Horizons Regional Council

Response to Climate Change Commission consultation questions on emissions budgets

Submitted 26 March 2021

Are you here to tell us your one big thing?

We commend the Commission's work in developing a robust package of advice. We strongly support the majority of the Commission's recommendations, and the sense of urgency expressed in the draft advice. As a package, the recommendations provide muchneeded direction and present a coherent view of what will be required for New Zealand to transition to a low-emission future.

We note that there is strong guidance and concrete measures in some areas of the policy pathway, and less specificity on other aspects. How the Commission's proposals play out for our communities and ratepayers will depend a lot on how its advice is interpreted. While we acknowledge that the Commission's role is to recommend policy direction rather than develop detailed policy proposals, we would encourage the Commission to strengthen aspects of its advice around transport, forestry, transitional support for the agriculture sector, and the partnership between central government, local government, and iwi. Further commentary is offered in the relevant sections below.

Our submission draws on experience working with and representing local communities, as environmental managers, and in providing transport services for our region. We thank the Commission for the opportunity to comment and would be glad to discuss any follow-up questions you may have.

Big issues question 1: The pace of change. Do you agree that the emissions budgets proposed would put Aotearoa on course to meet the 2050 emissions targets?

Strongly agree – Agree – Neutral – Disagree – Strongly disagree – Don't know

Detailed analysis is outside our technical expertise, but we agree the evidence presented suggests so.

Big issues question 2: Future generations. Do you agree we have struck a fair balance between requiring the current generation to take action, and leaving future generations to do more work to meet the 2050 target and beyond?

Strongly agree – Agree – Neutral – Disagree – Strongly disagree – Don't know

The Commission notes that, in many cases, there will be a time lag between policy decisions and reductions in emissions. There is also a limit on the number of new policies we can develop and implement in the short term, without significant risk of creating unintended consequences through poor design. Both of these factors constrain the pace of change.

On the other hand, the draft advice indicates that current targets are not consistent with limiting global warming to 1.5C. We acknowledge the dilemma this creates.

While being wary of pursuing 'haste' over 'speed', we believe there are areas in which more could be done to better position future generations, particularly in relation to transport, urban form, and rural land use.

Big issues question 3: Our contribution to 1.5C. Do you agree with the changes we have suggested to make the NDC compatible with the 1.5C goal?

Strongly agree – Agree – Neutral – Disagree (too ambitious) – Disagree (not ambitious enough) – Don't know

This question is outside our technical expertise

Big issues question 4: Role and type of forests. Do you agree with our approach to meet the 2050 target that prioritises growing new native forests to provide a long-term store of carbon?

Strongly agree - Agree - Neutral - Disagree - Strongly disagree - Don't know

We agree that trees and forests provide a range of benefits, including but not limited to carbon sequestration. We also agree that New Zealand cannot rely on covering ever more land in conifers to offset its emissions as a long-term strategy. On this basis, we support the change in focus the Commission proposes. Our views are expanded upon, including some areas we would like to see clarified, in response to consultation questions 11 & 17.

Big issues question 5: Policy priorities to reduce emissions. What are the most urgent policy interventions needed to help meet our emissions budgets? (Select all that apply)

Action to address barriers – Pricing to influence investments and choices – Investment to spur innovation and system transformation – None of them

We do not see this as an either/or situation. Removal of barriers, price signals, and investment need to work in concert to tackle the issue. There could, perhaps, be more attention to support (beyond pricing) for behaviour change.

Big issues question 6: Technology and behaviour. Do you think our proposed emissions budgets and path to 2035 are both ambitious and achievable considering the potential for future behaviour and technology changes in the next 15 years?

Strongly agree – Agree – Neutral – Disagree – Strongly disagree – Don't know

Overall, we agree that the budgets and path to 2035 strike an appropriate balance. We have concerns in relation to two sectors.

In relation to transport, we believe there could be greater attention to behaviour change (to reduce demand for private motor vehicles), rather than electrifying current practices.

In relation to agriculture, moving all farms to best practice may not require new technologies, but does requires a huge shift in farm systems and practices. We suggest that there may be too much reliance on behaviour change (with too little support) in this area.

Consultation question 1: Principles to guide our advice. Do you support the principles we have used to guide our analysis? Is there anything we should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

Yes; we note, however, that affordability appears to have been heavily weighted in the Commission's analysis.

Consultation question 2: Emissions budget levels. Do you support the proposed emissions budget levels? Is there anything we should change, and why?

Too ambitious – About right – Not ambitious enough – Don't know

On the whole, we agree the budget levels are about right, and strike a balance between ambition and achievability. We are, nonetheless, concerned that the targets to which they align are not sufficient to limit warming to 1.5C, as noted in our response to 'big issue 2' above.

Consultation question 3: Break down of emissions budgets. Do you support our proposed break down of emissions budgets between gross long-lived gases, biogenic methane and carbon removals from forestry? Is there anything we should change, and why?

Too ambitious – About right – Not ambitious enough – Don't know

Consultation question 4: Offshore mitigation. Do you support the recommendation that emissions budgets must be met as far as possible through domestic action? Is there anything we should change, and why?

Fully support - Partially support - Neutral - Do not support - Do not know

We agree in principle; details are outside our technical expertise.

Consultation question 5: Cross-party support for emissions budget. Do you support the recommendation that the Minister seek cross-party support on emissions budgets, ensuring debate in the House so that the positions of each political party are on the parliamentary record? Is there anything the Commission should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

Yes; from a local government perspective, this is likely to provide better consistency of direction, improving our ability to plan and respond.

Consultation question 6: Coordinate efforts to address climate change across Government. Do you support enabling recommendations to improve coordination across Government, including long-term policies and strategies, clarity about lead agencies and Ministers, and establishment of a separate appropriation for climate change? Is there anything the Commission should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

As a policy issue, climate change spans a number of Ministers – and departments – with differing portfolios and priorities. We support the recommendations to establish a Vote Climate Change and assign specific responsibilities to Ministers and agencies. We would further encourage the Commission to consider making recommendations as to governance, perhaps drawing on the interdepartmental models available under the Public Service Act 2020. From a local government perspective, this is likely to improve clarity and coherence of direction and, thereby, the efficiency and effectiveness of policy interventions.

Consultation question 7: Genuine, active and enduring partnership with iwi/Māori. Do you support recommendations in relation to partnership with iwi/Māori? Is there anything the Commission should change, and why?

Fully support - Partially support - Neutral - Do not support - Do not know

We agree with the Commission that iwi involvement is crucial, and strongly support the recommendations. We also note, with the Commission, the burden that responding to consultation (across environmental and social policy) already places on iwi groups.

In its draft Long-Term Plan, Horizons Regional Council has set aside \$3 million per annum for at least the next three years to support iwi involvement in freshwater planning. The Commission may find this figure a useful point of reference: iwi involvement in our response to climate change is unlikely to be less resource-intensive than fresh water.

Given the sums involved – and broader capacity and institutional constraints – we suggest that the Commission strongly encourage central government to invest in supporting meaningful hapū and iwi participation in local partnerships that respond to national challenges like climate change.

Consultation question 8: Central and local government working in partnership. Do you support recommendations that legislation and policy be aligned to enable local government to make effective decisions for climate change mitigation and adaptation, and that funding and financing mechanisms be implemented to enable the emissions reduction plans to be implemented effectively and to address the distributional effects of policy change? Is there anything the Commission should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

We support the Commission's call for a stronger partnership between central and local government, as outlined in enabling recommendation 4. We agree that alignment of policy and funding are critical areas; we believe the Commission's advice could go further.

A genuine partnership between central and local government requires more than central government setting (and funding) coherent policy direction. A partnership requires that the parties work together on a relatively equitable footing. We suggest this implies that central and local government jointly develop the work plan the Commission proposes. From a local government perspective, the work plan would need to address major impediments to progress at a local level. It might usefully include support for the development and application of tools for local responses (perhaps extending existing programmes, such as the 'Just Transitions' initiative in Taranaki). Other matters of relevance to the proposed work plan are mentioned in response to other questions below.

Given its connections to local communities and role in implementation, we believe local government's expertise and experience should influence legislative, regulatory, and policy design. Much of this will need to be nationally codeveloped and locally delivered. For the regional sector, this applies in particular to areas like transport and agriculture. We suggest that the form the partnership takes should be agreed in the work plan; partnership should reflect pressures (including resource pressures) on local government as well as central government's priorities.

The Commission has noted (in enabling recommendation 1) the importance of depoliticising climate policy to provide long-term consistency of direction. Looking forward, we might expect local government to bear the brunt of opposition to what may be necessary but unpopular actions – reducing parking to create cycleways and bus lanes, for example, regulation of agriculture, consenting a new windfarm, or decisions to retreat from specific, hazard-prone areas. Only though a genuine partnership can we ensure that policy is able to be implemented and build political commitment at all levels.

We strongly support the Commission's identification of funding and financial as also critical areas. We are pleased to see the Commission recognise the issue of unfunded mandate. Climate change, and the decisions central government makes, will impose costs on local authorities and communities. So will work with central government to better design and align policy interventions – nonetheless, we suggest this is expanded to include working together on legislative and regulatory requirements and funding models. Costs will not always fall evenly across communities. We support the Commission's recommendation that Government report on how it will fund emissions reductions plans and address distributional effects. Both the quantum and form of funding are important. The Commission elsewhere emphasises the importance of signalling consistent, long-term policy direction: we suggest that attention be given to structuring funding streams (and eligibility criteria) to provide local authorities and communities with enough clarity to plan ahead.

As a minor point, the Land Transport Management Act appears to be missing from the set of legislation that guides decisions on climate change.

Consultation question 9: Establish processes for incorporating the views of all New Zealanders. Do you support the development of new and more effective mechanisms to incorporate the views of all New Zealanders in determining climate actions and policies, such as an ongoing public forum? Is there anything the Commission should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

We agree that reflecting a representative range of views in decision making is important. It is not clear to us at what scale participatory processes are intended to be convened – whether nationally, regionally, or more locally. We assume the Commission envisages a multi-layered approach, with national discourse about policy direction and instruments, and local discussion about local application. We would like to see a degree of flexibility in any arrangement proposed, to recognise existing initiatives, the variability of local circumstances, and local preferences. We also note that servicing these mechanisms can be resource intensive and (depending on the approach taken) may not lead to timely conclusions. Many regional councils have experience in this area, through efforts to involve communities in freshwater planning.

Consultation questions 10 & 11. Locking in net zero. Do you support our approach to focus on decarbonising sources of long-lived gas emissions where possible? Is there anything we should change?

Fully support - Partially support - Neutral - Do not support - Do not know

We agree that trees and forests provide a range of benefits, including but not limited to carbon sequestration. We also agree that New Zealand cannot rely on covering ever more land in conifers to offset its emissions as a long-term strategy. We must address the structural issues that impede a transition to a prosperous, low-emissions society. On this basis, we support the change in focus the Commission proposes.

Do you support our approach to focus on growing new native forests to create a long-lived source of carbon removals? Is there anything we should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

We support the change in focus in principle, noting the many ecosystem and cultural cobenefits associated with native forests. We agree that establishing long-term sinks of single conifer species would miss many of these cobenefits and potentially bring additional management challenges. We support a rebalancing of incentives to achieve a better mix of forest types.

We note, however, that New Zealand natives are adapted to a particular range of climatic conditions: as those conditions change (as drought and fire risk increases, and pest species and diseases potentially change) there may be cases where exotics remain a useful tool for carbon sequestration. We also note that, at present, carbon markets can offer an additional incentive to support planting for other purposes. Hill-country erosion is a significant issue for our region, which we expect to get worse as the climate changes. We see a risk that changes in emissions policy may impact on our erosion-control programmes. We explore this point further in our response to consultation question 17.

Consultation question 12: Our path to meeting the budgets. Do you support the overall path that we have proposed to meet the first three budgets? Is there anything we should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

We support the broad pathway proposed by the Commission, but would like to see some of the 'alternative' solutions listed in Box 3.1 become part of the headline advice. In particular, we would like to see more attention to transformational change in the transport sector (urban form; mode shift) alongside electrification of private motor vehicles; in the agriculture sector, we would like to see more attention to how change is to be achieved. We expand on these comments in the relevant section below.

Consultation question 13: An equitable, inclusive and well-planned climate transition. Do you support the package of recommendations and actions we have proposed to increase the likelihood of an equitable, inclusive and well-planned climate transition? Is there anything we should change, and why?

Fully support – Partially support – Neutral – Do not support – Do not know

Consultation question 14: Transport. Do you support the package of recommendations and actions for the transport sector? Is there anything we should change, and why?

Support all the actions – Support some of the actions – Do not support these actions – Do not know – Neutral

We strongly support the focus on transport, as a major source of New Zealand's emissions, in the Commission's advice. Transformational change 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. We support the proposed integrated transport network to reduce dependence on private motor vehicles and would like to see it supported with stronger policy direction. In particular, we suggest that these structural changes be accorded at least as high a priority as electrifying the private vehicle fleet. Reduced dependence on private vehicles offers important cobenefits for the community in terms of health, traffic congestion, and general wellbeing / liveability.

The importance of urban form is acknowledged in the report: we suggest it be given a higher profile in the report's actions and recommendation. Urban design is crucial to reduce the need for lengthy commutes and to better integrate strategic planning for transport and land use. Where people live and work, and the choices this provides for how they travel, will be a critical factor influencing carbon emissions in the future as our population continues to grow. We suggest that the Commission consider a recommendation around strengthening land use and transport integration, in particular facilitating higher-density, energy-efficient housing development along key public transport corridors and nodes. While we accept that this may do little to reduce emissions within the first three budget periods, action is urgent due to the long-term impact of urban planning decisions.

The increases in public transport use, walking and cycling contemplated in the Commission's advice will place significant pressure on existing networks. Achieving a shift toward public transport and walking / cycling will require major 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 lowemission public transport. Funding is a key limitation in improving public transport services. Outside of the country's major urban centres significant funding increases are required to make public transport services an attractive alternative transport mode. Greater frequency of services and longer hours of operations will be required. Not only are we struggling to meet the required current local share, Waka Kotahi has very little available to support public transport services and infrastructure. Electrification of the passenger transport fleet (as recommended by the Commission) will greatly exceed the \$50 million set aside by Government. We would support a recommendation that government provide added financial support to local authorities to electrify their public transport fleets and improve services. If public transport expands to meet the proposed targets, not only will more expensive carbon-neutral vehicles be required, but we will need many more of them. Attention will also need to be given to alignment of policy with investment / procurement cycles: Palmerston North's public transport contract, for example, is due for review in 2023. If central government support for decarbonisation is not in place at that time, we will effectively be locked in for another decade. Government support should extend beyond funding (which we agree is crucial) to consideration of how to provide potential providers with enough scale and confidence to invest in costly new technologies and supporting infrastructure.

We note that 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. Our rural communities rely on motor vehicles both to access basic services and to move product (milk, livestock, produce). Neither public transport nor electrification offers an obvious solution in the more remote parts of our region. Given the challenges of decarbonising transport in rural areas, there are likely to be disparities not only between, but within, regions. Transport is an enabler for people to access economic, social and educational opportunity and there is a risk that people will be left behind if the transition is not well managed.

We also encourage the Commission to provide greater direction in relation to the freight sector, in particular rail. This might include a recommendation that prioritises transition from lower efficiency to higher efficiency transport modes, ahead of within-mode replacement technologies; this might also apply to passenger services, including reinvigoration of inter-regional passenger rail. Clear direction, and substantial and sustained investment, will be required to make rail and coastal shipping more competitive. Given lead times for major infrastructure projects, this investment needs to be confirmed as soon as possible if we are to accommodate the required mode shift.

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. We encourage the Commission to provide more detail on how they suggest these challenges be addressed.

Changes to the regulatory, tax and funding framework may be necessary, both to incentivise change and to deal with changing cost structures and revenue streams. We suggest that the Commission consider a recommendation to examine the land transport funding model to determine the best way to fund the transition to, and management of, the future network needed to achieve emission reduction targets. The Commission might also consider pricing tools, such as congestion charging, variable or distance-based charging, to encourage more carbon-efficient practices. We would also support a recommendation to remove regulatory barriers, such as cumbersome traffic resolution processes, which slow or hinder delivery of walking, cycling and public transport infrastructure.

Consultation question 15: Heat, industry and power sectors. Do you support the package of recommendations and actions for the heat, industry and power sectors? Is there anything we should change, and why?

Support all the actions – Support some of the actions – Do not support these actions – Do not know – Neutral

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.

With this in mind, we suggest the Commission consider strengthening its advice in two areas. Firstly, there could be more explicit support for micro- and own-use generation (including community led energy solutions): where viable, this can improve resilience to extreme weather events and reduce the need for larger infrastructure projects. Secondly, where new windfarms or dams are required, the Commission might recommend clear Government leadership on the inevitable trade-offs between renewables, biodiversity, landscape, and other values. Local preferences should remain part of the decision-making process, but clear direction from Government would reduce protracted conflict and provide for a more strategic response.

Consultation question 16: Agriculture: Do you support the package of recommendations and actions for the agriculture sector? Is there anything we should change, and why?

Support all the actions – Support some of the actions – Do not support these actions – Do not know – Neutral

We are pleased to see an emphasis on collaboration and innovation in the Commission's approach to the agricultural sector. 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.

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. This is particularly true for nitrous oxide – as part of the agricultural nitrogen cycle, any policy intervention will interact particularly closely with regional council efforts to improve freshwater outcomes.

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). While the Commission's proposed policies do not require new technologies, they do involve behaviour and system change on a large scale. We question whether this is realistic without other, supporting measures.

The climate, soils, rainfall, etc of farms vary considerably across New Zealand. Farmers, like any other population, fall across a bell curve in terms of expertise, attitudes, and behaviour. Financial resources vary. Changes in farm practice across to improve water quality in our region have involved a long – and ongoing – journey that has absorbed significant public and private resource over many years. While we agree with the Commission's intent, we struggle to see that driving best practice for the purpose of reducing methane emissions will be fundamentally different.

Scenarios used to inform the Commission's analysis included some dairy land transitioning to horticulture. We 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. In our region, this has proven to be a particularly difficult issue in the Horowhenua. We would be happy to engage further with the Commission on the details.

Finally, we note that there are often market barriers to changing land use – market access, local processing capacity, etc. We have some experience in this area, through 'Accelerate25', our regional economic development programme. Water availability will increasingly also become a constraint in some places. Creating / surfacing opportunities for landowners / operators from the market back is an important part of achieving positive change. Resource would need to be available to support landowners to understand their options and transition to new crops. This might be an area that warrants closer attention in the Commission's advice.

Consultation question 17: Forestry: Do you support the package of recommendations and actions for the forestry sector? Is there anything we should change, and why?

Support all the actions – Support some of the actions – Do not support these actions – Do not know – Neutral

The Commission's emphasis on putting the right tree in the right place (for the right reason) aligns in principle with Horizons' efforts through the Sustainable Land Use Initiative (SLUI) and other programmes. The main focus of SLUI is hill-country erosion: a significant issue for our region, that we anticipate will get worse with more frequent intense rainfall events as a result of climate change. Rather than large-scale afforestation, SLUI primarily integrates trees and woodlots into hill-country farming systems. Different species are used in different situations – sometimes natives, but often cheaper, faster growing exotics. The programme relies on investment by both central government and ratepayers, and uptake by farmers. We see a risk that a change in emissions policy (e.g. availability of carbon credits; government grant schemes) might undermine our efforts to respond to other pressing environmental issues – and, more especially, the region's efforts to the set of the

effects of climate change. We would encourage the Commission to be mindful of potential unintended consequences, ensuring that policy on diversified, well-managed forests aligns with incentives for sustainable mixed farming systems.

In parts of our region, there is considerable concern about the detrimental effects of excessive &/- inappropriate afforestation on employment, local services, and communities. A shift in focus from (exotic) plantation forestry for offsetting, to permanent (native) forests with a range of cobenefits, may go some way to allaying those concerns. While this is likely – in due course – to slow the conversion of farmland 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. Ensuring that policy signals deliver an appropriate pattern of land use across catchments, and managing the effects on local communities, is an area that should feature in the proposed partnership between central and local government.

The Commission would require forest management plans for all forests over 50ha (including new permanent native forests). It is not clear from the draft advice whether those plans would include pest control in all cases. A comprehensive pest-control regime, covering all forests, offers significant potential for further carbon sequestration as well as other cobenefits. We submit that this should go beyond 'encouragement' of pest control in pre-1990 forests. In extremis, browsing by pest species can lead to canopy collapse and turn potential carbon sinks into carbon sources. As forest areas increase, so does the habitat available for pest species. Pest control needs to be done before planting for trees to establish properly, then maintained to maximise carbon sequestration and ecological cobenefits. In round figures, pest control (for possums and ungulates) costs \$160 per hectare in the first year, and \$70 per hectare each year thereafter. While these are small numbers individually, they quickly add up across a region and across the land area the Commission seeks to afforest. 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. We recommend explicit inclusion of suitable pest control in management plans for all forests – pre-1990, post-1989, and newly established carbon sinks. We suggest that fire risk is another issue that should be reflected in forest management plans. Clear, national direction on requirements is appropriate to both ensure issues (such as pest control and fire risk) are addressed and minimise bureaucratic barriers to afforestation.

Consultation question 18: Waste: Do you support the package of recommendations and actions for the waste sector? Is there anything we should change, and why?

Support all the actions – Support some of the actions – Do not support these actions – Do not know – Neutral

Consultation question 19: Multisector strategy: Do you support the package of recommendations and actions to create a multisector strategy? Is there anything we should change, and why?

Support all the actions – Support some of the actions – Do not support these actions – Do not know – Neutral

We support the multisector strategy in principle. Local government decision making (whether Long-Term Plans, transport planning, resource management planning, or elsewhere) already involves considerable process. We would not wish to see further bureaucratisation of these processes slowing decision making, nor duplication of reporting requirements exacerbating resource pressures. We suggest that central government be encouraged to work in partnership with local government in its response to recommendations that affect local government, to enable efficient, effective, and timely decision making. This includes RM reform, financial reporting, and procurement processes.

Consultation question 20: Rules for measuring progress: Do you agree with proposed rules for measuring progress towards the 2050 targets? Is there anything we should change, and why?

Support all the actions – Support some of the actions – Do not support these actions – Do not know – Neutral

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. We encourage the Commission to incorporate broader measures into its framework for measuring progress – the four wellbeings of the Local Government Act, for instance, or Treasury's Living Standards Framework. A wider set of metrics may provide better information about the value of economic activity, as well as impacts on Māori, women, and minority groups.

Consultation question 21: Nationally Determined Contribution (NDC). Do you support our assessment of the country's NDC? Do you support our NDC recommendation?

Fully support – Partially support – Neutral – Do not support (too ambitious) – Do not support (not ambitious enough)

This question is outside our expertise

Consultation question 22: Form of the NDC. Do you support our recommendations on the form of the NDC?

Fully support – Partially support – Neutral – Do not support (too ambitious) – Do not support (not ambitious enough)

This question is outside our expertise

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

Fully support – Partially support – Neutral – Do not support (too ambitious) – Do not support (not ambitious enough)

This question is outside our expertise

Consultation question 24: Biogenic methane. Do you support our assessment of the possible required reductions in biogenic methane emissions?

Fully support the assessment – Somewhat support the assessment – Do not support the assessment – Do not know - Neutral

This question is outside our expertise. We suggest, however, that it is important to signal long-term expectations to farmers as early as possible, to allow the necessary investment decisions to be made and farm systems to adapt.