

Zero Carbon Act

Submission by Churches Climate Change Network

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Summary: Churches Climate Justice Network and the ZCA

Churches bring values of care and responsibility for our common home and affirm policies for climate justice in the Zero Carbon Act in addressing the significant changes and opportunities of a low emissions economy and risks to homes, land, livelihoods, and people.

1. A Just Transition

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We affirm equity and intergenerational justice, and ensuring that vulnerable communities are supported through plans for just transitions. Planning includes provisions for regions, support for workers in industries where job losses will occur, education and training opportunities in a low emissions economy. Just transition includes mitigation and adaptation strategies. In particular we refer to Just Transition, (CTU)¹ to guide the management of economic transformation and the changing profile of work.

2. A 2020- 2050 target with Just Transitions and Adaptation

We prefer working with a 2020 to 2050 period to strengthen focus on policy and public understanding for reducing carbon emissions in the short and longer terms.

We support Parliament setting plans and a timeframe of 5-6 years to achieve emissions budgets under the Zero Carbon Act. We support a **Te Tiriti o Waitangi** framework with principles of **Just Transition**: fairness, equity, stewardship, and supported employment into a low emissions economy. A participatory process for involving stakeholders and the public in the Climate Commissions work will support pathways of change.

We support a stronger ambition and a **‘two baskets’** approach to targets for long lived and short lived greenhouse gases. This enables us to take account of New Zealand’s particular emissions profile of nearly 50% of our GHG’s from agriculture and methane. We emphasise the urgency of reducing long lived cumulative emissions to net zero in the period 2020-2050 in support of the Paris Agreement to keep global warming below 2 degrees Celsius, striving to 1.5 degrees. Reducing methane will make a significant contribution to meeting NZ’s obligations, and we commend the advice for a GWP* /CO₂-e* measure to provide more accurate accounting for short lived and long lived greenhouse gases.

We emphasise the importance of **gross emissions** and an emissions budget plan to reduce gross emissions, with care to avoid over-reliance on offsets to meet net zero emissions targets.

Reducing CO₂ & N₂O emissions within set budget periods is imperative, in particular before 2036 when the 2 degree warming limit will be reached at current rates of emissions. It is appropriate that adaptation (i.e. addressing the impacts of climate change, such as droughts and sea level rise) being included in the Zero Carbon Act.

¹ Richard Wagstaff and Sam Huggard (2017) ‘Just Transition’. New Zealand Council of Trade Unions. www.union.org.nz/wp-content/uploads/2017/10/JustTransition.pdf

3. Climate Change Commission

We support the functions of the Climate Change Commission of providing expert advice; monitoring our progress; reporting with accountability for meeting targets. The Commission is to include Māori representation, scientific, technical and policy experts. We recommend that plans for budgets, targets and reducing long lived and short lived emissions, and adaptation be prepared by the Commission. A Stakeholders Forum will provide a complementary engagement strategy.

4. Cross Party Agreement

We appreciate all efforts to achieve a cross party agreement, without compromising planning for budgets and transitions to meet net zero carbon between 2020-2050.

5. Conclusion

We affirm the proposed Zero Carbon Bill to support progress in meeting New Zealand's responsibilities of stewardship and our care for succeeding generations.

The Churches Climate Change Network

The Churches Climate Network is an ecumenical collaboration for Climate Justice. The network is a coalition of organizations and units within the Anglican, Methodist, Society of Friends (Quaker), Catholic, Salvation Army, Presbyterian churches and is open to Christian faith groups working on climate change. The network works with the Church Leaders of the respective churches.

Climate Justice

The orientation of the network is to engage with and support climate justice as an ethical approach to climate change. Members are involved in many different aspects of climate change work, including leading and supporting campaigns, engaging with the science, contributing to policy development, linking with Pacific Islands partners and working with education, ethics and theological interpretation.

While climate change is focussing attention on love for earth, our common home, it is also putting homes, land, livelihoods, and people at risk both in Aotearoa NZ and globally.

The Churches Climate Network recognises Te Tiriti o Waitangi as the founding document of our nation. Te Tiriti o Waitangi therefore provides a framework for climate justice in Aotearoa NZ, with partnership, consultation responsibilities and provisions to ensure that Treaty Settlement Agreements (settled and to be settled) are upheld.

The Churches Climate Change network is tuned to the Pacific region and, while acknowledging the resilience and indigenous traditions of Pacific Peoples, we work to support Pacific interests in climate finance, renewable energy, food security, adaptation and to address climate induced migration with dignity.

Climate justice includes a moral duty to support our global neighbours who are some of the most at-risk in the world. Meaningful action on climate change also requires, caring for creation and stewarding our resources for future generations.

Principles of fairness and equity are central to climate justice. **Intergenerational** responsibilities mean addressing climate change now in the context of planned transitions to net zero emissions in the period 2020 – 2050. Net zero emissions is to be inclusive of reducing gross emissions so that net zero is not achieved through over-reliance on offsets.

We wish to prevent passing on major problems to our children and grandchildren as far as possible. Inaction now will increase costs and risks later. We therefore support Just Transitions, so that industries, work and employment associated with contributing to Green House Gas emissions are given support to contribute to the zero carbon new economy. This is a complex issue which is mentioned further in this submission.

The Paris Agreement is historic as a global consensus to address climate change by limiting warming to 2 degrees Celsius, striving for 1.5 degrees. We support policy to fulfill Aotearoa New Zealand's INDC obligations, and to express leadership in reducing emissions.

Theology and Climate Justice

We affirm God's love for the whole of creation and our common home with its capacity for healing and renewal, and recognize that we are part of a community of shared destiny.

Zero Carbon Act - ‘Our Say’

1. A Just Transition

We strongly support principles of climate justice and fairness being embedded within a Zero Carbon Act, and Te Tiriti o Waitangi as a framework for the Zero Carbon legislation and policy.

By **fairness**, we mean giving careful consideration to equity issues, such as intergenerational justice and the principles of Just Transition. While new opportunities will be created in a zero carbon economy the magnitude of change requires plans with managed preparation for the changing profile of industry, business and work. It is well recognized that wealthy people are more resilient to change because of having the resources to adapt, whereas lower income people have fewer means to adapt and are more exposed because of spending a greater proportion of income on food and household energy (Productivity Commission draft report, Ch 9).²

Just transition therefore means ensuring that vulnerable people and communities are supported by the policies that ensue from a Zero Carbon Act, and that a just transition is planned for regions and workers in industries where job losses will occur. The framework of Climate Justice is proposed to align with the Just Transition framework outlined by the Council of Trade Unions.³

Planning, clear signalling and engagement with industry and communities at risk of job losses should be done as early as possible to enable communities and businesses to plan for the impact and opportunities of emission reduction policies. We note the policy advice in the ‘Jobs After Coal’ report as a further reference for policy to facilitate skills transfer and re-training for those employed in coal mining industry.⁴

Furthermore, the targets and plans set in place by this legislation should avoid passing the cost of transition to future generations. A holistic approach to economic transitions and the environmental impact of climate change policies will be part of an integrated approach.

Recognition of Te Tiriti o Waitangi in the Zero Carbon Act requires governance level partnership between iwi and the Crown. Therefore, it is imperative that the Government works in partnership with iwi and hapū to develop the Zero Carbon Bill. Targets and policies should be made with Māori/iwi consistent with upholding tino rangatiratanga of iwi and

² Productivity Commission Draft Report. Chapter 9, pp. 221-235.
www.productivity.govt.nz/sites/default/files/Productivity%20Commission_Low-emissions%20economy_Draft%20report_FINAL%20WEB%20VERSION.pdf

³ Richard Wagstaff and Sam Huggard (2017) ‘Just Transition’. New Zealand Council of Trade Unions. www.union.org.nz/wp-content/uploads/2017/10/JustTransition.pdf

⁴ Coal Action Network Aotearoa (2015) ‘Jobs After Coal’.
https://coalactionnetworkaotearoa.files.wordpress.com/2015/05/jac_2015_final-low-res2.pdf

hapū (Article 2 Te Tiriti o Waitangi). Climate change policies should be informed by tikanga Māori, Māori worldviews, Māori science for climate change⁵, and other Māori interests.

In view of the major challenge of climate change to public health, government should also consult with the health sector, including the Ministry of Health, District Health Boards, professional health societies and Ora Taiao, which comprises over 600 health professionals. However, we believe that the need for consultation must be balanced by the need for urgency in starting down the path towards a carbon neutral society.

2. A 2020- 2050 period for targets

We express caution about the far off date of 2050. The real issue is the cumulative emissions of long lived gases generated from New Zealand and all countries. Working with the 2020 to 2050 period brings into focus the need for immediacy in reducing carbon emissions and reduces the inclination to defer action. A 2020 to 2050 period strengthens focus on policy and public understanding for reducing carbon emissions in the short and longer terms

We have considered both the second and the third options for a net zero carbon target in the period 2020-2050 as the Churches Climate Network support a strong ambition. We have some important caveats.

We support the ‘two baskets’ approach, with targets for long lived and short lived Greenhouse Gases (GHG’s). This enables us to take account of New Zealand’s particular emissions profile that 49% of our GHG’s come from agriculture, of which 43% are from Methane. Alongside this, we emphasise the urgency of reducing long lived cumulative emissions to net zero by 2050.

The *Our Climate Your Say* options are confusing in that they force people to choose between the scientific approach of recognising the difference between long-lived GHG’s such as CO₂ vs short-lived gases such as methane, and a seemingly more ambitious target of net zero emissions across all gases by 2050.

We support a target of reducing *overall* greenhouse gas emissions to net zero by 2050, but doing so in a way that treats the different gases according to their radiative forcing (warming) effects. This means achieving *negative* long-lived gas emissions, while reducing short-lived gas emissions. This would balance out to net zero across all gases, but in the most impactful way possible. This is the strongest option for New Zealand’s contribution to meeting the Paris Agreement goal to keep global warming well below 2 degrees C, striving for 1.5 degrees C.

⁵ Climate Resilient Māori Forestry and Agriculture.

<http://www.deepsouthchallenge.co.nz/events/dsc-seminar-8-climate-resilient-maori-forestry-and-agriculture>

A project on alternative forestry which uses kaupapa Māori, bio-physical and economic assessment tools to understand and evaluate different land-use decisions.

Alongside landowners, the project identifies multiple land-use opportunities with a range of social, economic, environmental and cultural benefits. These included alternative forestry (mānuka, kānuka, tōtara, mataī, puriri, harakeke and kawakawa), horticulture (including honey, olives and olive oil, lemons and hemp) and other business options derived from mātauranga Māori.

There has been a lot of focus on methane in recent papers circulating in preparation for the Zero Carbon Act, because of New Zealand's particular profile of high methane emissions. However this needs to be held alongside reducing long lived gases CO₂ and N₂O.

Economic Change - Long Lived Gases / CO₂ and N₂O

We emphasise the need for policy for transport and energy to reduce long lived CO₂ and N₂O gases. The significance of economic transitions cannot be overstated.⁶ The announcement of no new fossil fuel exploration, in April 2018, by Energy Minister Hon. Megan Woods gave an important signal of a shift in economic profile ahead.⁷ Opposition from the oil and gas industry also shows the contested dynamics involved in this change,⁸ with issues that are similar to the dairy industry. A Just Transition framework needs clarity of planning so that industry can anticipate change and avoid stranded assets, and so that investment in new industries are underpinned by certainty of policy direction.

Just Transition is underpinned by industry policy to support investment and diversification of industry; employment law that supports 'Living Wages', job security, and respectful employment conditions; and state social security for changing jobs with education and training that supports preparation for work in the changing economy.⁹

Agriculture is significant to the New Zealand economy and lowering CO₂ through land use change with agricultural diversification, and through low emission food production and processing industries are important along with addressing methane.

With regards to the two baskets approach and measures for mitigation we recognize New Zealand's particular profile of methane, and reinforce the significance of early mitigation and reducing emissions of long lived gases alongside setting budgets for reducing methane.

Short Lived Gases / Methane

In recommending that New Zealand should aim for reducing short-lived emissions we mean that we should not settle for stabilizing methane at current levels (ie no changes in livestock agriculture). Stabilizing methane at current levels would in effect hold temperature rise at current elevated levels while causing no further warming (from short term GHG's), stabilizing methane at current levels would not cause temperatures to drop. We recommend that advice on where levels of short lived gas reductions should be set will be provided by the Climate Change Commission.

There will be a range of policy options at a more technical level. We mention the Carbon Law proposed by Johan Rockström from the Stockholm Resilience Centre, during his talk in New Zealand 5 May 2018, which proposed halving CO₂ emissions every year, or over defined

⁶ Productivity Commission Draft Report 2018. Pp. 1-13.

⁷ Hon Megan Woods . <https://www.newshub.co.nz/home/politics/2018/04/no-plans-to-ban-oil-gas-exploration-altogether-energy-minister-megan-woods.html>

⁸ <https://www.stuff.co.nz/business/105665923/minister-says-campaign-against-labour-law-reform-is-deliberately-misleading>

⁹ Richard Wagstaff and Sam Huggard (2017)' Just Transition'. P. 9

periods.¹⁰ Also Differential Abatement Obligations (proposed by Guy Salmond, Ecologic) is a further consideration as a policy setting.

Different Treatment of Long Term Cumulative Emissions and Short term Emissions

Differentiated Abatement Obligations works with the ‘polluter pays’ principle; until now New Zealand has not regulated fully for polluter pays – as in freshwater¹¹. The different treatment of gases should lead to Different Abatement Obligations, so that those who emit short-lived gases would be obliged to offset them with short-term offsets (such as pine trees which have about the same life-time as methane) and those who emit long-lived gases would be obliged to offset them with permanent offsets (native forests would only partially contribute to long term offsets). This means the emissions of each gas should either be reduced, or be offset in accordance with its inherent characteristics.

Differentiated Abatement Obligations offers fairness to future generations because the offsets proposed will have benefits relative to each of the short and long term gases. It works with a principle of shared responsibility by all sectors (universal) and avoids some bearing the burden (eg CO₂ /transport/ industry) while others evade obligations(methane - agribusiness).

The Zero Carbon Act should focus on both gross emission reductions and net zero emissions in the period 2020-2050, with the different types of gases being addressed through different budget targets. We stress the importance of setting budgets that set us on a trajectory of early mitigation for reducing cumulative gases (CO₂ and N₂O) with peaking in 2036 in order to avoid the impact of cumulative emissions and the warming effects for centuries to come.¹²

The paper ‘Climate metrics under ambitious mitigation’¹³ is an important reference for resolving the CO₂ equivalent measure (CO₂-e), the GWP (Global Warming Potential) which conflates long and short term gases through a calculation for the CO₂ equivalent of

¹⁰ Rockström, J. et al. (2009) ‘Planetary boundaries: exploring the safe operating space for humanity’, *Ecology and Society*, 14 (2), 32.

¹¹ NZ has historically regulated point-source polluters and required them to abate their pollution at their own expense, but until 2011 we exempted the non-point source pollution that comes from farm runoff. This failure to apply the PPP has had the perverse effect of encouraging the expansion and intensification of livestock farming and NZ’s freshwater quality has declined rapidly, even as industrial and sewage outfalls were being cleaned up. (G. Salmon 28 June 2018)

¹² Royal Society of New Zealand (2016) ‘Transition to a Low Carbon Economy for New Zealand.’ P. 24. <https://royalsociety.org.nz/assets/documents/Report-Transition-to-Low-Carbon-Economy-for-NZ.pdf>
- Productivity Commission Draft Report (2018). P. 25ff.

¹³ Oxford Martin School, University of Oxford (2017) ‘Climate metrics under ambitious mitigation’. Programme Briefing.

methane.¹⁴ In the conventional GWP₁₀₀ measure, one tonne of methane is calculated as equivalent to so many tonnes of CO₂ without differentiating the cumulative warming effect of CO₂ from the short lived (approx 25 year) impact of methane. The different behaviour of gases in terms of temperature responses should be accounted for, with provision for the different time scales of short and long term gases, coinciding with peak warming as proposed in the GWP* model.¹⁵ For the purposes of international reporting via a common scale this is denoted as CO₂-e*.

Gross Emissions and Domestic Reductions

We recommend that the Zero Carbon Act set an explicit gross emissions-reduction target for domestic long-lived gases for the period 2020- 2050. As indicated in the Productivity Commission Draft Report¹⁶ there is a heavy reliance on New Zealand meeting its Paris obligations through offsets and the Churches climate Network strongly supports mitigation of gross emissions.¹⁷

The ambitious tree planting policies currently being activated signals heavy reliance on offsets from forestry, and the risk of avoiding the reduction of long lived greenhouse gas emissions. There are risks involved in relying too much on planting trees (carbon sinks), as highlighted by the Parliamentary Commissioner for the Environment, Simon Upton in his submission to the Productivity Commission on its draft report on a 'Low-Emissions Economy.'¹⁸ While we suggest an 80-90% reduction against 1990 levels, we recommend that the government seek advice from the Climate Change Commission on the appropriate balance between gross emissions-reductions and the use of carbon sinks.

New Zealand should be required to meet its 2020-2050 targets through domestic emissions reductions only. Relying on international carbon credits (even if the credits have integrity) creates uncertainty about what reductions need to be achieved here in New Zealand. It also means we are investing in other country's low emission transitions, rather than our own.

This does not mean preventing New Zealand from purchasing international carbon credits as an additional contribution to global mitigation efforts, however. Purchasing credits helps other countries finance their transition to a zero carbon economy, and is a way for New Zealand, as a developed nation, to look after our global neighbours.

Carbon Emission Budgets

With respect to carbon budgets we draw attention to the importance and advantage of early action in particular to give attention to peak warming (the maximum temperature rise of 2

¹⁴ Keith Shine, with Myles Allen, Michelle Cain, David Frame, Jan Fuglestvet and Adrian Macey (2017) 'Placing emissions of different greenhouse gases on a common scale.' University of Reading. UK.

¹⁵ Oxford Martin School. See note 10.

¹⁶ Figure 2.6, p. 30.

¹⁷ Jonathan Boston, Submission to ZCA. July 2018.

¹⁸ www.pce.parliament.nz/media/1720/low-emissions-economy-submission-web.pdf

degrees) and the rate of carbon equivalents that can be emitted to stay within 2 degrees, which is estimated to be used up by 2036. We propose that New Zealand's budgets and targets be calibrated in accordance with the 2036 limit,¹⁹ which in effect means immediate, rather than deferred action.

4. Parliament response

The Zero Carbon Bill should require Parliament to set out plans within a timeframe such as 5 or 6 years to achieve the emissions budgets, and this time frame should be no more than 12 months after an emissions budget has been set. While the UK's Climate Change Act provides a strong model for New Zealand in many respects, a weakness is that it does not set clear timeframes for the government to make policy plans to meet future emission budgets. We should learn from this and ensure a Zero Carbon Act has a strict time frame for setting out policy plans and clearly defined interim targets, such as every 5 or 6 years as mentioned.

Of key importance when setting plans to make budgets, is adhering to the principles outlined under 1) *A Just Transition*: fairness, equity, environmentally sustainability, and a commitment to *Te Tiriti o Waitangi* as referred to in the Churches Climate Network section.

The government must continue to engage with the community, in particular ensuring information on meeting targets is well circulated with avenues for the public to contribute their views. The community needs encouragement and guidance to be engaged in achieving the targets, which will involve adapting lifestyles to low emission emission generating products and services, and supporting the policies, leaders, technologies, services and businesses that promote the reduction of greenhouse gas emissions.

Engagement with stakeholders and the wider public with access to information are vital to ongoing mandate of the Climate Change Commission and for sustaining public support.

5. Climate Change Commission

We support the functions of the proposed Climate Commission, namely, providing expert advice; monitoring our progress; and holding the government to account.

Transparency needs to be central to its operation, to enable the public to have easy access to its monitoring activities.

A Te Tiriti o Waitangi framework for the Commission means Māori representation on the Commission along with technical and policy experts. It is crucial that our policy actions are in line with the latest science and with sound policy principles.

Furthermore, it is important that the Commission should not be a decision-making body. A Commission with decision-making powers is less effective as a watchdog; there is a conflict of interest in holding itself to account over its own policy decisions.

With regard to engagement with stakeholders, we prefer that a Stakeholders forum be constituted for regular engagement with the Commission. In general we have reservations

¹⁹ Productivity Commission Draft Report (2018). Ch. 8.

about including stakeholder representatives on the Commission unless they are fully representative of all stakeholders – including those less resourced to engage. Stakeholders have vested interests which may stand in the way of the most ambitious targets and the transition process. Some businesses are set to face costly transitions and such businesses may be perverse to zero emissions and transitions and seek to lobby for weak policy; other businesses benefit – those paving the way in renewables and technology; an equally powerful voice must be ensured for those who are vulnerable to the most negative climate impacts. A forum would facilitate the engagement of multi-sectoral interest groups in the climate change transitions, and provide a reference for those involved in practice, in ethics and a range of climate change interests.

It is important that elected officials be responsible for making plans and meeting Zero Carbon Act targets. Since Commissioners are to be appointed rather than elected they are not mandated to hold decision-making power. Thus the final responsibility rests with Parliament.

Finally, it is important that our transition to a net zero emissions economy is comprehensive and coordinated across all sectors; overall responsibility for these plans should lie with the government.

6. Adapting to the impacts of climate change

We support a framework for adaptation (i.e. addressing the impacts of climate change, such as droughts and sea level rise) being included in the Zero Carbon Act, and that the Climate Commission should contribute its expertise to our adaptation response. This may require a separate expert working group.

We support the government being required to prepare a national climate risk assessment, and a national policy plan to address these risks. A monitoring and reporting framework is also important.

We also support the proposal to set up a targeted adaptation reporting power that could see some organisations share information on their exposure to climate change risks.

Education

The scope of climate change adaptation is vast, as has been signalled in the scope for Just Transition. While education may be beyond the brief of this consultation, we wish to bring it into the purview of adaptation and Just transition planning. We have outlined education and training needs of industry and work. We include also the need for climate change education in schooling with an approach which runs across pre-school to secondary and vocational pathways, and which integrates climate learning into curriculum areas to prepare students for their future of higher education and work.²⁰

7. Cross Party Agreement

²⁰ Eames, Chris (2017) 'Climate Change Education in New Zealand.' Australian Curriculum Studies Association. <https://slideheaven.com/climate-change-education-in-new-zealand.html>

Cross party agreement to the Zero Carbon Act is the key to durability of the Act and continuity of policy. Cross party agreement provides long term policy certainty. At present the National Party supports a Climate Change Commission.

The Parliamentary Commissioner for the Environment has suggested, in the interests of achieving a cross party agreement, that the Act set up a Commission and be empowered to set targets, carbon budgets, recommend policies for a Just Transition and for adaptation plans.

We support all efforts to achieve a cross party agreement, without compromising planning for budgets and transitions to meet net zero carbon between 2020-2050.

8. Conclusion

Finally, it is important that our transition to a net zero emissions economy is comprehensive and coordinated across all sectors; overall responsibility for these plans should lie with the government.

This Zero Carbon Bill represents a major step forward in New Zealand's progress in addressing climate change and all the ramifications involved, and it is important that it is established in fashion that it engages the whole country in a determined effort to drive towards a future which honours our commitment to succeeding generations.