Oxfam Aotearoa submission to Emissions Reduction Plan discussion document

November, 2021

Introduction

Oxfam Aotearoa 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 consultation questions, with a particular focus on what policies can enable 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 Aotearoa 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 Aotearoa 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 appreciate that it is a significant challenge to develop deep and effective draft strategy across every sector and this is a significant coordination effort across Ministries. However, Oxfam has real concerns with the level of overall ambition in the emissions budgets and the policies outlined in the discussion document, and the limiting effect these place on New Zealand's ability 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 and what policies can help to do that in a fair way. Oxfam applies a global justice, economic gender justice and human rights lens to climate change issues. A summary of the recommendations in the submission is copied below:

Emissions Pricing

- Price agricultural emissions in the Emissions Trading Scheme at the processor level from 2022, with far less than the planned 95% free allocation
- Phase out the industrial allocation under the Emissions Trading Scheme much faster than currently planned, with all free allocation gone by 2030 at the latest. Accompany this with R&D funding and just transition planning for hard to abate sectors like steel.

Agriculture

- Price agricultural emissions in the Emissions Trading Scheme at the processor level from 2022, with far less than the planned 95% free allocation.
- Phase out of synthetic nitrogen fertiliser by 2030.
- Establish transition hubs in line with the recommendations of the Aotearoa Circle's Fenwick Report and a $1 billion regenerative farming fund, in line with Greenpeace's policy briefing.

Transport

- Set a target to reduce VKT by 20% by 2030.
- Fund pedestrian and cycling improvements at a scale similar to England's Walking and Cycling Plan.
- Bring forward the timeframes for constructing light rail in Wellington and Auckland to to have them completed within this decade. Choose the most cost-effective options to free up more funding for other public transport improvements.
- Provide free public transport for community service card holders, under 25s and tertiary students in line with the calls from the Aotearoa Collective for Public Transport Equity, fully funded by central government in Budget 2022.
- Bring public transport back into public ownership to improve driver pay and conditions, so that services can be easily expanded.

Energy

- Takeover the running of Tiwai Point Aluminium Smelter in 2024 following Rio Tinto's exit, run it at half capacity, and use the remaining electricity to help decarbonise food processing, schools, hospitals and small industry in the South Island.
- an energy strategy should consider other interventions, including restoring public ownership or breaking up the gentailers, to enable an equitable and affordable renewable electricity supply to meet our goals.

Buildings and infrastructure

- Accelerate the Building for Climate Change Programme by fully adopting the recommendations of the Green Building Council to achieve zero carbon buildings by 2030, and a deep retrofit of existing housing stock, including requirements for improving accessibility of housing at the same time.

Transition pathway

Do you agree that the emissions reduction plan should be guided by a set of principles? If so, are the five principles set out above the correct ones? Please explain why or why not.

These principles are good ones to shape decision-making, however in their current format, they do not guide decision-making in a way that adequately considers the scale and urgency of action to reduce climate pollution consistent with limiting warming to 1.5 degrees Celsius.

Ambition

For the principle of "A clear, ambitious and affordable path" it is important to determine what the path is leading towards. What is ambitious should be dependent on consistency with limiting warming to within 1.5 degrees Celsius, as a bare minimum.

The statutory purpose of the Emissions Reduction Plan is to meet the Emissions Budgets. Emissions Budgets themselves have the statutory purpose of "meeting the 2050 target and contributing to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels" (Section 5W). The emissions reduction plan should therefore be a clear and ambitious path towards achieving the dual purpose of the emissions budgets: to meet the statutory targets and contribute Aotearoa's fair share towards keeping warming to within 1.5 degrees.

This in turn shapes what can qualify as "ambitious" within that principle. Currently, the draft budgets and plan only estimate emissions reductions of just 8 per cent below current levels by 2030. This pathway is not consistent with the average reductions needed globally to limit warming to 1.5 degrees Celsius, as outlined by the IPCC, let alone New Zealand's fair share towards contributing to that goal.

A better measure for the pathway set in the emissions reduction plan would therefore be the median of IPCC pathways for each gas outlined in the Special Report on 1.5 degrees. 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.[1]

Affordability

What is affordable is relative and defined by political will regarding sources of government taxation and revenue, and must factor in the costs of offshore mitigation to meet the NDC too.

In the Climate Change Commission's draft advice, it estimated the costs for meeting the first two emissions budgets they recommended 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."[2]

These costs, particularly in the first budget period are very moderate when compared to the cost of responding to the existential Coronavirus pandemic for example. There is greater capacity to bring direct investment forward into the first budget period.

Additionally, it is imperative that the costs considered for domestic emissions budgets also factor in the costs of meeting New Zealand's NDC through the purchase of offshore carbon

[1] He Pou a Rangi Climate Change Commission 2021 Draft advice for consultation, p. 148.
[2] P. 87.

credits. On the proposed budgets, it is expected that New Zealand's Nationally Determined Contribution under the Paris Agreement will be met through 47 MT of domestic reductions, while leaving 102MT of reductions to be met offshore through purchase of carbon credits.

The costs of this offshore mitigation could range between $7.5 billion to $13.2 billion.[3] This hides the actual 'affordability' of meeting our domestic emissions budgets. This is a real cost that should be considered in the Emissions Reduction Plan, 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 the expenditure on purchasing offshore credits to be invested in accelerating 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 Emissions Reduction Plan should have the principle of a clear, ambitious and affordable path towards achieving meeting the statutory targets and contribute Aotearoa's fair share towards keeping warming to within 1.5 degrees;
- The path set in the Emissions Reduction Plan should be consistent with at least the median of IPCC pathways for each gas outlined in the Special Report on 1.5 degrees;
- 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' path, not siloed off from the policy-making in the ERP.

2. How can we enable further private sector action to reduce emissions and help achieve a productive, sustainable and inclusive economy? In particular, what key barriers could we remove to support decarbonisation?

Pricing is a key tool to both incentivise the widespread adoption of available mitigation practices, and to incentivise land use change to lower emissions uses.

The free industrial allocation allotted to certain industries creates a distortion of the incentive to reduce emissions. When the ETS was set up, this 'free allocation' was meant to be gone completely by 2029.[4] But successive government's lack of action has meant that many will still be receiving government subsidies beyond 2050 – this is when the country is meant to reach zero carbon.[5]

Phasing out free industrial allocation by the end of the decade, as originally intended, would go a long way to incentivising change in those big companies to reduce their emissions faster. For hard to abate sectors like steel, this should be accompanied by appropriate R&D funding and just transition plans for workers.

[3] According to Cabinet papers advising on a 40% NDC (using an emissions budget approach), rather than a 41% NDC.
[4] Motu, A guide to the emissions trading scheme (2018), p. 7 https://www.motu.nz/assets/Documents/our-work/environment-and-agriculture/climate-change-mitigation/emissions-trading/ETS-Explanation-August-2018.pdf
[5] Stuff.co.nz "Free carbon credits worth billions will continue being allocated for decades" (26 October 2019) <Free carbon credits worth billions will continue being allocated for decades | Stuff.co.nz>

Furthermore, immediately applying this price incentive in the agriculture sector, responsible for 48% of New Zealand's emissions profile, is necessary to stimulate further action to reduce emissions in the sector.

Agriculture was first meant to enter the Emissions Trading Scheme in 2010. The point of obligation was going to be at the processor level. The He Waka Eke Noa proposed pricing options would not take effect in 2025, and even if the 'backstop' option of the Emissions Trading Scheme is used, agricultural emissions would receive a 95% free allocation, paying just 5% of the emissions price.
Such a high level of free allocation will not create enoughprice incentive to reduce emissions in the sector. The He Waka Eke Noa update on 23 November estimates that the average dairy farm, with a 95% discount on emissions, will incur in 2025 a cost of just $0.04/kg milk solids.[6] The average cost on meat production is estimated at $0.10/kg of sheep meat, $0.06/kg beef and $0.13/kg venison.[7]

The modelled emissions reductions as a result of this price incentive will be "less than 1% reduction in both CH4 and N2O below 2017 levels, additional to reductions as a result of other environmental policies."[8] The ICCC summarised that "*[m]odelling suggests that emissions pricing with a high level of free allocation would drive very little production change in the dairy sector in the near term. In the sheep and beef sector, the reduction in total production in response to pricing of agricultural emissions [with a high level of free allocation] is also expected to be small*".[xi]

There is limited evidence of the potential of emissions leakage,and therefore the need for such a high level of free allocation in agriculture. The Interim Climate Change Committee (ICCC) found in 2018 that "*[t]here appears to be a low risk of emissions leakage in the near term for dairy, given the presence of economy-wide emission targets and constraints on production increases from both climate and non-climate policies in most competitor countries and their high production efficiency. The situation is less clear for the red meat sector given the broader range of competitors, but the move to extract value from high environmental integrity will reduce the risk*".[ix]

Recommendations:

- Phase out free industrial allocation under the Emissions Trading Scheme much faster than currently planned, with all free allocation gone by 2030 at the latest. Accompany this with R&D funding and just transition planning for hard to abate sectors like steel
- Price agricultural emissions in the Emissions Trading Scheme at the processor level from 2022, with far less than the planned 95% free allocation

3. In addition to the actions already committed to and the proposed actions in this document, what further measures could be used to help close the gap?

The measures summarised in the list of recommendations in our introduction can be taken as our answer to this question.

5. Are there any other views you wish to share in relation to the Transition Pathway

The Transition pathway outlined in the consultation document is not ambitious enough. The IPCC highlights that limiting warming to 1.5°C "will require rapid emission cuts of

[6] He Waka Eke Noa Draft Engagement Document, Draft for discussion (23 November 2021), p. 10 < https://hewakaekenoa.nz/wp-content/uploads/2021/11/He-Waka-Eke-Noa-Draft-Engagement-Document-November-December-2021.pdf>
[7] Ibid
[8] Ibid.

greenhouse gases between now and 2030, then slower reductions until the end of the century".[9] The crucial questions are how steeply to reduce emissions before 2030, and how much each gas contributes.

The interquartile range of pathways in the IPCC Special Report on 1.5 degrees pathways show that New Zealand needs to achieve reductions of net emissions 40-58% by 2030 from 2010 net emissions levels for CO2, and 11-30% reduction in methane emissions from 2010 levels. Yet the emissions budgets proposed will only result in emissions reductions of roughly 7-9% below current levels by 2030, on an all gases basis.[10]

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 (noting that this was using a gross-net accounting whereas the IPCC pathways use net-net accounting). The Commission's advice regarding New Zealand's NDC therefore shows that the draft emissions budgets are not ambitious enough to be consistent with global efforts to keep to 1.5 degrees.

Recommendation:

- The first three Emissions Budgets should be strengthened to at the very least align with the IPCC median of the interquartile range for keeping warming to 1.5 degrees Celsius.

Working with our Tiriti partners

9. What actions should a Māori-led transition strategy prioritise? What impact do you think these actions will have for Māori generally or for our emission reduction targets? What impact will these actions have for you?

- Sufficient resourcing for Māori to lead in our transition planning - including at community level, through formal iwi structures, and through other Māori representative groups.
- A Māori-led transition strategy that prioritises an equitable transition for Māori by Maori, shaped by and giving effect to the tino rangatiratanga of Māori as protected in Te Tiriti o Waitangi.
- Ensuring a process of reciprocity between the Crown and Māori.
- Active protection of Māori rights, interests, whenua and taonga.

Making an equitable transition

The Climate Change Commission recommends developing an Equitable Transitions Strategy that addresses the following objectives: partnership with iwi/Māori, proactive transition planning, strengthening the responsiveness of the education system, supporting workers in transition, and minimising unequal impacts in all new policies.

[9] He Pou a Rangi Climate Change Commission Evidence Document 1, p. 12
[10] Based on the estimated 47MT domestic reductions in the Nationally Determined Contribution, and the first two proposed emissions budgets totalling 599 MT CO2e (AR5).

13. Do you agree with the objectives for an Equitable Transitions Strategy as set out by the Climate Change Commission? What additional objectives should be included?

- The principle of 'nothing about us without us' must be applied. The Special Envoy of the United Nations Secretary General on Disability and Accessibility has paraphrased this to be "nothing about climate change, without persons with disabilities." This must form a key part of the strategy to ensure disabled people are not left behind or negatively effected by climate mitigation policies.
- Formal education, training, retraining, and life-long learning for working people, their families, and their communities. Oxfam supports a Clean Energy Industry Training Plan to be developed by the Government, in partnership with the energy industry and education providers.

14. What additional measures are needed to give effect to the objectives noted by the Climate Change Commission, and any other objectives that you think should be included in an Equitable Transitions Strategy?

- The Commission suggests that the Equitable Transitions Strategy should be co-designed alongside iwi/Māori, local government, regional economic development agencies, businesses, workers, unions, the disability community and community groups.
- as much of the strategy as possible should be included in the final Emissions Reduction Plan in May 2022, along with a firm process to work with iwi, unions, employers and communities on refining and implementing it.

15. What models and approaches should be used in developing an Equitable Transitions Strategy to ensure that it incorporates and effectively responds to the perspectives and priorities of different groups?

- The Transition Strategy must be co-designed and implemented by the affected communities and their relevant representative organisations. Māori, Pacific Peoples, disabled communities, ethnic communities, and low-income groups must be involved in order for the Strategy to reflect their needs.

Other actions

16. How can Government further support households (particularly low-income households) to reduce their emissions footprint?

- Free public transport for community service card holders, as well as students and under 25s budgeted for in Budget 2022 and implemented in 2023.

20. Is there anything else you wish to share in relation to making an equitable transition?

Oxfam analysis of 'carbon inequality' globally suggests that the excessive consumption emissions of the richest within society far exceed the per capita emissions budget consistent with 1.5 degrees of warming.[11] The total emissions of the richest 10 per cent alone are set to exceed the 1.5°C-aligned level in 2030, regardless of what the other 90 per cent do.[12] By 2030, you would need an annual income of more than NZD 255,000 to be in the richest 1

[11] Oxfam, Carbon Inequality in 2030: Per capita consumption emissions and the 1.5ºC goal (5 November 2021) < https://policy-practice.oxfam.org/resources/carbon-inequality-in-2030-per-capita-consumption-emissions-and-the-15c-goal-621305/>
[12] https://www.oxfam.org.nz/news-media/carbon-emissions-of-richest-set-to-skyrocket/

per cent; more than NZD 82,000 to be in the richest 10 per cent; more than NZD 14,500 to be in the middle 40 per cent; or less than NZD 14,500 to be in the poorest half of the global population.

An equitable transition should therefore not only support most impacted or vulnerable communities in the transition, but target the emissions of those most responsible and most financially able to carry the costs of the transition.

Recommendation:

- An equitable transition should include policies targeted at this excessive consumption, such as carbon sales taxes on SUVs, private jets or super yachts, or levies on business class or frequent flights – and wider progressive carbon pricing to fund, for example, the expansion of universal social services; ending the tax-free status of aircraft fuel, unconditional aviation industry bailouts and tax breaks for company cars.

Aligning systems and tools

23. Is there anything else you wish to share in relation to government accountability and coordination?

Where there are public entities that offer whole-of-government perspectives on climate change, these entities – like the Climate Change Commission – tend to lack the powers needed to drive the ambitious change, and largely play an advisory role. The lack of coordination also acts as a ceiling on ambition, leaving the Government to introduce isolated policies to tackle climate change (for example, on electric vehicles)

Emissions Pricing

30. Do you agree the treatment of forestry in the NZ ETS should not result in a delay, or reduction of effort, in reducing gross emissions in other sectors of the economy?

Yes.

32. Are there any other views you wish to share in relation to emissions pricing?

The Emissions Trading Scheme must be used as a tool to ensure New Zealand's largest polluters face a strong price incentive to reduce pollution, and currently, it is not set up to enable this. Please see the answer to question 2 regarding this topic.

Circular economy

48. What are your views of the potential proposals we have outlined? What work could we progress or start immediately on a circular economy and/or bioeconomy before drawing up a comprehensive strategy?

The bioeconomy, being based on replacing fossil-based products, materials and energy with renewable biomass, does not automatically align with circularity, nor necessarily environmental sustainability.

As the Zero Waste Network and the Rubbish Trip outlined in their submission:

"If a bioeconomy is to be included within the circular economy strategy, more work needs to be done to outline how the bioeconomy embeds the core principles of a circular economy. Many models of the circular economy, notably those proposed by the Ellen MacArthur Foundation, already account for biological cycles alongside technical cycles. As noted in our answer to question 46, the concept of a bioeconomy has arisen in an entirely different context to circular economy theory and is not inherently compatible.

There also needs to be an understanding that just because a feedstock for a new product or energy source is biomass, doesn't make that end use climate-friendly, non-toxic or regenerative. Burning biomass still creates emissions. Compostable products made from biomass may still be using additives that are harmful for human health and soil. Composite products that mix biomass with polymers do not align with the need to design for circularity. Sometimes it's easy to get carried away and to forget to stop and ask ourselves 'is this actually a circle, or a different kind of line?'

Ultimately, it is better to include the bioeconomy within a circular economy strategy than to design a separate bioeconomy strategy, but the scope of the bioeconomy must be clearly defined to be compatible with the genuine economic transformation a circular economy engenders."

Transport

We are proposing four new transport targets in the emissions reduction plan, and are seeking your feedback.

52. Do you support the target to reduce VKT by cars and light vehicles by 20 per cent by 2035 through providing better travel options, particularly in our largest cities, and associated actions?

The Ministry of Transport's own analysis, includes a high ambition pathway that's compatible with a 20% reduction by 2030. Given that mode shift is the area that reductions can be made fastest in between now and 2030, the government should make this VKT reduction target more ambitious and set it for 2030.

53. Do you support the target to make 30 per cent of the light vehicle fleet zero-emissions vehicles by 2035, and the associated actions?

Oxfam supports the establishment of a vehicle scrappage scheme, to assist low-income communities to trade in their old, polluting cars to receive discounts on new electric cars, e-bikes, or public transport passes.

56. The Climate Change Commission has recommended setting a time limit on light vehicles with internal combustion engines entering, being manufactured, or assembled in Aotearoa as early as 2030. Do you support this change, and if so, when and how do you think it should take effect?

The government should set an end date for the importing of internal combustion engines for 2030.

57. Are there any other views you wish to share in relation to transport?

In order to reduce reliance on cars and achieve an ambitious VKT reduction target, people who could use alternatives need greater transport choices, particularly in our big cities. Other countries in Europe have really accelerated this since the pandemic, adding many kilometres of cycleways and footpaths, and making enough space so that both pedestrians and cyclists feel safe. For example, Greater Auckland recommend taking a leaf out of England's book with their cycling and walking plan.[13]

By contrast, the New Zealand government has scuppered a pedestrian and bike crossing over the harbour bridge indefinitely, and Wellington's 'Let's Get Wellington Moving light rail might not be built until at least 2034; it could be as late as 2043.[14] Let's get on with doing these sooner. The faster options for building these are also the most cost effective, freeing up billions of dollars for investment in other parts of our big cities' transport needs.

Provide free public transport for community service card holders, under 25s and tertiary students.

To get more people out of their cars, public transport needs to be cheap and easy to use – particularly for people with the least resources.

The government is going to trial discounted public transport in parts of Auckland from next year, giving half-price fares for Community Service Card holders. This is to run for three years then perhaps be extended nationwide, as the government proposes in the Emissions Reduction Plan discussion document. Oxfam supports the free fares coalition of over 40 organisations proposing that this is fully funded by central government in Budget 2022 and free fares for the groups listed beginning in 2023.[15]

Improving bus drivers' wages and conditions is key to this too, so that we get more drivers and services can expand.

The outsourcing of the bus sector to private enterprise in the 1990s caused service delivery, driver wages and ridership to plummet. Extracting shareholder dividends dragged wages downwards – in 1990 the standard award rate was 66% above the minimum wage, today rates in the industry are only 10-25% above the minimum wage. Many drivers still have hours of unpaid book-off period in the middle of the day.

The climate implications of this are stark. The Climate Change Commission recommends public transport usage be doubled by 2030 to reach our Paris climate goals, however bus driver wages are so low that operators are struggling to recruit new drivers. The operators – which are now almost completely owned by offshore private equity funds[16] – know that raising wages ultimately means a loss in market share, meaning collective bargaining to improve these wages is typically frustrated, leading to strikes and lockouts that leave passengers scrambling to make alternative arrangements. Drivers, passengers and climate are the losers.

A number of other upcoming policies reinforce the logic of public ownership of the buses. With the Government requiring all buses bought from 2025 to be zero emissions (e.g.

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[13] UK Government "Gear change: a bold vision for cycling and walking" (July 2020) https://www.gov.uk/government/publications/cycling-and-walking-plan-for-england

[14] https://lgwm.nz/all-projects/mass-rapid-transit/#e513

[15] https://freefares.nz/

[16] https://www.thelawyermag.com/nz/practice-areas/transport/oio-approves-nz-bus-sale/208044; https://transporttalk.co.nz/news/iwi-owned-bus-sold-offshore

electric or green hydrogen), under the current framework these additional costs will be borrowed through the private sector and then claimed by the private sector, meaning that as well as shareholder dividends and CEO salaries, the NZ public pays private sector interest rates. This fact alone was a major motivating factor in Wellington Regional Council's recent decision to back public ownership.

Additionally, the Government has signalled the bus industry to be among the first considered for fair pay agreements; the cost of raising wages will be covered by Councils. Both of these changes will increase costs to the public sector without making a dent on private sector profits. Those profits should instead be devoted towards increasing driver wages and conditions to address recruitment issues, and reducing fares to increase ridership and eliminate private vehicles trips.

Recommendations:

- Set a target to reduce VKT by 20% by 2030
- Fund pedestrian and cycling improvements at a scale similar to England's Walking and Cycling Plan
- Bring forward the timeframes for constructing light rail in Wellington and Auckland to to have them completed within this decade. Choose the most cost-effective options to free up more funding for other public transport improvements.
- Provide free public transport for community service card holders, under 25s and tertiary students in line with the calls from the Aotearoa Collective for Public Transport Equity, fully funded by central government in Budget 2022
- Bring public transport back into public ownership to improve driver pay and conditions, so that services can be easily expanded.

Energy and industry

Energy strategy

58. In your view, what are the key priorities, challenges and opportunities that an energy strategy must address to enable a successful and equitable transition of the energy system?

The current electricity market of the 'gentailers' hinders the rapid transition to affordable, renewable electricity, by creating a distorted incentive for generators to limit supply therefore driving up energy prices. An energy strategy that merely sets market signals and guidance, but does not address the unequal market power of the gentailers will not succeed in creating an affordable and abundant renewable electricity system.

The strategy should therefore consider either breaking up the gentailers of Meridian, Genesis and Contact into their generation and retailing arms, or restoring public ownership over these enterprises.

The share of renewable generation in our energy mix has hardly moved in decades, with private sector decisions starving the sector of investment capital. In 2013 the Key Government sold off 49% of three 'gentailers' – Genesis, Mercury and Meridian Energy (along with now collapsed Solid Energy). The cumulative cost of privatising these firms in the years 2013 – 2020 comes to almost $5 billlion. Investing this capital into renewable

generation would easily fund the infrastructure to link up our network (e.g. moving Manapouri hydro electricity to meet demand in other parts of the country), as well as new generation (e.g. some of the many consented wind farms) and/or storage infrastructure (e.g. the Onslow battery project). This could prevent – for example – Genesis having import dirty Indonesian coal in a dry year, as happened in 2021.

Public ownership would have other benefits in the electricity industry, for example avoiding the situation we saw reported in 2020 when Meridian deliberately spilled dam water to maintain the electricity price (costing customers around $80 million), and ensure that when we agree to support low-income consumers (i.e. through the winter energy payment) that it doesn't just result in windfall profits for the private sector.

Recommendation

- Oxfam therefore recommends that an energy strategy should consider other interventions, including restoring public ownership or breaking up the gentailers, to enable an equitable and affordable renewable electricity supply to meet our goals.

63. Are there any issues, challenges and opportunities for decarbonising the industrial sector that the Government should consider, that are not covered by existing work or the Commission's recommendations?

Before her death last year, Jeanette Fitszimons proposed a path forward for Tiwai point Aluminium Smelter, which uses 13 per cent of the country's electricity. Tiwai has been threatened with repeated closure by global mining giant Rio Tinto.[17]

A big question lingering if the smelter closes, is what to do with the massive supply of renewable electricity it uses. It would take a lot of new transmission lines to bring it up to the north island where the household demand is highest. It appears that the government is in talks with Fortescue Minerals billionaire about turning it into a 'green hydrogen' factory, which remains mostly an experimental technology with uncertain markets.[18] Much of this hydrogen might be exported, of no net benefit to New Zealand.

Instead of handing over from one global mining giant that disregards indigenous rights to another, Jeanette's proposal was for the government to take over Rio Tinto when they want to leave (currently threatening closure in 2024), and continue to run the smelter at half capacity. This will maintain a source of renewably-produced, low emissions aluminium, and many of the skilled jobs that are there, while also freeing up around 7 per cent of the country's renewable electricity supply to help decarbonise South Island industry and public facilities.

As Jeanette put it:

"[This] would help with the transition away from coal in the South Island where milk and other food processing, schools and hospitals and various small industries are still reliant on coal. Voluntary redundancy might take care of many of the displaced workers, and we retain the skills, earnings and tax contributions of the others. We retain a (scaled down) export industry and the new company becomes part of the operation of the grid. Less transmission

[17] Jeanette Fitzsimons "A modest proposal for the future of the smelter at Tiawi Point (19 November 2019) < https://thespinoff.co.nz/business/29-11-2019/a-modest-proposal-for-the-future-of-tiwai-point>
[18] RNZ "Tiwai point eyed up hydrogen production" (5 May 2021) < https://www.rnz.co.nz/news/national/441832/tiwai-point-eyed-up-for-hydrogen-production.

infrastructure needs to be built. We save all or most of the ETS carbon subsidy and stabilise our now genuinely '100% renewable' electricity system."

Recommendation:

- Take over the running of Tiwai Point Aluminium Smelter in 2024 following Rio Tinto's exit, run it at half capacity, and use the remaining electricity to help decarbonise food processing, schools, hospitals and small industry in the South Island.

68. What level of support could or should Government provide for development of low emissions fuels, including bioenergy and hydrogen resources, to support decarbonisation of industrial heat, electricity and transport?

Hydrogen and bioenergy should not be used as a way to delay the replacement of fossil gas networks with electrification of heat in and energy in buildings and industry.

Firstly, there are not enough biofuel sources domestically to be used as a primary decarbonisation source of heat, electricity and transport, therefore would create reliance on ongoing fossil gas to make up the difference. They are also used as a tactic to maintain the existing fossil gas pipeline network and delay their phase out, rather than developing alternative heating and electricity systems. International analysis by the Sierra Club and Earthjustice shows that environmentally friendly alternatives to fossil gas amount to a PR campaign meant to distract from efforts to convert the building sector to all electric power.[19]

Second, locking in this demand for bioenergy helps to prop up existing unsustainable resource uses, such as industrialised agriculture (through using the methane from feedstock, effluent ponds etc to convert into bioenergy) and while wood chips can be a short-term measure, they require a regular harvesting of exotic forests that would be at odds with the plans to prioritise planting of permanent native forests to drive emission removals.

Buildings and construction

The Commission recommended the Government improve the energy efficiency of buildings by introducing mandatory participation in energy performance programmes for existing commercial and public buildings. What are your views on this?

Oxfam supports the New Zealand Green Building Council's recommendations that would require energy-efficiency labelling on existing buildings (residential and non-residential of more than 1000m²) when they are sold or leased by 2024.[20] Government can also lead with procurement declaring that, from January 2022 NABERSNZ energy-efficiency ratings will be required on base buildings in leases of more than 1000m² for government ministries, rising to require 4-star NABERSNZ from October 2024.

The Climate Change Commission has called for "Government to have by 31 December, implemented measures on existing buildings to mandate participation in energy performance programmes". The simplest step is implementing a Commercial Buildings Disclosure programme, as in Australia. This has delivered significant savings for Australian businesses

[19] https://www.desmog.com/2020/07/14/report-renewable-natural-gas-buildings-greenwashing/
[20] https://www.nzgbc.org.nz/Attachment?Action=Download&Attachment_id=45030

and reduced carbon emissions. It would provide additional transparency, and large emissions reductions for New Zealand buildings. Government is far too unambitious here. This is easily achievable and will free up much needed electricity for other uses such as electric vehicles.

72. The Building for Climate Change programme proposes capping the total emissions from buildings. The caps are anticipated to reduce demand for fossil fuels over time, while allowing flexibility and time for the possibility of low-emissions alternatives. Subsequently, the Commission recommended the Government set a date to end the expansion of fossil gas pipeline infrastructure (recommendation 20.8a). What are your views on setting a date to end new fossil gas connections in all buildings (for example, by 2025) and for eliminating fossil gas in all buildings (for example, by 2050)? How could Government best support people, communities and businesses to reduce demand for fossil fuels in buildings?

The Building for Climate Change programme could be transformational, but it isn't ambitious enough, especially around timeframes. Tens of thousands of buildings and homes are being consented each year. The sector needs clarity on what the first cap will be and how it impacts homes and buildings. Thousands of buildings will be constructed before 2035, and we must move more quickly. The consultations around the Building for Climate Change programme are also running too slowly, with the next draft taking too long to release. A great deal of feedback to the consultation called for zero energy targets closer to 2030 than initial government proposals. Government needs to listen to this and to be more ambitious with the final targets

Oxfam supports a 2025 or earlier end date for new fossil gas connections in all buildings, and eliminating their use in new building by 2030.

This needs to be part of setting a ten-year trajectory to ensure new buildings are zero energy under the Building Code by 2030. To achieve this, we support three updates to the Building Code in 2022, 2026, 2030, as suggested by the New Zealand Green Building Council.[21]

73. The Government is developing options for reducing fossil fuel use in industry, as outlined in the Energy and industry section. What are your views on the best way to address the use of fossil fuels (for example, coal, fossil gas and LPG) in boilers used for space and water heating in commercial buildings?

The government should have a focus on an all-electric heating and energy system. Repurposing the energy used at Tiwai point Aluminium Smelter could help the short-term decarbonisation of much industry and public facility process heat, while new renewable energy supply is planned and constructed. It will also help to mitigate the dry-year problem for our renewable electricity supply.

74. Do you believe that the Government's policies and proposed actions to reduce building-related emissions will adversely affect any particular people or groups? If so, what actions or policies could help reduce any adverse impacts?

As outlined by the Green Building Council, it is imperative Government also confirm election campaign commitments that Energy Performance Certificates will be required to incentivise greener homes that will use less energy to heat, cool and ventilate over their lifetime. In

[21] https://www.nzgbc.org.nz/zerocarbon/roadmap

addition to the already identified milestones, the government must also prioritise the growing energy inequity problem in Aotearoa.

Right now, New Zealand has an energy equity problem. Too many households need to spend high proportions of their incomes heating cold, inefficient homes. If we are serious about tackling poverty and improving the lives of all Kiwis, we must ensure our homes don't shackle New Zealanders to high energy bills. The most equitable way to tackle the carbon pollution of our buildings, and improve New Zealanders' wellbeing, is to push energy efficiency into every corner of the economy, particularly to those disadvantaged communities where households spend far too big a share of their income on energy bills.

79. What should the Government take into account in exploring how to encourage low-emissions buildings and retrofits (including reducing embodied emissions), such as through financial and other incentives?

A combination of deep retrofit of existing housing stock with heat pump installation can achieve modest emissions reductions, but has huge co-benefits for healthier, warmer homes, improving the accessibility of our older housing stock for disabled communities, and savings for low-income communities' power bills.

Currently just 2% of New Zealand's housing stock meets accessibility requirements for disabled people. The warmer kiwi homes initiative should be greatly expanded, but with requirements for improving accessibility of housing at the same time.

Agriculture

83. How could the Government better support and target farm advisory and extension services to support farmers and growers to reduce their emissions?

In order for farmers have the information and choices available to shift adopt farm management practices that reduce emissions and/or shift production modes, funding for regenerative, organic extension services, via local 'Regeneration hubs' or transition hubs for 'sunrise sectors' has been called for by both the Aotearoa Circle Fenwick Report of business leaders and sector group Organics Aotearoa New Zealand.[22] The Fenwick report also calls for linking these hubs to government funded 'transition banks' with revolving loan schemes, and other appropriate finance to de-risk the transition for farmers.

Recommendation

- Oxfam recommends that the government set up these hubs and fully fund regenerative organic advisory services, cover the costs of organic certification and inspection, establish a centre of research excellence in regenerative organic production, and substantially increase the funding to regenerative organic research.

84. What could the Government do to encourage uptake of on-farm mitigation practices, ahead of implementing a pricing mechanism for agricultural emissions?

[22] Aotearoa Circle, Fenwick Forum Report 2020 https://static1.squarespace.com/static/5bb6cb19c2ff61422a0d7b17/t/5ef16ab4eade2b25c640ad14/1592879840886/The+Fenwick+Forum+Report+June+2020.pdf ; Stuff.co.nz "Organics sector aims to contribute $4.7 billion to GDP by 2030 (5 November, 2021) https://www.stuff.co.nz/business/farming/126884867/organic-sector-aims-to-contribute-47-billion-to-gdp-by-2030

Bring forward a pricing mechanism for agricultural emissions by pricing agricultural emissions in the Emissions Trading Scheme at the processor level (as detailed in answer to question 2). Creating a price incentive to adopt on-farm mitigation practices is the best tool that the government has.

In addition to this, there are more direct regulatory measures that the government could implement alongside a pricing mechanism to drive de-intensification and land use change from intensive livestock farming.

This could include a phase out of synthetic fertiliser and imported Palm Kernel Extract (PKE) feed used in farming, and limits on stocking rates of livestock.

In 2015, 429,000 tonnes of nitrogen and 155,000 tonnes of phosphorus were applied to New Zealand soil as fertiliser. Since 1990, the use of synthetic nitrogen fertiliser has gone up by 628% as part of the transition to intensive dairy farming.[23] Phasing out synthetic nitrogen fertiliser can reduce emissions of nitrous oxide that fertilisers release, reduce the CO2 produced by manufacturing them, and accelerate the shift to de-intensifying farming, which will ultimately reduce methane significantly too.

Recommendations:

- In addition to bringing forward the pricing of agricultural emissions, the government should require the phase out of synthetic nitrogen fertiliser by 2030, and the phase out of imported Palm Kernel Extract feed.

85. What research and development on mitigations should Government and the sector be supporting?

- Convert state-owned farms into Regenerative Farming Training Centres with training facilities and long-term research trials.
- Supporting and expanding Our Land and Water's research into regenerative agriculture to develop a robust evidence base to understand the emissions benefits of regenerative farming in Aotearoa, and develop a credible certification market for products by linking regenerative practices with pathways to organic certification.

87. How could the Government help reduce barriers to changing land use to lower emissions farming systems and products? What tools and information would be most useful to support decision-making on land use?

Even in the face of price incentives, farmers may face barriers to de-intensifying or adopting land use change, due to:

- high levels of investment and debt in their current model
- access to advice and information on the best land use change or de-intensifying strategy for their land
- finding access to markets for new products
- or their ability to certify and get consumer recognition for lower emissions food and fibre to achieve a price premium that compensates for reduced production levels.

The BERG report notes that for the results modelled that achieved a 30% reduction by 2030 to occur, there must be a market for the new mix of products at prices that achieve a similar level of current profitability. It also points out that significant changes in training, community demographics, and local infrastructure are also required to enable large shifts towards horticulture.[24]

[23] https://www.stats.govt.nz/indicators/fertilisers-nitrogen-and-phosphorus
[24] Report of the Biological Emissions Reference Group, p. 42.

The aforementioned transition hubs could provide contextual information on land use change appropriate for the soils in the area. Government grants, or government funded transition banks can help to de-risk the transition.

Oxfam supports the recommendations in Greenpeace Aotearoa's briefing on a $1 billion regenerative agriculture fund.[25] They recommended the government make the following investments, all of which are already in practice internationally.

- Provide one-off grant funding for agroforestry, cover-cropping and reduced tillage:
    - for the establishment and initial maintenance of trees, and
    - for the first three years undertaking these practices to allow farmers to gain experience in them.
- Construct plant-based food manufacturing facilities and diversified, value-added food, fibre and timber processing.
    - Provide grant funding for the processing of regenerative organic and plant-based foods, and by constructing these processing facilities directly.
- Invest in research and development, training and advisory services for regenerative organic farming.
    - Fully fund regenerative organic advisory services, cover the costs of organic certification and inspection, establish a centre of research excellence in regenerative organic production, and substantially increase the funding to regenerative organic research.
    - Convert state-owned farms into Regenerative Farming Training Centres with training facilities and long-term research trials.
- Finance the construction of organic compost and seed facilities, by:
    - constructing large-scale facilities that target major urban waste streams, and
    - by providing grant funding for on-farm construction of compost infrastructure.
- Finance the fencing and replanting of streams, wetlands and marginal land.

88. Are there any other views you wish to share in relation to agriculture?

How much methane should be reduced by, and by whom, is a question of policy and equity, as well as science. Many farmers and farming industry groups argue that because methane emissions from agriculture in New Zealand have stabilised over the last decade these emissions are not contributing further to warming (if they were to continue to remain stable in the future), and that asking agricultural emissions to reduce to meet a long-term emissions reduction target is unfair. The stabilisation of methane emissions would lock these emissions in at their current rates (which have already contributed to 1.1-1.2 degrees of warming). The consequences of this can be seen all around the world, but are particularly felt by our colleagues and partners across the Pacific, who are facing intensifying threats to all aspects of life, culture and security due to climate destruction. This is an unjust outcome that privileges New Zealand's already very high levels of methane emissions.

By grandfathering our high share of methane emissions and committing to only modest reductions by 2030, New Zealand shuts out other countries with lower methane profiles from their share of the 'methane budget' for 1.5 degrees. 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.

[25] Greenpeace Aotearoa, "The case for the New Zealand Government to invest in Regenerative Agriculture as part of its Covid 19 economic recovery package" (April 2020) https://storage.googleapis.com/planet4-new-zealand-stateless/2020/05/3e54dd9c-govt-investment-in-regenerative-agriculture-greenpeace-nz.pdf

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. 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.

Biogenic methane emissions in 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.

The 10% reduction by 2030 goal set in the Zero Carbon Act was set with a focus on farm practices and technology adoption, outside of broader conversations about the role of pastoral agriculture in New Zealand's economy, as well as sources and mitigation options for other sectors, and the relative costs of doing those to meet our 'all greenhouse gases' targets under the Paris Agreement.

However, within the BERG report, there were clear signs that greater than 10% reductions could be achieved by 2030. When the currently available farm-level options were combined into mitigation 'packages' with the expectation of technology developments, the analysis estimated that biological emissions could be reduced by 10–21% below 2017 levels in 2030".[26] This equates to about 12-24% below 2005 levels by 2030.

When greater land use to horticulture and forestry was modelled, it found that a 30% reduction below 2005 levels in land-based emissions by 2030, and 50% by 2050 reduction was possible.[27] The modelled societal impacts were an overall positive impact on employment, and the reduction in net land-use revenues in the pastoral sector is mostly offset by the increase in net revenue from horticulture and forestry.

Summary

- A minimum contribution towards keeping to 1.5 degrees for New Zealand's agriculture sector would see methane reduced by 21% below 2010 levels by 2030 (IPCC 1.5 mid-point), or 24% below current levels.
- A fair share could be between 30% and 45% below 2005 levels by 2030, accounting for the fact that New Zealand's methane emissions are largely in the harder to abate agriculture sector.
- A minimum contribution to 1.5 degrees for agricultural nitrous oxide emissions would be to reduce them by 9% below 2010 levels (IPCCC 1.5 midpoint), or 19% below current levels by 2030.

[26] Report of the Biological Emissions Reference Group (2018), p. 27.
[27] P. 40.

- A 30% reduction in agricultural emissions by 2030 below 2005 levels is possible when land use change is considered, independent of technological development of methane inhibitors or vaccines.
- Technological developments could drive emissions reductions further, but these are unlikely to be in widespread use before 2030.
- There is therefore scope for much greater emissions reductions than legislated for in the Zero Carbon Act, and planned for by the government and the Climate Commission.