By email

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Tēnā koutou

Submission on the Climate Change Commission 2021 Draft Advice

The Greater Wellington Regional Council (Greater Wellington) thanks the Climate Change Commission (the Commission) for the opportunity to submit on its 2021 Draft Advice for Consultation on reducing Aotearoa New Zealand's greenhouse gas emissions. We have provided an online submission through the consultation hub.

Greater Wellington acknowledges the well-considered and detailed analyses that have been undertaken that underpin the advice. Greater Wellington commends the overall approach that the Commission has taken to produce this set of draft recommendations to central government. The Commission has clearly identified the steps that need to be undertaken by central government to reduce Aotearoa New Zealand's emissions and join global efforts to avoid the worst impacts of climate change.

Overall comments

- Greater Wellington supports the sense of urgency expressed in the draft advice as demonstrated by
 the focus on gross emissions reductions, which is particularly important for achieving the
 Government's 2050 goals. This is especially the case given long lead-in times for built transport
 infrastructure, housing and land development, and the associated life span of infrastructure,
 vehicles and buildings.
- Greater Wellington recommends that the Commission reassess the budgets and increase their ambition to align with the global goal of limiting warming to 1.5°C above pre-industrial levels.
- Greater Wellington notes that to realise increased ambition significant investment will be critical to
 expand public transport, walking and cycling networks to ensure the required mode shift can be



accommodated safely, reliably, efficiently and affordably in the short timeframe these budgets cover.

- The scale of investment required to deliver on the mode shift targets is beyond the capacity of the
 current local/central government funding models to address. Future funding must be available for
 new initiatives, including fare reductions for certain groups, and increased financial assistance rates
 to public transport authorities will be critical to achieving the necessary shifts, which are essential
 for meeting the transport sector path.
- We also note that significant changes to align the policy and regulatory environment will also be needed to achieve the targeted emission reductions. The availability of pricing tools – like congestion charging, variable or distance-based charging – are required to effectively manage demand, encourage ride sharing or more efficient trips and contribute to reducing emissions.
- There is an opportunity to reconsider the contributions for long lived gas emissions reduction by sector and to advance the ambition for the transport sector, while allowing for a more carefully planned, holistic transition for the land sector. Research is required to ensure the transition will not unfairly impact the Māori economy, rural communities or exacerbate climate impacts.
- The choice of accounting framework that will be applied to land emissions (from vegetation and soil) means that just 1.6-3.7% of Aotearoa New Zealand's total land area will be accounted for across the time period 2020 to 2035. The impact of this choice means the role of natural capital and ecosystem services is largely excluded from making a contribution to the emissions reduction pathway, and the attendant risks and opportunities have correspondingly been side-lined.
- There is an opportunity to support innovation and NZ industry. Decarbonising the bus fleet for example, done well, will support local manufacturers and help create a new skilled part of our workforce. Taking a wider view of the role of natural capital in transitioning the land sector will help transform our key primary industries into sustainable, climate-safe industries with a future.
- Finally, Greater Wellington notes that the Commission has identified the importance of integrating the climate response into other Government action and reforms. Historically, cross-agency integration of policies and measures has been challenging to achieve in practice. The Resource Management Act reforms and the COVID-19 response in particular could enhance, neutralise or derail climate action. For example, the pressure to solve the housing crisis could exacerbate the climate crisis. The economic response to COVID-19, and desire to 'get back to normal', will also challenge our climate response, particularly once the borders open again. We challenge the Commission to include a stronger directive to Government that ensures the climate response that is required to meet the emissions budgets is at the core of its entire policy and legislative agenda.



In summary Greater Wellington has the following **key** recommendations:

- 1. The **level of ambition** set for the first three budgets must be strengthened.
- 2. Alignment across Government is critical and must be prioritised.
- 3. Advice to **significantly increase investment in public transport** and enabling **active travel modes** must be strengthened.
- 4. Land sector transition must be revised to take a more holistic approach and avoid inequities.
- 5. Care must be taken to ensure a **just transition** for all.

Yours sincerely

Daran Ponter

Chair

Greater Wellington Regional Council

Ham Fools

Thomas Nash

Climate Committee Chair

Greater Wellington Regional Council

Climate Change Commission 2021 Draft Advice – Greater Wellington Regional Council Submission

Responses to general consultation questions

Consultation question 1Principles to guide our advice

Do you support the principles we have used to guide our analysis? Is there anything we should change, and why?

- Greater Wellington **strongly supports** the seven principles.
- Principle 2 "Focus on decarbonising the economy". Greater Wellington strongly supports the focus on reducing gross emissions. This will challenge the Government to drive the change to a low emission economy rather than meeting targets using forestry or off-shore offsets. It is also a lower risk approach.
 - We encourage and expect more connection with the climate change experts and responsible officers, including those progressing sustainability to be a part of your programmes and panels moving forward. This may help to address your concern and expectation to obtain the viewpoints of all New Zealanders an ambitions but hard to achieve goal. As you may know, local government consistently and regularly consults with our communities on what it is important to them. This can act as more effective, climate change calibrated way of obtaining viewpoints in a more effective and informed way.
 - Hence, we could expect to be part of future panels and solution policies so we can coimplement these at the regional and local level – while "advising-up" around the expertise we have on the ground and the connections with may have to commercial entities progressing and working on green tech applications.
- Principle 3 "Create options". We strongly support this principle. We recommend enhancing our options by going hard and fast on road transport. This will create a buffer to more carefully transition the land sector. Continuing to displace dry stock hill farming with plantation forestry while leaving the more intensive agricultural activities occurring on lowlands relatively untouched will continue the environmental degradation that has been observed over the last few decades (https://www.mfe.govt.nz/environment-aotearoa-2019).
- Principle 5 "Transition in an equitable and inclusive way". The contribution each sector of the economy makes towards meeting the first three carbon budgets will be crucial in meeting this principle. Road transportation is the largest source of increasing emissions and is also the largest source of increasing costs to households (https://www.stats.govt.nz/information-releases/household-expenditure-statistics-year-ended-june-2019). Applying this principle will be crucial during the transition towards a carbon-free transport system. 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. A significant proportion of the national private vehicle fleet that are older, higher emitting, and less fuel efficient are owned by young people, people and families on low-incomes, and people in less economically developed regions of the country. Any transition policies will need to create realistic and affordable alternatives for these groups. Transition also needs to recognise the diversity of where we live

in Aotearoa New Zealand and that transport options that are realistic and attractive for urban dwellers are not necessarily so for suburban, semi-rural and rural dwelling New Zealanders.

To fully embody the principles of "equity" and "inclusive" there needs to be some thinking around how we partner with mana whenua/Māori and other potential key stakeholders to build an understanding of the potential pathways forward, to better understand the impacts on different communities, regions or sections and make decisions around managing these impacts in a just and inclusive way.

- It will be important to transition the land sector more carefully, to fairly distribute costs that might otherwise fall disproportionately across the population. We still need to understand the iwi/Māori economy, and its emissions profile, to ensure the transition does not exacerbate historic and current grievances for Māori. Continuing to displace dry stock hill farming with plantation forestry while leaving the more intensive agricultural activities occurring on lowlands relatively untouched will continue the environmental degradation that has been observed over the last few decades (https://www.mfe.govt.nz/environment-aotearoa-2019). It is important to adopt this principle when considering which sector qualifies as 'hard to abate' as discussed under 3.2. A farmer might say that it is hard to abate their emissions, as might a petrol-car owner, because they can't afford to change practice. The aviation industry may also identify themselves as a hard to abate sector.
- Principle 6 "Increase resilience to climate impacts". The draft advice takes a narrow view of resilient actions. There are many examples in both rural and urban settings where actions which reduce emissions can have positive or negative resilience outcomes. The wider benefits of native afforestation are touched briefly on while the need to understand other ecosystems better is only considered in terms of their value for storing carbon. The role natural capital plays in resilience is largely absent. We recommend the Commission revises its advice to take a holistic view of the land sector, and expand its advice beyond what is otherwise a bifurcated and incomplete framework for the land sector. A plan that includes environmental restoration targets and is catchment centred can perform "double duty" in displacing emitting activities with removing activities on the one hand while increasing climate resilience, and improving environmental and economic outcomes for both rural and urban communities on the other (https://ourlandandwater.nz/future-landscapes/land-use-suitability/; https://niwa.co.nz/freshwater-and-estuaries/our-services/catchment-modelling/cluescatchment-land-use-for-environmental-sustainability-model; https://deepsouthchallenge.co.nz/research-project/climate-resilient-forestry-horticulture; https://climate-adapt.eea.europa.eu/metadata/adaptation-options/adaptation-of-integratedland-use-planning).
- Principle 7 "Leverage co-benefits": The transition of the transport system towards carbon zero provides great opportunities to create co-benefits, including health (active mode usage), reduction of other harmful emissions, and broader wellbeing (e.g. more liveable urban environments). There are, however, multiple co-benefits to be leveraged from taking a more holistic approach to the land sector response, in mitigating the impacts that are now inevitable, as well as risks that the changing climate brings to this climate response. These include climate regulation, soil and water quality, employment opportunities and safer, healthier communities (e.g. https://www.nature.com/articles/s41893-021-00692-9). In fact this is an important component of the story needing to be told to bring communities with us as we change the way we work, the way we get around and the way we live. To focus only on emissions reductions and not the potential benefits relating to the four well-beings fails to capture the additional good to be achieved through these activities.

 While not explicitly identified as a principle, the Commission has also constrained its advice by only applying existing technologies to develop their emissions scenarios, even though this has not been included here for comment. This is a principle we are neutral upon, given stronger targets/budgets could drive greater innovation.

Consultation question 2 Emissions budget levels

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

- Greater Wellington does not support the emissions budget levels for long-lived gases. We note
 the Commission's assessment of whether their proposed emissions budgets and the path for
 achieving them is consistent with contributing to the global 1.5°C goal, and where in the overall
 scheme of things it falls short. We consider the ambition for transport emissions reductions
 could be increased to enable an overall increase in ambition.
- Greater Wellington notes that the budget for biogenic methane is near the upper bound of the 1.5°C consistent pathway. Greater Wellington also notes that the Agriculture sector will be impacted by required emissions reductions for long-lived gases from within the sector, across the land sector as a whole, behavioural and diet changes as well as other environmental reforms. We recommend that the budget is reassessed to take account of the cross-sector, cross-gas interactions and other external pressures that will be driving changes to the agriculture sector, in order to determine whether a budget closer to the middle of the 1.5°C consistent pathway could reasonably be achieved.

Consultation question 3Break down of emissions budget

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

• Greater Wellington supports the breakdown for emissions budgets 1 and 2 for long-lived gases, as the forestry removals predicted for those periods will already be locked in to some extent. Greater Wellington recommends the breakdown for budget 3 for long-lived gases is revised to reflect a more ambitious reduction pathway for gross CO₂ emissions from the transport sector, and a reduction in ambition for exotic forestry removals. This is to address concerns with the exotic forestry targets and allow for more careful land sector planning.

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

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

- Greater Wellington strongly supports budget recommendation 4.
- The strong focus on gross emissions reduction and lack of dependence on offshore mitigation is laudable. This will send a strong signal to business and industry that emissions must be reduced. It will add to the economic pressure from rising carbon prices to help drive the economic transformation required to reduce gross emissions, and where intervention is needed focus policies and measures on ways that reduce gross emissions in order to meet the budgets. This is expected to help drive innovation as well.
- Reducing domestic emissions also makes sense from a prudent risk management perspective as forestry is increasingly exposed to risks of wildfire and storms. It also ensures that co-benefits derived from emission reduction measures are enjoyed by New Zealanders.

Consultation question 5 Cross-party support for emissions budget

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

Greater Wellington strongly supports the recommendation.

Consultation question 6 Coordinate efforts to address climate change across Government

Do you support enabling recommendation 2? Is there anything we should change, and why?

• Greater Wellington **strongly supports** the recommendation.

Consultation question 7 Genuine, active and enduring partnership with iwi/Māori

Do you support enabling recommendation 3? Is there anything we should change, and why?

- Greater Wellington strongly supports the recommendations and plan for central government to partner with iwi/Māori and local government to implement emissions reduction pathways and actions. Iwi/Māori hold a wealth of environmental knowledge, mātauranga Māori (e.g. https://link.springer.com/article/10.1007/s10584-007-9372; https://niwa.co.nz/climate/information-and-resources/climate-and-m%C4%81ori-society). It is essential that central and local government provide for iwi/Māori participation at all levels of planning, and at different scales as appropriate. As much of the knowledge is or has been generated at the local level and passed down through generations, deeper engagement at the level of whānau, hapū and/or iwi, will be needed to reflect localised knowledge.
- To enable genuine, active and enduring partnerships with iwi/Māori however, two key challenges need to be addressed. These include the capacity of iwi/Māori to partner and the methods that are used to engage, which are often based on colonial methods. True

partnerships require that partners are equally resourced and able to meet on equal terms. We recommend the Commission ensures their advice to the Government includes how iwi/Māori will be resourced sufficiently to be able to participate at the levels and scales required, and that iwi/Māori are able to determine how they want to partner and participate.

Consultation question 8 Central and local government working in partnership

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

- Greater Wellington strongly supports that "central and local government work together".
 - There is a need for true partnership between central and local government in the areas highlighted in enabling recommendation 4, to achieve the ambitious goals recommended by the Commission.
 - This partnership needs to start early on, by working out jointly how to work as partners and by jointly developing the work plan mentioned under the heading "progress indicators".
 - Local government has more direct access to and relationships with our communities.
 Greater Wellington agrees with the statement that "our communities know what actions need to be taken to benefit or empower them" (p. 20).

New and unforeseen challenges are maturing regionally, nationally and globally. As preexisting problems are accentuated and the unknowns stack up, our economic uncertainty grows. We now think our economic recovery could take up to ten years. Naturally, our region will be directly affected in the next two to five years, as Aotearoa New Zealand strives to build back better, the world seeks a return to a kind of normalcy, and our Central Government response and support, is scaled back.

The pressure to build back without considering how to incorporate green technology and climate change considerations is both risky and a missed opportunity to activate and support Aotearoa New Zealand's commercial potential to lead responses and solutions.

Crisis to Opportunity

Our region's demands have changed as our commuter corridors, housing and transport pressures morph to reflect changes in work patterns, and more. Growing housing demand has pushed prices up in all districts. The housing crisis combined with the economic strains of coping with uncertainty, closed borders and reduced business revenues, will create long-term challenges. But there are and will be more opportunities for innovation.

The opportunity has to be in activating shared and cross-government and sector responses to climate change – that don't disadvantage our economic resiliency and advantage our response and activities that benefit from connections and enable commercial leadership in climate change solutions.

We encourage the Commission to consider how they can tap into the resources and expertise across government and find collaborations to work on shared solutions — and leadership responses that will bring out the best of Aotearoa New Zealand's response to climate change, while cohesively equipping our communities to be resilient and ready.

- Greater Wellington recommends that the regional sector be involved in the design of policy
 approaches regarding transport due to the role we have in setting regional transport strategy.
- Greater Wellington notes that the Land Transport Management Act (LTMA) is missing in the legislation that needs to be aligned. The LTMA is the vehicle through which the majority of land transport investments are planned and funded. The Government has signalled its intention to spend between \$26.850 billion and 29.950 billion on transport over the period 2021/22-2026/27. Government priorities are set through the Government Policy Statement (GPS) which regional councils are required to give effect to by ensuring that their Regional Land Transport Plans are consistent with the GPS. Waka Kotahi New Zealand Transport Agency (Waka Kotahi) must also give effect to the GPS in developing the National Land Transport Programme. If legislation is being considered to give effect to climate change goals, we recommend that the LTMA is added to the list of legislation required for alignment.
- Greater Wellington strongly supports that this advice is integrally connected to the legislative reform listed in 4a.
- Greater Wellington **strongly supports** 4b, and that the funding for the implementation sits with the appropriate level of government.

Consultation question 9

Establish processes for incorporating the views of all New Zealanders

Do you support enabling recommendation 5? Is there anything we should change, and why?

- Greater Wellington neither agrees nor disagrees with the recommendation.
- The creation of a public forum would not necessarily aid the incorporation of the views of 'all New Zealanders' in our climate change policies. An open forum would attract interest groups and would not necessarily represent all New Zealanders, and not significantly differ from existing methods of involvement such as public consultations (such as this one) and select committee hearings.
- A citizens' assembly that selected its members by a random ballot, much like a jury, would be
 more representative, but would need to be well resourced so its non-expert members had the
 time and background information necessary to develop and provide well-informed opinions.
 Note that selection by a random ballot can still develop a bias in the profile of people enlisted if it
 is attractive and easy for people to decline to be involved, potentially skewing the profile of the
 assembly in terms of political views, education, age or other factors.
- The process would also need to reflect Te Tiriti o Waitangi partnership.

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?

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?

• Greater Wellington strongly supports this approach.

- Greater Wellington is taking a similar approach to reducing its own organisational carbon footprint.
- Greater Wellington provides a number of useful resources on its website to guide restoration in the region (http://www.gw.govt.nz/what-to-plant-at-your-place/).
- Greater Wellington notes however that the successful establishment of new native forests and
 their growth rates are impeded by multiple factors, including site specific characteristics,
 preparation and post-planting maintenance, species and sources of plant material. In particular
 the presence of pest herbivores, in particular feral deer, goats and possums, will threaten the
 success of native plantings. The cost of pest management and fencing must be factored into the
 provision of incentives to increase the amount and improve the success of native forest
 establishment.
- Incentives for landowners to change land use and increase native restoration will need to include a greater level of financial support than has previously been available through for example the Government's afforestation grant scheme, and include an advisory and/or support service.

Consultation questions 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?

- Greater Wellington strongly agrees that reducing emissions from the transport sector is a key
 action to achieve the proposed emissions budgets and supports the proposed actions for the
 sector.
- We would like to see more focus in the overall transport advice on reducing the need to travel, through short term measures (like changing the way when/where/how we work), and measures with long lead in time (like better integration of urban planning and transport). In the hierarchy of interventions, reducing the need to travel should come before mode shift and mode shift before fleet changes.
- Changing the way we work has been shown through the Covid-19 period to have significant
 negative impacts on businesses (predominantly retail and hospitality) in CBDs like Wellington's
 and correlating positive benefits on suburban/regional businesses. Changes in our travel
 patterns and habits will mean re-engineering and re-imagining our regional spaces, with
 resulting impacts on rating bases, property prices and utilities servicing and provision across our
 regions.
- While accelerating uptake of the electric vehicle fleet is important, we would like to see a
 greater emphasis on investing in high quality, electric public transport and safe, connected and
 attractive active mode networks.
- We question how realistic the proposed speed of EV uptake is. Aotearoa New Zealand has one
 of the oldest vehicle fleets in the world, and as a small market may not attract much attention
 from EV manufacturers as an area to prioritise supplying. We also **note** the affordability and
 equity issues raised in this context.
- We note there is work needed to ensure the electricity grid can support the move to an electric fleet.
- The proposed budget assumes that the share of average household travel distance per person by walking, cycling and public transport can be increased by 25%, 95% and 120% respectively by 2030.

- Significant investment in public transport is needed to make it more attractive and to accommodate future growth (as this assumed uptake will place significant pressure on these networks). In the Wellington region, public transport demand is growing strongly, but the system is near capacity. One way of achieving this could be higher funding assistance rates for these activities. This would support our managed approach to increasing capacity to enable further mode shift than we are currently experiencing.
- Capacity of the network will be an issue. Our bus and rail networks will not be able to handle the number and type of mobile units needed in their current format. The level of infrastructural investment will be very high compared to recent history and challenging in the current economic climate if the council is expected to contribute significantly more from rates. In order to accommodate a 120% increase in public transport, roads would need to be strengthened (to carry more and heavier vehicles) and conceivably widened (for dedicated bus lanes). There will be implications for rail signalling and level crossings also.
- Long lead in times for rail projects mean the funding and investment needs to be confirmed as soon as possible if we are to achieve the required mode shift.
- Significant investment will also be needed in active mode networks and facilities to support the required uptake in these trips safely.
 - Cycleway projects, particularly, often have multiple benefits for communities, for
 example strengthening coastlines and providing liveable spaces for people, in addition
 to forming good cycling and walking links. See Waka Kotahi's <u>Benefits of Cycling</u> and
 <u>Land Transport Benefit Framework</u>, also <u>A Cost Benefit Analysis of an Active Travel
 Intervention with Health and Carbon Emission Reduction Benefits</u> (Victoria University)
 - Evidence shows when safe, cohesive, continuous infrastructure is created, people who
 would otherwise not consider these modes reconsider their options. This also directly
 supports transport equity
 - o <u>Seville's bold cycle network</u>
 - <u>Evaluating Transport Equity</u> (Victoria Transport Policy Institute)
 - Evidence also shows removing private car access to certain key areas creates safer environments, delivering on Road to Zero, and increases liveability and spending
 - Oslo saw zero pedestrian and cyclist deaths in 2019
 - Walking & Cycling Economic Benefits (Transport for London)
 - New infrastructure needs to be accompanied by a 'package' of support: cycle skills and road safety awareness programmes, bike purchase schemes, workplace end-of-trip facilities, congestion and/or parking charges, robust behaviour change campaigns at national and regional level with consistent messaging to all road users, including drivers. Some ideas include:
 - o Wellington City Council's Active Transport Workplace Fund
 - Pedal Ready Cycle Skills adults, schools, families, eBikes
- Legislative changes to enable the use of road pricing tools like congestion charge/cordon charge/parking pricing is an important action that has significant potential to support the proposed emissions budgets. Not only to reduce travel demand, but to encourage mode shift and more efficient travel through ride sharing/higher vehicle occupancies.
- The role of urban form in contributing to emissions reduction budgets should be strengthened and given a higher profile in the report actions and recommendations. Where people live and work, and the choice this provides for how they travel, will be a critical factor influencing transport generated carbon emissions in the future as our population continues to grow. Urban drift is a factor in human historical behaviour that should be factored into future urban design.

More attention should be given to the freight sector, which is only covered very briefly. Rail and
coastal shipping will need to play a much bigger role in the future and more infrastructure
investment will be required to make these modes competitive. Regulatory changes to the
market will be required to achieve these.

Consultation questions 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?

Greater Wellington strongly supports the package of recommendations.

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?

- Greater Wellington **strongly support** the actions and associated recommendations for the transport sector.
- In particular Necessary action 4 (d) Place further emphasis on decarbonising the rail system. Greater Wellington strongly supports the Commission's advice including the full electrification of the Auckland to Wellington railway line. Reducing our reliance on fossil fuels when investing in public infrastructure is wise.
- In addition, we note that a recommendation to significantly increase investment in rail is required to provide capacity for mode shift.
- In relation to Necessary action 2: "Develop an integrated national transport network to reduce travel by private vehicles and increase walking, cycling, low emissions public and shared transport":
 - We note that the direction in the GPS on land transport is already strong in relation to supporting low emissions public transport, walking, and cycling, but a key issue is the availability of funding, including affordability of local share, and the sometime onerous processes required to unlock that funding.
 - We note that many councils are already planning and implementing first and last kilometre travel solutions to increase the 'reach' of their public transport networks. We would like to see government "partner with councils" to support and facilitate this work, rather than simply "encourage".
 - We strongly support 2c improve mobility outcomes through measures including supporting public transport uptake nationally and locally by improving the quality and integration of services. We note that the clause "by reducing fares for targeted groups (such as for those under 25 years of age)" should be revised to cover "disadvantaged groups", in order to have a more progressive impact.
- **Strongly support** recommendation 2b to "significantly increase the share of central government funding available for these types of transport investment, and link funding with achieving our

- emissions budgets" as current funding levels will not support the changes needed to develop the transport network envisaged by the Commission.
- **Strongly support** the recommendations under Necessary actions 3 and 4, including the recommendation to "Place further emphasis on decarbonising the rail system, and establish an investment strategy and clear targets to increase the share of rail and coastal shipping".
- Some additional areas that would support the emission reduction budgets in the transport sector include:
 - A recommendation to remove regulatory barriers, such as the cumbersome traffic resolution processes, which significantly slow or hinder delivery of walking, cycling and public transport infrastructure. Greater Wellington cannot add, move or even slightly modify a bus stop. It must apply first to the local authority, who also have regulatory obligations to follow.
 - A broader recommendation around reducing travel demand and encouraging more efficient travel – capturing more flexible working times and other arrangements (not just work from home) to allow for more off-peak travel and to encourage increased vehicle occupancies. This could include a national policy that all government meetings and workshops, and all government, private sector and academic/tertiary sector conferences in Aotearoa New Zealand, should have an online option irrespective of attendance type and size
 - A recommendation to make legislative changes to enable the consideration of road pricing tools to manage travel demand, influence mode shift and encourage ride sharing – with the added benefit of less traffic making active modes more attractive.
 - A recommendation to accelerate the uptake of e-bikes for adults and children (alongside new cycle network infrastructure) by subsidising the up-front purchase cost at government-level, reconsidering fringe-benefit issues for employer-based packages, salary sacrifice and equivalent opportunities, partnering with local suppliers to smooth freight supply issues, and funding the quicker roll-out of associated charging and secure parking facilities. The UK's <u>Cycle to Work Scheme</u> has proved popular.
 - A recommendation here around strengthening land use and transport integration, in particular facilitating higher-density, energy-efficient housing development, especially along key public transport corridors and nodes. The role of urban form in contributing to emissions reduction budgets is not given enough profile in the report recommendations. The Ministry for the Environment's National Policy Statement on Urban Development should be referenced.
 - A recommendation that identifies targeted policy and investment to transition from lower efficiency to higher efficiency transport modes ahead of replacement technologies, e.g. use of coastal shipping (including incentives to create a domestic industry) and significant reinvestment in rail, to make it the preferred long-distance freight option (particularly in the multi-modal and freight forwarding business).
 - A recommendation to examine the current land transport funding model to determine the
 best way to fund the transition to, and management of, the future network needed to
 achieve the envisaged emission reduction targets. The transport funding model will need
 to be changed to accommodate the decrease in petrol and diesel vehicles (i.e. revenue
 generated through Fuel Excise Duty and Road User Charges).
 - A recommendation for government to provide added financial support, through increasing the Financial Assistance Rate for example, to public transport authorities to increase the size of their bus fleets. This will be required to make public transport more accessible to people by lowering fares while also facilitating the development of more capacity on the network. If public transport expands to meet the proposed targets, many buses will need

to be purchased. These must be electric powered to avoid lock in of emissions over their 20-year life but EV buses currently cost significantly more than diesel buses.

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?

- Greater Wellington supports Necessary action 5, as these are necessary steps as a precursor to
 enabling an electric vehicle fleet. In terms of what else might be done, we would recommend
 establishing the long-term future of the Manapouri supply upon closure of Tiwai Point and the
 economic development potential linked to climate change that this might generate.
 - Strongly supports Necessary action 10.

 In relation to action b ("Ensure a coordinated approach to decision making is used across Government agencies and local councils to embed a strong relationship between urban planning, design, and transport so that communities are well designed, supported by integrated, accessible transport options, including safe cycleways between home, work and education"). We would like to see the role that better integrated urban planning and transport has to play in reducing GHG emissions strengthened in the Commission's advice. Well designed and integrated communities not only make carbon-free travel options more attractive and easier to use, but they also reduce the need to travel, as key origins and destinations of travel are located closer to each other. This is an area that needs urgent attention, due to the long-term impact of urban planning decisions. Spatial planning is fundamental but needs to have climate change mitigation and adaptation at its core.

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?

- Greater Wellington **supports** the package of recommendations and recommends some further considerations.
- **Strongly supports** Necessary action 11. The assessment of alternative farming systems and barriers provides a solid basis for more work.
- Notes: Water storage issues have been identified as a factor constraining alternative farming systems, but have not been factored into the future of current agricultural farm management practices. We are already experiencing water security issues and more frequent and longer drought events are predicted to increase over this century
 (https://niwa.co.nz/climate/information-and-resources/drought-monitor/drought-indicator).
- Notes: The advice considers the escalating impacts of climate change and the need to adapt in relation to forestry but not agriculture. We recommend further consideration is drawn from the large body of Aotearoa New Zealand-specific research that has assessed the impacts of climate change on the agriculture sector, and adjust its advice as appropriate. Taking a holistic view of the land sector and the challenges ahead from an impacts perspective is crucial for advising on the most appropriate emissions reduction pathways to take across the land sector.

- Notes: There is an expectation that the increased productivity gains that have been made in animal agricultural production over the past few decades will continue to be made or at least maintained. Some of these gains have been possible through the increase in non-pasture feed use, including imported palm kernal extract (PKE),

 (https://www.mpi.govt.nz/dmsdocument/20897/direct) emissions from which are not included in the accounting framework the Commission is applying to the budgets. There are leakage issues that are often used to defend Aotearoa New Zealand's "sustainable" food production claims. If the assumption that continued increasing use of non-pasture feed is required to maintain production levels while decreasing stock numbers to achieve the emissions reduction pathway then that should be explicitly recognised as a negative outcome so that the trade-offs are understood and choices are informed.
- We note it would be helpful to have increased analysis undertaken to better understand the
 potential of regenerative farming, and the competitive advantage of driving our food
 production sector towards practices which enhance ecosystems and biodiversity and
 sequestration of atmospheric carbon as well as low carbon outcomes.
- In the same vein, productivity gains have also been made through increasing nitrogen fertiliser use (https://www.dairynz.co.nz/news/tactical-use-of-nitrogen-fertiliser/). This is a major source of the increasing concentration of nitrous oxide in the atmosphere, a potent greenhouse gas and ozone depleting substance (https://www.mpi.govt.nz/dmsdocument/20963/direct) that also impacts water quality (https://www.waikatoregion.govt.nz/environment/land-andsoil/managing-land-and-soil/managing-farm-nutrients/managing-farm-nitrogen/). If the continued increasing use of N fertiliser is required to maintain production levels while reducing stock numbers to achieve the advised emissions reduction pathway, the increasing emissions and other environmental damages associated with the practice should also be explicitly recognised to allow informed decisions to be made. Advice is provided separately for the agriculture and forestry sectors, and in terms of their role as primary industries, rather than considering the land sector as a whole. Around 70% of Aotearoa New Zealand has been altered through land use change, and this has occurred disproportionally in the lowlands. The recommendation that just 300,000 hectares (1.1% of total land area) is converted back to its native state, and that this should be restricted to steep, unproductive land, is missing the importance of the land in climate action. There is existing research and evidence available to draw from to justify widening the response to encompass the role that the land sector plays in mitigation and resilience (e.g.: https://royalsocietypublishing.org/doi/10.1098/rstb.2019.0104; https://www.frontiersin.org/articles/10.3389/fcosc.2020.615419/full; https://www.sciencedirect.com/science/article/abs/pii/S0006320713001705; https://www.cbd.int/doc/publications/cbd-ts-86-en.pdf).
- We **recommend** a more holistic view is taken into consideration in the advice given on the contribution the land sector will make in achieving the emissions reduction pathways given its importance in climate regulation, productivity, resilience, and soil, water and air quality. These are essential to realise truly sustainable primary industries.

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?

- Greater Wellington supports some of the package of recommendations.
- Greater Wellington does not support the targets for new exotic afforestation. A large proportion of Aotearoa New Zealand's exotic forest estate is currently at harvest age (https://figure.nz/chart/npJZqBL16yzYVpAi), due to the legacy effect of historic planting spikes in the 1980's-mid-1990's. This has multiple impacts on the capacity of the industry, including labour, logging operators, transport operators, mill availability, nursery production and planting. Planting more forests now and over the next few years will exacerbate the problem with nursery supply and planters already at capacity replanting existing harvested forests. A more sustainable strategy could be to hold off planting new areas of exotic forestry until the mid-2030's, to even out the age-class distribution. This would have multiple benefits for the economy, reduce the pressure on the environment created by harvest activities, and enable all forests to be accounted for against our targets. One of the reasons they are not fully accounted for is the see-saw effect which is observed in the planted forests emissions profile that is created by the uneven age class distribution of the estate. Efforts could instead be focussed on creating incentives to restore native systems - not just on the 1.15 to 1.4 million hectares of erosion prone land you have identified that is unsuitable for other land uses, but also on lowland sites to reduce environmental impacts of the otherwise intensive land uses that predominate our lowland landscapes. In addition, expanding the targets for native restoration into non-forest ecosystems will provide significant co-benefits, including for biodiversity and water quality, as well as resilience to the impacts of climate change. Greater Wellington **strongly recommends** reassigning the planted forest targets to native habitat restoration.
- Successfully restoring native habitats can be challenging, particularly in places where
 landscapes have been heavily modified and seed sources are depleted or absent. Sourcing
 appropriate plant material to restore sites needs to be well planned and site specific, and may
 require long lead in times. The current supply chain will require upscaling to meet the increased
 demand, which will take time.
- Greater Wellington strongly supports time-critical necessary action 5, part a, regarding the
 native afforestation targets. In addition to acknowledgement that pest control is essential to
 enable natural regeneration it is also a critical success factor in establishing all native forests,
 whether actively or passively managed.
- Greater Wellington **strongly supports** time-critical necessary action 5, part b, on forest management action. In particular, Greater Wellington recommends that pest control, which is important to both enhance and protect carbon stored in forests, is explicitly included as a requirement of forest management plans.
- Part c, the design of a package of policies that can deliver the amount and type of afforestation
 will be challenging and require effective incentives for landowners to change land use.
 Examples of successful initiatives are, however, limited (https://www.mpi.govt.nz/science/land-use-change-report/).

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?

• Greater Wellington **strongly supports** the package of recommendations.

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?

- Greater Wellington **strongly supports** the package of recommendations.
- Greater Wellington strongly supports all recommendations under Necessary Action 15. We see
 this as one of the most fundamental sets of actions in the advice to achieve the outcomes
 sought.
- Greater Wellington strongly supports Necessary Action 19. Proceeds from ETS unit auctions should be used to support an equitable transition. Industrial allocations need to be reviewed to ensure the current recipients are not free-riding. The avenues for voluntary carbon offsetting need to be redefined in the post Kyoto-Protocol rules era.
- Supports Necessary action 16 "Support behaviour change".
- We consider that it is not sufficient that "Government embed[s] behaviour change as a desired outcome in its climate change policies and programmes". We would like to see Government carry out more work to understand why the measures we have taken in the past haven't worked to change behaviour significantly. We need to better understand how we can incentivise behaviour change, particularly where good alternatives are already available.

Consultation question 20 Rules for measuring progress

Do you agree with Budget recommendation 5? Is there anything we should change, any why?

- Greater Wellington does not agree with Budget recommendation 5. Greater Wellington
 recommends the Commission changes the encouragement 5c(v) to a recommendation that the
 Government considers the use of existing methods to estimate all land use emissions, that are
 currently applied nationally and internationally to meet reporting requirements under the
 United Nations Framework Convention on Climate Change (UNFCCC).
- The choice of accounting framework that will be applied to land emissions (from vegetation and soil) means that just 1.6-3.7% of Aotearoa New Zealand's total land area will be accounted for across the time period to 2035 (i.e. all land deforested since 1990 and all land afforested since 1989 that has not yet reached its long term average carbon stock as shown in Figure 3.18). The impact of this choice means at best 96.3% of Aotearoa New Zealand's vegetation and soils are excluded from the accounting framework. This means the role of natural capital, while referred to in different ways, makes up a small part of the response, and the attendant risks and opportunities are side-lined. Fully accounting for all land emissions will incentivise the protection and enhancement of carbon stocks in all forests, as well as other significant sources of emissions and removals such as peatlands.
- The accounting framework that has been applied internationally since 2008, on which the
 modified activity-based approach is based, has not resulted in good outcomes for Aotearoa
 New Zealand's land sector. The impact can be seen in our National Greenhouse Gas Inventory
 which keeps track of all land emissions across Aotearoa New Zealand. Net emissions have

- increased far more dramatically than gross emissions since 1990, but as we account for a subset of those emissions against our international climate change targets, intervention has not been considered necessary.
- The IPCC provides methods to estimate emissions across all land uses (https://www.ipcc.ch/report/2019-refinement-to-the-2006-ipcc-guidelines-for-nationalgreenhouse-gas-inventories/) including wetlands (https://www.ipcc.ch/publication/2013supplement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories-wetlands/) and emissions estimates for all land uses are reported annually in Aotearoa New Zealand's National Greenhouse Gas Inventory, being a reporting requirement under the UNFCCC. The IPCC provides methods to estimate emissions across all land uses (https://www.ipcc.ch/report/2019-refinement-to-the-2006-ipcc-guidelines-for-nationalgreenhouse-gas-inventories/) including wetlands (https://www.ipcc.ch/publication/2013supplement-to-the-2006-ipcc-guidelines-for-national-greenhouse-gas-inventories-wetlands/) and emissions estimates for all land uses are reported annually in Aotearoa's National Greenhouse Gas Inventory, being a reporting requirement under the UNFCCC. This would mean one less set of books would need to be maintained if the National Greenhouse Gas Inventory is used for tracking progress against the Zero Carbon Act targets. The outcome of choosing the proposed accounting methods means we will need to maintain three sets of books; one for UNFCCC reporting, one for reporting progress against the Paris Agreement NDC (which does not have a split gas target) and one set for tracking progress against the Zero Carbon Act targets. It is already confusing enough.

Consultation question 21Nationally Determined Contribution (NDC)

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

- Greater Wellington **strongly agrees** that Aotearoa New Zealand's NDC is not consistent with the 1.5°C goal of the Paris Agreement, and that it should be significantly strengthened.
- The NDC needs to be increased to drive action to limit the amount of offshore mitigation which will be needed to meet the NDC and in doing so will contribute towards Aotearoa New Zealand's transition.

Consultation question 22Form of the NDC

Do you support our recommendations on the form of the NDC?

 Greater Wellington has no view on the form of the NDC but strongly agrees with Enabling NDC recommendation 1b.

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?

• Greater Wellington **supports** the package of recommendations.

Consultation question 24 Biogenic methane

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

• Greater Wellington agrees with the assessment.