

He Whakarāpopotanga o ngā Tukunga Kōrero – Summary of Submissions Report

Hīkina te Kohupara – Kia mauri ora ai te iwi Transport Emissions: Pathways to Net Zero by 2050

August 2021

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Introduction

This Summary of Submissions Report is for Te Manatū Waka Ministry of Transport's (the Ministry's) *Hīkina te Kohupara – Kia mauri ora ai te iwi - Transport Emissions: Pathways to Net Zero by 2050* discussion document (hereafter Hīkina te Kohupara). Hīkina te Kohupara sets out potential pathways and policies to phase out emissions across the transport system; it does not represent Government policy.

Transport is responsible for 43 percent of our total domestic carbon dioxide (CO₂) emissions, and 21 percent of total greenhouse gas (GHG) emissions in Aotearoa. Transport emissions need to fall significantly, and quickly, to achieve our emissions reductions commitments and 2050 net zero-emissions target.

Submissions on Hīkina te Kohupara were open to the public between 14 May and 25 June 2021. The Ministry welcomed feedback from a variety of groups and individuals with an interest in the transition to a zero-carbon system including: business associations/networks; community groups and non-governmental organisations (NGOs); iwi; local government agencies; and academics and/or members representing academic institutions.

How we plan to use this summary

This Summary of Submissions Report will feed into the transport chapter of the Government's first Emissions Reduction Plan. Under the Climate Change Response Act 2002 (the CCRA), the Government must prepare Emissions Reduction Plans in response to the Climate Change Commissions (the Commission's) advice over five-yearly emissions budget periods. The first Emissions Reduction Plan must be published by 31 December 2021.

The Government will publicly consult on the draft Emissions Reduction Plan later this year, which will include transport content that has taken account of this feedback.

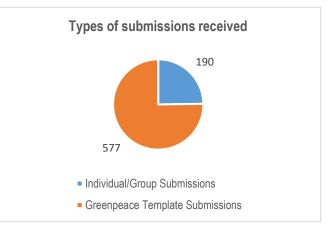
The Ministry thanks all submitters for taking the time to respond to our consultation questions for Hīkina te Kohupara. Many of the submissions received would have taken considerable time and resource to prepare, and for that we are grateful.

Submission Breakdown

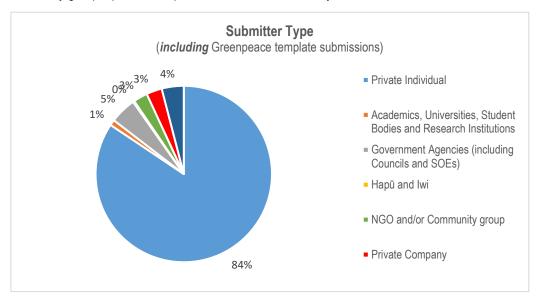
Number of submissions and submitter types

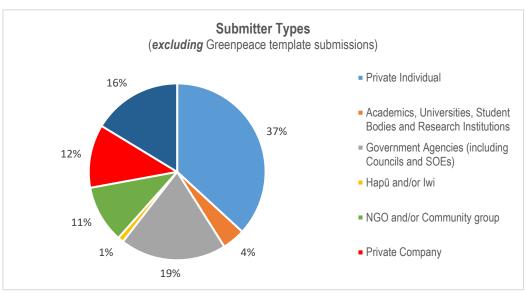
The Ministry received a total of 767 submissions on Hīkina te Kohupara. One hundred and ninety of these were unique individual or group submissions, and 577 of these were Greenpeace template submissions. Approximately 50 percent of these Greenpeace template submissions had additional personal comments.

We received public submissions from a variety of groups, including: private individuals; academics, universities, research institutions and student



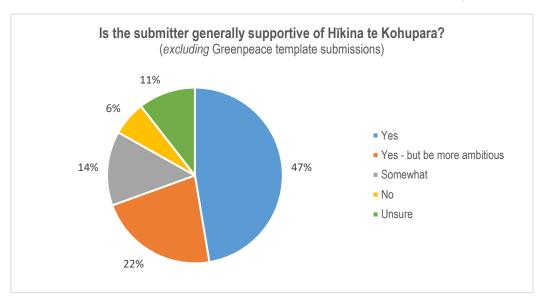
bodies; government agencies, such as local councils and State Owned Enterprises (SOEs); hapū and iwi; NGOs and/or community groups; private companies; and business/industry associations and/or networks.

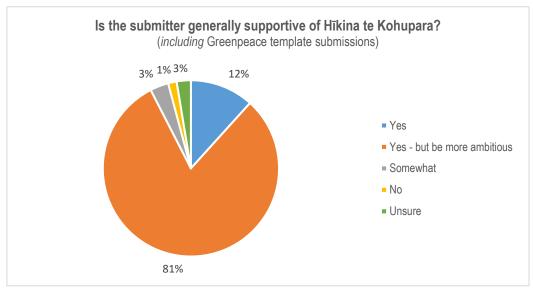




Overview of feedback and comments on Hīkina te Kohupara

When *excluding* Greenpeace template submissions, the majority (69 percent) of the 190 unique submitters expressed support for Hīkina te Kohupara. Forty-seven percent were generally supportive, while 22 percent were supportive but wanted a higher level of ambition. Fourteen percent were somewhat supportive; 6 percent were not supportive; and 11 percent did not express any opinion. When including Greenpeace template submissions, there was 93 percent support for Hīkina te Kohupara, with 81 percent calling for a higher level of ambition. Three percent were somewhat supportive; 1 percent were not supportive; and 3 percent did not express any opinion.





Chapter 1: The Purpose, Scope and Principles of Hikina te Kohupara

Hīkina te Kohupara's purpose is to identify how Aotearoa can shift its transport system to a zero-emissions pathway. Hīkina te Kohupara will also be used to inform the Government's first Emissions Reduction Plan, and support the development of a 10 - 15 year transport emissions action plan.

Hīkina te Kohupara covers domestic transport GHG emissions. It does not cover international aviation and maritime emissions for travel to/from Aotearoa as the Paris Agreement is silent on their inclusion (and subsequent domestic obligations). The Government is addressing international emissions through its involvement with the International Civil Aviation Organization and the International Maritime Organization. However, Hīkina te Kohupara does consider some domestic opportunities for reducing maritime and aviation emissions which could also reduce international emissions to/from Aotearoa, such as low-carbon fuels.

Hīkina te Kohupara does not consider embodied emissions in transport infrastructure (such as roads, rail, ports, etc.) as these will be captured elsewhere in the Government's first Emissions Reduction Plan.

The Ministry has also developed a set of key principles to help shape our advice to the Government on transitioning to a zero-carbon transport system. The intention of these principles is to guide discussions around which options Aotearoa should pursue and prioritise.

Summary of what we heard from submitters

General feedback and comments on the purpose of Hīkina te Kohupara

Of the submitters who commented on the purpose of Hīkina te Kohupara, many were supportive of the intent and direction of the paper. Many submitters recognise the importance of limiting temperature increase within 1.5°C, and that rapid action following consultation on Hīkina te Kohupara will be necessary in order to reach our net zero-carbon target. Submitters were also supportive of Hīkina te Kohupara informing the transport chapter of the Emissions Reduction Plan.

Several submitters, particularly NGOs and Community groups, called for the transport chapter of the Emissions Reduction Plan to go further and faster than outlined in Hīkina te Kohupara to make up for potential lack of emissions reduction by other sectors.

"We fully support the intent and direction of travel of this paper (pun intended) as it provides further transport-specific analysis to inform the Government's Emission Reduction Plan that is to be released by the end of 2021."

General feedback and comments on the scope of Hīkina te Kohupara

Only a few submitters commented on the scope of Hīkina te Kohupara, namely around aviation emissions. These submitters acknowledged that addressing international emissions was currently out of scope for the Government's net zero 2050 target. However, they considered this should not prevent the Government from making a position statement on international emissions, and considering a sustainable aviation fuel (SAF) policy in Aotearoa.

Consultation Question 1a: Do you support the principles in in Hīkina te Kohupara?

Most submitters supported the principles in Hīkina te Kohupara.

Several submitters stated that the principles, while well crafted, needed sufficient direction to then be translated into tangible action, which would require sufficient leadership and a raft of clear, implementable measures. Submitters also commented that specific and measurable targets were key to ensuring greater accountability.

"We agree with the seven principles. We are especially supportive of Principle 1, 2, 4, 5, and 7."

In particular many submitters commented on Principles Two, Four, Five and Seven, as outlined below.

Principle Two: We need to focus on moving to a zero-carbon transport system, rather than offsetting emissions

Several submitters expressed their support for Principle Two, which outlined Hīkina te Kohupara's general focus on reduction, rather than offsetting of emissions. One submitter noted, "We support Principle 2 and the implicit focus on changing behaviours, rather than offsetting existing ones".

Principle Four: Co-ordinated action is required across the transport system to avoid and reduce emissions

"...it is crucial that Te Manatū Waka work with other agencies, Māori and territorial authorities, industries, businesses and communities, to move as fast and as effectively as possible." Submitters expressed notable support for Principle Four, which states that co-ordinated action is required across the transport system to avoid and reduce emissions, including within and across central and local Government, industry, iwi

and hapū, communities, businesses, and councils. Submitters, particularly councils, argued the need for a systems-level approach to rapidly avoid and reduce emissions, and cautioned against a 'siloed' approach to reducing emissions.

"Co-ordinated action is key to achieving New Zealand's zero carbon targets. New Zealand must look at all policy options, adopt all possible technologies, and influence all relevant actors (Government, business, and consumers)."

Principle Five: To ensure a Just Transition, we need to manage the impacts and maximise the opportunities brought about by changes to the transport system

Support for Principle Five was evident across all submitter types. Some submitters felt further consideration of rural community impacts was needed. They also stated that the Just Transition principle should include focus on how different solutions or policy options may be more or less successful with certain populations based on broader factors.

"A Just Transition is non-negotiable; people who already experience social/economic disadvantages will be affected as will businesses in the transport sector." "...the Council supports the themes and principles outlined in the Ministry's discussion document, in particular: Supporting a Just Transition – making the transition fair, equitable and inclusive for all people."

Principle Seven: Innovation and technologies will play an important role in reducing emissions, but people are the key to our future

While submitters supported Principle Seven, and agreed science and innovation will play a key role in reducing transport emissions, several submitters supported strengthening Principle Seven to further emphasise shifting people's behaviours, especially to ensure enduring change and to meet our targets. Submitters stated that we need a better understanding of what will encourage behavioural change, especially when it comes to mode shift.

One submitter noted that research shows 60 percent of New Zealanders do not realise that their transport use is their biggest carbon footprint source. They stated that Principle Seven needs to be "more explicit that a deep understanding of how and why people act i.e. behaviour change – is needed to create enduring change – rather than relying too heavily on a single technology fix." Further to this, they commented that more behaviour change and information campaigns, such as EECA's lower energy transport campaign, will be needed.

Consultation Question 1b: Are there any other considerations that should be reflected in the principles? Some submitters proposed new principles for Hīkina te Kohupara. These largely fall into the themes outlined below.

Submitters would like to see a new principle that upholds partnership with iwi/Māori, Te Tiriti o Waitangi, mātauranga Māori and te ao Māori

Many submitters (across all submitter types) suggested that partnership with iwi/Māori and upholding Te Tiriti o Waitangi should be a key principle in Hīkina te Kohupara. A group of academics commented that the Government must uphold Te Tiriti and ensure Māori are enabled by the changing transport system, empowered to make decisions, and that policies to decarbonise transport benefit tangata whenua. Several submitters also called for mātauranga Māori and te ao Māori to be reflected in the principles and woven throughout the document.

"We support the development of a principle explicitly recognising and addressing the articles of the Treaty of Waitangi." Just Transition is nonnegotiable; people who already experience social/economic disadvantages will be affected as will businesses in the transport sector."

Submitters would like to see a new principle which takes into account adaptation and resilience

Submitters expressed a desire for either Principle Two be strengthened to incorporate adaptation, or a new principle created that takes adaptation to climate change and/or resilience to natural hazards into account. A submitter raised the need to ensure our zero-carbon transport system was appropriately equipped to adapt to our changing climate.

One government agency supported including a guiding principle focused on resilience: "Opportunities for cobenefits will be encouraged to ensure an inclusive and safe, transport system which is resilient to natural hazards and supports economic activity". Such a principle was important as Hīkina te Kohupara acknowledges that there is an opportunity to deliver co-benefits alongside emission reduction from transport, and that the Transport Outcomes Framework includes 'Resilience and Security'.

Submitters would like to see a new principle that incorporates health, wellbeing and safety

Several submitters have called for a new principle which incorporates and prioritises emission reduction actions and/or policies which also provide for wider health, wellbeing and safety benefits. One submitter noted that transport policies that support a move to a low-carbon transport system should also maximise the health and wellbeing of people.

Chapter 2: Transport emissions - our current state and pathway

Chapter 2 sets out the current state of Aotearoa's transport emissions. It states that:

- Transport is Aotearoa's second largest source of GHG emissions, contributing 19.7 percent of gross domestic emissions.
- Transport emissions are increasing, while other sources of emissions have plateaued.
- The majority of transport emissions come from light vehicles (67 percent), followed by heavy vehicles (23 percent).
- Per capita, our larger cities generate fewer emissions than rural towns. However, because cities have so many people and vehicles, they produce more emissions overall than rural towns.
- Aotearoa's high level of car dependency has wider environmental, public health and economic impacts.

Many submitters included comments within their submissions on the general state of transport emissions, the climate crisis, and Aotearoa's level of ambition.

Summary of what we heard from submitters

General feedback and comments

Most submitters commented on the general state of transport emissions and the climate crisis.

The Greenpeace template submissions commented on the fact that we are in a climate emergency and that we must treat it like one. Other common themes included references to the state of the climate, and the need to take action to protect future generations.

"We need to decrease emissions to ensure we provide for the future of our young ones."

"Transport is one of our biggest emission sources, we have to make change."

Many submitters also acknowledged the challenges around reducing GHG emissions would be balanced by substantial benefits for both the environment and society.

While generally supportive of Hīkina te Kohupara, some submitters, particularly NGOs and/or community groups, expressed concern that the actions proposed would not be sufficient to keep global warming below 1.5°C.

Only a few submitters commented that the proposals to reduce GHG emissions outlined in Hīkina te Kohurpara were unjustifiable and unwelcome.

"The Council welcomes the government's efforts to develop the appropriate regulatory environment to meet the 2050 emission reduction targets introduced by the Climate Change Response (Zero Carbon) Amendment Act 2019 and keep New Zealand's commitment under the Paris Agreement to limit warming to 1.5°C"

"[X] fully supports urgent action to address climate change – we consider this to be the clarion call of our times. It is clear that radical change is required in the way we organise our lives, economies and society." "We express grave concern regarding the state of climate emergency in Aotearoa and call for urgent action to restore the mana and mauri of our whenua, wai (water) and hau (air)...Therefore, we strongly support rapid action to reduce carbon emissions to net zero by 2050."

Chapter 3: The Government's role and levers for reducing transport emissions

Central government has an important leadership role to play given its influence in the transport system. Government must build and strengthen its relationships with key stakeholders and partners to ensure success in reducing transport emissions. This will include collaboration between central and local government, iwi and hapū, the private sector, industry associations and advocacy groups. Interdependencies between key sectors and transport, such as the energy sector, will also need to be considered. Many sectors and individual players, public and private, will need to align their settings and priorities to reduce transport emissions.

Delivering emission reductions will rely on a variety of Government levers to influence the transport system, including investment, regulation, and economic and education tools. An integrated approach will require multiple agencies to use a combination of levers, and in a coordinated way, over time.

Many submitters, in particular councils, provided detailed comments on the Government's role and available levers for reducing transport emissions.

Summary of what we heard from submitters

General feedback and comments

Responses on this section have been separated into two parts below to appropriately capture submitters feedback.

Is the Government's role in reducing transport emissions clear?

Many submitters agreed that the Government would play a central role in reducing transport emissions.

"[X] strongly supports the following statements in the Green Paper: 'Achieving emissions reduction targets will require a combined effort from all New Zealanders including central and local government, iwi, communities and businesses."" "There is a lot of good information in this section, and the government's role is clearly to force down transport emissions, as well as encouraging and supporting correct local Council actions and planning." "We agree with the Ministry that Government's role in the transport transition is clear in that it needs to set the national direction through policy and funding, drive crosssector collaboration to deliver a just transition and lead by example."

Submitters were also supportive of a "co-ordinated and collaborative approach", such that Central government would need to also work alongside local government, iwi, communities and businesses. However, some submitters felt commentary was too high-level, and suggested providing further detail in relation to what co-ordination and collaboration would practically look like across the various relevant parties. Submitters also suggested including an exploration of existing system barriers and specific actions to help overcome these.

One council considered this Chapter overly "Ministry of Transport centric" and insufficiently reflective of the integrated approach outlined and the levers available for Government to regulate and invest across other sectors that have direct transport impacts. For example, "the National Policy Statement on Urban Development has the potential to achieve reductions in vehicle kilometres travelled due to greater density in appropriate locations. The location and zoning of schools is also another key aspect that the Government can directly control."

Many councils emphasised the need for stronger collaboration between central and local government in order to reduce transport emissions, especially as some larger councils have control of, or at least some influence over, several interventions/levers that can support emissions reduction. One council stated, "Understanding the approach that central government intends to take towards collaborating with local government will have a strong influence on the ability of local government to contribute to the nation-wide approach to emissions reduction".

Councils also commented that local government would need more funding in order to meet both national and local emission targets and asked "central government to consider possible ways this could be achieved." One council

stated its ability to effectively implement emission reduction inventions with the urgency required to meet our net zero targets was often constrained by "availability of funding; slow-decision making processes; committed investments that do not support emissions reduction; the need to balance emissions reduction against other outcomes; insufficient legislative and regulatory support for mode shift; and lack of community mandate for certain solutions."

A few submitters noted that the Government's role also includes leading by example. Submitters highlighted that the Government can demonstrate leadership through education and procurement policies. For example, one NGO noted the importance of the government as a "major segment of the economy and its driver through procurement policies."

Are there other levers the government could use to reduce transport emissions?

Most submitters who commented on Consultation Question 2 were supportive of the levers identified in Hīkina te Kohupara, including investment, regulation, economic and educational tools, analytics and modelling, monitoring, evaluation and oversight, and international standards. Many submitters, particularly NGOs and community groups, stressed that all levers need to be 'pulled' to meet our net zero target.

"The Government needs to pull all the levers it has from carbon pricing, regulation, standards, incentives..."

"Regulatory intervention must be considered carefully and if it is necessary, we believe the policy choices should favour incentives rather than bans to achieve the desired outcome."

"Financial incentives have a role to play, but their application does need to be considered against real world application in the region to avoid unintended consequences." Several private companies emphasised regulatory levers and financial incentives needed to be carefully considered. However, one private company stated, "as we are takers of technology, we could be much further ahead of the game" if government regulated us to do so.

Quite a few councils and academics commented on the role of investment. Several submitters considered more work was needed to free up the constraints within the National Land Transport Fund (NLTF) to allow for prioritisation of mode shift.

However, one local council argued that "even if existing funding sources were optimally allocated from an emissions perspective, they would still be insufficient to facilitate the mode shift required to achieve emissions reduction targets...growth in the NLTF has not kept pace with escalations in the cost of providing transport infrastructure and services".

Councils also noted that future updates to the GPS should include an increase in the proportion of funding dedicated to enabling mode shift as well as public and active transport. Several academics also noted that the investment section of Hīkina te Kohupara needs "significant strengthening", and that we will not achieve our emissions reductions without a "moratorium on major new road building".

Several submitters identified that the Government's role in funding Research, Science and Innovation is a missing lever in Hīkina te Kohupara. One submitter stated "The key lever that is missing is the Government's role as the major funder of RS&I in New Zealand, particularly in this case applied directed R&D to facilitate change."

Chapter 4: The role of innovation in the transport system

Innovation has always been a driver of change in the transport system. Innovative policies and new technologies can improve the way people and goods move around. Electrification, shared mobility and automation are likely to have a significant impact on our transport system and could all contribute to decarbonisation, depending on how they are adopted. The Government can play an important role in supporting innovation, by enabling supportive regulation, creating stronger connections between the Government and non-government sectors, and providing targeted funding for the development and trialling of new technology and approaches.

Private sector and community groups provided most of the feedback on this section. Private companies mainly focussed on the role that regulation and policies can play, while community groups discussed how best to utilise existing technologies over investing in new technologies. Many submitters encouraged the Government to focus on transport innovation associated with decarbonisation and low-emission technologies. Industry associations were most vocal on the risks of technology lock-in, while the public sector emphasised the importance of innovative solutions for street design, infrastructure and placemaking.

Summary of what we heard from submitters

General feedback and comments

Submitters noted that boosting innovation requires leveraging the skills and expertise of the private sector and targeted investment. Strong connections between government and NGOs are therefore considered essential. They also argued that implementing policies to support transport innovation was a key Government role, and modernising existing regulatory frameworks would encourage the uptake of specific technologies.

Submitters considered Aotearoa should focus on existing, effective technological solutions (e.g. electric vehicles (EVs)) that encourage mode shift and reduce travel demand. These submitters expressed reservations around relying on immature or non-commercially viable technologies. It was also noted that the Government should support transport innovation by reducing barriers to change instead of advancing new technologies.

Consultation Question 3: What more should Government do to encourage and support transport innovation that supports emissions reductions?

Submitters focussed their comments on a few different areas relating to technology and innovation.

Be aware of the risks of technology lock-ins when encouraging innovation

Many stakeholders, predominantly industry associations, stressed the Government needed to be aware of the technology lock-in risk associated with encouraging innovation to support emissions reduction. These submitters warned that focussing on one, or a few, preferred technologies and/ or investments could exclude (lock-out) suitable alternatives. Submitters felt it is essential that policy and regulation settings allow for new technologies given Aotearoa's status as a predominantly technology-importing nation. It was also noted that the focus should not be on innovation that is expensive, uncertain and likely to increase inequity within the current transport system (e.g. trackless trams).

Innovation could help to accelerate decarbonisation of the vehicle fleet

There was general support for innovation's role in decarbonising the light vehicle fleet, particularly around electrification. Submitters considered the Low Emission Vehicle Contestable Fund needed to be increased, and research on the social aspects of low-emission transition prioritised. Vehicle-to-grid technology was suggested as an option to modulate peak use demand.

Investments in innovative solutions to street design, infrastructure and placemaking are very important

Submitters, mostly from the public sector, considered investment in street design, infrastructure and placemaking essential to ensure urban environments are ready for the future of urban mobility. Submitters also supported investments in micromobility infrastructure (to support the shift to active modes of travel) and in the digital

connectivity of rural communities. One submitter requested the Government consider and promote the role of automation in the transport system (e.g. automated light rail and trains).

Government should focus on identifying the needs for innovation

Private sector companies stated that the Government should focus on enabling regulation to support innovation and provide targeted funding for developing and trialling new technologies (e.g. the Low Emissions Transport Fund). One submitter noted that expertise on the feasibility and viability of transport innovation lies within the sector, and that the Government should therefore focus on identifying the needs for innovation. One local government agency proposed that the Government take a more active role in funding and coordination. Multiple submitters also wanted more support for community-led trials and regional pilots to stimulate local initiatives for sustainable energy.

Chapter 5: The Avoid, Shift, Improve Framework

Hīkina te Kohupara uses the Avoid-Shift-Improve (ASI) framework to identify opportunities to reduce emissions across the transport system. The ASI framework addresses each of these four elements:

- Avoid improve the overall efficiency of the transport system through interventions to reduce the need to travel and trip lengths.
- Shift improve the efficiency of trips by promoting mode shift to low-carbon modes, such as walking, cycling, public transport, coastal shipping and rail freight.
- Improve lower the emissions of transport vehicles and fuels.

Transport emissions are driven by transport activity (number of trips and kilometres travelled), mode share (percentage share of different modes), energy intensity (quantity of fuel used per kilometre) and carbon intensity (emissions from quantity of fuel per kilometre).

The Ministry has developed three themes to group together opportunities within this framework and highlight interdependencies within different parts of the system. Theme One and Two focus on people and Theme Three on freight.

Twenty-six submitters commented specifically on the use of the ASI framework in Hīkina te Kohupara.

Summary of what we heard from submitters

General feedback and comments

Submitters who did comment on this chapter were very supportive and welcoming of the use of the ASI framework in Hīkina te Kohupara as a method to identify opportunities to reduce transport emissions.

Several submitters emphasised the need for the Ministry to ensure that the 'Avoid' and 'Shift' principles within the ASI framework are at the forefront of Hīkina te Kohupara and stressed their fundamental role in reducing emissions.

"This green paper is an enormous step forward in the right direction for the Ministry. The focus on 'avoid' and 'shift' levers is warmly welcomed."

"We need to Shift the way New Zealanders move from cars to public transport, cycling and walking."

Several submitters note that the ASI framework is not applied to the domestic aviation or freight sections, where "avoiding demand could have large, immediate emission reductions." One submitter noted that while Aotearoa has its own small 'fly-less' movement, more could be done to encourage people to 'Avoid' flying.

Local government agencies, such as councils, also expressed their support for and role in using the ASI framework, particularly when it comes to land use changes required to avoid the need for the current levels of travel.

However, councils also noted challenges around the capability and resource required to adequately employ the ASI framework. One council asked, "How can central government ensure that local government delivers its share of the Avoid/Shift framework?". Another noted that their ability to successfully implement Avoid and Shift interventions are often constrained by "funding availability; slow decision-making processes; committed investments which don't support emissions reductions; and the need to balance emissions reductions against other outcomes".

Chapter 6: Theme One - Changing the way we travel

This section discusses the way our cities and towns are shaped, and how this can influence the overall efficiency of our transport system. To reduce our emissions, especially over the medium to long term, we need to integrate land-use, urban development, and transport planning. Quality compact, mixed-use urban development can reduce trip distances, decrease car dependence and encourage the uptake of walking, cycling and public transport. Alongside providing better travel options, we must also design and manage our streets to be more inclusive of different people and encourage travel by active modes and public transport. Placemaking will also be critical for supporting higher density urban developments to create places that people want to live, work and play in.

This section also discusses the role of transport pricing in influencing peoples travel choices. Generally, pricing refers to charges imposed on transport users for the use of the system; examples of this include congestion charging, distance pricing and parking management. These mechanisms can help to capture the social and environmental costs of travelling by private motorised vehicles, and with the right incentives, can deliver meaningful behavioural changes. Transport pricing can also help to address any rebound effects that come from investment in public transport, walking and cycling, such as induced car travel from reducing congestion.

Summary of what we heard from submitters

General feedback and comments

A large number of submitters commented on this section of the paper. Submitters were generally enthusiastic about the recommendations, particularly those under "shaping our towns and cities" and "providing better travel options". Submitters also put forward several of their own recommendations. Less than half of all submitters commented on the transport pricing section.

Feedback and comments on shaping our towns and cities

Generally, submitters were supportive of the actions proposed to reduce transport emission related to better integration of transport, land use, and urban development. There were some comments applauding the "future-focused and pre-emptive nature of the themes", while others noted a lack of consideration for rural or peri-urban communities. One submitter commented on the need to "bring good quality, essential services to communities outside of towns and cities, and to invest in social, arts, education and leisure amenities in regional and rural areas."

Most submitters supported the push for quality, compact mixed-use development to counter urban sprawl, and for the integration of better and more accessible public transport, walking and cycling networks. Many also commented on the importance of using efficient building materials and processes to achieve this, while ensuring that any indirect consequences of compact urban form to physical or mental health, the environment (e.g. the review of Aotearoa's Three Waters system), or the economy are thought of and mitigated.

Submitters also referenced housing. Many commented on the importance of ensuring new housing developments are affordable, support communities and align with high quality amenities (e.g. placemaking, public and active transport networks).

Submitters identified the need for this section's recommended actions to align with spatial planning and other urban policies to ensure regional and local councils transform our towns and cities appropriately. Most councils highlighted the need for support and guidance from central government.

Consultation Question 4: 'Do you think we have listed the most important actions the government could take to better integrate transport, land use and urban development to reduce transport emissions? Which of these possible actions do you think should be prioritised?

Quality compact, mixed-use urban development

Most submissions were supportive of quality, compact mixed-use development in urban areas to reduce emissions, and the integration of transport, land use and urban development.

However, a large number of submitters referenced the "harsh reality" of unaffordable living in urban areas (i.e. many people choose to live further from main centres where they can afford to buy houses), and that this inequality needs to be addressed, specifically for low-income households (see rural considerations below and in 'better travel options' section).

Local councils strongly support clear guidance from central government on how to:

- align land use changes with existing planning rules and urban/spatial plans;
- link urban density and mixed land use with accessibility (through PT, waking, or cycling); and
- receive guidance and expectations for quality high-density environments (including streets, public spaces, buildings, and green space).

One submitter also noted the need for broader support from central government to regulate and implement changes. They also noted a need for coordination with the private sector/industry given their role in designing and developing new areas.

Several submitters (mainly councils and climate groups) endorsed transport GHG emission impact assessments for proposed urban developments. However, some called for this to include an assessment of the inadvertent impacts of developments on emissions and the sustainability of other sectors (e.g. supply of goods, green space, building materials, energy efficiencies).

A government agency supported the aspiration to "work together to explore options to increase housing around Transport Orientated Developments (p.43), including land swap," while a council also supported transit-oriented spatial planning, as recognised in the draft Wellington Regional Growth Framework.

Finally, several submitters noted the long lead-in time for land use changes to have an impact on emissions reduction. Some submitters noted that the Resource Management Act (RMA) reforms may enable a faster pace of change. Some suggested prioritising efforts to accelerate mode shift.

Spatial planning

Several submitters were in support of spatial planning as a tool to better align infrastructure provision and provide for future urban development.

One Regional Council suggested prioritising the action to require spatial plans to be developed (under the proposed legislation to replace the RMA) and implemented. It also highlighted the importance of central and local government working together to improve spatial

[X] supported "Use of regional spatial planning to better align infrastructure provision and provide for" future urban development. If implemented well, this will improve the emissions performance of cities"

planning capability. However, it acknowledged that there is uncertainty about the content of the new legislation and noted that aspects of regional land transport plans could eventually be components of spatial plans.

Other submitters contended that spatial planning alone does not generate good outcomes without sufficient delivery mechanisms. They strongly supported an increased Funding Assistance Rate for walking and cycling improvements (under the National Land Transport Fund), road re-prioritisation and public transport improvements.

Rural and peri-urban considerations

Several submitters requested the Government carefully consider the impact of policies on rural populations to ensure an equitable transition such that the impacts of the transition are not unduly borne by those living rurally (see rural considerations under "providing better travel options for further considerations in this vein).

Similarly, one research institute noted the need to consider the requirements of smaller cities and towns, "The approach of councils in smaller cities needs to be different to those in larger cities. There seems to be a great deal of focus on shifting people in and out of CBDs. For many commuters this is of no use. They move from their homes to their workplaces, many of which are not in the CBD – bus services to industrial areas seem to be very low on the list of considerations".

"...bring good quality, essential services to communities outside of towns and cities, and to invest in social, arts, education and leisure amenities in regional and rural areas. Supported by effective public transport links notably electric rail, and quality digital connectivity, such investments would help reduce strains on towns and cities and the associated high emissions."

Placemaking and inclusive street design

At the heart of integrating transport, land use and urban development is liveability. One government agency recommended that central government:

- require and support local councils to deliver more liveable urban environments, including low traffic neighbourhoods, placemaking and innovative street design; and
- support and adequately fund local councils to ensure storytelling and communications are well executed in placemaking and Innovating Streets for People initiatives.

Storytelling and communications were noted as important measures to secure buy-in and to bring communities along on the transition journey. Councils and community groups were generally more supportive of placemaking as they seemed to have experience with the Waka Kotahi Innovating Streets for People Programme.

Submitters were also supportive of inclusive street design, and the idea of including communities in the design process. One iwi submission recommended incorporating mana whenua stories, history, and tikanga into these designs and formation, and making spaces culturally appropriate, diverse and accessible for people with disabilities. Another submitter noted that "strong leadership and a clear collective vision at central and local government is important to bring communities along on the journey."

Movement and Place

Comments on this section focused on the clash between movement and place functions, particularly in our towns and cities.

One submitter noted that while Hīkina te Kohupara discusses separating through traffic from local it does not have enough emphasis on the freight function in the street environment. An example is supermarket access, which require trucks to deliver food for people to buy. Another issue is through traffic competing with local traffic and local congestion, such as export products en route to ports being held up local congestion, costing more emissions and lost productivity.

"in some locations where there is a high movement function and low place function, other modes such as freight may need to be prioritised... even when communities desire safer streets, road controlling authorities and Waka Kotahi may require extensive studies that only examine the consequences on vehicular traffic flow. Any reduction in level of service for car travel may be a roadblock to making streets safer for all users. Shifting the focus from vehicular level of service to safety for all users is important."

Reallocating street space

Submitters strongly supported widespread street space reallocations or a "third lane" to support walking, cycling, public transport, placemaking and mircomobility.

Submitters also strongly supported setting targets for councils to deliver public transport and active travel networks (with appropriate central government funding), that require street changes (e.g. dedicated/priority bus lanes on some routes; connected cycling networks) by a specific date. However, one NGO advised that current legislation that mandates public transport to be profit-making for councils to obtain government funding must first be removed. Some suggested funding consequences if Road Controlling Authorities do not deliver these changes within the given timeframes.

One council also noted that it will be crucial for central government to acknowledge that targets will need to be 'moulded' to each council, as public transport and active travel networks may not be appropriate in every area.

Submitters also noted the need for regulatory changes to empower Road Controlling Authorities to more easily consult on and make street changes, i.e. a purpose-built regulatory pathway for trialling street space reallocation. For example, one council submission noted that the Traffic Management Plans it used as a framework for piloting cycleways in a city were not fit for purpose as they create some legal uncertainties which can constrain design and slow delivery.

"We also support legislative changes to improve existing consultation processes, make it easier to make changes to streets and roads, and enable temporarily street closure to through traffic (see the United Kingdom's Experimental Traffic Order5)".

A group of academics also recommended that road space reallocation extend beyond space for different transport modes: "...space could be allocated for housing or green space - research shows that urban trees sequester carbon at similar rates to natural vegetation and can help to reduce flood risk. One benefit of reallocating road space to modes with much greater spatial efficiency is that it reduces the overall space required for transport, thereby freeing up space for other uses".

Feedback and comments on providing better travel options

Submitters were broadly in support of increasing the share of travel by public transport, walking, cycling, and shared mobility in our towns and cities. It was generally agreed that bold, sustained investment is needed in all areas: infrastructure, incentives, operations, services and amenities, legislation and regulations. There was strong support for:

- higher Funding Assistance Rates for walking and cycling investments and dedicated/priority bus lanes to strongly incentivise Road Controlling Authorities to prioritise and accelerate street changes;
- increased investment in improving and integrating public transport, walking and cycling infrastructure; and
- increased investment in public transport operations and services (i.e. increasing the reach, capacity, frequency, quality, and reliability of services).

Submitters called for a greater focus on shifting interregional travel to rail and/or bus/coach. E-ferries and ropeways (such as cable cars, cableways and gondolas) were also suggested as potential opportunities to support mode shifts.

"Electric ferries could provide more regional transport since aviation is going to be very difficult to decarbonize."

Consultation Question 5: Are there other travel options that should be considered to encourage people to use alternative modes of transport? If so, what?

Funding considerations

Many submitters called for increased Funding Assistance Rates for walking and cycling investments and dedicated/priority bus lanes. One submitter noted that only "the right infrastructure will empower and motivate people to change their transport behaviours".

Submitters also expressed support for changing policy and funding settings to ensure Waka Kotahi and Road Controlling Authorities maximise opportunities to 'build back better' when doing street renewal. One submitter was particularly interested in understanding how this could be accelerated in existing Kāinga Ora developments.

One submitter was opposed to increased funding in public and active modes: "In our view there has been excessive effort and investment contributed by central and local government on alternative modes over the last several years. There has also been a lack of rigour and transparency in reporting back on the effectiveness of that public funding." Another submitter voiced desire for the Government to monitor the changes that investment in mode shift produces.

A number of submitters suggested the Government provide stronger funding signals to give confidence that proposed changes will be able to go ahead, and enable investors to direct the funding to the right places in sensible proportion to business as usual needs.

One council suggested revising the Government Policy Statement on Land Transport to clarify that mode shift is necessary to reduce transport emissions and to identify clear mode shift and vehicle kilometres travelled reduction targets for Waka Kotahi to achieve through its investment programme. They noted that Waka Kotahi does not currently have a consistent position on whether mode shift is necessary to reduce emissions.

Public transport

Submitters agreed there is need for major investment in public transport improvements in terms of frequency, reach, speed, quality, reliability and comfort, both within cities, and for linking townships and rural communities. They also suggested improvements to public transport services and amenities to increase uptake, such as adopting Crime Prevention through Environmental Design principles, providing WiFi on board, electronic timetables, bus shelters and park and ride facilities. One submitter recommended increasing bus driver pay and work conditions to address existing driver shortages.

In addition to improving service levels, submitters agreed that public transport must be affordable and comparable to (or less than) the cost of private vehicles to facilitate mode shift. Submitters contended that low flat-rate fares (particularly for-under-25s, community service card holders and off-peak travel), or no fares, will help increase uptake of public transport and address transport equity.

One council noted that, when reducing public transport fares, it is important to ensure that reduced farebox recovery does not adversely impact on the central government funding available to support public transport investment. Another submitter noted that lower public transport fares should not come at the expense of improved service quality.

Rural and peri-urban considerations

Several submitters commented that public transport, walking and cycling is not practical for rural populations. Instead, electrifying or improving the fuel efficiency of private vehicles may be the best options for rural areas. One submitter expressed that "walking and cycling options are best focussed on urban centres for lacking relevance to many rural use situations".

We recommend more research on the needs of rural transport-disadvantaged, with community taxi schemes being one potential solution. We note that the housing crisis has brought an increase in people moving to small towns or villages to find housing and that these people will be reliant on their cars to access shops and jobs."

Increasing focus on interregional rail

Several government agencies and NGO submitters commented that they would like to see a larger focus on the role of interregional rail in reducing the need for interregional air and road travel. Several submitters also supported enhancing interregional bus/coach services and the provision of intercity cycleways.

However, some submissions highlighted the need for policy changes. Submitters noted that interregional public transport services are currently treated as exempt under the Land Transport Management Act, and the law may need to be changed to clarify this (the Public Transport Operating Model (PTOM) review may consider this issue). The lack of any framework for local authorities to plan, fund or manage interregional rail services was also noted.

One submitter was opposed to interregional rail: "expanding interregional rail risks making it harder to travel between regions or more time-intensive to do so, leading to far-reaching impacts on the regions."

Walking and cycling

Submitters agreed that safety, and perceptions of safety, can either encourage or discourage uptake of active modes (including e-biking). They were in favour of a range of improvements to active mode pathways to ensure they are safe, inclusive, well-connected and fit for purpose, including:

- speed reductions (30km/h was commonly raised);
- safe, separated walking and cycling networks;
- provision of safe and secure bike parking facilities at employment, schools and other high-use places;
- adopting universal design principles;
- pedestrian and cyclist priority at signal-based crossings in high walking and cycling areas; and
- changing the legal framework around financial liability for accidents involving cars and bikes/pedestrians.

Submitters commented that walking and cycling infrastructure must also be geographically logical and designed with minimal obstructions to suit a range of users. They also had several suggestions to increase active transport uptake among children, such as restricting parking around schools and provision of safe surrounding walking and cycling routes. One submitter recommended local authorities work with schools to ensure safe active travel routes that connect housing and schools, while another recommended infrastructure be specifically developed to enable safe active transport by children.

Enabling network integration of different transport types

Enabling integration of different transport types was a recurring theme raised by submitters. Submitters supported increasing access to transport hubs through providing safe, separated, connected cycle networks and walkways, and secure facilities for people to leave bikes or scooters. Several submitters suggested allowing people to carry bikes on trains/buses/ferries for free and compulsory provision of space/racks to do this.

Submitters also supported increasing the focus on first mile/last mile active mode shifts to transport hubs to increase the 'reach' of public transport networks. One council was keen to see government "partner with councils" to support and facilitate this.

One council are keen to ensure
Project Next (the new national
integrated public transport e-ticket
system) has an ability to subscribe to
public transport services. For
example, a member of the public can
pay a fixed monthly rate for unlimited
public transport services. "This will
encourage people to maximise their
use of public transport and justify their
monthly investment."

Submitters also expressed a desire for the Government to explore other, less traditional modes of low-carbon transport for "first or last mile" commuter trips, such as e-scooters, e-mopeds, small e-motorbikes, electric cargo bikes, electric carts and electric 'tuk-tuks'.

Submitters were also in strong support of an integrated ticketing system.

Shared mobility/micromobility

Submitters supported measures to increase the uptake of shared mobility and micromobility services.

Some supported the idea of mini-buses or on-demand shuttles to fill gaps in the public transport network and reduce private car use.

A business association suggested incentivising micromobility through the provision of additional dedicated parking spaces for scooters and motorcycles, or allocated parking for electric transport modes like there is for electric cars (along with ensuring EV charging stations in urban centres also cater for e-scooters and e-motorcycles).

Others suggested providing subsidised or free bikes/e-bikes/scooters to commuters and/or targeted communities, alongside share schemes, training and safety equipment as a way to facilitate mode shift and reduce transport disadvantage. Some suggested funding for shared mobility in government-led urban developments. One submitter cautioned that shared e-scooters in two US cities are largely replacing walking and cycling.

Workplace tax incentives

A large number of submitters suggested workplace incentives to increase uptake of public and active transport. For example, providing pay-back opportunities for e-bikes/bikes or subsidising public transport. Submitters recommended removing Fringe Benefit Tax from public transport passes that companies purchase for employees to support this.

Other submitters also noted that changes could be made to our GST system to incentivise mode shift in workplace travel.

More research is needed on mode shift in Aotearoa

Submitters expressed that there is no one size fits all approach to mode shift, and that the Ministry should commission relevant research to ensure measures designed to shift demand or mode choices are effective and enduring in the context of broader local planning priorities.

One submitter commented that "the list of proposed actions is relatively broad and vague and there is insufficient information to determine the effectiveness of either one of the explicit actions or the collective actions, therefore we cannot comment on the importance or priority of those actions".

Improving the investment decision-making process

Submitters suggested several improvements to the investment decision-making process. A regional council suggested the Ministry review Waka Kotahi's existing business case tools and models to determine whether these remain fit for purpose in transitioning our transport system toward lower emissions. Another submitter called for better-informed and more transparent infrastructure decision-making.

Submitters also suggested clarifying agencies' roles in delivering large and frequent public transport systems in Aotearoa, and ensuring that there are legislative settings in place to enable

"Poor decision-making may lead to excessively costly solutions or solutions that are inconsistent with long-term requirements, which will in turn constrain our ability to efficiently achieve long-term goals such as transport emissions reduction. Options such as better uptake of cost benefit analysis, post-implementation reviews, and development of a priority list of projects and initiatives that have undergone a quality process may improve the decision-making environment."

them (e.g. land acquisition, statutory powers and consenting). They also supported the review of the PTOM to ensure that it remains fit for purpose and contributes to the Government's transport priorities.

Public education campaigns

Some submitters noted a cultural shift needs to be addressed, and that convincing people to shift to public transport and more active modes will be extremely challenging. Many submitters called for a public education campaign focussed on increasing acceptance and uptake of alternative transport modes and educating commuters on how best to share roads and spaces with each other.

General feedback and comments on transport pricing and management

Less than half of the submissions commented on transport pricing and management, though most agreed that pricing mechanisms are an important tool to encourage behaviour change and reduce emissions. Submitters noted that pricing mechanisms need to consider how they will impact vulnerable communities before implementation. There were several comments on the role pricing and demand management should have in the development of urban planning. Submitters asked for early investment in public transport, and for new roads to include space specifically for active and public transport modes.

Submitters commented that they expected the Government to be transparent with the way it used revenue from transport and pricing management and its rationale for collection. A few business associations and councils commented that pricing mechanisms are viewed by some residents as punitive taxes. They suggested ensuring there were viable alternative transport options before implementing any pricing scheme.

Consultation Question 6: Pricing is sometimes viewed as being controversial. However, international literature and experiences demonstrate it can play a role in changing behaviour. Do you have any views on the role demand management, and more specifically pricing, could play to help Aotearoa reach net zero by 2050?

The comments on this section broadly followed two themes: how we can encourage behaviour change towards low- and zero-emissions transport modes, and specific pricing mechanisms for demand management.

Behaviour change towards public transport and active modes

Many submitters commented on the role demand management and pricing could have on improvements to public transport and active modes. Comments were divided into two areas: infrastructure revenue for these modes, and incentives to encourage behavioural change towards these modes. Some submitters voiced concerns over the current state of the public transport system and considered it inadequate to facilitate the mode change needed. Several submitters noted that the revenue from pricing should fund public transport and active mode improvements, which would facilitate future mode shift.

Views on pricing mechanisms for demand management

Most submitters agreed that pricing would be a key element to encourage behaviour change. A minority noted that these mechanisms should not serve as an ongoing revenue source as this was not their key purpose.

Most submitters supported congestion charging, parking management and road pricing. Other pricing mechanisms which received support included, low-emissions zones and smart distance pricing systems. Increasing fuel excise duty was met with mixed reviews. Some submitters were concerned this would unfairly impact low-income groups, while others commented this would encourage the mode shift needed to lower transport emissions. Submitters agreed that pricing mechanisms had to work in concert with improvements to alternative transport modes to be effective.

Councils were generally supportive of parking management as a mechanism to influence trip choice. Some councils were concerned Government was restricting their ability to set standards and strategies that best suited their communities. Others asked for strong guidance on parking management as they saw it as a highly contentious issue. Congestion charging was generally supported in principle by councils, subject to the mitigation of equity impacts and the assurance of transport alternatives for areas incurring a charge.

Chapter 7: Theme Two - Improving our passenger vehicles

Theme Two revolves around improving our passenger vehicles. This includes private vehicles, public transport (buses, trains and ferries) and planes. Shifting our reliance from fossil-fuelled vehicles to EVs and low-emission fuels is essential if we are to decarbonise transport. Measures include incentive schemes for the uptake of low-emission vehicles, investment into charging infrastructure, using sustainable biofuels and sustainable aviation fuels, phasing out internal combustion engines (ICE) vehicle imports, and supporting councils to procure electric buses, among other measures.

This theme received a high level of interest from correspondents, with well over half of submitters responding to consultation questions revolving around Theme Two. Feedback primarily came from business associations (including fuel suppliers, energy suppliers), local councils, NGOs, academics and private individuals.

Summary of what we heard from submitters

General feedback and comments

Submitters were largely supportive of the content in Chapter 7 but noted that investment in mode shift should take precedence over investment in individual passenger vehicles. Submissions also focussed on the importance of integration between Themes One and Two, and the decarbonisation of the light vehicle fleet.

Feedback and comments on decarbonising the light vehicle fleet

Submitters expressed general support for a biofuels sales mandate to immediately reduce emissions from the current ICE light vehicle fleet, provided they were sustainably sourced and did not take up arable land that should be used for food production.

Various groups expressed concerns that accelerating the uptake of EVs would take precedence over mode shift away from vehicles and car ownership. These submitters positioned reduced vehicle ownership as first priority.

"Behaviour change should be based on making alternatives attractive, rather than by penalising existing travel patterns, which are often based on necessity rather than choice."

Many submitters also expressed concerns about of the feasibility of recycling EV batteries, a lack of charging infrastructure, EVs being charged with non-renewable electricity sources, and the overall supply of EVs.

Consultation Question 7: Improving our fleet and moving towards EVs and the use of sustainable alternative fuels will be important for our transition. Are there other possible actions that could help Aotearoa transition its light and heavy fleets more quickly, and which actions should be prioritised?

Many submitters support the Clean Car Standard and Discount, the phase-out of ICE vehicles (provided reasonable alternatives are available) and scrappage schemes to remove polluting vehicles from our roads. Many submitters expressed support for e-bikes being included in EV incentive schemes to support mode shift. A few submitters supported a ban on the marketing of large, fuel inefficient SUVs and utes.

Most submitters supported decarbonising the light vehicle fleet and prioritising policies to accelerate EV uptake and a biofuels mandate.

Several energy groups gave detailed submissions regarding the energy capacity required to transition the private vehicle fleet to electric, and types of charging that should be prioritised to maximise use of our current grid capacity. Smart charging was frequently referenced as a priority. One submitter expressed support for the development of a National Energy Strategy, including transport decarbonisation.

"Reducing
emissions from
our car and truck
dependent
society will not
only save New
Zealanders
money and
carbon, it will also
make our cities
safer, healthier,
more vibrant and
liveable."

Feedback and comments on decarbonising the public transport fleet

Most submitters supported decarbonising the public transport bus fleet, but emphasised the importance of making public transport an attractive option in the first instance. A few submitters, however, considered decarbonisation of the public transport fleet should not be a priority in decarbonising transport. Several submitters from regional communities expressed concern that money spent electrifying their bus fleet would still render the services relatively under-used compared to travel by private car.

"We understand Aotearoa's targets need to reduce emissions and NZ need to be educated to move to more sustainable options.

However, public buses are only responsible for 1% of emissions, and with a high cost of purchasing replacement, [X] recommends that the money for replacement should be allocated to more efficient options and allow for future improvements in bus technology."

Many submitters wanted to see greater emphasis on the electrification of the rail network and expanding the rail network generally.

Consultation Question 8 Do you support these possible actions to decarbonise the public transport fleet? Do you think we should consider any other actions?

A range of submitter types called for public transport to connect with other forms of mobility; i.e. buses and trains needing to be able to take bikes, and supporting micro mobility options at train stations and bus stops, and for increased funding towards the procurement of electric buses by councils.

Several submitters called for low-emission (hydrogen and/or biofuel fuelled) and electric buses to be exempt from Road User Charges (RUC). An industry association also supported augmenting a biofuels mandate with phase-in requirements for synthetic diesel such that buses would solely use synthetic diesels to operate from 2035.

Feedback and comments on decarbonising the aviation fleet

Many submitters expressed concern that international air travel was not included in the discussion document.

Several submitters from the aviation, fuel or Sustainable Aviation Fuel (SAF) sectors called for a public-private, cross-agency advisory body focused on aviation decarbonisation, and Government investment into SAF.

Submitters had mixed attitudes towards Government intervention in aviation emissions. Some supported direct Government intervention and investment while others considered Government should leave the cost of the transition to the sector itself and/or did not need to intervene in the aviation sector because it was covered by the Emissions Trading Scheme (ETS).

Many submitters called for reducing flying. Several airports that submitted talked about operational improvements they have undertaken to decarbonise.

Consultation Question 9 Do you support the possible actions to reduce domestic aviation emissions? Do you think there are other actions we should consider?

While many submitters supported decarbonising aviation, approximately half of these submitters supported reducing flying over decarbonising. Multiple submitter types supported greater emphasis on 'Avoid' and 'Shift' frameworks, incentivising and supporting rail, or a national bus network as opposed to air travel.

Submitters also called for a freeze on airport expansions until sufficient progress on sustainable flying, removing aviation subsidies, and/or a ban on domestic flying entirely.

"We recommend that government sets a date for the end of short haul fossil-fuelled flights by 2025 (for non-essential services) and to start heavily investing in interregional rail services that are commuter-centric rather than just focused on tourism."

Chapter 8: Theme Three - Supporting a more efficient freight system

Our domestic freight system plays a vital role in the economy, allowing producers to transport their goods to consumers and other businesses within Aotearoa and the rest of the world.

Supporting and achieving a more efficient freight system is a critical part of getting to net zero, particularly as freight's role in Aotearoa is forecast to expand over time. Heavy vehicles, the majority of which are large trucks, emit nearly 25 percent of our transport emissions.

Chapter 8 focuses on freight, Hīkina te Kohupara's third theme, and examines how we can improve the efficiency of our overall supply chain, shift freight to low-emissions modes, and improve the fuel efficiency and carbon intensity of freight modes and fuel. Though submissions ranged across the submitter types, business and industry associations formed the majority of responses.

Summary of what we heard from submitters

General feedback and comments

Submitters were largely aligned in recognising the need to decarbonise our domestic freight system. Several submitters underscored the challenges associated with the inherent complexity of the freight system, agreeing with the need to consider the supply chain system as a whole when taking action.

Support for the specific decarbonisation levers and approaches as set out in Chapter 8 of Hīkina te Kohupara was notably more mixed. Varied responses were evident in several key areas, including the overall level of ambition and proposed priority transport modes.

Consultation Question 10: The freight supply chain is important to our domestic and international trade. Do you have any views on the feasibility of the possible actions in Aotearoa and which should be prioritised?

Several submitters agreed with the need to shift a higher proportion of freight towards rail and coastal shipping. The role of rail, and its potential for expansion, was repeatedly cited.

Coastal shipping was also repeatedly referenced, with one submitter stating its viability as an option for shifting non-urgent bulk domestic freight. Although supportive of expanding current levels of coastal shipping and encouraging cleaner and more efficient ships and ports, one submitter underscored the importance of ensuring prior consultation with iwi and hapū, and the need to meaningfully consider effects on the wider environment, such as "marine life, kai sources, and the foreshore and seabed".

"the headline targets in our RLTP [Regional Land Transport Plan] seek a 30 % reduction in transport emissions and a 100% increase in rail freight tonnage in Canterbury by 2030".

Though in the minority, some submitters expressed concern over the Government taking a prescriptive approach towards freight modes. One submitter stated, "any actions especially in relation to modal choices made for the freight task, must reflect a sound understanding of the particular conditions that drive those choices by freight owners".

Although supportive of expanding current levels of coastal shipping and encouraging cleaner and more efficient ships and ports, one submitter underscored the importance of ensuring prior consultation with iwi and hapū, and the need to meaningfully consider effects on the wider environment, such as "marine life, kai sources, and the foreshore and seabed".

Several business and industry associations expressed the challenges of reducing their freight emissions while retaining their commercial viability. One submitter noted the tension between domestic and international regulations, and the potential for inconsistency across jurisdictions to result in detrimental impacts to their

commercial operations and to the wider domestic economy. Submitters feared that higher transport costs associated with domestic freight decarbonisation measures could increase the costs of their goods and services, thereby reducing the ability of domestic producers and exporters to compete with overseas markets.

Feedback and comments on enabling modal-choice in freight through the use of low-emissions modes
Submitters raised the need to realistically identify ways to avoid/reduce freight demand, as opposed to focusing solely on efficiency measures to reduce freight emissions.

Several submitters supported a whole-of-government approach involving communities, businesses and industries to enable modal-choice in freight through the use of low-emissions modes. Others, however, considered Government interventions to "advantage one transport mode over another" could result in negative economic consequences, particularly to industry and the wider economy.

Consultation Question 11 Decarbonising our freight modes and fuels will be essential for our net zero future. Are there any actions you consider we have not included in the key actions for freight modes and fuels?

Several submitters considered Hīkina te Kohupara did not adequately interrogate measures to achieve an overall reduction in freight and felt there was too great a focus on efficiency. One submitter considered this a disconnect, stating "there is an assumption that demand as it exists now should continue, or even increase. This perspective is also incompatible with any Net-Zero target, especially a shortened one".

In relation, some submitters referenced the need to challenge the existing reliance on "same-day delivery", and to take specific action to address this consumer behaviour. One industry submitter noted the challenges around doing so, stating that, "One of the biggest challenges will be addressing the market-led consumer demand for products which has driven suppliers and users of the freight system to an unsustainable model where goods are supplied just in time as the lowest price."

Several submitters considered reference to biofuels and hydrogen could have been expanded further. Some felt that the ambition around biofuels was too low, and considered the proposed biofuels mandate a key first step but one that could be elevated further. Views around hydrogen were mixed. One submitter considered hydrogen to be an inefficient energy source with high infrastructure costs, and that Hīkina te Kohupara had not adequately considered these factors. Conversely, some felt hydrogen's potential had been overlooked.

Submitters also noted the wider implications of freight decarbonisation that were not explicitly referenced in Chapter 8. An academic noted changes in freight structure and processes have major implications for communities and people, and that the existing focus on freight efficiency "misses potential co-benefits, particularly within urban environments".

Chapter 9: Supporting a Just Transition

This section provides an overview of the distributional impacts that are likely to result from the transition to a zerocarbon transport system. People who already experience social/economic disadvantages are more likely to be negatively affected by increasing transport costs.

Of the 97 direct submissions in response to Chapter 9, submitters ranged from local and central government agencies, industry groups and business associations, academics, NGOs and community groups, iwi, and private individuals.

While not a consultation question, we have also included submitters' feedback and comments on the presence of te ao Māori, and Te Tiriti o Waitangi in Hīkina te Kohupara.

Summary of what we heard from submitters

General feedback and comments

Many submitters supported more in-depth analysis of distributional impacts, and encouraged proactive mitigation of negative unintended consequences. Specific suggestions for Government are detailed below.

Consultation Question 12: A Just Transition for all of Aotearoa will be important as we transition to net zero. Are there other impacts that we have not identified?

Data and evidence

Submitters considered evidence gathering and data collection key to ensuring a Just Transition, and critical to enable more comprehensive, evidence-based decision-making. Suggestions included undergoing targeted surveys and focused projects.

"Bringing a spatial lens over transport decision making that carefully considers the locations and groups in our community with the least access to opportunities and who experience the greatest marginalisation, will enable a more just transition."

Engagement and coordination

The need for engagement, coordination and inclusivity also

emerged as a theme across submissions. Submitters encouraged central government agencies to work together and with industry to develop a comprehensive strategy that clearly articulates the economic, social, and environmental opportunities of a Just Transition, as well as how negative impacts will be mitigated as we move toward a zero-carbon transport system.

Equity

Submitters considered equity considerations needed to be woven throughout Hīkina te Kohupara, rather than just in one section. Others expressed support for schemes to assist New Zealanders to purchase EVs, such as subsidies and feebate schemes, but considered low-income earners were insufficiently supported. Some framed the Clean Car Discount as a subsidy for the wealthy.

Many submitters suggested that policy to transition our transport system should be specifically targeted towards disadvantaged groups. Measures described included prioritising investment in public transport, active and low-emissions modes to prevent factors, such as income and physical ability, from impacting access to work and essential services.

"those who are last to electrify are also last to benefit from the savings gained from EVs."

Māori perspectives

Submissions from iwi/hapū centred on preventing further disadvantages to those groups already disproportionately affected by transport poverty and income inequality. These submitters reinforced that those on low incomes already spend a greater proportion of their income on transportation. They encouraged cross-sector collaboration and a government-wide approach to address underlying issues of poverty, systemic racism, housing, education and income inequality, as well as other areas where Māori and Pasifika tend to be disproportionately affected.

One group recommended "that ICE vehicle fees are only implemented once e-vehicles become accessible and affordable to whanau. Alternatively, we recommend that additional financial support, schemes such as e-vehicle social leasing or funding, be available to assist low-income households to purchasing e-vehicles, or be exempt from ICE vehicle fees."

Additional considerations

Submitters advocated for greater consideration of, and impacts to, aged populations, disabled persons, businesses and consumers, as well as rural and farming communities.

Feedback and comments on the use of te ao Māori, and Te Tiriti o Waitangi and Hīkina te Kohupara

The few submitters that commented on the use of te ao Māori were generally supportive of a collaborative approach to reducing transport emissions that incorporates te ao Māori and Māori principles, such as rangatiratanga and kaitiakitanga.

Submitters were also supportive of an approach which upholds Te Tiriti o Waitangi. However, some felt Hīkina te Kohupara had not done enough to honour Te Tiriti.

Several submitters considered a partnership approach critical to address existing inequity across the transport system, notably for Māori. One submitter underscored the importance of enabling kaupapa Māori research to identify barriers, needs and aspirations within a te ao Māori and transport context, and felt this a prerequisite for the Ministry to meet its obligations under Te Tiriti.

"Government needs to commence an honest discussion about how as a society we can address the fundamental challenges exposed by climate change – in particular how we can draw on our unique advantage of the dual-world view and partnership of cultures envisioned, but not yet realised, in Te Tiriti. The document does not do enough to honour te Tiriti. It calls for consultation with Māori/lwi when development of key transport initiatives should involve true partnership relationships."

"Further, while rural travel is recognised to contribute half of the country's transport GHG emissions, potential solutions are only touched on. This is one area where iwi, hapū and rural whānau are already demonstrating leadership, including vehicle sharing and communityowned public transport."

Chapter 10, 11, and 12: Including Potential Pathways, Emissions Budgets and Where to Next?

This section of the report looks at the pathways to get us to a zero-carbon transport system by 2050, what should be included in the first three emission budget periods and where to next.

Chapter 10 outlines the multiple pathways Aotearoa could take to achieve a zero-carbon transport system by 2050. Hīkina te Kohupara demonstrates there are different strategies we can take to reduce transport GHG emissions. However, given the scale of the challenge, and the limited time available, we need to take advantage of the opportunities to reduce emissions across the whole transport system. Most submitters supported Pathway 4 as the only viable option to meet our 2050 target, however some submitters expressed discomfort supporting any pathway as they did not feel that there was enough modelling on various areas.

Many submitters gave substantial submissions on Chapter 11, which outlined policies proposed for inclusion in the first three emissions budget periods. Only two submission referenced Chapter 12, which asked where we should go next, as most submitters felt they had already submitted on that under earlier consultation questions.

Summary of what we heard from submitters

General feedback and comments on the Four Potential Pathways

Of the 14 submitters who commented on this section, a clear theme emerged that reducing our transport emissions to zero-carbon by 2050 is a big challenge, and we must start now and with urgency. Several submitters noted that we need to prioritise the most efficient options now, considering the short and long-term outcomes. Other submitters commented that any pathway not meeting our Zero Carbon Act target should be disregarded, and that even the most ambitious pathway – Pathway 4 – is too slow.

Some public sector agency submissions expressed the need to look both across the transport and wider-Government systems. They considered this would allow us to connect with other government reforms (such as the RMA changes, etc.) and identify synergies to reduce emissions across Government. These submitters also noted that appropriate funding and resource will be needed to allow delivery from local government, and that this funding will have to be at a different scale than what has come before.

Some submitters questioned the modelling used for the four pathways, including how the modelling was done, and gaps for specific areas. One submitter noted that, "public communication of the change required will be essential to achieving these decarbonisation pathways."

Consultation Question 13: Given the four potential pathways identified in Hīkina te Kohupara, each of which require many levers and policies to be achieved, which pathway to you think Aotearoa should follow to reduce transport emissions?

Eighty-three submitters commented on the potential pathways to get to zero-carbon by 2050. There was significant support for Pathway 4 (65 percent). Roughly half of those who supported Pathway 4 supported increasing the level of ambition, and a handful also supported Pathway 1. Six submissions were in favour of Pathway 2, mainly private companies or business associations. One submitter supported Pathway 3, and the remaining submitters did not express support for any one pathway.

Of those submitters without a pathway preference (26 percent of those who commented on this question), many commented that they felt unable to do so without further modelling or information on which to make their decision. Some submitters requested further modelling of all policies, while others requested further information on specific areas, such as domestic aviation, interactions of urban development policies, and freight. One comment from a business association was, "at this stage, the model does not include many modes. This includes the omission of freight rail, aviation, ships, and boats from the modes considered, as well as sustainable aviation and shipping fuels and hydrogen".

General feedback and comments on 'What opportunities should the Government progress over the first three emissions budget periods?'

All but one submitter chose to comment on the specific consultation question, rather than make a general comment. The content of the single submission is reflected under the response to Consultation Question 14 below.

Consultation Question 14: Do you have any views on the policies that we propose should be considered for the first emissions budget?

Many submitters felt strongly about this section. From the 55 submissions, most were from business associations, private companies, NGOs, research institutions and government agencies. Few private individuals submitted. Submitters' suggested policies for inclusion are summarised by subject area in the tables below.

Theme One – Changing the way we travel

Subject area	Suggested policies
Urban development and placemaking	 No new greenfield development. Introduce regulatory frameworks that ensure emissions generation is calculated for any proposed development. Rapidly increase city centre living densities and heights without any space for cars. Increase pedestrian-friendly car-free zones in all towns and cities. Mandate the use of high-quality street design guidance. Provision of more medium-density-housing for middle income people.
General comments on public transport, cycling & walking	 Government should set targets to increase mode shift for public transport, walking and cycling, and impose penalties on funding when targets are not met. A quantum shift in investment is required for both infrastructure and services. Reallocate road space and build infrastructure to encourage mode shift. Reduce vehicle kilometres travelled, i.e. through Sustainable Urban Mobility Plans. Change tax setting for businesses to incentivise mode shift (i.e. fringe benefit tax and GST changes). Investigate ways to optimise consultation processes to encourage mode shift.
Public transport	 Public transport should be free or at least be made more affordable. Require government employees to increase their mode shift. Investigate shifting public transport to public ownership to ensure equity. Bring forward the ban on new urban diesel buses. Introduce of a night train between Wellington and Auckland and interregional passenger rail.
Cycling	 Support councils to provide for active transport through funding capability and capacity for active transport planners. Form advisory groups tasked with understanding the barriers to women, and for Māori and Pasifika, taking up cycling and micromobility. Investigate government supported bike share schemes. Implement network of secure cycle parking, suitable for e-bikes. Subsidise the purchase of e-bikes.
Walking	 Support walking and micromobility in all infrastructure decisions at all times. Identify, through research aspects of the environment that are needed to encourage active transport and require these changes through regulation.
Shared mobility	Create contestable funds for medium-large scale local micromobility initiatives. Shift the current focus from public transport to shared mobility.
Transport pricing	 Implement transport pricing such that low-income earners are not disproportionately impacted. Allow cities the option of imposing congestion charges and parking levies. Introduce a smart Road Distance Charge App designed to reduce travelling distances in general.

Theme Two – Improving our passenger vehicles

Subject area	Suggested policies
Decarbonising light vehicles	 End ICE vehicle imports in 2025. Make incentives for EV uptake conditional on (or give priority to) shared vehicles. Expand investment in low-emission vehicle infrastructure to EV battery recycling. Incentivise people to trade in high emission vehicles for e-bikes or cash. Ensure collaboration with the electricity sector to enable widespread electrification. Introduce accelerated depreciation allowances for EV fleets to increase supply. Introduce differential road user charges to incentivise take up low-emission vehicles. Optimise EV charging investment to target regional hubs.
Decarbonising public transport	 Engage with sector to accelerate the decarbonisation of the bus and ferry fleet. Invest in all-electric or sustainable biofuel buses and trains. Upgrade long-distance coach services to be low-emission vehicles.
Decarbonising aviation	 Shift interregional transport from flights to land transport, particularly trains. Develop a decarbonisation plan for aviation, encouraging mode shift. Implement policies to support domestic sustainable aviation fuel production. No new terminals or airports until the existing aviation industry reaches net zero-carbon. Establish a cross-agency advisory body focused on aviation decarbonisation. Undertake a detailed study into the use of low-carbon fuels for aviation in Aotearoa. Support development of next generation aircraft. Support operational improvements through New Southern Skies. Undertake regulatory assessments to ensure emissions standards are met.

Theme Three – Supporting a more efficient freight system

Subject area	Suggested policies
Optimising freight routes	More emphasis on carbon-neutral last-mile transport, including local distribution centres and cargo e-bikes
Shifting road freight to rail and coastal shipping	 Ensure the National Supply Chain Strategy identifies ways to avoid/reduce freight. Increase efforts to position rail as the first freight choice. More investment in rail services, and in the port and rail network Electrify the remaining track and move more freight to rail and coastal shipping.
Cleaner trucks	 Include an RUC exemption for biofuel vehicles. Investigate introducing CO₂ standards for trucks. Increase funding to accelerate uptake of zero- and low-emission trucks. Implement a more ambitious biofuels mandate which includes aviation and heavy vehicles, and specifically considers farm vehicles and buses in rural areas. Trial a rural EV demonstration project over the first budget period to identify the additional support needed to facilitate EV uptake in rural communities. Investigate a Government subsidy for EV heavy vehicle charging infrastructure.
Cleaner rail	 Enable greater coordination and alignment between significant freight movers. Ensure that short term pricing decisions by KiwiRail do not lead to freight being moved off railway lines and back onto roads.
Cleaner ships	Undertaking a detailed study into the use of low-carbon fuels for shipping.

Other

Subject area	Suggested policies
System change	 System needs to change from a competitive profit-driven model to one that provides access, safety and resilience while reducing GHG emissions. Government needs to prioritise activity with the most significant abatement potential over short and long term. Only fund projects that reduce emissions and end investments in urban state highways and roads that simply encourage urban sprawl and increase car use. Take advantage of our low Crown debt position and low cost of borrowing to invest an unprecedented amount to deliver on mode shift targets. Review how co-benefits are considered to ensure the full benefits of health and wellbeing are being considered, quantified, and communicated to communities. Ensure transport equity is considered across transport decisions. Strengthen the climate change priority in the GPS to deliver on outcomes. Reform parking charges, parking fines, and parking standards, reduce public car parking provision, and introduce parking levies.
Modelling and data	 All policies should have CBAs and must take account of the ETS. Some submitters offered different assessment approaches and were concerned about a lack of modelling leading to the wrong approach being taken. All future policies should be assessed for their emission reduction potential.
Governance and leadership	 Employ more women, particularly Māori, Pasifika and other people of colour, and people from low-income groups in the managerial positions. Government should lead by example – i.e. public education programme for transport decarbonisation and procurement of low-carbon transport Government should coordinate to deliver on projects, such as product stewardship schemes and develop support plan for Just Transition for affected businesses. What is adopted needs to align across government as a whole.
Education	 Fund a communication and behaviour change campaign that seeks to inform communities on the collective journey we need to take. Introduce an emissions testing regime for in-service vehicles in the existing fleet to ensure all drivers are better educated about the emissions profile. Educate and support vehicle owners to maintain their current vehicle to minimise the deterioration of emissions over time.

Feedback and comments on 'Where to next?'

Only two submitters commented on this section. Both reinforced the need for Government to take bold action and maintain progress irrespective of pushback. One submitter urged the Government to go further and position wellbeing, justice and Te Tiriti o Waitangi at the core of the transport transformation.