And the criticism continues today, as the Bill was passed

*This article is an edited version of a research paper submitted in partial fulfilment of the Master of Laws at the University of Auckland in 2019. The author is now research assistant and doctoral candidate at the Friedrich-Alexander University in Nuremberg, Germany. Email address: philipp.semmelmayer@fau.de.

1 Paris Agreement (opened for signature 22 April 2016, entered into force 4 November 2016) UN Doc FCCC/CP/2015/10/Add.1, art 3.

2 New Zealand Foreign Affairs & Trade “Our global agreements” <<https://www.mfat.govt.nz/en/environment/climate-change/negotiation-and-agreements/>>.

3 Climate Change Response (Zero Carbon) Amendment Bill 2019 (136-1) [CCR(ZC)A Bill], Explanatory Note, at 1.

with little change. This article makes a critical analysis of the Act as such and deals with the various criticisms, taking a solution-oriented approach, if and where possible.

1. INTRODUCTION

With the Climate Change Response (Zero Carbon) Amendment Act 2019, New Zealand launched a new climate legislation. The purpose of the Act 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 the global average temperature increase to 1.5°C above pre-industrial levels. The overarching purpose was to represent a balance of the guiding principles agreed by New Zealand's Cabinet to frame the development of climate change policy: leadership at home and abroad; a productive, sustainable and climate-resilient economy; and a just and inclusive society. To meet this purpose, the Act seeks to set out a durable framework, as well as stable and enduring institutional arrangements, for climate change action. With mechanisms seeking to increase transparency, the Act seeks to strike a balance between flexibility and prescription in New Zealand's long-term transition, as well as building in considerations for how impacts are distributed.⁴

The Act attempts to achieve its purpose by establishing a new independent Climate Change Commission (the Commission) to provide independent expert advice and monitoring, to help keep successive governments on track to the long-term mitigation and adaptation goals:⁵

- setting a new greenhouse gas (GHG) emissions reduction target to—
 - reduce gross emissions of biogenic methane within the range of 24% to 47% below 2017 levels by 2050, with an interim requirement to reduce emissions to 10% below 2017 levels by 2030;
 - reduce net emissions of all other greenhouse gases to zero by 2050;
- establishing a series of emissions budgets to act as stepping stones towards the 2050 target;
- establishing a range of climate change adaptation measures to make sure New Zealand understands the risks we face and has a plan to address them.

To understand why New Zealand took legislative action, it is necessary to understand the (legal) historical background. In 1992 the parties to the United Nations Framework Convention on Climate Change (UNFCCC) agreed on

4 At 1.

5 At 2.

the ultimate objective to achieve stabilisation of GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. According to the UNFCCC such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed sustainably.⁶ Therefore, it provides the parameters and forum for discussion and development of principles of international climate change law, requiring parties to create national strategies to reduce GHG emissions and to cooperate in learning about and adapting to climate change.⁷ In 1997 the Kyoto Protocol to the UNFCCC, entering into force in 2005, committed the parties to set specific rules and emissions reduction targets.⁸ With the Climate Change Response Act 2002 (CCRA) New Zealand created its own legal framework to ratify the Kyoto Protocol and to meet obligations under the UNFCCC.⁹ The CCRA is administered by the Ministry for the Environment but includes powers for the Minister of Finance to manage New Zealand's holdings of units that represent New Zealand's target allocation for GHG emissions under the Protocol; it enables the Minister of Finance to trade those units on the international market. Also, it established a registry to record holdings and transfers of those units. Furthermore, the CCRA established a national inventory agency to record and report information relating to GHG emissions following international requirements.¹⁰ Since 2002 several amendments to the CCRA have been adopted,¹¹ the most well-known of which is arguably the Climate Change Response (Emissions Trading) Amendment Act 2008 that established the New Zealand Emissions Trading Scheme (NZ ETS), a national all-sectors all-greenhouse gases uncapped and highly internationally linked emissions trading scheme.¹² Of course, it should be mentioned that New Zealand's Government has launched several other actions and laws to counteract climate change, albeit in part only incidentally, such as

6 United Nations Framework Convention on Climate Change (opened for signature 4 June 1992, entered into force 21 March 1994) 1771 UNTS 107 [UNFCCC], art 2.

7 Cinnamon Carlarne, Kevin Gray and Richard Tarasofsky "International Climate Change Law: Mapping the Field" in Cinnamon Carlarne, Kevin Gray and Richard Tarasofsky (eds) *The Oxford Handbook of International Climate Change Law* (Oxford University Press, Oxford, 2016) 4 at 4.

8 See essentially Kyoto Protocol to the United Nations Framework Convention on Climate Change 2303 UNTS 148, 37 ILM 22 (1998), arts 2 and 3.

9 Climate Change Response Act 2002 [CCRA], s 3.

10 Ministry for the Environment "Climate Change Response Act 2002" <<https://www.mfe.govt.nz/climate-change/climate-change-acts-and-regulations/climate-change-response-act-2002>>.

11 For an overview see <<http://www.legislation.govt.nz/act/public/2002/0040/90.0/versions.aspx>>.

12 Climate Change Response (Emissions Trading) Amendment Act 2008, s 5.

the Resource Management Act 1991 (RMA), the Land Transport Management Act 2003 (LTMA), a target to reduce GHGs by 50 per cent below 1990 levels by 2050 notified in the New Zealand Gazette on March 2011, and the One Billion Trees Programme.

However, although international and domestic legal obligations exist, New Zealand has been lacking a nationwide approach to drive effective and coordinated action on the issue of climate change. New Zealand's GHGs have increased substantially on 1990 levels. The existing framework(s) has fallen short of providing a stable and credible policy environment to enable necessary long-term planning, decision-making and investment by the private sector and civil society.¹³ Even the highly advertised NZ ETS has so far not performed as positively as expected. This is mainly because the issue of climate change has played a minor role in political reality so far.¹⁴ The widely perceived failure has even been subject to litigation. In *Thomson v Minister for Climate Change Issues* a law student brought proceedings against the Minister for Climate Change Issues (the Minister) for alleged failures relating to New Zealand's GHG target, and argued, inter alia, that there was a violation of the CCRA.¹⁵ The New Zealand High Court dismissed the application for judicial review; however, it did accept the propriety of the Court reviewing the Minister's policy decisions. According to the High Court, the decision of the Minister setting the 2050 target under the CCRA was justiciable; however, no remedy was needed due to the election of the current Government which had announced that it intended to set a new emissions reduction target.¹⁶ Furthermore, with *Smith v Fonterra Co-operative Limited* a speculative tort law case on climate change has recently been brought before the courts with minimal success, but has attracted public attention.¹⁷

In 2015, the well-known United Nations Climate Change Conference in Paris took place. It was the 21st yearly session of the Conference of the Parties

13 Ministry for the Environment "Regulatory impact statement Zero Carbon Bill" <<https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/regulatory-impact-statement-zero-carbon-bill.pdf>> at 1.

14 For an overview of the political development see Prue Taylor "The New Zealand Legislation: Pursuing the 1.5 Target using a Net Zero Approach" in Thomas L Muinzer (ed) *National Climate Change Acts: The Emergence, Form and Nature of National Framework Climate Legislation* (Hart Publishing, Oxford, 2020) (forthcoming) at 2–4.

15 *Thomson v Minister for Climate Change Issues* [2017] NZHC 733, [2018] 2 NZLR 160.

16 The Hon Justice Brian J Preston SC "Mapping Climate Change Litigation" (2018) 92 ALJ 774.

17 *Smith v Fonterra Co-operative Group Ltd* [2020] NZHC 419 (claims in public nuisance and negligence against industries for emission of greenhouse gases struck out).

(COP 21) to the UNFCCC and the 11th session of the Meeting of the Parties (CMP 11) to the 1997 Kyoto Protocol.¹⁸ The conference negotiated the Paris Agreement, which brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so.¹⁹ And it is indeed high time to undertake ambitious efforts; global temperatures are already up about 1.0°C from pre-industrial times and the previous four years have been the warmest on record on earth — including July 2019, which was the hottest month on record. And there are ever starker signs of harm caused by climate change. Coral reefs are dying, Arctic sea ice is shrinking and sea levels are rising, while droughts, floods and hurricanes grow more severe.²⁰ Shockingly, although previous legal efforts have not produced the changes in state behaviour, nor private actions, necessary to effectively combat climate change,²¹ even after Paris, climate action falls far short of the unprecedented transformation needed to limit the impacts of climate change. The gap between national reductions of emissions needed and national pledges made under the Paris Agreement is “alarmingly high” and covers only one-third of what is needed to meet the Paris Agreement’s goal.²² New Zealand’s pledge also seems rather modest. Its NDC is a commitment to reduce GHG emissions to 30 per cent below 2005 levels by 2030.²³ With the Act, the current Government seeks to intensify New Zealand’s efforts on a national level. Modelled on the UK’s CCA and in continuation of the outlined legislation, it amends the CCRA. In addition to its international commitments, New Zealand hereby also followed voices and protests worldwide and domestically which have been calling for more effective political action on climate change and have become increasingly prevalent. Movements like Generation Zero are on the rise and seek to protect the global and local commons.

18 UN Climate Change Conference Paris 2015 “Sustainable Development Goals” <<https://www.un.org/sustainabledevelopment/cop21/>>.

19 Paris Agreement, above n 1, art 2.

20 NDC Global Outlook Report 2019 *The Heat is On: Taking Stock of Global Climate Ambition* <https://reliefweb.int/sites/reliefweb.int/files/resources/NDC_Outlook_Report_2019.pdf> at 6 and 7.

21 Carlarne, Gray and Tarasofsky, above n 7, at 4 and 5.

22 United Nations Environment Programme *Emissions Gap Report 2018* <http://wedocs.unep.org/bitstream/handle/20.500.11822/26895/EGR2018_FullReport_EN.pdf> at XIV.

23 Submission under the Paris Agreement, New Zealand’s Nationally Determined Contribution <<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/New%20Zealand%20First/New%20Zealand%20first%20NDC.pdf>>.

2. THE ACT

In this context, the Act has been subject to extensive consideration. The Ministry for the Environment and wider government have put significant resources and effort into producing a strong evidence base to underpin the legislative project. Amongst other means and measures, this included consulting scientific experts and literature commissioning, a range of sophisticated economic impact analyses and modelling, and undertaking an open and extensive public consultation process.²⁴ The result of this effort will be represented and discussed below by analysing the four core points of the Act: the Commission (part 2.1); the 2050 target (part 2.2); the emissions budgets (part 2.3); and the adaptation measures (part 2.4); as well as the integration of the Act into the existing legal system (part 2.5).

2.1 The Climate Change Commission

The Act installed the Commission as the successor of the Interim Climate Change Committee (ICCC), a ministerial advisory committee created by the Government in mid-April 2018 to explore how New Zealand transitions to a net zero emissions economy by 2050. In contrast to the ICCC, which had focused specifically on the agricultural and renewable sectors, the Commission's functions will be more extensive. It is designed to provide independent expert advice and hold the Government to account.²⁵

2.1.1 Specific details about the Commission

Section 8 of the Act inserts the new pts 1A to 1C into the CCRA. The new pt 1A establishes the Commission as an independent Crown entity (ICE) and provides for its membership, purposes, functions, duties and powers (ss 5A to 5N). According to s 5B, the Commission's purposes are to provide independent expert advice to the Government on mitigating, and adapting to, the effects of climate change; and monitoring and reviewing the Government's progress. The Commission consists of seven members, including a Chair and Deputy Chair, appointed by the Governor-General on the Minister's recommendation (ss 5D and 5E). Upstream, there is a nominating committee to nominate candidates to

²⁴ Ministry for the Environment, above n 13, at 14, 19, 27 and 28.

²⁵ Climate Change Response (Zero Carbon) Amendment Act 2019 [CCR(ZC)A Act], s 8 (in force 14 November 2019). How the Act sets out the Commission's functions concerning the target, the emissions budgets, the emissions-reduction plans and the adaptation measures, established by the Act, will also be discussed in parts 2.2 to 2.4.

the Minister for appointment to the Commission, which is regulated in ss 5F and 5G. The Minister has to take account of certain characteristics needed of members collectively before recommending the appointment of a member (s 5H). Particular attention is paid to seeking nominations from iwi and Māori representative organisations for nominations for the Commission, and the Minister has regard to the need for the Commission to have members who have skills, experience, expertise and innovative approaches, relevant to the Treaty of Waitangi. In contrast to the Bill, the Act now provides for additional greater consideration to the Crown–Māori relationship, when the Commission performs its functions.²⁶

In accordance with s 5J, the Act provides for the Commission's functions to be to review the 2050 target and, if necessary, recommend changes, provide advice to the Minister to enable the preparation of emissions budgets, recommend any necessary amendments to emissions budgets, provide advice to the Minister about the quantity of emissions that may be banked or borrowed between two adjacent emissions budget periods, provide advice to the Minister to enable the preparation of an emissions reduction plan, monitor and report on progress towards meeting emissions budgets and the 2050 target, prepare national climate change risk assessments, prepare reports on the implementation of the national adaptation plan, and provide other reports requested by the Minister. Furthermore, the Act provides for the Minister to request the Commission to prepare reports on matters related to reducing emissions of GHGs and adapting to the effects of climate change (s 5K). Also, it provides the Commission to act independently. However, the Minister may direct the Commission to have regard to Government policy to recommend unit supply settings of the NZ ETS, and provide advice about New Zealand's NDC (s 5O).

2.1.2 Issues related to the Commission

Whether the established Commission is compatible with international law and specifically with the Treaty of Waitangi is controversially discussed. Several submissions to the proposed Bill, mainly from iwi and Māori, suggested alternative partnership approaches to the membership and processes of the Commission, as well as measures to ensure careful consideration of Māori interests, along with equity outcomes more generally, across the scope of the work of the Commission.²⁷ For instance, a special Māori Committee was suggested to ensure extensive consideration of Māori interests. However, the nomination process does not blatantly overlook the Treaty of Waitangi. Whether it proves to be fair will arguably show its application in practice.

²⁶ CCR(ZC)A Act, pt 1 s 5 amending s 3A.

²⁷ Ministry for the Environment, above n 13, at 124.

As far as international law is concerned, the Act is consistent with the Paris Agreement and other international agreements concerning climate change, since there is no legal obligation to establish a commission. So far, however, other countries have already established and implemented independent institutions to provide advice to government — including Australia, Denmark, Finland, Ireland, Sweden and the UK — and the resonance of these countries is quite positive. The Commission is modelled on the UK's Committee on Climate Change (CCC), an independent advisory body that advises the UK Government on whether it is meeting its climate change mitigation goals. The CCC was and — over 10 years after it was established — is still a quite progressive step towards a more effective climate change policy. And even though the creation of a new power like the Commission always raises the question whether there is a need to do so, in theory, and arguably also in practice, this question should be answered with a “yes” when it comes to a commission which exercises its power primarily to provide independent advice to the Government.

Besides an ICE there were several models for a Commission to choose from. One discussed option suggested that the Commission's function should be the responsibility of an Officer of Parliament, leading to the Commission being responsible to Parliament rather than the executive Government. However, this option was ruled out with the rather feeble argument that it would not be appropriate for an Officer of Parliament to have functions in advising the executive.²⁸ Not addressed was the argument that in terms of monitoring via annual progress reports and end of budget reports, the Commission would be more independent by reporting directly to Parliament (as in the CCA). Furthermore, the option to establish the Commission as an autonomous Crown entity (ACE) was ruled out. This decision was justified by the argument that this would lead to the Commission being less independent than an ICE, because it would then need to give regard to government policy in its advice. On the other hand, an ACE would have provided for the Commission to perform its advising functions with a close connection to government and would have provided for it to have a decision-making role in respect of the NZ ETS. However, this form would have fitted less well with the accountability functions proposed for the Commission.²⁹ In conclusion, the Act claims an arguably justifiable model. As an ICE, the Commission is responsible to the Minister rather than Parliament but retains independence in terms of its advice.³⁰ In practice, however, attention should be given to the influence of the Government on the Commission. The reason for this is not only s 50, but also the geographical proximity of the Commission to the Government. As a successor of the IPCC the Commission

28 At 125.

29 At 125.

30 At 125, 128 and 129.

also shares the same facilities as the Ministry for the Environment. However, this entanglement is mitigated by the fact that both have their own separate space in the building and their own secure information management system.³¹ Also, it allows the Commission to perform its monitoring functions at arm's length from the Government, and thus make the best use of information and provide relevant advice.³²

As far as the independence of the Commission is concerned, further consideration was not given to the option where the membership of the Commission consisted of stakeholder representatives, as this was considered to jeopardise the ability of the Commission to provide independent advice — rightly so. In order for the advice of the Commission to be independent, and to ensure public trust in the independence of the Commission's advice, its membership should comprise experts in relevant fields, rather than representatives of particular sectors or stakeholders.³³ The Act also refrains from an option where the collective expertise required of the Commission was prescribed in more detail, as this was considered to allow insufficient flexibility for the considerations of the Commission to evolve. Thus, personal independence is guaranteed as well. Finally, to provide far-reaching independence, further consideration was not given to the option where the functions proposed for the Commission are performed as a statutory independent function in a government department, as this would not provide for an independent body.³⁴

However, independence leads to an arguably bigger issue: the lack of enforceability. In line with the CCA, the Commission does not have any decision-making or enforcement powers, because it is generally considered that lack of enforcement powers is necessary to prevent an independent body from becoming politicised.³⁵ Thus, the Commission and its impact on policy are not very strong. This becomes particularly clear when looking at the wording of the Act. The Commission is only allowed to “review”, “provide advice”, “recommend”, “monitor”, “report” and “prepare”.³⁶ So its power is defined quite narrowly. On the other hand, establishing a commission as an enduring piece of institutional architecture that will ensure continued progress towards a low-emissions and climate-resilient future and additionally have the power to enforce its powers would raise issues with fundamental principles like

31 “Interim Climate Change Committee Gets Underway” Scoop <<http://www.scoop.co.nz/stories/PO1805/S00034/interim-climate-change-committee-gets-underway.htm>>.

32 Ministry for the Environment, above n 13, at 128 and 129.

33 At 128.

34 CCR(ZC)A Bill, Explanatory Note, at 4.

35 Prue Taylor and Kate Scanlen “The UK Climate Change Act: an act to follow?” (2018) 14(3) PQ 66 at 71.

36 The enforceability of the budgets and the target will be discussed in more detail below.

parliamentary supremacy. Accountability would not rest with the Government where the Commission has decision-making powers. It could mean a lack of public accountability and could lead to a situation where the Government defers all hard decisions to the Commission. Also, if the Commission had decision-making powers, this might limit the transparency around the decision-making process.³⁷

However, given the urgency and human rights implications of climate change policy (together with the difficulties of judicial review (see below), and the weakness of New Zealand's unwritten constitution), some form of enforcement role should have been implemented rather than dismissed (as happened).³⁸ In fact, the current situation is not adequately designed to prevent policies from backsliding.³⁹ An example, where greater enforceability is discussed, is the Commission's role to advise on NZ ETS settings. If the Government refuses to take advice on this matter, the Commission should have the power to introduce the policy settings into the NZ ETS, including the power to directly set the carbon price in a manner analogous to the Reserve Bank's ability to set interest rates.⁴⁰ However, under the current legal situation, the Commission does not have this right.

There are, of course, several smaller issues with the Commission, such as the discussion over the question whether the number of commissioners appointed is appropriate. For the various views expressed on this question, the following should be noted: generally, the number of commissioners should be large enough to provide sufficiently for the breadth of expertise required, but not so large as to make the Commission unworkable. Fitting the number into New Zealand's domestic context does not necessarily mean fewer commissioners because New Zealand is in comparison — economically and geographically — a rather small country. As an industrialised country the main branches of agriculture, forestry, food industry and tourism are fairly unusual and also the late establishment of the Commission over 10 years after its British role model leads to more complex problems. This fact also plays an important role in the question whether greater scientific expertise of the commissioners is

37 Ministry for the Environment, above n 13, at 93 and 94.

38 Taylor and Scanlen, above n 35, at 71.

39 Sam Fankhauser, Alina Averchenkova and Jared Finnegan *10 years of the UK Climate Change Act* (LSE, 2018) <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/03/10-Years-of-the-UK-Climate-Change-Act_Fankhauser-et-al.pdf> at 16.

40 Greenpeace New Zealand Submission on Zero Carbon Bill <<https://storage.googleapis.com/planet4-new-zealand-stateless/2018/07/c4fbc4ed-substantive-greenpeace-submission-on-zero-carbon-bill-2018.pdf>> at 19.

needed to achieve the best scientific practice.⁴¹ In light of these considerations, the seven members already elected seems sufficient at present.

Finally, it is to be welcomed that the Act highlights the importance of having the Commission as one independent body with oversight on both mitigation and adaptation. Whereas the UK's CCC model is responsible for mitigation functions, and a separate Adaptation Sub-Committee (UK ASC) is responsible for adaptation functions, the Act states that the "climate resilience" objective is of equal importance with the "low-emissions" objective, and placing its consideration at an institutional level on an equal footing with mitigation could help to establish appropriate priority for adaptation policies.⁴² The incorporation in one Commission arguably also leads to a more effective and more compact way of working.

2.2 2050 Emissions Reduction Target: To Signal an Economy-Wide Transition

The 2050 Emissions Reduction Target is the centrepiece of the Act and seeks to signal an economy-wide transition and thus contribute to the global effort under the Paris Agreement. It is New Zealand's second 2050 target, while the first non-binding 2050 target is based on the Kyoto Protocol, but has received little attention in legal reality. Besides its compatibility with the law, this raises the question of how effectively the target is designed and how achievable the target is.

2.2.1 Specific details about the 2050 emissions reduction target

Under the newly inserted s 5Q (pt 1B) the Act provides the target for emissions reduction, known as the 2050 target, which requires that:

- net accounting emissions (ie gross emissions combined with emissions and removals from land use, land-use change, and the forestry sector) of GHGs 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 gross emissions (ie New Zealand's total emissions from the agriculture, energy, industrial processes and product use, and waste sectors) of biogenic methane in a calendar year are:
 - 10 per cent less than 2017 emissions by the calendar year beginning on 1 January 2030;

41 Alexander Gillespie "Reliable Scientific Foundations: International Best Practice and the New Zealand Experience" (2017) 21 NZJEL 1 at 14 and 15.

42 CCR(ZC)A Act, s 3 (purpose); CCR(ZC)A Bill, Explanatory Note, at 4; Ministry for the Environment, above n 13, at 128 and 129.

- and are at least 24 per cent to 47 per cent less than 2017 emissions by the calendar year beginning on 1 January 2050 and for each subsequent calendar year.

Section 6 amends s 4(1) of the CCRA and defines the new term biogenic methane as all methane GHGs produced from the agriculture and waste sectors. This setting of a GHG emissions reduction target in primary legislation seeks to provide a clear signal on New Zealand's long-term emissions reduction goals.⁴³ The Act allows the target to be reviewed and revised, but the latter solely under special circumstances. This includes that the Commission is satisfied with certain conditions (like significant change of climate/climate change, see s 5T(2)(a)), that are met, before recommending a change (see s 5T). The Act does not prescribe what the Government's response to a target recommendation is. If the Commission recommends amending the target, this would involve a new amendment Bill being introduced to the House of Representatives, following adequate policy development and consultation.⁴⁴ However, the final decision on review remains with the Minister who has 12 months to provide the Commission (and subsequently Parliament) with a written response.

Already at this point — with regard to the following remarks on the emissions budgets — the issue of enforceability is to be mentioned. Sections 5ZM to 5ZO determine that 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 that 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. Also, the Act provides that a person or body may, but is not required to, take the 2050 target or an emissions budget into account in the exercise or performance of a public function, power, or duty. However, the Bill's clause stating that failure to do so "does not invalidate anything done" has been removed in the Act. The justification was that removal of this clause will enable the common law to develop regarding the status of the budget and targets and how they should be considered.

Finally, the Act provides that the responsible Minister may issue guidance for departments on taking the 2050 target or an emissions budget into account.

2.2.2 Issues related to the 2050 emissions reduction target

As the centrepiece of the Act, the target is arguably the main issue. This is not surprising, considering that New Zealand's latest GHG Inventory shows

⁴³ CCR(ZC)A Bill, Explanatory Note, at 2.

⁴⁴ At 2.

continuing increases in both gross and net emissions.⁴⁵ And, regrettably, the new target seems to have a lot of flaws and also raises many questions.

As far as the Treaty of Waitangi is concerned, the Treaty itself does not contradict the target. Already at the time of drafting the Bill, however, it was stated that it is very difficult to project how the target and the thereupon proposed policy interventions may specifically affect iwi and Māori.⁴⁶ It remains to be seen whether and to what extent New Zealand's Government will take the appropriate steps to fulfil its obligations under the Treaty, to actively protect Māori in the use of their land and resources.⁴⁷ And although there was an almost overall consent among iwi and Māori with setting a binding 2050 target, it appears that much more needs to be done to achieve a holistic approach, including evaluating the Act from a perspective that actively acknowledges tikanga (Māori custom and practice), matauranga Māori (traditional knowledge) and kaitiakitanga (guardianship responsibilities of Māori).⁴⁸

The main question is, whether the target can be seen as compatible with international law — and especially with the Paris Agreement since the Agreement leaves it to the states how to contribute to the global effort to limit the global average temperature increase to 2.0°/1.5°C above pre-industrial levels. Of course, to a great extent, it also depends on the future actions made upon the Act as a framework, if New Zealand really undertakes ambitious efforts with the view to achieving the goal of the Agreement and thus acts compatibly with the Agreement.⁴⁹ However, surprisingly, a comparison between New Zealand's NDC and the target stated in the Act makes clear that they have almost nothing in common. Concerning the 2030 target, in contrast to the NDC, the Act just states a 2030 sub-target for biogenic methane. This raises the (as yet unanswered) question, why the NDC target or a more ambitious 2030 target was not implemented into the Act, since a 2030 target is a vital first step to achieving the goals set in the Paris Agreement.⁵⁰ After all, the Act was (also) launched to meet the NDC. It seems as though New Zealand's Government sets two separate targets intentionally,⁵¹ leading to just one binding target (2050 target stated in the Act) and leaving out the NDC target, by not implementing

45 Ministry for the Environment “New Zealand's Greenhouse Gas Inventory 1990–2017” (submitted to the UNFCCC, April 2019) at 1.

46 Ministry for the Environment, above n 13, at 30.

47 *New Zealand Maori Council v Attorney General* [1987] 1 NZLR 641, (1987) 6 NZAR 353.

48 Taylor, above n 14, at 27.

49 Paris Agreement, above n 1, art 3; ambitious efforts are defined in arts 4, 7, 9, 10, 11 and 13 of the Agreement.

50 UNFCCC *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015* UN Doc FCCC/CP/2015/10 (29 January 2016) at 2, 4 and 5.

51 See Ministry for the Environment “About New Zealand's emissions reduction

it into domestic law. This becomes even more obvious when considering the linguistic division between the NDC and the target set by the Act in s 50(2) (b). It seems that implementing a 2030 target has been avoided as it would put a much greater burden on non-agricultural emitters of GHGs.⁵²

Furthermore, it is questionable whether the target stated in the Act can provide the basis for achieving a 1.5°C goal, since it is divided into a rather strict and a soft target (for biogenic methane). Besides taking into account the results of the 2018 consultation, an economic analysis, the latest climate science and New Zealand's GHG emissions profile, the target is mainly based on the Intergovernmental Panel on Climate Change (IPCC) special report, which concluded that in the central range of global scenarios consistent with staying within 1.5°C of warming, as set out under the Paris Agreement, with limited or no overshoot:⁵³

- global emissions of carbon dioxide need to reduce to net zero around 2050, and below zero thereafter; and
- global emissions of agricultural methane need to reduce by 24 per cent to 47 per cent from 2010 levels by 2050 (here the Act uses a different baseline year).

To be consistent with this goal, the Government decided to set a target that distinguishes between biogenic methane (a short-lived gas) and all other GHGs (such as carbon dioxide and nitrous oxide), rather than a single target for all GHGs.⁵⁴ This division is permissible since New Zealand is not constrained from doing so by international agreements.⁵⁵ The main reason for the division into long- and short-lived gases is that short-lived gases like biogenic methane decay relatively rapidly in the atmosphere, lasting for decades rather than centuries. This means global temperatures could be stabilised (at a given temperature level) without necessarily reducing emissions of these gases to zero. However, reducing short-lived gases further below the stabilisation level may also reduce

targets” <<https://www.mfe.govt.nz/climate-change/climate-change-and-government/emissions-reduction-targets/about-our-emissions#2030>>.

52 Taylor, above n 14, at 15.

53 Intergovernmental Panel on Climate Change [IPCC] “Global Warming of 1.5°C: An IPCC special report on the impacts of global warming of 1.5°C [...]” <<https://www.ipcc.ch/sr15/>> at 95–100.

54 CCR(ZC)A Bill, Explanatory Note, at 4; Ministry for the Environment, above n 13, at 41.

55 Parliamentary Commissioner for the Environment [PCE] *A Zero Carbon Act for New Zealand: Revisiting Stepping stones to Paris and beyond* (PCE, Wellington, March 2018) <<https://www.pce.parliament.nz/media/196427/zero-carbon-act-for-nz-web.pdf>> at 23; Matthew CM Hill “Keeping Commitments: Examining the New Principles in the Paris Agreement” (2017) 21 NZJEL 53 at 58.

climate impacts. Furthermore, to stabilise temperatures, long-lived gases like carbon dioxide and nitrous oxide either need to reduce entirely to zero or be balanced out (to net zero) by an equal amount of removals, for example by planting new forests.⁵⁶

The different characteristics of methane do not mean that its warming impact can be ignored. For one, the additional warming caused by methane emissions in the short term can lead to further warming in the longer term from positive climate feedbacks. Also, it is the combined impact of *all* GHGs, including methane, that contributes to the dangerous and currently increasing amount of warming that is occurring.⁵⁷ Furthermore, the division into two types of gases seems highly controversial. The premise is that a stable rate of emissions will not lead to increases in atmospheric concentrations.⁵⁸ However, what is a fair target for methane is not solely a question of stabilising the temperature impact of a gas by a given year. Given its potency and short-lived nature, reducing methane can contribute to rapid atmospheric cooling.⁵⁹ Options that might have avoided that, like creating quantifiable rather than percentage reductions, delivering a halving of gross emissions every decade,⁶⁰ or implementing GHG emissions in the current RMA system,⁶¹ were discussed insufficiently in advance, if at all. In addition, New Zealand's GHG emissions are mainly made up of approximately 44 per cent carbon dioxide, 43 per cent methane, and 12 per cent nitrous oxide,⁶² and biogenic methane comprises 93 per cent of short-lived gas emissions in New Zealand. Since the Act defines biogenic methane as all methane GHGs produced from the agriculture and waste sectors, two main emitters of GHGs will be regulated under the rather soft target for biogenic methane. And although the Act claims that it does not apply a separate target for the agriculture or land sector, because this was considered to be inconsistent with the IPCC conclusions, which are based on the different

56 Ministry for the Environment, above n 13, at 36.

57 PCE, above n 55, at 16.

58 CCR(ZC)A Bill, Explanatory Note, at 4.

59 Taylor, above n 14, at 15.

60 J Rockström and others "A roadmap for rapid decarbonization" (2017) 355(6331) *Science* 1269 at 1269 and 1270 <<https://www.kivi.nl/uploads/media/58de6670d6a9d/20170325-roadmap%20for%20fast%20decarbonization-1269.full.pdf>>.

61 Klaus Bosselmann "Carbon Neutrality and the Law: The role of the RMA in enforcing greenhouse gas reductions" in Niki Harré and Quentin D Atkinson (eds) *Carbon Neutral by 2020: How New Zealanders Can Tackle Climate Change* (Craig Potton Publishing, Nelson, 2007) at 258–275.

62 Ministry for the Environment, above n 45, at xxv; Ministry for the Environment *Our Climate Your Say: Consultation on the Zero Carbon Bill* (Ministry for the Environment, Wellington, 2018) <<https://www.mfe.govt.nz/sites/default/files/media/Consultations/FINAL-%20Zero%20Carbon%20Bill%20-%20Discussion%20Document.pdf>> at 17.

impacts of different GHGs rather than their sources,⁶³ the outcome is almost the same. Consequently the soft target applies to New Zealand's agriculture and thus its dairy farming industry, which is the backbone to New Zealand's largely export-based economy, and leads to further problems like irrigation sucking precious water out of the rivers and cows' waste leaching so easily back down through the fragile soil that contamination is escalating beyond control.⁶⁴

The reason behind this is arguably the political and economic power of New Zealand's agricultural sector. This led — above all — to political controversy. Allegations were made that the idea of this particular target was set by the Biological Emissions Reference Group (with members like Beef + Lamb NZ, Dairy NZ Limited, Deer Industry NZ) and already adopted by the previous Government. Furthermore, the poorly performing waste industry is a major problem of New Zealand in international comparison.⁶⁵ The Act, however, works around this problem.

A target to achieve net zero GHG emissions by 2050, under which all GHG emissions are fungible (under one target) was considered. A target set at this level would have represented significant international leadership and put New Zealand front and centre among the countries making every reasonable effort to keep the world on a trajectory that is consistent with holding the global average temperature to 1.5°C above pre-industrial levels. This option was also preferred by a clear majority of submissions (99.9 per cent). Also, the experience with the UK's CCA shows that all sectors and GHGs should be included in one target.⁶⁶ However, the Act ruled out such a strict target, stating that this would not explicitly acknowledge the scientific basis for different pathways for different gases and that the level of ambition also carries with it the risk of most significant economic impacts, which could exacerbate the risks of uneven distributional impacts and require greater measures in support of a just transition.⁶⁷ Furthermore, the Parliamentary Commissioner for the Environment claims that placing all emitters in direct competition for whatever emissions rights are available without knowing in advance the marginal cost of abatement, a single target allowing for complete fungibility between gases risks intense lobbying from some sectors pulling down the level of ambition of both the target and budgets.⁶⁸ Thus, instead of taking the lead internationally,

63 CCR(ZC)A Bill, Explanatory Note, at 4; Ministry for the Environment, above n 13, at 41.

64 Mike Joy and David Larsen "The Incontinent Cows of Middle-earth" *The New York Times* (online ed, New York, 15 August 2019) <<https://www.nytimes.com/2019/08/15/opinion/new-zealand-cows.html>>.

65 Benedikt Miller "The New Zealand and German Legal Waste Systems — Status Quo and Current Movements" (2018) 22 NZJEL 169 at 173.

66 Fankhauser, Averchenkova and Finnegan, above n 39, at 30.

67 Ministry for the Environment, above n 13, at 65.

68 PCE, above n 55, at 21.

New Zealand seems to be following the general trend that the target is following the economy.

The lack of willingness for actual transition is also shown by the legislative documents on the Act that fail to mention the possibility for New Zealand becoming a carbon negative country, which is indeed feasible as the country Buthan has impressively demonstrated.⁶⁹ Pro-economy critics stressed, however, that New Zealand's global impact is very small. And indeed, while New Zealand is responsible for only about 0.17 per cent of annual global GHG emissions, its climate is impacted by the accumulation of GHG emissions of all other countries in the world.⁷⁰ However, on a per capita basis, New Zealand's emissions are the fifth highest in the OECD, exposing it to the argument that New Zealand is not taking care of "its fair share".⁷¹ New Zealand has taken a leadership role in promoting research cooperation on agricultural emissions and has to show significant productivity gains that have meant a decline in GHGs per unit of agricultural output.⁷² However, this has not to date been reflected in New Zealand's ambitions for emissions reductions.⁷³

New Zealand temperatures have already risen by about 0.9°C in the past 100 years, and over the past century, the sea levels at New Zealand ports have risen between 14 and 22 centimetres. New Zealand cannot limit the impacts of climate change alone — any future warming will depend on the level of future global emissions. Small emitters collectively account for about a third of global emissions and, together, can have a significant impact.⁷⁴ New Zealand could also be more courageous with regard to the past, since it already successfully underwent major economic changes during the 1980s. A recent study from Westpac NZ (2018) found that taking early and planned action on climate

69 "Why Buthan is the only carbon negative country in the world" (nd) GVI <<https://www.gvi.co.uk/blog/bhutan-carbon-negative-country-world/>>; Tshering Tobgay "This country isn't just carbon neutral — it's carbon negative" (TED video, February 2016) <https://www.ted.com/talks/tshering_tobgay_this_country_isn_t_just_carbon_neutral_it_s_carbon_negative#t-4949>.

70 Ministry for the Environment, above n 13, at 21; PCE, above n 55, at 12.

71 Organisation for Economic Co-operation and Development [OECD] "Environmental Performance Reviews: New Zealand 2017" <<https://www.oecd.org/newzealand/oecd-environmental-performance-reviews-new-zealand-2017-9789264268203-en.htm>>.

72 Ministry for the Environment *New Zealand's Seventh National Communication: Fulfilling reporting requirements under the United Nations Framework Convention on Climate Change and the Kyoto Protocol* (Ministry for the Environment, Wellington, December 2017) <https://unfccc.int/files/national_reports/annex_i_natcom/application/pdf/091345_new_zealand-nc7-1-21-12-17_web_final_-_seventh_national_communication_2017.pdf> at 19.

73 PCE, above n 55, at 12.

74 Ministry for the Environment, above n 13, at 21; N Stern *The Economics of Climate Change: The Stern Review* (Her Majesty's Treasury, London, 2007) at vi.

change could be less economically challenging, compared with taking delayed and abrupt action later. Modelling undertaken by Concept Consulting Group, Motu Economic and Public Policy Research and Vivid Economics (CMV, 2018), also indicates that greater technological change and early action to raise emissions prices may help to constrain long-term costs.⁷⁵ Also, more and more investors are keen to take advantage of the opportunities of moving to a low-carbon economy.⁷⁶ Economic analysis shows that a transition to a low/zero-emissions economy will be challenging, yet technically achievable for New Zealand.⁷⁷ A methane vaccine is under development to mitigate on-farm emissions in the dairy, sheep and beef sectors. With reasonable certainty, research and development will give rise to material on-farm reduction opportunities in the future.

In addition to the goal itself, the base for the target seems to be quite problematic as well. The target's emphasis on *net accounting emissions* to 2050 (and beyond) is questionable. For example, it enables gross emissions to increase, provided they are offset by removals. Although a net approach provides flexibility, the target should identify an intention to move away from net emissions to a low- or zero-emissions economy. Emphasis on net accounting emissions for another 30 years (and beyond) potentially delays the intense transformations needed. There is a significant difference between a low- or zero-emissions economy and a *net emissions economy*.⁷⁸

Finally, the arguably most controversial issues are caused by s 5ZM, a rather perplexing section⁷⁹ that has led to the most well-known designation of the Act as "toothless".⁸⁰ And indeed, the lack of enforceability is surprising. Legal review and enforceability have been widely discussed and endorsed in recent years.⁸¹ Fighting climate change and climate change laws or policies in the courts is increasingly seen as a viable and important strategy as more cases are being initiated.⁸² In *Thomson v Minister for Climate Change Issues*

75 Ministry for the Environment, above n 13, at 25.

76 PCE *Stepping stones to Paris and beyond: Climate change, progress, and predictability* (PCE, Wellington, July 2017) <<https://www.pce.parliament.nz/publications/stepping-stones-to-paris-and-beyond-climate-change-progress-and-predictability>> at 3.

77 Ministry for the Environment, above n 13, at 64 and 132.

78 Taylor, above n 14, at 14.

79 At 9.

80 Greenpeace "Russel Norman: Toothless Zero Carbon Bill has bark but no bite" (press release, 8 May 2019) <<https://www.greenpeace.org/new-zealand/press-release/russel-norman-toothless-zero-carbon-bill-has-bark-but-no-bite/>>.

81 Geoffrey Palmer "Can Judges Make a Difference? The Scope for Judicial Decisions on Climate Change in Domestic New Zealand Law" (2018) 49 VUWLR 191.

82 Alina Averchenkova, Sam Fankhauser and Michal Nachmany *Global Trends in Climate Change Legislation and Litigation* (LSE, 2017) at 13.

the High Court noted that especially the *Urgenda*⁸³ case illustrated that “it may be appropriate for domestic courts to play a role in government decision making about climate change policy”.⁸⁴ The Act’s solution, however, leads to a legitimate concern that without enforcement action the gap will continue to widen between the emissions targets and budgets set in law and the policies put in place to achieve those targets and budgets. Furthermore, as shown above, judicial decisions are even more important because the Commission does not have legal enforcement powers.

In comparison, the UK’s CCA takes a different approach and is silent on enforceability. Whilst failure to comply with the CCA’s procedural obligations (such as to produce reports) would be judicially reviewable, there is uncertainty regarding the legal enforceability of the primary duties of the Act.⁸⁵ In contrast, the New Zealand approach seems to go much further by expressly excluding judicial review (beyond declaratory judgment) and thus can be seen as rather regressive. The fear of politicians being restricted in their behaviour seems to be great, even though there are still several burdens if legal enforceability were to be feasible. This is because if public interest groups pursued judicial review on the basis that there was a policy gap, they would still have to convince the courts that the gap was not a legitimate deferral of action in respect of policies that need to influence an emissions outcome in a period that may still be some years away.⁸⁶

2.3 Emissions Budgets: Stepping Stones to Low-Emissions New Zealand

Emissions budgets can be understood as interim targets or “stepping stones” to New Zealand’s emissions reduction target.⁸⁷ Section 6 of the Act amends s 4(1) to the CCRA, which defines the newly introduced emissions budgets as the quantity of emissions that would be permitted in each emissions budget period as a net amount of carbon dioxide equivalent. Emissions budget periods are five-year periods for the years 2022 to 2050.⁸⁸

83 *State of the Netherlands v Urgenda Foundation* [2015] HAZA C/09/00456689.

84 *Thomson*, above n 15.

85 Teresa Weeks “Examining the UK Climate Change Act 2008, Research Note September 2017” NZ Productivity Commission <<https://www.productivity.govt.nz/assets/Documents/cea3a9faa8/Examining-the-UK-Climate-Change-Act-2008.pdf>> at 15; J Church “Enforcing the Climate Change Act” (2015) 4(1) UCL Journal of Law and Jurisprudence 109 at 133 and 134.

86 PCE, above n 55, at 31.

87 CCR(ZC)A Bill, Explanatory Note, at 3.

88 Specified in s 8 pt 1B s 5X(3) of the CCR(ZC)A Act (notably the period 2022 to 2025 is four years).

2.3.1 Specific details about the emissions budgets

The purpose of the system of emissions budgets is to help manage the transition to a low-emissions New Zealand and avoid any abrupt changes in policy. They are also to serve as a valuable tool for tracking progress and determining whether New Zealand is on track to meet the target. In doing so, they shall create accountability across successive governments. Emissions budgets should signal the reductions required in the short to medium term and will be supported by a plan that includes strategies and policies to achieve the reductions required. In this way, emissions budgets seek to operate as a market signal, providing households, businesses and industries with greater predictability and driving investment in low-emissions technology and innovation.⁸⁹

With s 8 the Act inserts pt 1B ss 5V to 5ZO into the CCRA which introduce the rules concerning the emissions budgets. With respect to ss 5ZG and 5ZI (which require the Minister to prepare and publish an emissions reduction plan), the Minister must include in an emissions reduction plan a strategy to recognise and mitigate the impacts on iwi and Māori of reducing emissions and must ensure that iwi and Māori have been adequately consulted on the plan.⁹⁰ According to s 5W, the Minister sets a series of emissions budgets to meet and maintain the 2050 target. The Minister sets an emissions budget for each emissions budget period that does not exceed the emissions budget for the relevant emissions budget period and sets out the emissions budget periods (s 5X). Each emissions budget must state the total emissions permitted, expressed as a net quantity of carbon dioxide equivalent, and include all GHGs (s 5Y). The emissions budgets must be met, as far as possible, through domestic emissions reductions and domestic removals (s 5Z). In ss 5ZA to 5ZD the Act interlinks the role of the Commission with the setting of emissions budgets by imposing obligations on both the Commission and the Minister. The Commission also has to monitor progress towards meeting emissions budgets, to report annually on results of monitoring, and to report the end of an emissions budget period evaluating the progress made (ss 5ZJ to 5ZL). Emissions budgets can also be revised if the Commission recommends they should be, because since the emissions budgets were originally set, there have been methodological improvements to the way that emissions are measured and reported, or significant changes have affected the considerations on which the emissions budgets were based. If the Minister determines to revise an emissions budget, the Minister must present to the House of Representatives an explanation of the reasons for revising the original emissions budget (s 5ZE). The Act also provides that if the total emissions in an emissions budget period

⁸⁹ CCR(ZC)A Bill, Explanatory Note, at 3.

⁹⁰ CCR(ZC)A Act, pt 1 s 5 amending s 3A.

are lower than the emissions budget for that period, the excess reduction may be carried forward to the next emissions budget period (banked); if they are greater, up to 1 per cent of the next emissions budget may be carried back (borrowed) to make up the excess emissions in that particular emissions budget period (s 5ZF). The Minister must prepare and publish a plan setting out the policies and strategies for meeting an emissions budget (s 5ZG). As far as enforceability is concerned, this applies accordingly to the topic of the 2050 target above. In this regard, therefore, ss 5ZM to 5ZO apply.

2.3.2 Issues related to the emissions budgets

As mentioned above for the 2050 target, much more needs to be done to integrate iwi and Māori. At present, substantive provisions take an ad hoc approach focusing more on the impacts of policies than on how Māori interests might be relevant to determining the content of budgets and reduction plans. For example, the “economic, social, health, environmental, ecological, and cultural interests” of Māori (stated in the Act, pt 1 s 5 amending s 3A concerning the national adaptation plan) are not explicitly relevant to setting budgets. Reduction plans do not have to be developed with specific reference to these interests; however, the impacts of emissions reduction policies do.⁹¹

To be compatible with the Paris Agreement and to achieve the 2050 target, future emissions budgets have to be set in a very strict manner. They play a vital role since the Paris Agreement commits parties to reach global peak of GHGs as soon as possible. New Zealand cannot merely rely on afforestation to deliver the necessary offsets over the next 12 years, or on major innovations being market-ready and adopted.⁹² Especially the first three budgets should be set as ambitiously and progressively as possible since New Zealand modelled the budgets system mainly on the UK’s model, only circa 10 years later, which made the urgency even more acute.⁹³ Setting strict(er) and more ambitious budgets is also important since New Zealand’s net emissions have risen by 64 per cent between 1990 and 2015, while the UK’s net emissions have fallen by 38 per cent.⁹⁴ When the CCA came into force in 2008, UK emissions had been on a downward trend for about 30 years due to the privatisation of the electricity sector in the late 1980s and the subsequent move away from coal to natural gas for electricity.⁹⁵

91 Taylor, above n 14, at 26.

92 Taylor and Scanlen, above n 35, at 71.

93 PCE, above n 55, at 15.

94 At 4 and 14.

95 Carbon Dioxide Information Analysis Center, Environmental Sciences Division, Oak Ridge National Laboratory, Tennessee, US “CO2 emissions (metric tons per

Over the past 10 years, the UK power sector has changed radically and the transformation is ongoing. And although the CCA was a major driver of this transformation, which has helped to meet the first two carbon budgets and decouple GHGs from GDP,⁹⁶ and the UK is currently on track to meet its third budget (2018–2022), the main reason for meeting the goals set in the first three budgets is that the UK converted its energy generation from predominantly coal-burning to cleaner sources.⁹⁷ Today, critics from the UK claim that the fourth budget (2023–2027) cannot be achieved because it requires a much steeper reduction than previous budgets. Thus, previous success has come largely from targeting “low hanging fruit”.⁹⁸ Given the already low-carbon-intensity of the power generation sector, New Zealand’s Government should enhance the role of the reduction plans, since they are the key tool for meeting the emissions budgets. The Act contains little detail on the content of these plans.⁹⁹

As far as the emissions budgets system is concerned, different options were considered for the highly interlinked issues, which are the length of an emissions budget period, whether — and in what circumstances — budgets could be revised, whether banking and borrowing across budget periods should be allowed, and the role of the Commission concerning emissions budgets. The system chosen is in many ways similar to the UK model, which is still widely regarded as international best practice. As far as revising emissions budgets is concerned, the decision that any emissions budget may be revised is generally seen as a solution to provide a stable and predictable policy environment with the flexibility to respond to changing circumstances. Furthermore, allowing both banking and borrowing across consecutive budget periods to provide a safety valve that is transparent and easily controlled, due to the Commission’s advisory role, has so far also caused little criticism.¹⁰⁰

A bigger discussion triggered the issue of the length of an emissions budget period. Concerning determining the optimal length, it is necessary to strike the right balance between policy predictability and flexibility to respond to

capita) — the United Kingdom” <<https://data.worldbank.org/indicator/EN.ATM.CO2E.PC?locations=GB>>.

96 Fankhauser, Averchenkova and Finnegan, above n 39, at 3.

97 Committee on Climate Change [CCC] *Meeting Carbon Budgets: Closing the policy gap* (CCE, UK, June 2017) <<https://www.theccc.org.uk/wp-content/uploads/2017/06/2017-Report-to-Parliament-Meeting-Carbon-Budgets-Closing-the-policy-gap.pdf>> at 8 and 21; Committee on Climate Change *An independent assessment of the UK’s Clean Growth Strategy* (CCC, UK, January 2018) <<https://www.theccc.org.uk/wp-content/uploads/2018/01/CCC-Independent-Assessment-of-UKs-Clean-Growth-Strategy-2018.pdf>> at 9.

98 Taylor and Scanlen, above n 35, at 68.

99 Taylor, above n 14, at 9.

100 Ministry for the Environment, above n 13, at 89 and 90.

changing circumstances. It is also important to consider whether it is preferable to align emissions budgets with New Zealand's three-yearly electoral cycle or decouple them and, in doing so, depoliticise them, and to consider the international context. Five-year budgetary periods were considered as a good compromise between flexibility and certainty, because they would be longer than the current electoral cycle (providing certainty) and balance the administrative costs with the flexibility required to tailor budgets. Five-yearly budgets also allow annual fluctuations (eg as a result of drought) to be taken into account and averaged out across the whole period.

Combined with the first three emissions budgets set in advance, this solution seeks to allow some flexibility in terms of managing the Commission's workload and the Government's responsibility.¹⁰¹ This option reflects the UK model.¹⁰² The also considered four/six-year models were therefore ruled out, even though the CCC complained that a five-year emissions budget is too long, and recognises that a shorter budgetary period would be more likely to ensure that policies remain fit for purpose and are regularly updated if they are found to be falling short.¹⁰³ It seems that the longer budgets have been given preference to provide a sufficiently stable policy environment for businesses and investors. A shorter period would have been justifiable with the same arguments. The (controversially discussed) Climate Protection Act (Klimaschutzgesetz) launched by the German Federal Cabinet on 9 October 2019 stipulates legally binding climate protection budgets/targets for each year and each individual area.¹⁰⁴ How this concept will work out, only time will tell.

As far as the role of the Commission is concerned, at first glance, it seems appropriate to give the Commission an advisory and monitoring role, but with mechanisms to hold the Government to account.¹⁰⁵ However, in light of the fact that Parliament has no say in decisions over the emissions budgets, the Commission's powers should be broadened to hold Government to account. This is closely interlinked with the controversially discussed issue that the Government is under no duty to show how its various policies will add up to deliver on successive budgets, and has full control over the final budget decision. In comparison, the UK's CCA provides for Parliament to make the

101 Ministry for the Environment, above n 13, at 78 and 79; CCR(ZC)A Bill, Explanatory Note, at 4 and 5.

102 Ministry for the Environment, above n 13, at 79.

103 At 79.

104 Juris "Entwurf des Klimaschutzgesetzes und Klimaschutzprogramm 2030 beschlossen" (2019) <<https://www.juris.de/jportal/portal/page/homerl.psml?nid=jnachr-JUNA191002519&cmsuri=%2Fjuris%2Fde%2Fnachrichten%2Fzeigena%2Fricht.jsp>> (translation: Draft Climate Protection Act and Climate Protection Programme 2030 adopted).

105 Ministry for the Environment, above n 13, at 95.

final decision on emissions budgets.¹⁰⁶ Thus, the decision on the budgets is withdrawn from a democratic and balanced public discussion.

2.4 Adaptation: Measures to Increase New Zealand's Resilience to Changing Climate

The world is already committed to some level of climate change due to past emissions, and it will continue to change, regardless of what is being done now to reduce emissions. Therefore, the Act seeks to provide a framework on how to respond to the effects of climate change. The framework for enhanced action on adaptation will consist of a national climate change risk assessment, to improve the understanding of the climate risks that New Zealand faces, a national adaptation plan, which will outline the Government's approach to improving New Zealand's resilience to the effects of climate change, and monitoring and reporting against the national adaptation plan to ensure accountability.

2.4.1 Specific details about the enhanced action on adaptation

With s 8, the Act inserts pt 1C ss 5ZP to 5ZX into the CCRA which regulate the specific details about the enhanced action on "adaptation". With s 5ZP the Act provides for "national climate change risk assessment" to assess the risks to New Zealand from the current and future effects of climate change, and identify the most significant risks and the need for coordinated steps to respond to those risks in the next six-year period. According to ss 5ZQ and 5ZR, the Commission shall make the national climate change risk assessment within six years (after the first risk assessment issued by the Ministry in August 2020), and the next national climate change risk assessments every six years. The Minister responsible for the Act must prepare a national adaptation plan in response to each national climate change risk assessment (s 5ZR). Concerning the national adaptation plan, the Minister must, in preparing the plan, take into account the economic, social, health, environmental, ecological, and cultural effects of climate change on iwi and Māori.¹⁰⁷ For each national adaptation plan, the Commission shall provide the Minister with a progress report that evaluates the implementation of the adaptation plan and its effectiveness two years, four years, and six years after the adaptation plan is made publicly available (s 5ZU). According to s 5ZW, the Minister requests certain organisations to provide information on climate change adaptation (adaptation reporting power), and in

¹⁰⁶ Taylor, above n 14, at 24.

¹⁰⁷ CCR(ZC)A Act, pt 1 s 5 amending s 3A. See Ministry for the Environment *National Climate Change Risk Assessment for New Zealand — Main report* (ME 1506, Ministry for the Environment, Wellington, August 2020) (listing 43 priority risks in five domain values).

s 5ZX the Act provides regulations to be made in respect of requirements that relate to information the Minister requests.

2.4.2 Issues related to adaptation

Whether the Act responds effectively to climate change by considering the relationship with tangata whenua will be an issue,¹⁰⁸ since it has been very difficult to project how the proposed policy interventions may specifically affect iwi and Māori.¹⁰⁹ As mentioned above, most attention is given to Māori interests in the context of national adaptation plans. However, surprisingly, those standards do not apply to the national risk assessment, according to the Act.¹¹⁰

On an international level, New Zealand is obliged to increase the ability to adapt to the adverse impacts of climate change by the Paris Agreement.¹¹¹ However, neither the Paris Agreement nor the Act describe how far adaptation measures should reach. In any case, the term “adaptation measures” must be understood as broadly as possible. For instance, climate change can also increase the likelihood of refugees seeking shelter from climatic stress in more severely affected regions, including the Pacific Islands.¹¹² So it is vital to understand and implement the wide scope of the obligation to adapt. This is even more true with regard to the current legal and policy framework. There are barriers to effective adaptation action in New Zealand due to the absence of any requirement for coordination between agencies, or clear lines of responsibility, and misalignment in how climate change adaptation and resilience objectives are incorporated into legislation and policy.

The current legal and policy framework lacks an integrated, nationwide approach to adaptation that has clear objectives and priorities for New Zealanders to understand the risks posed by climate change and take appropriate action. There are also various levels of understanding and acceptance of climate change by the public. Many sectors are generally well-informed about potential climate change impacts but are not acting even when it is likely to be in their best interests (eg infrastructure), while in other cases information in its current form is not reaching key decision-makers.¹¹³ Even the more recent measures seem to lack adequate adaptation. The One Billion Trees Programme, for example, seems to be too fixated on carbon. There is no planning ahead to the second half of the century when it will be essential to have resilient forests that

108 Ministry for the Environment, above n 13, at 28.

109 At 30.

110 Taylor, above n 14, at 25.

111 Paris Agreement, above n 1, art 2(1)(b).

112 PCE, above n 55, at 33.

113 Ministry for the Environment, above n 13, at 104.

are more diverse, and thus can withstand some of the environmental effects of climate change. New Zealand must be careful not to make the same mistakes as the UK, where — compared with mitigation — the debate on adaptation has progressed more slowly and has received less attention.¹¹⁴

Furthermore, it seems to be even more disconcerting that the Government, in terms of adaptation, deals with climate change with the Act as a distinct statute outside broader resource management regimes. In increasingly more countries, there is greater integration of climate change considerations across legislation. For example, in Norway, climate change mitigation is more integrated into spatial planning legislation than it is in New Zealand's RMA, to develop a comprehensive adaptation.¹¹⁵

In terms of who prepares the national climate change risk assessment, several potential responsible bodies were considered, including other central and local government agencies. And although some critics claimed that the Commission already had enough to handle due to their wide functions, the Commission is best placed to carry out this function, as it is important that the national climate change risk assessment is understood to be based on the best available evidence and independent of the politics of the day.¹¹⁶ Allocating responsibility for the national adaptation plan to other organisations was considered, but only central government has the necessary authority to undertake this function. Therefore, the plan is prepared by the Minister.¹¹⁷ This brings administrative and compliance costs with it,¹¹⁸ which should not discourage the inherently good concept of adaptation.

Furthermore, there was a strong push for the now established six-yearly cycle to line up with relevant investment cycle timings, including local government long-term planning time frames and land transport investment planning, both of which happen in three-yearly cycles. A five-yearly cycle was considered to align with the communication of NDCs under the Paris Agreement, but NDCs are focused on mitigation rather than on adaptation.¹¹⁹

By including a mechanism by which information can be gathered from those responsible for providing public services and infrastructure, the Act gives remedy to the lack of readily available and adequate information. Currently, there is no formal requirement for New Zealand organisations or firms to report on the risks that climate change poses to their operations. Adaptation reporting power is an opportunity for greater public understanding and greater benefits by ensuring that organisations prepare effectively for climate change and report

114 Fankhauser, Averchenkova and Finnegan, above n 39, at 4.

115 Ministry for the Environment, above n 13, at 27.

116 CCR(ZC)A Bill, Explanatory Note, at 5.

117 At 5.

118 Ministry for the Environment, above n 62, at 49 and 50.

119 CCR(ZC)A Bill, Explanatory Note, at 5.

publicly on their work.¹²⁰ Voluntary, informal reporting was considered and remains a viable option alongside the Act's proposal for mandatory provision of information. Experience in the UK has found that mandatory adaptation reporting does not necessarily lead to a higher standard of reports.¹²¹ However, even voluntary information-gathering is likely to be more successful if the Minister can require the provision of information.¹²²

2.5 Integration of the Act into the Existing System

As mentioned above (in parts 2.2.2 and 2.4.2), the Act provides very little integration with other legislative frameworks. In this context — besides, for example, the LTMA, the Building or the Energy Efficiency and Conservation Acts — special attention must be given to the RMA. Prior to amendment in 2020, the RMA explicitly prevented local government from taking into account GHG emissions from activities, when conducting a wide range of planning and permitting functions.¹²³ After 31 December 2021, regional council policy statements, regional plans and district plans should address any emissions reduction plan and any national adaptation plan, and all the documents will become relevant to any resource consent application that may increase GHGs.¹²⁴ Further the Government has commissioned a comprehensive review of the RMA, including the ways it interacts with other key legislation such as the CCRA and the Act. This 2020 report provides for proposed new legislation, including spatial plans and the integration of regional and district plans to implement climate change objectives.¹²⁵

120 Ministry for the Environment, above n 13, at 7 and 112.

121 At 116.

122 CCR(ZC)A Bill, Explanatory Note, at 5 and 6.

123 Resource Management Act 1991 [RMA], ss 70A, 104A; Bosselmann, above n 61, at 258–275.

124 Resource Management Amendment Act 2020, amending RMA, ss 61, 66, 74, and repealing ss 70A, 104A (from 31 December 2021); Urban Development Act 2020 (Kāinga Ora public housing); Taylor and Scanlen, above n 35, at 68; Madeline Seaman “Contributions of Philosophy and Psychology Towards Understanding the Effectiveness of Environmental Law in a New Zealand Context” (2018) 22 NZJEL 113 at 113–115.

125 Resource Management Review Panel *New Directions for Resource Management in New Zealand* (Resource Management Review Panel, Wellington, June 2020) <<https://www.mfe.govt.nz/sites/default/files/media/RMA/rm-panel-review-report-web.pdf>>; Ministry for the Environment “Improving our resource management system” <<https://www.mfe.govt.nz/rma/improving-our-resource-management-system>>; earlier Cabinet decisions about the review are outlined in the Cabinet paper “Comprehensive review of the resource management system: scope and process” <<https://www.mfe.govt.nz/sites/default/files/media/RMA/cabinet-paper-comprehensive-review-rm-system-scope-process.pdf>>.

The present lack of integration is questionable, but this issue is being addressed, and it should become more realistic to achieve the emissions budgets, the target, or an appropriate adaptation. However, the NZ ETS shall be a key tool in meeting emissions budgets and achieving the 2050 target. Thus several improvements to the NZ ETS were progressed through the Act, including price-control measures.¹²⁶ However, to be more effective, a broader reform of the ETS system would have been needed. In the absence of strong integration across other sectors, the Act gives the impression that it will be primarily reliant on an enhanced ETS for reductions and forestry for removals. If so, this may only deliver a modest improvement on “business as usual”, and not the whole of the economy and society transformations required.¹²⁷

Finally, the CCRA states its relationship to offshore mitigation, defined as “emissions reductions and removals, or allowances” (s 4(1)). The Act allows the Government to purchase reductions, sourced from overseas to meet emissions budgets, but only as a last resort and not as a first choice. The Commission sets a limit on the number of reductions sourced from overseas that can be purchased and includes reasons for this limit. This is designed to place primary reliance on reducing emissions at home while retaining the flexibility to manage the uncertainty of making long-term projections. While providing so, the Act states that it does not impact upon New Zealand’s commitment to communicating and achieving NDCs.¹²⁸ Understandably, this system has encountered much criticism, because it does little to reduce national emissions. This was also a major point of criticism of the UK’s CCC. Furthermore, this system has the potential for abuse and seems extremely inscrutable.

3. CONCLUSION

With the CCRA, amended in 2019, New Zealand finally commits to a framework, including a binding target in primary legislation, to tackle climate change on both fronts — mitigation and adaptation. The Act promises a strong shift in the country’s understanding of, and commitment to, the necessary global climate change response. However, whether the Act meets these promises and ambitious goals is doubtful. As global emissions climb, the time frame for reductions shortens and the need for steeper cuts increases.¹²⁹ As stated in this article, it is highly uncertain whether the Act can address the significant

126 CCR(ZC)A Bill, Explanatory Note, at 6.

127 Taylor, above n 14, at 14.

128 CCR(ZC)A Bill, Explanatory Note, at 6.

129 Taylor, above n 14, at 28.

economic, fiscal and social implications in the short and long term, and will over time alter New Zealand's economy and society; the listed issues are varied. And although the Act states that a "just and inclusive society" is its overarching purpose, the treatment of justice issues is generally muddled and superficial, resulting in the omission of significant principles including the precautionary principle, human rights and interspecies justice.

The Act could be significantly improved by including a comprehensive set of general justice principles (like those stated in the United Nations 2030 Sustainable Development Goals).¹³⁰ Inequality and poverty are still high on the agenda in New Zealand and make it difficult to establish a functioning climate system where health, happiness and compassion are the measures of success. Furthermore, as this article shows, the Act is an almost distinct statute, and does not consider greater integration of climate change across the current legislation.

In many ways strictly modelled on the UK's CCA, the Act might face the same issues as its role model, which was expected to put climate change on the agenda across government departments and to enable policy-making in the relevant sectors in line with the long-term climate objectives. For the UK, this has happened only to a degree. The CCA has triggered many policy debates (for example, on airports, renewable energy, shale gas, and flooding) but whether it actually changed their outcomes, materially or legally, can be questioned.¹³¹ However, despite these issues, the uncertainty created by Brexit, and the resistance to climate ambition shown by the now ruling Conservative Government, the CCA has ensured that the UK remains bound to its economy-wide long-term emissions reductions pathway.¹³²

In conclusion, it can be said that New Zealand must make further efforts to live up to its green image. Under the Act, a zero-emissions development strategy is needed, including policies and plans, which provide a pathway for an actual transition. Climate change law needs steps to action into the unknown. The Act, in its content, seems to lack those steps, but subsequent actions under the RMA, upon which the environmental future of New Zealand relies, are being incrementally addressed. What the future will look like is therefore still uncertain. The task ahead is daunting — the past four years were the warmest on record and GHGs from human activities are still rising. The choices countries and their governments now make (especially for the first five-year milestone of the Paris Agreement) will profoundly affect us and the planet we leave to future generations.¹³³ Nevertheless, the CCRA is a step in the right direction.

130 At 19.

131 Fankhauser, Averchenkova and Finnegan, above n 39, at 4.

132 Generation Zero "International case studies and lessons for New Zealand: A Zero Carbon Act research paper" (April 2017) at 19 and 25.

133 NDC Global Outlook Report 2019, above n 20, foreword.

However, it only provides the framework for future policies and laws. Thus, it is not a substitute for ongoing political commitment to a low/zero-emissions economy. Based on the Act and its first emissions budgets, changes need to be made to take the first steps towards actual transition.