Submission to He Pou a Rangi - the Climate Change Commission’s Draft Advice for consultation

Introduction

This submission is made by Oxfam New Zealand (Oxfam). Oxfam welcomes the submission process to provide New Zealanders the opportunity to have their say on how we make the shift to a zero-carbon future.

Our submission outlines responses to a number of the 24 consultation questions asked by the Commission, with a particular focus on the scale of action necessary for global climate justice. Oxfam’s recommendations will ensure that New Zealand is playing its part in global efforts to keep to 1.5 degrees, both in its domestic action and its international commitments.

Oxfam New Zealand is a registered New Zealand Charitable Trust that is a legally autonomous member of the global Oxfam confederation of 20 affiliates running programmes in 66 countries. Oxfam New Zealand works in partnership with Oxfam in the Pacific (a registered Trust in Fiji), to together deliver international development programmes in the Pacific region, conduct advocacy and campaigns that amplify the voices of marginalised people, and respond to humanitarian crises. Oxfam has a wealth of experience from working with communities from around the world, and with women in particular, that has helped us learn how best to adapt to and mitigate climate change based on a human-rights approach.

We acknowledge the hard work done by the Commission in preparing this advice, taking New Zealand from a position of not having a plan to cut its pollution, to having one. We appreciate that it is a significant challenge to develop deep and effective advice for the breadth of areas that the Commission covers. However, Oxfam has real concerns with the level of overall ambition in the Commission’s advice and the limiting effect this places on New Zealand being able to fulfil its responsibilities to act in line with 1.5 degrees and confront the country’s outsized carbon footprint.

Our submission is largely focused on how the emissions budgets need to be strengthened, what policies can help to do that in a fair way, and the level of New Zealand’s global action in its Nationally Determined Contribution. Oxfam applies a global justice, gender justice and human rights lens to climate change issues.
1. Do you support the principles we have used to guide our analysis?

Oxfam partially support these principles.

These principles mostly look good. However there is a crucial piece missing from Principle 1 ‘Align with the 2050 target’, on the dual statutory purpose of contributing to the global effort to limit warming to 1.5°C.¹ The emissions budgets must enable New Zealand both to meet the 2030 target and our international obligations under the Paris Agreement. The effect of not properly giving weight to this dual purpose is outlined in answer to consultation question 2.

2. Emissions budgets numbers

Do you support budget recommendation 1? Is there anything we should change and why?

- Emissions budget 1 (2022 – 2025) – not ambitious enough
- Emissions budget 2 (2026-2030) – not ambitious enough
- Emissions budget 3 (2031-2035) – not ambitious enough

[This answer is also relevant to consultation question 12]

The scenarios used to develop the emissions budgets used the wrong starting point

In modelling different scenarios for achieving the 2050 target, the Commission appeared to work backwards from 2050, without considering the ‘front-loading’ of reductions needed by 2030 to be on a pathway consistent with 1.5 degrees. The IPCC highlights that limiting warming to 1.5°C “will require rapid emission cuts of greenhouse gases between now and 2030, then slower reductions until the end of the century”.² The crucial questions are how steeply to reduce emissions before 2030, and how much each gas contributes.

One part of the Commission’s draft advice did present 2030 pathways consistent with the IPCC 1.5 scenarios³. These pathways show that New Zealand needs to achieve reductions of emissions 40-58% by 2030 from 2010 levels for CO2, and 11-30% reduction in methane emissions from 2010 levels.

But the scenarios developed by the Commission would only create gross reductions of 19-30% in CO2 and 10-24% in methane emissions off 2018 levels.⁴ It was these scenarios, and not ones based off 1.5 degree pathways that were used to form emissions budgets. This led to budgets that are very clearly not consistent with 1.5 degree 2030 pathways for CO2 emissions, and only partially consistent with some 2030 pathways for methane emissions.

The emissions budgets proposed would only achieve total net emissions reductions of 17.2% from 2018 levels by 2030.⁵ The Commission’s own recommendation for an NDC 2030 pathway that would be consistent with 1.5 degrees recommended a much steeper emissions budget for the NDC, of “much more than 35%” below 2005 levels. The

---

¹ Climate Change Response (Zero Carbon) Amendment Act 2019, s 5W.
² He Pou a Rangi Climate Change Commission Evidence Document 1, p. 12.
³ He Pou a Rangi Climate Change Commission 2021 Draft advice for consultation, p. 148.
⁴ Chapter 8 of the Commission’s evidence, at Table 8.2.
⁵ P. 33.
Commission’s own advice therefore shows that the draft emissions budgets are not ambitious enough.

The draft advice retrospectively tries to attach 1.5 consistency to the emissions budgets by looking ahead to 2035 when steeper emissions reductions start to kick in. However, this is too little too late, and inconsistent with what the IPCC 1.5 report recommends is needed now. Equally, no analysis was done on the consistency of these pathways with New Zealand’s equitable contribution under a 1.5 pathway, just the interquartile range.

There is much greater capacity for reductions in the first and second emissions budgets to achieve consistency with the IPCC pathways for 1.5. A range of policies that would achieve deeper emissions reductions over the next decade are outlined in answer to questions 14-17.

There is an error of law in solely focusing on achieving the 2050 target

Such an outcome is in contrast to the statutory purpose of emissions budgets. In the Climate Change Response Act, meeting the 2050 target sits side by side with “contributing to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5°C Celsius above pre-industrial levels” when setting emissions budgets (section 5W). The Commission has created emissions budgets based on a requirement they be “ambitious but achievable”. This is drawn from the statutory consideration of the need for emissions budgets that “are ambitious but likely to be technologically and economically achievable”. This is a relevant consideration for the commission, but must be considered in light of the purpose of emissions budgets under Section 5W.

Furthermore, the setting of emissions budgets sits within the overall statutory purpose of “contributing to global efforts to limit… to 1.5 degrees” and “enable[ing] New Zealand to meet its international obligations under the Convention, the Protocol, and the Paris Agreement” (section 3). When preparing an emissions budget, the Commission is legally obligated to consider New Zealand’s international obligations, including our differentiated responsibility under the Paris Agreement. But by choosing scenarios in the first place that weren’t based on 1.5 degree pathways and didn’t consider global equity, there is a negatively cascading effect on the consistency of the emissions budgets with a safe and equitable 1.5 degree pathway.

The extent to which the emissions budgets are inconsistent with efforts for 1.5 degrees is emphasised by the fact that there is a 43MT gap between the emissions budgets up to 2030, and New Zealand’s current Paris Agreement target for 2030 (our NDC). The Commissions own analysis, found that NDC to be “not compatible with Aotearoa making a contribution to global efforts under the Paris Agreement to limit warming to 1.5°C above pre-industrial levels” (NDC recommendation 1).

Recommendations:
- Develop scenarios that map pathways to both meeting the 2050 target and being consistent with global efforts for 1.5 degrees, particularly by 2030.
- Use these scenarios and the policies outlined in answer to questions 14-17 to increase the emissions budgets 1 and 2 to be compatible to with at least the upper quartile of reductions modelled by the IPCC for 1.5 consistency using a split gas approach.

6 Draft Advice for consultation, p. 76.
7 Climate Change Response (Zero Carbon) Amendment Act 2019, section 5ZC(2)(b)(iv).
- Properly consider New Zealand’s differentiated obligations under the Paris Agreement, and how emissions budgets can meet our NDC, in the setting of emissions budgets.

There are hidden costs in the low level of ambition that the Commission has chosen, through the consequences for meeting an enhanced NDC, and failing to properly take into account the costs of inaction.

The Commission in its analysis has emphasised the more moderate impact of meeting the emissions budgets on the economy, creating a balance of what is “achievable, affordable and socially acceptable pathways for Aotearoa to take”.\(^8\) The cost estimates for meeting the first two emissions budgets are “no more than $190 million each year over emissions budget 1, $2.3 billion each year over emissions budget 2 and $4.3 billion each year over emissions budget 3.”\(^9\)

These costs, particularly in the first budget period are very moderate when compared to the cost of responding to the Coronavirus pandemic or other such existential issues, and suggests that there is greater capacity to bring direct investment forward into the first budget.

Additionally, the focus on the costs of meeting the emissions budgets omits the costs needed to meet the shortfall between the budgets up to 2030 and New Zealand’s NDC, through the purchase of offshore carbon credits. If the NDC were enhanced to the median of the IPCC 1.5 ranges (and it should go further to reflect New Zealand’s fair share), the costs of offshore mitigation could be wide ranging between $1.9b and $11.5b (pg 158). This hides the actual ‘affordability’ of meeting our emissions budget.

This is a real cost that should be considered, and an opportunity cost to the country in funding its own domestic transition. What might be ‘practical’ or “affordable” to do domestically changes when one considers the international obligations New Zealand has signed up to and the money that will need to be invested in offshore mitigation or in further domestic mitigation.

Were this money to be invested in accellerating New Zealand’s domestic decarbonisation, that would go further towards making our emissions budgets more compatible with 1.5 degrees, while also fulfilling our international commitments under the Paris Agreement.

Recommendations:
- The costs of inaction, as well as the costs of offshore mitigation to meet the NDC should be factored into recommendations about what would be an ‘affordable’ or ‘achievable’ emissions budget, not siloed off.
- The commission should model what the relative costs of bringing forward emissions reductions pre-2030 would be in order to be consistent with 1.5C pathways for 2030 and to meet much more of an NDC through domestic reductions within the emissions budgets than offshore mitigation.

3. Breakdown of emissions budgets

Do you support our proposed break down of emissions budgets between gross long-lived gases, biogenic methane and carbon removals from forestry? Is there anything we should change, and why?

\(^8\) Draft Advice for consultation, p. 3.
\(^9\) P. 87.
Gross long-lived gases – not ambitious enough
Biogenic methane - not ambitious enough
Forestry - about right

The analysis given in answer to questions 1 and 2, as well as question 24 shows that the figures for reductions in both long-lived gases and biogenic methane are not ambitious enough to align with a 1.5°C pathway for 2030, let alone New Zealand’s equitable obligations to go further than the median.

The Commission should not be arbitrarily constrained by the Zero Carbon Act’s target for a 10% reduction in biogenic methane by 2030. This should be seen as a minimum to aim for. It is clear that given the very minimal reductions proposed for methane proposed, a much larger share of reductions will have to come from long lived gases in order to get New Zealand on track both to meet the 2030 NDC.

If methane were to have proportional reductions to long lived gases before 2030, given its large contribution to New Zealand’s overall emissions, a much stronger NDC would be possible and could be met largely through domestic emissions budgets. This would be in line with the science: the IPCC report highlighted that “[e]missions of short-lived gases such as methane need to reduce significantly through the next 20 years, but not necessarily to zero by 2050 or 2100”\textsuperscript{10}. Yet the methane pathway selected by the commission is towards the upper end of the scenario range of 1.5 pathways outlined by the IPCC. In other words, it is barely an adequate methane reduction, for a pathway that has a very slim chance of staying within 1.5 degrees (let alone taking into account the differentiated obligations on New Zealand to do more than the average).

4. Limit on offshore mitigation for emissions budgets and circumstances justifying its use

*Do you support budget recommendation 4? Is there anything we should change, and why?*

We fully support the limits on the use of offshore mitigation for meeting the emissions budgets, for the same reasons outlined in answer to question 23

7. Genuine, active and enduring partnership with iwi/Māori

*Do you support enabling recommendation 3 on creating a genuine, active and enduring partnership with iwi/Māori? Is there anything we should change and why?*

Partially support

Indigenous peoples’ management of resources is crucial to equitable emissions reduction and approaches to climate action must reflect this importance.

The following progress indicators should be added to the plan to partner with Māori and support Māori governance of taonga by:

★ Government to create binding best practices that require at least co-governance of land, water and air with whānau, hapū, iwi.

\textsuperscript{10} Evidence Ch1, p. 13
13. An equitable, inclusive and well-planned climate transition

Do you support the package of recommendations and actions we have proposed to increase the likelihood of an equitable, inclusive and well-planned climate transition? Is there anything we should change, and why?

Partially support

There is a lot more work that needs to be done in this area. For example:

- While disability is mentioned in the report, this does not go far enough. The commission needs to expand on this with a disability-responsive position statement and work group recommendations, to ensure a just transition.
- Gender is not mentioned in the report once; yet climate change disproportionately impacts women and people of diverse genders. It’s vital that the Commission takes into account research on the gender impacts of climate change and climate action, and include this into their analysis.
- Unions are not mentioned once in the advice; there needs to be a greater focus on unions and how they can be partnered with to enable a just transition, particularly regarding the recommendation for the government to develop policies about the workforce transition. We can deliver good, clean, living wage jobs to everybody that wants one.

14. Transport

Do you support the package of recommendations and actions for the transport sector? Is there anything we should change and why?

Oxfam supports all these actions.

However they are not enough and a lot of work to enhance them and make them more specific.

We need an active and public transport mode shift. Car dependence and urban sprawl is one of the biggest contributors to climate change, road deaths, social exclusion and isolation. Furthermore, it entrenches socioeconomic inequalities and restricts access to opportunities.

The Commission should be recommending a complete transformation to how New Zealanders get around; walking, cycling and public transport can and must play a much larger part in decarbonising the transport system. To create an equitable transport system, disabled people must be engaged in this work. Additionally, it is crucial that these forms of transport are affordable to all members of Aotearoa New Zealand’s population, and we support the recommendation to reduce fares for targeted groups.
We must design active transport systems that work for disabled people, including understanding the flow on impacts in the urban environment from active transport, to ensure disability rights are upheld. This shift also presents many co-benefits for health and wellbeing from more people using active transport, and will achieve a more holistic and just transition. We must not miss the opportunity to prioritise accessibility for disabled people, and a co-benefit of building for disability access is that it will also benefit everyone. Disabled people deserve to access, and benefit from active transport as users.

The recommendations in the active and public transport area are not ambitious enough; modelled walking and cycling increases are not even consistent with the current model growth rates in Auckland, or Auckland Council’s targets for 2030. The draft emissions budgets anticipate Auckland Council’s Climate Action plan is aiming for Public transport mode share by distance increased from 7.8 per cent to 24.5 per cent (a 300% increase), cycling mode share from 0.9 per cent to seven per cent (700%). It plans for a 12 per cent reduction in total vehicle kilometres travelled. By comparison the Commission’s draft advice for the whole country only assumes the share of distance travelled by walking, cycling and public transport can be increased by 25%, 95% and 120% respectively by 2030, and that total vehicle kilometres travelled would remain flat. Much higher growth rates are possible with the right investment and as witnessed globally through tactical reallocation of street space during the pandemic.¹¹

More specific actions based around creating liveable, compact, accessible and equitable cities, where infrastructure is interconnected to reduce emissions (transport, buildings, housing etc.)

We support the proposals for converting internal combustion engine vehicles to EVs as a supporting measure for situations where alternatives to private vehicle ownership are not possible. The shift to EVs must be equitable and accessible to all members of the community, and take into account disabled people’s preferred method of accessible transport, and create policies that remove barriers for disabled people to access this.

The Commission should recommend that the government must also take into account any unintended consequences of mass EV adoption and co-create policy with those affected, including an increased safety risk to pedestrian injury to Blind or low vision communities, from the lack of audible sound emitted from EVs.

When setting any targets for the import of internal combustion engine vehicles, we must make sure that we are not creating more barriers for our communities, especially disabled people, to be able to meet their access requirements. We need a disability responsive EV policy to ensure that disabled people can participate in all modes of low carbon transportation.

Making it easier to drive increases demand for driving. The commission should advise the Government that continuing to expand road capacity (such as to reduce congestion or enable greenfield growth) is incompatible with addressing climate change. It is vital that

¹¹ Tactical Urbanism: Making it happen (July 2020)
file:///C:/Users/alex.johnston/Downloads/Tactical%20urbanism_Arup_July%202020.pdf
the Commission makes strong recommendations to the government about the trajectory of current transport investment so that emissions-intensive roading projects are not locked in. The recently updated Auckland Transport Alignment Project, of more than $31 billion in transport investment in the Auckland region, would result in increased emissions of 6% over ten years.\textsuperscript{12} This goes against the intent of the emissions budgets to reduce transport emissions, as well as Auckland Council’s own targets for reducing Auckland’s emissions by 50% by 2030.\textsuperscript{13}

This discrepancy is partly the result of the government’s New Zealand Upgrade Programme in response to Covid-19 brings forward billions of dollars in wasteful roading projects, including Mill Road and expanding the motorway from Otaki to Levin, which would not align with emissions reductions goals had they been properly considered. There is a need for the Commission to strongly call out the government’s current investment programme in transport, in order that high-emissions infrastructure doesn’t get locked in. As urbanist blog Greater Auckland notes\textsuperscript{14}

“In 2021, with both the council and government having declared a climate emergency, every policy should be actively contributing to reducing our emissions. It’s simply not good enough for ATAP to rely on other policy interventions to do its job for it, especially when the solutions exist and are proven to work, such as reallocating road space to prioritise walking, cycling and public transport.”

Equally it is important that targets for mode share of public transport and reductions in transport emissions are not developed from an artificial starting point, by using reduced baselines for public transport use due to Covid-19\textsuperscript{15}, and in light of anticipated emissions growth from wayward investment in the next two years before the emissions budgets start.

15. Heat, industry and power

Do you support the package of recommendations and actions for the heat, industry and power sectors? Is there anything we should change and why?

Oxfam supports all the actions.

However, there is much more room to go further. Namely:

- ★ Building energy efficiency: The models presented in Chapter 12 only anticipate a 2% increase in energy intensity improvements for households through the policies recommended (changing from 4% to 6% by 2035). Much larger direct investment in energy efficiency is needed, especially as we work to make all of the housing stock accessible for disabled communities. With only 2% of accessible housing stock

\textsuperscript{12} Auckland Transport Alignment Project 2021-2031 Investment Programme, p. 3  

\textsuperscript{13} Auckland Council Climate Actions and Targets  

\textsuperscript{14} Greater Auckland ‘What’s Wrong with ATAP?’ (March 15, 2021)  

\textsuperscript{15} This is already the case in the updated ATAP targets (see above n 6)
available, if all new builds and renovations for reasonable accommodations are both accessible and energy efficient, combining huge government investment in accessible housing and energy efficiency improvements could lead to much efficiency gains in existing housing stock and reduced emissions intensity of new builds. In commercial buildings, the models do not anticipate the scale of change that will be created by the Government policy to decarbonise the public sector by 2025 policy.

★ Energy efficient homes must be financially affordable and physically accessible. Temperature controlled environments are an accessibility issue. We have the opportunity to create 100% accessibility in how we design low carbon homes and commercial buildings. We must go beyond simply changing our methods of construction, to changing what we are constructing, to ensure we are meeting accessible standards for disabled people, and the entire population. Everybody deserves to live in a warm, dry, cheap to run, healthy and accessible home.

★ More ambitious targets and bans on coal: We need to get out of burning coal earlier than the 2037 date proposed for ending coal use in process heat for food production, specifically for the dairy industry. We recommend bringing this date forward to 2027 - and the transition must be to renewables, not gas.

★ The advice must include a ban on new and expanded coal mines in Aotearoa, and an end date for all coal mining in Aotearoa - including coal mining for export. There should be an immediate ban on any new coal mining on conservation land.

★ Gas: The proposed 2025 phase out date for fossil fuel heating in new buildings could be brought forward to 2022. Existing consents for ‘pipes in the ground’ for new developments could be compensated financially.

★ Making our biggest polluters pay: End immediately the subsidies through free carbon credits given to our biggest emitters for their pollution - the “level playing field” internationally may soon be turned on us with carbon border adjustment mechanisms, such as that being agreed in the EU. If our exporters don’t have to pay a carbon price here, they may have to pay it for their exports into not just the EU, but possibly also the US and China.

16 Agriculture

_Do you support the package of recommendations and actions for the agriculture sector? Is there anything we should change and why?_

Oxfam supports some of the actions.

_We do not agree with the Commission’s plan to reduce as little agricultural methane as possible_ (the lower end of the target ranges - 13% by 2035 and 24% by 2050). We must aim for the most ambitious climate plan, not the least. I/we want to see more agricultural climate pollution reduced and faster.

For agriculture _we need direct regulations on the sources of climate pollution_. The potential reductions in biogenic methane considered by the Commission did not adequately contemplate a reduction in production levels as a potential tool for achieving further reductions, overly relying instead on technological fixes (as discussed further in question 24).
We agree with Greenpeace Aotearoa’s submission points in regards to tackling agricultural emissions. Namely:

- A sinking cap on synthetic nitrogen fertiliser, which eliminates it by 2024
- A sinking cap on imported feed which eliminates it by 2024
- A prohibition on all new dairy conversions,
- A maximum stocking rate limit, which is set low enough to drive a significant reduction in the national herd.

The Commission has also failed to recommend that agri-business internalise the costs for the vast historic and ongoing climate pollution that this industry has created. To address this inequity the Commission should advise that agriculture enters the Emissions Trading Scheme in 2021 with no subsidies, ie. that they enter at 100% with no free allocation.

17. Forestry

Do you support the package of recommendations and actions for the forestry sector? Is there anything we should change and why?

Oxfam supports all the actions.

Further consideration needs to be given to how sovereignty will be returned to mana whenua to manage lands and forests, to uphold article 2 of Te Tiriti o Waitangi. This presents a huge opportunity, similar to the freshwater space, to devolve and give back full authority to mana whenua over forests.

We support the commission’s focus on large reductions of carbon dioxide with as little reliance on emission removals by forestry as possible.

We support the significant increase in new native forests and the assumption that no further native deforestation occurs from 2025. All native habitats must be incorporated into this approach. For example, wetlands and tussock should be recognised for their role in storing carbon, and protected from destruction.

Our approach to forestry must address climate change while recognising the intersecting biodiversity crisis. We support the commission’s recommendation to reduce reliance on exotic forestry due to the damage it causes to native habitats. We suggest a stronger approach to restore and manage existing native habitats to allow for a reduction in the proposed exotic afforestation.

18. Waste

Do you support the package of recommendations and actions for the waste sector? Is there anything we should change and why?

Oxfam supports some of the actions.

The Commission’s waste advice focuses on reducing methane emissions from organics that end up in landfills. However, long-lived GHG emissions are also generated from the extraction, production, transport and consumption of packaging and goods, which is intrinsic to our current, unsustainable ‘take-make-throw’ linear economy. To meet the 2050
emissions targets, the Commission should expand its advice to consider all waste streams, and build consumption-based measurements into its analysis.

Multiple, urgent policy interventions are required. These should be determined by referring to the waste hierarchy and the perspective of local communities. Aotearoa can make a just transition from a throwaway culture to a low waste, low carbon circular economy by strengthening and resourcing local communities to produce locally grown kai and locally made goods, and to develop innovative, brave new solutions to prevent and reduce waste. Achieving this requires comprehensive education programmes and a balance of multiple, urgent policy interventions. The waste hierarchy, which prioritises prevention, reduction and reuse, can be used as a climate lens that highlights what these urgent policy interventions are.

The Commission should provide more detail on the interventions needed to reduce organic waste to landfill. For example, mandating separate collection of organics (first emissions budget) and ban organic waste from landfill (second emissions budget) to halve food waste at source by 2030 (in line with the NZ Food Waste Champions 12.3 goal), and divert more organic waste to local and regional composting. The Commission should also recognise the preference for local communities to build soil and sequester carbon through decentralised local composting systems, rather than centralised anaerobic digestion.

Oxfam supports the submission of ‘The Rubbish Trip’ in this area.

21-23. Our Nationally Determined Contribution (NDC)

Do you support our assessment of the country’s NDC? Do you support our NDC recommendation?

Oxfam does not support this recommendation (not ambitious enough).

The Commission should choose pathways that don’t rely on CCS and choose those that give a 66% chance of keeping to 1.5 degrees.

The chosen IPCC pathway is crucial for affecting a fair share calculation by giving a global carbon budget for a certain chance of staying within 1.5°C. Oxfam and most civil society organisations have real concerns about the high overshoot scenarios considered by the IPCC, and overreliance on Carbon Capture and Storage (CCS) or carbon dioxide removal (CDR). The IPCC itself has warned that large scale reliance of CDR would pose a “major risk in the ability to limit warming to 1.5°C” because it remains unproven at scale.16

Therefore, we urge the Commission to aim to align decarbonisation with the P1 illustrative pathway, which does not depend CCS before 2050. The draft analysis excluded high overshoot scenarios, but used the interquartile range of the no or limited overshoot

---

scenarios (including those aligned with the P2 illustrative pathway, which depends on CCS before 2050).

Going above 1.5 degrees of heating puts millions more at risk of potentially life-threatening heatwaves and poverty.\(^{17}\) It all but wipes out coral reefs that entire ecosystems and billions of people rely on worldwide. Seas swallow even more of the world’s cities, and in the Pacific, whole nations and cultures will struggle to survive. Relying on a 50% of keeping to 1.5°C, or on large scale CCS is not good enough. The Commission should therefore choose pathways well below the median of the IPCC Low or No Overshoot of 1.5C scenarios.

**Splitting the pathways by gas before reaggregating to form an NDC target has significant risks which could lead to an unfair conclusion**

A high proportion of biogenic methane emissions does not necessarily reduce New Zealand’s fair share

Almost all international analysis of international equity, ‘fair shares’ and effort-sharing has been conducted on an all gases basis using the GWP100 measure. If New Zealand is to adopt a split gases approach to setting out 2030 NDC, much more analysis is necessary.

While the pathways considered by the IPCC do include different reductions for different gases by 2030 as set out in box 8.2, that itself does not necessarily change a country’s fair share of the global effort to limit warming to 1.5°C. The significant ongoing methane emissions beyond 2050 in the pathways considered by the IPCC reflect the limited methane mitigation potential in the integrated assessment models. The proportion of global methane emissions from agriculture, forestry and other land use is projected to grow until mid-century. This makes mitigating agricultural emissions even more important. The IPCC explicitly noted that the scenarios it considered did not include all proposed mitigation measures for methane, and that no detailed assessment of mitigation measures for methane had been conducted. In particular, the IPCC has noted that the integrated assessment models do not yet fully consider the methane potential of replacing or drastically reducing animal proteins in people’s diets with plant proteins. Analysis of these further mitigation measures could result in future scenarios for 1.5°C including deeper cuts to global methane emissions by 2030.

Further, there are several issues in taking directly from the pathways considered by the IPCC to form a split gas contribution for New Zealand. The IPCC did not intend these pathways to be used in setting national targets or policies, and particular caution must be used when analysing the different pathways for different gases separately. The IPCC expressly noted that it is possible to distribute the emissions reductions differently between sectors, including agriculture.

The Commission has chosen to disaggregate the pathways for CO\(_2\) and biogenic methane, before reaggregating them using a GWP100 value. This means that different scenarios for methane and CO\(_2\) could be mixed and matched from their respective interquartile ranges, and the resultant combination might not end up being compatible with a 1.5°C pathway.

Separately considering the interquartile range, median, or mean of a selection of pathways considered by the IPCC for biogenic methane and other gases could lead to mixing and matching pathways from different scenarios to in effect create a hybrid ‘Frankenscenario’ from scenarios developed in entirely different studies using entirely different methodologies.

\(^{17}\) Half a Degree and a World Apart: The Difference in Climate Impacts Between 1.5°C and 2°C of Warming
That is, “the carbon budget in each of these pathways depends also on the non-CO\textsubscript{2} mitigation measures implemented in each of them, particularly for agricultural emissions.” Consequently, scenarios that assume lower reductions in methane often assume higher reductions in other gases, and vice versa. A hybrid scenario created by mixing and matching between these pathways is therefore unlikely to align with 1.5°C.

Practically, if countries like New Zealand with high biogenic methane emissions use a split gas approach to model lower emissions reductions as being consistent with 1.5°C and other countries with lower biogenic methane emissions continued to use GWP100 methodology, the global emissions cuts will be insufficient to limit warming to 1.5°C. Critically, as IPCC lead author Joeri Rogelj notes:

\begin{quote}
[All] the key scientific and analytical inputs on emissions pathways that were available during the preparations and adoption of the Paris Agreement used the GWP-100 metric.
\end{quote}

\begin{quote}
[Applying] novel metrics to a pre-defined policy context is problematic if no appropriate measures are taken to ensure internal consistency with the earlier use of other metrics in that same policy context. In absence of such appropriate measures, policy targets can be re-interpreted without clear scientific or moral reasoning.
\end{quote}

New Zealand must not frame itself as unique or exceptional in grappling with agricultural emissions; indeed, already over 90% of existing NDCs mention agriculture. The Paris Agreement, by requiring all gas targets, is asking countries to achieve the same outcome taking into account different national circumstances. Just as New Zealand has a high proportion of methane, so does Ireland. Likewise, countries such as the US or Germany have large steelmaking industries that will be hard to decarbonise, and some countries that have already heavily decarbonised will have to adopt stringent policies to go further having used all their ‘low hanging fruit’ such as Denmark and the UK. New Zealand’s particular circumstances doesn’t let it off the hook for having a lower overall target.

Oxfam therefore recommends that the updating of New Zealand’s NDC ensures that the same IPCC pathways are used for assessing what our fair share of methane and CO\textsubscript{2} reductions must be before aggregating them, and that these are below the median of the low or no overshoot scenarios, so that New Zealand is aligning its contribution for each gas consistently with a greater than 50% chance, and ideally a 66% chance of keeping to 1.5 °C.

\textit{The Commission has not fully considered the equity dimensions to a split gas target for methane – New Zealand has outsized methane emissions}

Importantly, there are critical equity dimensions that apply to biogenic methane emissions that the Commission has not yet considered. Different countries have vastly different capabilities to mitigate their methane emissions. Furthermore, for the 2 billion people that rely on 500,000 small scale farms that help put food on their table, agriculture is a core need rather than an export industry.

So long as people’s diets worldwide continue to include animal products, there is likely to be a minimum unavoidable per capita level of methane emissions associated with a healthy diet. This means that as people in developing countries escape extreme and relative poverty, improve their diets, and achieve greater food security, their per capita methane emissions will rise. Three-quarters of people living in poverty reside in rural areas and depend on agriculture for their livelihoods. Oxfam believes that empowering small-scale
farmers is essential to fighting poverty, hunger, and food insecurity. The growth in smallholder farming – including pastoral farming – especially plays a critical role in food security and sustainable development.

Biogenic methane emissions in the developing countries are growing significantly. New Zealand’s biogenic methane emissions have also grown by 25% since 1990. However, New Zealand’s methane emissions correlate closely with the growth of an export industry, not the pursuit of food security and sustainable development.

High methane emitting, high-income countries such as New Zealand must reduce their methane emissions very significantly in order to allow the continued growth of smallholder pastoral farming in developing countries. Indeed, from an historical responsibility perspective, it is arguable that New Zealand’s high historic methane emissions mean that we have a responsibility to reduce our methane emissions even more. The interests of New Zealand farmers exporting milk powder to middle classes in Europe and China do not trump the rights of people in developing countries to feed their families or break free from extreme poverty.

If, therefore, the Commission recommends that New Zealand set an NDC on the basis of split-gas modelling, it is critical that the Commission also addresses the unique international equity factors that apply to biogenic methane (this is further discussed in answer to question 24).

**The Commission should publish its own fair share analysis**

Determining Aotearoa’s overall NDC contribution needs to be done using appropriate equity / capability /need calculations, that applies New Zealand’s differentiated obligations under the Convention and the Paris Agreement to safe 1.5 degree pathways. Oxfam’s own analysis of these pathways found our equal per capita share of a no or limited overshoot 1.5°C trajectory, we would need to cut emissions by 80% below 1990 levels by 2030.

When historical responsibility is taken into account Aotearoa’s national fair share would exceed 99% emissions reductions by 2030 below 1990 levels.\(^{18}\)

The range in the IPCC pathways for 1.5 degrees does not represent differentiated obligations between countries, but rather the “uncertainty in how fast emission of different greenhouse gases need to be reduced to limit warming”.\(^{19}\) When selecting an appropriate mitigation contribution for New Zealand, it is more than likely that our ‘fair share’ of would be beyond the interquartile range.

The Commission did not recommend how much the NDC is strengthened beyond 35%, as this decision should reflect the tolerance for climate and reputational risk and economic impact, and principles for effort sharing, “which require political decisions”.\(^{20}\) While the decision ultimately rests with government, the consideration of international legal principles of equity under the Convention are more than political considerations, they are legal ones (explored further below).

Not making a determination of what New Zealand’s fair share of effort, or our highest possible ambition would be is just as political as making one, as it reinforces the status quo.

---


\(^{19}\) Draft advice for consultation, p. 150.

\(^{20}\) NDC recommendation 2.
which does not consider principles of effort sharing. A proper fair share analysis using a split gas approach is needed to enable the government to have clarity on what is expected of it under these legal principles, even if that was only to give a range of numbers depending on the equity principles used.

The UK Committee on Climate Change recently recommended an enhanced NDC to the UK government which would reflect “the UK’s responsibility as a richer nation with larger historical emissions. The timing of these actions would align to that required from other climate leaders.”

Evidently, the UK Committee did not see these recommendations as too political to shape a specific recommendation. We expect the He Pou a Rangi – the Climate Change Commission to act similarly.

**The Commission should recommend an NDC that represents New Zealand’s highest possible ambition**

Equally, the NDCs are required to show a country’s highest level of ambition to reduce global emissions, a progression on previous efforts, and to be more ambitious over time – these are principles of international law.

Though article 4(3) of the Paris Agreement refers to each ‘successive’ NDC that New Zealand communicates to the UN, the principles of highest possible ambition and progression are relevant for the updating of our current NDC, due to the ‘ratcheting up’ of expectations and ambition expected in the Paris Agreement that will allow Parties to achieve its aims. Many other countries have boosted their NDCs in updating or recomunicating them, and there is an expectation from the COP26 Presidency on other Parties to do the same.

**The draft emissions budgets, when combined with offshore mitigation, do not create an NDC that reflects New Zealand’s highest possible ambition for 2030, since they focus on the 2050 target.**

Article 4(2) of the Paris Agreement requires countries to pursue domestic mitigation measures, with the aim of achieving the objective of the NDC. This creates a direct connection between the obligation to pursue domestic policies that reduce emissions and meeting the target that has been set in an NDC.

However, the article 4(2) obligation would also be considered in conjunction with the ability of the government to make up a shortfall between domestic measures and the NDC target through paying for transferred mitigation outcomes via international carbon markets under Article 6.

But the Article 6 option is “to allow for higher ambition in their mitigation and adaptation actions”. There is therefore a need to show that the domestic measures (proposed in the emissions budgets prepared by the Commission) reflect New Zealand’s ambitious efforts of what it can achieve domestically, with the option of extending that ambition further through offshore mitigation to achieve our ‘highest possible ambition’.

---


22 For more on the effect of these legal principles in international law, see Matthew Hill “Keeping Commitments: Examining the New Principles in the Paris Agreement” (2017) 21 NZJEL 53.

23 Article 4(2).

24 Article 6(1).
What amounts to “ambitious efforts” is different for each country, taking into account their respective capabilities and financial resources.\textsuperscript{25} Capabilities are respective – i.e. between countries, not just what New Zealand decides it is capable or what is affordable. Ambition also requires Parties to act ambitiously with their resources. New Zealand’s economic capabilities compared to others require it to go further than the average country, not act as a measure to lessen the ambition of an NDC because the costs of abatement starts to increase. This was the approach taken by the UK Climate Change Committee’s recommended NDC, which aligned with their domestic carbon budgets and was “explicitly designed to reflect the UK’s ‘highest possible ambition’ within the UK’s particular capabilities, as required by the Paris Agreement.”\textsuperscript{26}

The current approach of the New Zealand Commission is to take the emissions budgets, which it has created with a focus on meeting the Zero Carbon Act’s 2050 target as a default for domestic measures by 2030. It then tops the domestic reductions up with offshore mitigation, leaving the size of that ‘top up’ to the government depending on how much money it is willing to spend paying other countries for carbon credits. This approach does not lead to an NDC that reflects New Zealand’s highest possible ambition for 2030, because the modelling for domestic abatement that led to the draft emissions budgets was based on meeting the long-term target, not the 2030 NDC.

Evidence of the potential for further emissions reductions prior to 2030 through policies suggested in answer to questions 14-17 shows that there are many more domestic mitigation measures that could be pursued prior to 2030 to reflect our highest possible ambition. If the Commission were to properly model what pathways would allow it to meet both the 2050 target and a no overshoot IPCC scenario for 1.5C, as argued in answer to question 2, then that would enable greatly enhanced domestic emissions budgets to represent our highest possible ambition for 2030. Any offshore mitigation would therefore enable New Zealand to go even further to represent more of its fair share of global effort.

While our highest possible ambition might not achieve our fair share, the Commission can recommend what target would represent New Zealand’s highest possible ambition, as well as a target range that would represent our fair share of efforts for a strict 1.5C pathway. The gap between our NDC and our fair share could be partially met through greatly enhanced climate finance, and partially through offshore mitigation.

\textit{Other developed countries are going further by 2030, through domestic action alone, than New Zealand is planning to go.}

The draft advice notes that New Zealand, “has a responsibility to take the lead in reducing emissions and to support developing countries to transition.” This obligation under the Paris Agreement should drive New Zealand at the very least to keep up with other developed nations in its emissions reduction goals. Recent updates to other NDCs show New Zealand has a lot of catching up to do.

Ireland, with a similarly high share of agricultural emissions (representing 35\% of its total emissions), has put forward legislation with targets to reduce total domestic emissions, covering all greenhouse gases, by 51\% over the period to 2030, relative to a baseline of 2018.\textsuperscript{27} The UK has updated its NDC to an economy-wide net reduction in all GHG

\textsuperscript{25} Paris Agreement, Article 4(3).
\textsuperscript{26} UK Climate Change Committee, Advice on the UK’s 2030 NDC.
emissions of at least 68% by 2030 compared to 1990.\textsuperscript{28} The EU has agreed to a 55% reduction on 1990 levels by 2030.\textsuperscript{29} The target covers all gases including biogenic methane, and will be met without contribution from international credits.

It will be increasingly difficult for New Zealand to show that only achieving total net emissions reductions of 17.2% from 2018 levels by 2030 through domestic mitigation measures represents ‘ambitious efforts’ or that combined with whatever quantity of offshore mitigation the government deems it can afford or is politically feasible, represents New Zealand’s ‘highest possible ambition’.

Just to maintain parity with other developed nations, New Zealand’s NDC would need to be at least 50% reductions across all gases below 1990 levels by 2030.

**Recommendations:**

- We support the recognition that the first NDC is not compatible with Aotearoa making a contribution to limiting warming to 1.5C under the Paris Agreement.
- We support the finding that it is more likely to be compatible if “much more than 35% below 2005 gross levels by 2030.
- Rather than using the median of the interquartile range for each gas, before reaggregating, that the updating of New Zealand’s NDC ensures that the ‘like for like’ IPCC pathways are used for assessing what our fair share of methane and CO2 reductions must be before aggregating them, and that they align with pathways below the median of the IPCC Low or No Overshoot of 1.5C scenarios.
- The Commission should publish and recommend to the Government a ‘fair share’ 2030 target or target range in our NDC (nationally determined contribution), that reflects New Zealand’s outsized carbon footprint and historic responsibility for causing climate change, as well as our highest possible ambition. This would give a clearer indication to the government of how much the NDC should be strengthened by.
- The Commission should recommend what New Zealand’s highest possible ambition would be for a 2030 NDC, based on modelling what domestic emissions reductions are possible to align with a 2030 pathway for 1.5C in the domestic emissions budgets, rather than just emissions budgets on a 2050 pathway. This should be at the very least equivalent to the commitments of other highly developed nations, such as the UK’s 68% below 1990 levels.

**22. Do you support our recommendations on the form of the NDC?**

Oxfam supports these recommendations.

Climate finance for developing countries is crucial to supporting our neighbours in the Pacific and beyond to adapt to the escalating impacts of climate breakdown and transition to a clean energy future. Climate finance can be included as a non-mitigation measure in our NDC, to indicate an intention to contribute to further global efforts for 1.5 degrees. This needs to

\textsuperscript{28} “The UK’s Nationally Determined Contribution to the UNFCCC”

\textsuperscript{29} European Council of the European Union, *Paris Agreement: Council transmits NDC submission on behalf of EU and member states* (18 December 2020)
maintain at least a 50% share of climate finance going to adaptation. Any calculation of how much climate finance is contributing to mitigation efforts needs to reflect only that share of climate finance focused on mitigation. Oxfam has proposed ways of calculating how New Zealand’s fair share of climate finance might be calculated, based on existing collective commitments by developed country parties to the Paris Agreement.30

Climate finance can be included in representing our fair share of effort, but not the mitigation component of our NDC. Consequently, we urge the Commission to call for a rapid scaling up of our climate finance for developing countries to progressively close this gap to the greatest extent possible. The UK Climate Change Committee recommended that the UK commit greater support for climate finance in its NDC as a signal of international collaboration and that it highlight this in its NDC.31

**Recommendations:**

- We agree that the government in making its decisions should continue to define the NDC on the basis of all greenhouse gases using the most recent IPCC global warming potentials adopted by the Parties to the UNFCCC. If the government updates the NDC, it should adjust it to use the GWP100 values from the IPCC’s Fifth Assessment Report.
- We agree that the government in making its decisions should continue to contribute to further global mitigation beyond the NDC through the provision of climate finance to developing countries and active participation in mitigation mechanisms for international aviation and shipping.
- The Commission should recommend the government rapidly scale up climate finance for both adaptation and mitigation as a signal of international collaboration for 1.5 degrees, and recommend that the government highlight its climate finance contribution in the NDC as a non-mitigation measure. A starting point would be a doubling of the existing $300 million in climate finance between 2018-2022, extended out to 2025.

23. Do you support our recommendations on reporting on and meeting the NDC? Is there anything we should change, and why?

Do not support (not ambitious enough)

We agree that the NDC should be enabled to be met through a range of measures. However, only within strict parameters. As it currently stands, any enhancement in the NDC would be met through further international offsets than the current 43MT gap between our existing NDC and the emissions budgets proposed by the Commission, rather than through domestic mitigation measures.

The Commission notes the reporting gap in the current situation with offshore mitigation and carbon markets, and how that leads to the potential the NDC could not be met, Oxfam shares these concerns. Oxfam believes that signing New Zealand up to rely on large quantities of international offsets to meet our NDC is impractical and risky.

*Relying solely on offshore mitigation for any increase to our NDC is expensive and politically risky*

---


31 Letter: Advice on the UK’s 2030 Nationally Determined Contribution (NDC) December 2020
One implication of New Zealand heavily relying on offshore mitigation to meet its NDC is that the limited supply of offsets with environmental integrity drives the price of these units upwards. There are currently very few countries engaging in voluntary internationally transferred mitigation outcomes (ITMOs), in the absence of the Paris Agreement Article 6 rulebook being finalised with strong environmental integrity. The Commission estimates that the costs of offshore mitigation could be wide ranging between $1.9b and $11.5b, just to meet an NDC of 35% below 2005 levels by 2030.\footnote{Draft advice for consultation p. 158.} This is based on carbon prices ranging between $30 and $100 per tonne of CO2. A limited supply of units with environmental integrity, and increased competition for such units could drive the price much higher.

To drive our NDC higher and closer to our fair share, the costs of offshore mitigation would increase significantly beyond these estimates. Given the costs of policies modelled by the Commission in the first two emissions budgets amount to no more than $190 million each year over emissions budget 1, $2.3 billion each year over emissions budget 2, a situation could occur where the government is spending just as much if not more money on offshore mitigation than it is on policies that actually reduce emissions at home. This is unlikely to be a politically palpable option for the government to pursue.

The solution to this is not to commit to a less ambitious NDC, but to greatly step up our domestic mitigation measures and emissions budgets, so that, as the Commission notes, the domestic investment “would have a knock-on effect stimulating spending in downstream industries.”\footnote{P. 157.}

The current rules framework for international mitigation is problematic, and engaging in it could lead to negative human rights outcomes.

If negotiations for the Article 6 rulebook were to conclude in coming years, opening up an international carbon trading market, the bare minimum language that respects human rights and the rights of indigenous peoples would not be incorporated. There has been agreement that the rules for the Article 6.4 mechanism are to be reviewed starting in 2026 and ending by 2028, meaning the current set (not mentioning human rights) is locked in for nearly a decade.\footnote{https://www.carbonbrief.org/cop25-key-outcomes-agreed-at-the-un-climate-talks-in-madrid} There are numerous examples of how the Kyoto Protocol’s Clean Development Mechanism for international carbon trading was linked with human-rights violations, as projects under it, such as large hydropower dams, can, for example, lead to people being displaced or having their livelihoods destroyed.

Likewise, some commentators note that the most available and adaptable rules framework for getting underway with voluntary ITMOs is the Reducing Emissions from Deforestation and Forest Degradation program (REDD+).\footnote{O’Sullivan R., (2020) Can cooperation on REDD+ under Article 6 of the Paris Agreement start now, or is further guidance needed? Forest Solutions Dialogue Brief #1, Climate Advisors Trust, Washington D.C.} However this also has a chequered history of emissions leakage, and aggravating existing land and resource disputes, especially in cases where governments allocate carbon rights that conflict with the land rights of Indigenous and forest peoples.\footnote{Friends of the Earth International, ‘The Great REDD Gamble’ (October 2014) <https://www.foei.org/wp-content/uploads/2014/09/The-great-REDD-gamble.pdf>.} Examples include the implementation of REDD+ in Cameroon and the Kalimantan Forests and Climate Partnership project in Indonesia. There are reported cases of small holders and local communities being threatened and criminalised as well, in countries such as Peru and Brazil.
The voluntary set of principles that is meant to plug the gap until the Article 6 rules can be agreed, the San Jose principles, also does not account for human rights and sustainable development principles.\textsuperscript{37} It is good that New Zealand wants to only engage in this process with environmental integrity, and one would hope and assume that New Zealand will seek to engage in a mitigation partnership that also respects human rights standards.

But there are two risks of engaging with this problematic system, particularly where there will be a limited supply of country partnerships that would meet strong environmental and human rights standards. If other developed nations start to rely on international offsets as much as New Zealand is planning to, many will turn to problematic projects that do not uphold these standards. Alternatively if countries do want to uphold these standard, New Zealand will be faced with an even more limited supply and growing cost of such units, and faced with increasing desperation to meet its NDC, may compromise its own standards to purchase more units.

The only country currently engaging in internationally transferred mitigation outcomes to meet its 2030 NDC, Switzerland, has stated that it intends to meet 12.5 percent of its emissions reduction target by financing climate protection projects abroad.\textsuperscript{38} The UK Committee on Climate Change recently recommended a territorial NDC of 68% below 1990 levels, with international credits being something that could allow the government to go even further, but not for meeting their core obligation.

**Recommendations:**

- The NDC should be met primarily through greatly enhanced domestic emissions budgets, both to align domestic action more with New Zealand’s share of 1.5 degrees and to enable the billions of dollars in investment to be invested in the accelerating the domestic transition to zero emissions.
- The use of international offsets to meet the NDC should be pegged as a last resort and for a specified proportion of the NDC (no more than 10%), so that the vast majority be met domestically through enhanced emissions budgets.
- Furthermore, the government needs to demonstrate how any use of offshore mitigation allows for higher mitigation and adaptation actions than would be possible through ambitious domestic mitigation measures, that combined create its highest possible ambition in line with articles 3, 4 and 6 of the Paris Agreement.
- Oxfam supports the recommendation that the Government should develop a plan for how it will access and purchase offshore mitigation and take steps to implement it, in order to bring clarity to this process. We agree with the recommendation of regular reporting for how the NDC should be met. This planning must ensure that human rights are fully protected in any international carbon offset agreed to with another country, and has the highest environmental integrity.
- However further to this, the Government should build into this planning and reporting the ability to ratchet up domestic emissions budgets to meet its NDC domestically, particularly if ITMO projects with sufficient standards are unable to be found. This would allow time for the second emissions budget (2025-2030) to be adjusted to reflect deeper domestic emissions reductions and removals to increase the chances of meeting the NDC.
- The opportunity costs of relying on offshore mitigation vs domestic reductions need to be communicated clearly to the public.


\textsuperscript{38} Foundation for Climate Protection and Carbon Offset (Klik) First Implementation Agreement worldwide under the Paris Climate Agreement (20 October 2020) <https://www.klik.ch/news/publications?publication_id=145>
24. Eventual reductions in biogenic methane

Do you support our assessment of the possible required reductions in biogenic methane emissions?

Oxfam somewhat supports the assessment.

New Zealand’s contribution as a food-producing nation does not allow us a right to emit more methane than others. Doing so by only bringing methane emissions down to a point at which it has no net warming contribution going forward would ‘grandfather’ our relative higher share of methane compared to other countries, which is inequitable and unfair.

Any division of a remaining carbon budget for 1.5 degrees must build into it the right to development of lower-income countries, that have not benefited from decades of industrialisation (enshrined in Art 3.4 of the Paris Agreement). This is particularly relevant for assessing a fair share of methane reductions between countries. There are complex equity questions that apply to the international differentiation of methane emissions, and there is likely to be an unavoidable minimum per capita level of methane emissions, as explored in answer to question 21.

For people and communities in the lowest income countries to achieve the right to development will likely require significant increases in their biogenic methane emissions. To maintain a constant flow of methane emissions would therefore require additional reductions in methane emissions from wealthy countries such as New Zealand. Therefore New Zealand cannot ‘grandfather’ our higher relative share of methane emissions, which largely reflect primary exports to middle class communities and higher end consumption, to then deprive the world’s poorest communities from developing agriculture that will feed and sustain them. Put another way, a dairy farm sending milk to make cheese for European supermarkets does not have the same right to the remaining methane budget for 1.5 degrees than a woman developing subsistence farming to feed her family in Mozambique.

Developing a 1.5 consistent methane target for 2030 and 2050 would require further analysis than the median of the interquartile range, reflecting our historical responsibility and capacity to act. It is likely that our ‘fair share’ of methane reductions is far more than the interquartile range, and would most definitely be more than the median.

The potential reductions in biogenic methane considered by the Commission did not adequately contemplate a reduction in production levels as a potential tool for achieving further reductions, overly relying instead on technological fixes (as discussed further in question 16). Aiming for the upper end and beyond of the interquartile range is less a matter of relying on technology but a moral and legal imperative to reflect our ‘fair share’, and so the elephant in the room of reduced production and a smaller dairy herd to reduce emissions further than farm management practices allow needs to be addressed by the Commission.

Recommendations:
- We agree with the conclusion that New Zealand’s national circumstances do not provide sufficient reason to reduce biogenic methane emissions by less than other developed countries in contributing to the global 1.5 °C goal.
- Oxfam submits that the median or upper quartile of 1.5 consistent pathways is not enough to aim for. The Commission should recommend a 2050 methane target that reflects New Zealand’s differentiated obligations (including historical responsibility) and reflects the right to development of lower-income countries.
- We recommend the Commission models potential further reductions of methane based on reduced production and direct regulation of agricultural emissions, in order
not to be solely reliant on technological developments to reduce methane emissions in line with a fair contribution for 1.5°C.