

Report No.	21-16
Decision Required	

## CLIMATE CHANGE: PROPOSED PATHWAY TO ZERO CARBON TARGETS

## 1. PURPOSE

1.1. This report presents an overview of the Climate Change Commission's draft advice on reducing New Zealand's greenhouse gas emissions. It canvasses implications for our region, and possible themes for submission.

## 2. EXECUTIVE SUMMARY

- 2.1. The Climate Change Commission has released draft advice on reducing New Zealand's greenhouse gas emissions, and is taking submissions until 28 March 2021.
- 2.2. The Commission's advice includes:
  - Proposed first three emissions budgets, through to 2035;
  - Policy guidance on how emissions budgets could be met;
  - A finding that commitments New Zealand has made under the Paris Agreement are not compatible with limiting warming to 1.5°C above pre-industrial levels; and
  - Consideration of reductions in biogenic methane that might be needed by 2100.
- 2.3. The Commission concludes that New Zealand needs to do more in order to meet the targets established through the Zero Carbon Act. It also concludes that we should shift focus from net emissions (and offsetting with plantation forestry) to decarbonisation at source.
- 2.4. Decarbonisation would require transformational change of the transport and energy sectors, in particular. Plantation forestry would remain important for building materials and biofuel; native forests would be established as carbon sinks, eventually replacing carbon farming in its current form.
- 2.5. Through to 2050, the Commission believes biogenic methane targets can be met without loss of overall agricultural profitability. In the longer term, it suggests that deeper cuts in methane emissions are likely to be necessary.
- 2.6. The Commission recommends that Government seek cross-party support for climate policy. It should better align effort across departments, and develop a partnership model with local government and iwi/Māori, to support enduring and equitable change.
- 2.7. The Climate Change Minister is required to set emissions budgets for 2022-35, and produce an emissions reduction plan for 2022-25, by 31 December 2021. The presumption in law is that the Minister follow the Commission's advice.
- 2.8. Our assessment is that the Commission's analysis is robust and its recommendations generally sound. They provide much-needed direction and present a coherent view of what will be required for New Zealand to transition to a low-emission future. Aspects of the proposed policy response would benefit from greater specificity.
- 2.9. We recommend that Council express its support for the Commission's advice. Members may wish to offer local examples and other evidence to assist the Commission in fleshing out its final advice.



#### 3. RECOMMENDATION

That the Committee recommends that Council:

- a. **receive** the information contained in Report No. 21-16.
- b. agree to submit in support of the Commission's advice; and
- c. **agree** that specific submission points be confirmed by the Chair.

## 4. FINANCIAL IMPACT

4.1. There is no financial impact.

## 5. COMMUNITY ENGAGEMENT

5.1. The Climate Change Commission is seeking public submissions on its draft emissions budgets. There is no requirement for Horizons' to conduct public consultation.

## 6. SIGNIFICANT BUSINESS RISK IMPACT

6.1. The Commission's advice, if adopted by the Minister, will impact on several areas of Horizons' operations. There is, however, no significant business risk associated with this report.

#### 7. CLIMATE IMPACT STATEMENT

7.1. The Commission's position on emissions reductions is a key element of New Zealand's response to climate change. It will influence the context within which Horizons operates in the years ahead. Early engagement with the Commission's advice will improve our ability to respond effectively to climate change in our region.

## 8. LEGISLATIVE CONTEXT

- 8.1. The Climate Change Response (Zero Carbon) Amendment Act 2019 sets a framework for New Zealand's response to climate change, including action to reduce greenhouse gas emissions. It includes emissions reductions targets:
  - reduce emissions of greenhouse gases, other than biogenic methane, to net zero by 2050; and
  - reduce biogenic methane emissions by at least 10 percent by 2030 and 24-47 percent by 2050, compared to 2017 levels.
- 8.2. Under the Act, a Climate Change Commission has been established to provide independent, expert advice to Government and to monitor progress with implementation.
- 8.3. One of the Commission's tasks is to advise the Climate Change Minister on emissions budgets that move New Zealand toward its domestic targets and international obligations. Emissions budgets are, as far as possible, to be met domestically. The use of offshore mitigation paying for reductions and removals overseas is only to be used as a last resort. In providing its advice, the Commission is required to consider:
  - technologies and practice changes available now, technologies on the horizon, and costs and constraints in making these changes;
  - New Zealand's contribution to the global goal of limiting warming to 1.5°C above preindustrial levels;



- potential impacts on the economy, society, culture, environment and ecology, including on different regions, communities and generations;
- how emissions budgets could be met and the direction of policy for achieving them.
- 8.4. Emissions budgets are to be set well in advance, to improve predictability for communities, businesses, and investors. Budgets for three periods (2022-25, 2026-30, and 2031-35) are to be set by the Minister this year, along with an emissions reduction plan for the first period (2022-25). If the Minister departs from the Commission's advice, he is required to explain his reasons.

#### 9. NEW ZEALAND'S EMISSIONS

- 9.1. The Zero Carbon Act establishes a 'split target' for greenhouse gases. Biogenic methane (primarily from waste and livestock) on the one hand, and long-lived gases (primarily from the burning of fossil fuels) on the other. In 2018, New Zealand's gross greenhouse gas emissions comprised about 45.5 Mt CO2e of long-lived gases and 1.34 Mt CH4 of biogenic methane. Taking into account the greater global warming potential of short-lived methane relative to long-lived carbon dioxide, New Zealand's National Greenhouse Gas Inventory reports a total of approximately 78.9 Mt CO2e across all gases for 2018. About 30 percent of those emissions were offset by removals through forestry.
- 9.2. Gross emissions have increased by 24 percent since 1990. In more recent years, emissions from domestic transport have continued to rise even as emissions from other sectors stabilised or decreased. Emissions are projected to fall as a result of current government policy but not by enough to meet legislated targets.

#### 10. THE COMMISSION'S DRAFT ADVICE

- 10.1. The Commission released its draft advice for public consultation on 31 January 2021. The submission period was to close on 14 March, but has been extended until 28 March. Advice will be finalised and released by 31 May 2021.
- 10.2. Greenhouse gas emissions (and measures to reduce them) are a complex subject. They permeate the breadth of economic activity and social practice; they influence and are influenced by ecology and the landscape. The Commission's report is necessarily lengthy. It explores the impacts of possible policy on different sectors, and distributional effects across the community. This paper provides only a summary of key points as they relate to local government's role and our region. It does not attempt to replicate the Commission's advice. Members may find is useful to refer to the advice report and background information at:

https://www.climatecommission.govt.nz/get-involved/our-advice-and-evidence/

- 10.3. The Commission's advice includes:
  - Proposed first three emissions budgets, through to 2035;
  - Policy guidance on how emissions budgets could be met;
  - A finding that commitments New Zealand has made under the Paris Agreement are not compatible with limiting warming to 1.5°C above pre-industrial levels; and
  - Consideration of reductions in biogenic methane that might be needed by 2100.
- 10.4. The Commission's advice draws on a set of principles that it has developed for transition to a thriving, climate-resilient and low emissions Aotearoa:
  - Align with the 2050 targets.
  - Focus on decarbonising the economy.
  - Create options.



- Avoid unnecessary cost.
- Transition in an equitable and inclusive way.
- Increase resilience to climate impacts.
- Leverage co-benefits.

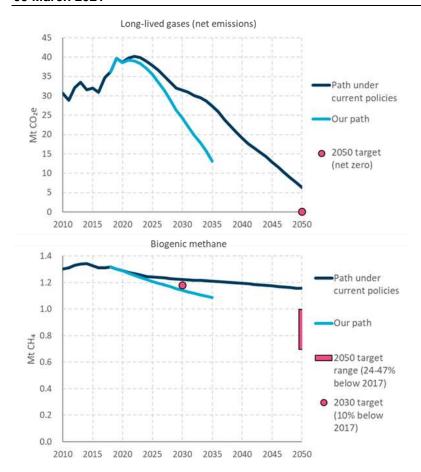
## **Proposed emissions budgets**

10.5. The emissions budgets proposed by the Commission are presented in Table 1 below. Due in part to methodological differences, these figures are not directly comparable to the figures quoted in paragraph 9.1 above. The budgets require relatively modest reductions in 2022-25, with steeper reductions in subsequent periods. Current and proposed emissions trajectories are illustrated in Figure 1.

	Emission budget 1 (2022-25)	Emission budget 2 (2026-30)	Emission budget 3 (2031-35)	
Total net emissions budget	271 Mt CO₂e	286 Mt CO₂e	223 Mt CO₂e	
Annual average	67.7 Mt CO2e/yr	57.3 Mt CO2e/yr	44.6 Mt CO2e/yr	
REMOVALS				
Forestry carbon removals	26 Mt CO <sub>2</sub> e 49 Mt CO <sub>2</sub> e		68 Mt CO₂e	
Annual average	6.5 Mt CO₂e/yr	9.8 Mt CO₂e/yr	13.6 Mt CO₂e/yr	
EMISSIONS – LONG-LIVED GASES				
Gross long-lived gases	174 Mt CO₂e	190 Mt CO₂e	153 Mt CO₂e	
Carbon dioxide	133.7 Mt CO₂e	143.2 Mt CO₂e	110.8 Mt CO₂e	
Nitrous oxide	29.4 Mt CO₂e	35.3 Mt CO₂e	33.1 Mt CO₂e	
F-gases	7.3 Mt CO₂e	8.1 Mt CO₂e	6.7 Mt CO₂e	
Non-biogenic methane	3.4 Mt CO₂e	3.1 Mt CO₂e	2.2 Mt CO₂e	
EMISSIONS – BIOGENIC METHANE Gross biogenic methane*	4.92 Mt CH₄	5.83 Mt CH <sub>4</sub>	5.53 Mt CH <sub>4</sub>	

**Table 1**: Proposed emissions budgets. From Climate Change Commission, 2021 Draft Advice for Consultation.





**Figure 1**: Emissions pathways for long-lived gases and biogenic methane. From Climate Change Commission, *2021 Draft Advice for Consultation*.

- 10.6. The Commission concludes that these reductions are ambitious but achievable, and that there are affordable, socially acceptable pathways to get us there. Those pathways do not rely on future technologies.
- 10.7. The overall cost of meeting the proposed emissions budgets is estimated to be less than 1 percent of GDP significantly less than was expected when targets were considered by Parliament. While the overall costs are small relative to the economy, they will not be evenly felt.
- 10.8. The Commission concludes that current policies do <u>not</u> put New Zealand on the right track. Government's current approach, centred on the Emissions Trading Scheme, focuses heavily on net emissions. Rather than driving meaningful decarbonisation, the Commission argues, this will use up land resources to offset avoidable emissions. This is not sustainable (given that we have a limited land area) and would leave the next generation to reduce gross emissions at the same time as they will need to adapt to escalating impacts of climate change.
- 10.9. The Commission proposes a "profound shift" away from net emissions and forestry offsetting, to focus instead on reducing emissions at source.
- 10.10. In light of this change in approach and the projected overshoot of its 2050 targets the Commission believes Government must pick up the pace. It concludes that strong and decisive action is urgently needed to drive transformational change across all sectors of the economy.
- 10.11. Priority areas identified by the Commission include increasing the number of electric vehicles on our roads, increasing our total renewable energy, improving farm practices,



and planting more native trees to create long-term carbon sinks. These priorities are outlined in Table 2 and explored in more detail in the following paragraphs. The Commission also recommends cross-cutting initatives to support behaviour change and make sure that climate change is factored into all government decisions.

		Budget 1	Budget 2	Budget 3
	Road transport	Accelerate EV uptake Improve average efficiency of new ICE vehicles		Phase out new light ICE vehicles Electrify medium and heavy trucks
ransport	Reducing travel demand	Encourage remote wor Encourage switching to	c transport	
Heat, Industry and Power	Non-road transport	Electrification of rail	Biofuei blending Start electrification of fe	erries and costal shipping
	Buildings	No new gas heating sys Improve thermal efficie	Start phase out of gas in buildings	
	Electricity	Phase out fossil base- load generation	Transmission and distribution grid upgrades Reduce geothermal emissions	Expand renewable generation base Achieve "95% renewable generation
Нед	Industrial process heat	Replace coal with blom	Replace gas with biomass and electricity	
	Agriculture	Adopt low emissions practices on-farm	Adopt low emissions breeding for sheep	Encourage the adoption of new low methane technologies when available
rand	Native Forests Ramp up establishing new native forests		ew native forests	Establish 25,000 hectares per year
	Exotic Forests	Average 25,000 hectares per year of new exotic plantation forests		Ramp down planting new exotic plantation forests for carbon storage
Waste and F. gases	Waste	Divert organic waste from landfill Improve and extend landfill gas capture		
Waste an	Hydrafluoracarb ons (HFCs)	Reduce import of HFCs in second-hand products Increase end-of-life recovery		

**Table 2**: Proposed actions to reduce emissions. From Climate Change Commission, 2021 Draft Advice for Consultation.

#### **Transport**

- 10.12. Transport emissions are a significant focus of the Commission's advice. We will need to change the way we plan and build our cities to make it faster and easier to get around. Key aspects of the Commission's strategy include:
  - An integrated national transport network to reduce travel by private car. Much more walking, cycling and use of public and shared transport.
  - Wide adoption of electric vehicles; EVs to make up the majority of the vehicles imported for everyday use by 2035. Government support and incentives to make this happen.
  - Increased use of low carbon fuels, such as biofuels and hydrogen, particularly in heavy trucks, trains, planes, and ships.

## Heat, industry and power

10.13. Use of fossil fuels for heat, industry and power will need to have almost ceased by 2050. (The Commission acknowledges that there may be some small exceptions, such as steel



production, where no viable alternative technology currently exists.) This means maximising electricity usage and, correspondingly, building more renewable electricity generation.

- Almost eliminate fossil fuels. This means ending the use of coal.
- Homes, buildings and infrastructure built now will still be here in 2050. Choices must be made with climate change in mind, e.g. by using low emissions technologies and prioritising energy efficiency.
- In the long-term, reductions in natural gas use in homes and businesses.

## Land use (forestry and agriculture)

- 10.14. The Commission argues for a progressive shift in approach from offsetting New Zealand's emissions with plantation forestry to creating long-term carbon sinks in the form of native forest on less productive land. There are a variety of reasons for this long-term sustainability, impact on communities, cobenefits of permanent forests, wildfire risk, an emphasis on decarbonisation of the economy.
- 10.15. In relation to agriculture, the Commission concludes that New Zealand can achieve methane reduction targets for 2030 (10 percent below 2017 levels) and the lower end of the 2050 target range (ca 24 percent reduction) without any technology developments or loss of profitability.
- 10.16. Changes in on-farm management practices driven by freshwater policy can also reduce biological agricultural emissions; farmers may already be moving in the right direction. Emissions reductions of the scale required will rely on highly skilled farm management and high-quality data to support decision making. Policies need to be cohesive across environmental issues to ensure they achieve multiple outcomes.
- 10.17. In addition to improving efficiency on farms now, the successful development of new technologies and practices would provide greater flexibility and allow New Zealand to meet the more ambitious end of the 2050 biogenic methane target range without reducing agricultural production.
- 10.18. The Commission's main recommendations in relation to land use include:
  - A cohesive Government strategy taking a holistic view of how we use and protect our land. It should include water, biodiversity and climate.
  - Farmers taking action now to reduce emissions on their farms while maintaining, or even improving, productivity. This includes reducing animal numbers and better animal, pasture and feed management. Policy support to make this happen.
  - A long-term plan for targeted research and development of new technologies to reduce emissions from agriculture.
  - Pine trees will still play an important role in getting to 2050 and could support a future bioeconomy, as bioenergy to replace fossil fuels and as timber for building.
  - Existing forests, small blocks of trees, soils and wetlands can all store more carbon.
     Work is needed to better understand this potential and how to include this in accounting systems.
  - Native forests can create a long-term carbon sink while providing a range of other benefits, like improving biodiversity and erosion control. Incentives are needed to get more native trees planted.

## Waste

10.19. The Commission advises that New Zealand needs to fundamentally change the way it thinks about waste. The report recommends measures to reduce waste going to landfills by a quarter in 2035, and better management of waste streams as a resource:



 Creating a circular, self-sustaining economy to reduce New Zealand's waste emissions and cut biogenic methane emissions. Strengthened product stewardship and a commitment to resource recovery and reuse.

## **Enabling an enduring transition**

- 10.20. Tackling climate change will require unprecedented coordination across government, industry and society. To that end, the Commission offers advice not only on the form of change required, but on how change might be achieved.
- 10.21. While action is urgent, the Commission argues that the speed of transition must be steady fast enough to be effective, but with adequate consideration and support for people through the change. An important part of this will be taking a long-term view and sending signals early to provide communities, businesses and investors with the predictability that they need to plan and invest. This will help to maximise opportunities while minimising disruption and inequalities.
- 10.22. Different groups, regions and sectors will be affected by climate change and associated policy in different ways. The Commission suggests that policy will need to be carefully designed and accompanied by targeted support. It will also need to recognise and encourage cobenefits of climate action, including health improvements, quieter streets, cleaner water and increased biodiversity through more native forests.
- 10.23. Communities and regions that may be particularly affected should be identified, and processes initiated for local transition planning in these areas. This would require the Government to work in partnership with local government and regional economic development agencies, iwi/Māori, local communities, businesses, civil society groups and stakeholders.

## lwi/Māori

- 10.24. The Commission recognises the importance of the Treaty Partnership in New Zealand's transition to a low-emissions society. It recommends further effort on the part of both central and local government to remove barriers and to give effect to a genuine and enduring partnership with iwi/Māori. This includes recognition of rights to exercise rangatiratanga and kaitiakitanga in a joint plan to reduce emissions, as well as support for Māori communities to transition to a low-emissions Aotearoa.
- 10.25. Specifically, the Commission proposes that the Government publish, by 31 December 2022, a plan to partner with iwi/Māori and local government to implement emissions reducing pathways and actions. The plan should:
  - Give effect to the He Ara Waiora tikanga.
  - Include pathways and actions (which could include regional outcomes and actions frameworks) to remove barriers to participation for iwi/Māori.
  - Enable iwi/Māori to exercise rangatiratanga and kaitiakitanga.
  - Promote equal access to new information, technology, employment and enterprise opportunities.

## Local government's role

- 10.26. Local government decisions in a number of areas (land use, urban form, road and transport services, housing, three waters, waste management, flood management, etc) have a bearing on individuals' and businesses' emissions. Although the Commission's budgets and policies are largely sectoral, they acknowledge that delivery on them will require central and local government to work in partnership.
- 10.27. The Commission advocates for alignment of legislation and policy to enable local government to make effective decisions in relation to climate change. It suggests this should encompass the Local Government Act, the Building Act and Code, national



- direction under the RMA, proposed RMA reforms, implementation of the freshwater management framework, and 30-year infrastructure plans.
- 10.28. The Commission also suggests that funding and financing mechanisms are required, across layers of government, to enable the emissions reduction plans to be implemented effectively and to address the distributional effects of policy change.
- 10.29. In the interests of more inclusive policy development, the report further recommends that central and local government develop new mechanisms to incorporate the views of all New Zealanders when determining policies and priorities.
- 10.30. The Commission proposes two indicators of alignment between central and local government:
  - Government to have, by 30 June 2022, outlined its progress on developing the necessary partnerships between central and local government.
  - Government to have published a work plan by 31 December 2022 outlining how alignment and funding will be addressed and the milestones for achieving this plan.

# **Equitable Transitions Strategy**

- 10.31. The Commission recommends that the Government develop an Equitable Transitions Strategy linked to its Economic Plan. The strategy should outline:
  - How the Government will build the evidence base for assessing the distributional impacts of climate change policy decisions that align with tikanga values.
  - A process for factoring distributional impacts into climate policy and designing social, economic and tax policy in a way that minimises or mitigates the negative impacts.
  - Guidance for developing local transition plans that are customised for and codeveloped with local government and affected communities.
  - How the Government will support affected workers to transition into new work.

## **New Zealand's Nationally Determined Contribution**

- 10.32. Nationally Determined Contributions (NDCs) are the targets each country sets itself under the Paris Agreement. Cumulatively, they aim to limit global warming to 1.5°C above pre-industrial levels. New Zealand's NDC is a 30 percent reduction in net emissions from 2005 levels over the 2021-30 period.
- 10.33. The Commission was asked to determine whether the New Zealand's current NDC was compatible with global efforts. It found that it is not.
- 10.34. The Commission advises that the NDC would need to be strengthened to reflect a reduction in emission, relative to 2005, of well over 35 percent by 2030. How much more than 35 percent should reflect the tolerance for climate and reputational risk, economic impacts, and principles for effort sharing. These are political questions that the Commission has left for politicians to consider.

## Long-term biogenic methane targets

10.35. The Commission was also asked to provide advice on how much biogenic methane emissions may need to reduce in the future for New Zealand to meet its international obligations. It concluded that New Zealand may need to reduce methane emissions by 49-60 percent below 2017 levels by 2100. This advice does not affect the 2050 target already in place.

#### 11. IMPLICATIONS FOR HORIZONS

11.1. Emission reduction targets have already been set by Parliament, through the Zero Carbon Act. They are not subject to debate. The Commission's task has been to identify a



- pathway to achieve those targets. The Commission concludes that we are not doing enough, but that meeting our targets is achievable with current technologies, and at a relatively modest cost.
- 11.2. The Commission has engaged widely in developing its advice, adopting a carefully considered, principled approach with a high degree of analytical rigour. Attention has been paid not only to the changes required to reduce emissions, but also to issues of fairness and durability.
- 11.3. Overall, it is recommended that Members support the Commission's recommendations. They provide much-needed direction and present a coherent view of what will be required for New Zealand to transition to a low-emission future.
- 11.4. Within that general frame, there are areas in which Members may wish to provide more specific commentary. Issues of particular relevance to local government and our region are canvassed below. In addition to feedback on its various policy proposals, the Commission has expressed interest in views on "six big issues":
  - Do the emissions budgets put New Zealand on course to meet 2050 targets?
  - Has a fair balance been struck between action now, and action for future generations?
  - Do proposed changes make the NDC compatible with the 1.5C goal?
  - Should planting new native forests to provide long-term carbon storage be prioritised?
  - What type of policy intervention is most urgently needed to help meet emissions budgets?
  - Are budgets and the pathway to 2035 both achievable and ambitious enough, considering the potential for behaviour and technology changes in the future?
- 11.5. The following discussion is not exhaustive; Members may have views on other aspects of the Commission's work. The Commission has indicated that is particularly interested in submissions that are supported by evidence.

## Pace of change

- 11.6. While the Commission (and Government) must work towards the targets for 2050 set out in the Zero Carbon Act, there are choices in the trajectory we take to get there. Our pathway is unlikely to be a straight line of consistent year-on-year reductions:
  - There will be significant lags between policy changes and reductions in emissions because of the age of our vehicle fleet, industry investment cycles, capacity issues, etc.
  - Forestry harvesting cycles have a significant impact on New Zealand's net emissions.
  - In addition, the Commission believes that a change in approach is necessary.
- 11.7. Against this background, several factors influence the appropriate pace of change:
  - Affordability: the Commission estimates the cost of its package at less than 1 percent of GDP – much less than assessments that accompanied the Zero Carbon Act. Impacts will not be felt evenly.
  - Achievability: Many of the recommendations are already in train but the work required to implement others is huge.
  - Effectiveness: while we talk about 'zero-carbon 2050', it is cumulative emissions that matter. The slower we are in reducing emissions now, the more aggressively we will need to do so in a few years.
- 11.8. Another consideration is the Commission's finding that New Zealand's NDC target is not consistent with international obligations. While the budgets presented in the Commission's advice put us on a pathway to the targets currently set in the Zero Carbon Act, those targets are more likely to become more stringent than less stringent between now and 2050. This risk must be set against the bow wave of work required over the next few years to set New Zealand on the course the Commission proposes.



- 11.9. While the report talks generally of the cobenefits of action to reduce emissions, and certainly considers impacts on the economy, society, culture, environment and ecology, the headline metric used to assess the overall affordability of the package is GDP. Members may wish to encourage the Commission to incorporate broader measures into its analysis four wellbeings, for instance, or Treasury's Living Standards Framework.
- 11.10. Members may also have a view on the pace of change. The role of local government in implementing the Commission's advice (discussed below) may have a bearing on the 'achievability' dimension.

# Partnership with iwi

- 11.11. The Commission identifies the importance of iwi involvement in action to address climate change. It also acknowledges the burden responding to consultation (across environmental and social policy) already places on iwi groups. An issue that the Commission might acknowledge more clearly is the tension between expectations of genuine partnership, the timeframes within which action needs to be taken, and the resourcing available to either iwi organisations or local government to do so.
- 11.12. Council has set aside a significant sum in its draft Long-Term Plan to support iwi involvement in freshwater planning. This may be a useful example of the sorts of figures involved. Members may wish to encourage the Commission to consider where costs most appropriately fall and how resource is best provided.

# Partnership between central and local government

- 11.13. We recommend that Council support a stronger partnership between central and local government, as outlined in enabling recommendation 4 (p.42 of the Commission's report), but consider whether the Commission's recommendations go far enough to address the institutional challenges that local government currently faces in responding to climate change.
- 11.14. Resource management reform, and creation of a Strategic Planning Act, present an opportunity to better align the various pieces of policy and legislation that have a bearing on local action. As a minor point, the Land Transport Management Act appears to be missing from the set of legislation that guides decisions on climate change.
- 11.15. Funding and financial are also critical areas. The decisions central government makes will impose costs on local authorities and communities. Members may wish to express a view on the form funding models should take. For example, the Commission elsewhere emphasises the importance of signalling consistent, long-term policy direction: is this also true for funding? How might funds be structured to provide to local authorities and communities with enough clarity to plan ahead?
- 11.16. Members may wish to consider whether there are dimensions beyond policy alignment and funding mechanisms that are important in establishing a genuine partnership between central and local government. It might, for example, be useful if central government's work plan included support for the development and application of tools for local responses, perhaps extending programmes such as the 'Just Transitions' initiative in Taranaki.

## **Participatory processes**

- 11.17. The Commission recommends the establishment of new participatory processes (such as a citizens' assembly) to ensure the views of all New Zealanders are reflected in policy development. It is not clear at what scale this is intended whether national, regional, or more local.
- 11.18. It would be useful to know what the Commission intends. If as seems appropriate at least some of these processes are envisaged at a regional or local level, resourcing may be an issue. A degree of flexibility may be appropriate to recognise existing initiatives and local preferences.



## Forestry, and decarbonisation at source

- 11.19. The commission has concluded that, with our focus on forestry offsets and net emissions, New Zealand is not currently on the right pathway. There are several reasons for this: the simplest is that we will eventually run out of suitable land for new plantations. The Commission argues that we should instead focus on reducing gross emissions (principally from transport and energy generation), invest in native forests as long-term carbon sinks and, over the longer term, shift the focus of plantation forestry towards biofuel and building material.
- 11.20. Prior to passage of the Zero Carbon Act, the Parliamentary Commissioner for the Environment produced a report in which he argued that plantation forestry should not continue to be relied upon to offset fossil fuel use. The Climate Change Commission's advice is consistent with that position.
- 11.21. Decarbonisation at source is closely linked to policies on forestry. At its broadest level, the emphasis in the Commission's report on putting the right tree in the right place (for the right reason) aligns with Horizons' efforts through the Sustainable Land Use Initiative and other programmes. Shifting focus from (exotic) plantation forestry for offsetting, to permanent (native) forests with a range of cobenefits, may go some way to allaying concerns in parts of the region about excessive &/- inappropriate afforestation to the detriment of local communities.
- 11.22. While a shift away from offsetting emissions through carbon farming is likely eventually to slow the conversion of farms to forestry, new forests will continue to be established for the foreseeable future. This may have a disproportionate effect on our region, and its rural communities, given the relatively large area of lower-producing pastoral land.
- 11.23. The Commission would require forest management plans for all forests over 50ha (including new permanent native forests). It is not clear whether those plans would include pest control. As forest areas increase, so does the habitat available for pest species. The Commission has recognised the issue, and would require pest control in pre-1990 forests. If foresters are to be incentivised (through the ETS or any other mechanism) to establish new, permanent forests as carbon sinks, it would make sense to maximise the carbon sequestration potential of those forests by actively managing pests. Explicit inclusion of pest control in the proposed forest management plans would be an obvious way to achieve this. The alternative may be that the task eventually falls back on regional councils.

#### **Agriculture**

- 11.24. The Commission's advice signals significant and ongoing change for the agricultural sector. The report indicates that this can be achieved without loss of profitability, and that many farmers will already be moving in the right direction. Reducing biogenic methane emissions by moving all farms to adopt best practice will require a substantial investment in research, knowledge transfer, and application to different farm systems (i.e., extension programmes). The Commission's observation that policies need to be cohesive across environmental issues (including fresh water and biodiversity, as well as climate change) is an important one. This should include integration into farm plans already being developed, policy mechanisms, and consideration of who regulates / advises farmers.
- 11.25. The report, overall, includes little discussion of nitrous oxide a long-lived greenhouse gas that makes up around 10 percent of New Zealand's emissions. Nitrous oxide is part of the agricultural nitrogen cycle and will interact particularly closely with regional council efforts to improve freshwater outcomes.
- 11.26. Scenarios used to inform the Commission's analysis included some dairy land transitioning to horticulture. Members may wish to draw the Commission's attention to the need for care in placing horticulture operations, given the high per-hectare leaching rates associated with high-rotation crops and potential impacts on waterbodies.



- 11.27. The Commission's advice proposes faster reductions in biogenic methane emissions than current policy settings will deliver. To do so, it relies principally on the existing policy development programme, He Waka Eke Noa. It would be useful to know what the Commission proposes be done differently, or what it considers He Waka Eke Noa should prioritise, to drive faster results.
- 11.28. The Commission acknowledges the need to support sectors and communities through transition though it is also clear that any support should be to enable transition, not to continue with high-emission practices. If Members agree with this approach in principle, you may take a view on what sort of support is most helpful.

# **Transport**

- 11.29. As a major source of New Zealand's emissions, transport features heavily in the Commission's advice. Aspects of the Commission's proposed policy approach could provide greater specificity. Transport is one of these.
- 11.30. On the whole, there is perhaps an overemphasis on electric vehicles and little detail on how to encourage people to use private motor vehicles less. The transformational change that the Commission says is necessary will mean changing our built environments to reduce the need for travel, and make modes other than private vehicles (such as cycling and public transport) safe, quick, and convenient.
- 11.31. The importance of urban form is acknowledged in the report but receives little attention. The report would benefit from closer consideration of how to encourage urban development that reduces the need for lengthy commutes and to better integrate strategic planning for transport and land use. Shorter commutes will likely do as much to reduce emissions, with greater cobenefits, than more efficient vehicles. Urban form is slow to change and policies may do little to reduce emissions within the first three budget periods. Nonetheless, clear policy direction can influence the decisions of planners and investors over time; progress in budget periods after 2035 will rely on that direction being provided soon.
- 11.32. Achieving a shift toward public transport and walking / cycling will require significant investment to make these modes more attractive and to accommodate future growth. The Government Policy Statement on Land Transport already provides support for walking, cycling, and low-emission public transport. Funding is a key limitation in improving public transport services. Not only are we struggling to meet the required the local share, Waka Kotahi have very little available to support public transport services and infrastructure. Further, electrification of the passenger transport fleet (as recommended by the Commission) greatly exceed the \$50 million set aside by Government. These costs are likely to fall to councils. Members may wish to suggest clearer direction, especially around mode-shift to public and active transport as a way to reduce carbon emissions.
- 11.33. The Commission's discussion of passenger transport has an implicit bias towards urban areas, where most New Zealanders live and the biggest gains are likely to be made. Members may wish to comment on the challenges of decarbonising transport in rural areas. Our rural communities rely on motor vehicles both to access basic services and and to move product (milk, livestock, produce). Neither public transport nor electrification offers an obvious solution in the more remote parts of our region.
- 11.34. More attention might also be given to the freight sector. Due to its location, large volumes of freight moved through our region (contributing, in passing, to relatively high emissions compared to other regions). A commitment to long-term investment will be required to make rail and coastal shipping more competitive.
- 11.35. Phasing out fossil fuels is perhaps the approach most likely to reduce New Zealand's emissions in the short term. Given the age of the vehicle fleet, however, there is room for doubt about the likely speed of uptake of EVs. Moreover, a focus on new vehicles may raise affordability and equity issues. Changes to the tax framework may be necessary,



both to incentivise change (e.g. fringe benefit tax, road user charges) and to deal with changing revenue streams (e.g. fuel tax). Members may wish to encourage the Commission to provide more detail on how they suggest these challenges be addressed.

## **Energy generation**

11.36. The models underpinning the Commission's advice suggest a roughly five-fold increase in demand for wind generation and a ten-fold increase in solar by 2050. This will likely present implementation challenges, including consenting renewable energy assets. Depending on the shape of proposed resource management reform, Councils may bear the brunt of any public opposition to necessary but unpopular decisions.

## 12. CONSULTATION

- 12.1. Local Government New Zealand is drafting a submission on behalf of the sector. At the time of writing, LGNZ's submission was not available. It will include input from several councils and special interest groups; we anticipate that Members will wish to support it.
- 12.2. This advice has been informed by discussion with staff at other regional and territorial authorities.

## 13. TIMELINE / NEXT STEPS

- 13.1. The submission period closes on 28 March. The Commission's preference is that submissions be made via a survey on its website. We anticipate that the survey will focus on the consultation questions the Commission has identified, which are outlined at: <a href="https://haveyoursay.climatecommission.govt.nz/comms-and-engagement/future-climate-action-for-aotearoa/supporting\_documents/ConsultationguestionsCCC.pdf">https://haveyoursay.climatecommission.govt.nz/comms-and-engagement/future-climate-action-for-aotearoa/supporting\_documents/ConsultationguestionsCCC.pdf</a>.
- 13.2. Draft submission points (and LGNZ's contribution, when it is received) will be circulated to Members separately from this report. We recommend that final submission points be confirmed by the Chair.
- 13.3. The Commission's final advice will be released by 31 May.
- 13.4. Emissions budgets for 2022-35 are to be gazetted by the Minister by 31 December 2021, along with an emissions reduction plan for the first four years (2022-25).
- 13.5. The Commission proposes several other milestones over the next few years, including establishment of a separate appropriation for climate change (March 2022), a plan for central government's partnership with iwi/Māori and local government (December 2022), and an Equitable Transitions Strategy (December 2023).

#### 14. SIGNIFICANCE

14.1. This is not a significant decision according to the Council's Policy on Significance and Engagement.

Tom Bowen

PRINCIPAL ADVISOR, STRATEGY & POLICY

### **ANNEXES**

There are no attachments to this report.