

Chapter 2

Ngā Kohinga Kōrero: mō ngā kōrero akiaki kōhukihuki

Consultation and submissions: what we heard about our draft advice

- ¹ The Climate Change Commission (the Commission) has consulted with, listened to, and learnt from thousands of people in preparing this advice.
- ² Between January 2020 and January 2021, Commissioners and staff held over 700 meetings, workshops and hui. We met with different sectors, people, and organisations to introduce ourselves and our work, and to hear views on what needs to be considered in Aotearoa in responding to climate change.
- ³ During our consultation phase, from 1 February to 28 March 2021, our team held or attended around 200 events across Aotearoa and talked with an estimated 4,000 people. Consultation is comprised of all our engagement activity and the submissions we received.
- ⁴ We held a series of online events, including open Zoom sessions targeted at a general audience. Overall, we had over 3,000 people attend these. We attended events to speak with people from community groups, unions, NGOs, business, central and local government, parliamentary groups, and others.
- ⁵ We met kanohi kitea with Iwi/Māori where possible and engaged online where not. We ran a targeted consultation survey for Iwi/Māori – the 100 Coastie Voices campaign. The focus of this was to identify broad issues that Iwi/Māori would consider to be most significant.
- ⁶ We received more than 15,000 submissions through our website, the 100 Coastie Voices survey, the post and by email.
- ⁷ We heard from rangatahi/young people through our collaboration with The Hive, a programme that uses social media to encourage young people to have their say on public policy.
- ⁸ Much of what we heard in our engagement was echoed in the submissions we received. Central themes around the impact of our advice on New Zealanders, the pace of change, and the need to carefully manage the transition to a low-emissions Aotearoa emerged.
- ⁹ The key themes identified through the 100 Coastie Voices survey aligned with what we heard more broadly through consultation – that the Government must uphold its commitments and obligations to Te Tiriti o Waitangi/The Treaty of Waitangi and the Crown-Māori partnership in its response to climate change.

10 In this chapter we discuss some of the main themes and insights from our engagement and consultation in more detail, and share how they have shaped our first advice and will continue to shape our future research, analysis, and advice to government.

11 While the valuable information we received through consultation reflects the views of many New Zealanders, it cannot be taken to represent the views of all New Zealanders. We are conscious that those who chose to respond to our consultation are highly engaged, and may not represent society as a whole. We have not, therefore, emphasised statistical summaries of the submission findings in our final advice. Instead, we have reflected on the themes we heard most consistently, and some of the areas where people had very different perspectives. We have also considered new evidence that has been provided to us through consultation. We have then re-examined the evidence and our judgements in light of what we learnt to form our final advice.

How we received and processed submissions

12 The 15,404 submissions we received came to us through:

- **Haveyoursay.climatecommission.govt.nz** – our online consultation portal was used by 4,247 submitters
- **hello@climatecommission.govt.nz** – our public information email address was used to provide 11,118 submissions including the template submissions we received
- **Postal service** – 39 submitters posted their submissions to us in hard copy.

13 We received 14,463 individual submissions, 901 submissions from organisations, 40 submissions from Iwi/Māori.

14 The ‘100 Coastie Voices’ campaign gathered an additional 167 responses from across Aotearoa.

15 As submissions were received, they were read and themes identified. Findings were summarised and recorded. Staff across the Commission discussed the information and themes coming through submissions. Staff also considered how these compared to the themes we heard through our engagement. Evidence we received through submissions and engagements was used to test and refine our modelling assumptions and inputs. Our judgements, conclusions and recommendations were also assessed and modified where appropriate in light of the material we received.

16 Submission themes, including how they changed and shaped our advice, were discussed with the Commission board and considered as part of making final judgements on our advice and recommendations.

17 In this chapter, and throughout the report, we have highlighted where we have changed our advice based on what New Zealanders have told us through our consultation process.

High level response to our draft advice

18 We heard through our engagements and through submissions that New Zealanders recognise the need to act on climate change. This came through from all the different groups we heard from. Where views diverged was what action we take and the speed with which we do so.

19 The number of submissions received, and the wide range of people that they come from, show that there is broad interest in how we transition to a thriving, climate-resilient, low-emissions future for Aotearoa – and there are wide-ranging views about the important things to consider.

20 We heard strongly that Te Tiriti o Waitangi/The Treaty of Waitangi and the Crown-Māori partnership should underpin the response to climate change in Aotearoa. The Commission has been clear about our commitment to ensuring an approach that upholds the Treaty, and this is addressed further throughout our report.

21 Overall our consultation demonstrated the need to act, and the potential magnitude of climate change impacts if we don't, are well understood. However, views differed around how Aotearoa should respond, its role in the world, and the part different communities, regions and businesses play in the transition.

22 We have reassessed and changed our draft advice in response to themes and new evidence that came through from consultation and the submissions we received. The chapters within the report cover the more detailed elements of what we heard, and we have noted in them the substantive changes made to our advice as a result.

The impact of change on the economy of Aotearoa, people's wellbeing, and the environment

23 Concern about the impact of the low-emissions transition on Aotearoa, the economy and the wellbeing of people, was evident in many submissions. This included the consequences of action, of inaction, and of different policy approaches.

24 Those who fully opposed the draft advice were predominantly concerned about the economic costs for Aotearoa and how those costs would be distributed. This includes approximately 6,000 template submissions from one organisation that were in opposition to the Commission's draft advice.

25 Other submitters who opposed action said this was because they believe action in Aotearoa will not make a difference to the global climate. Others supported climate action, but raised concerns about the potential economic impacts for certain people, communities, sectors or businesses.

26 There were divergent views on the cost of the transition across submitters. This – in general – saw either a preference for strong action regardless of cost, or a preference for only taking action if it would incur no or minimal costs.

27 There was commentary throughout consultation and through some submissions about the estimated impacts of emissions budgets on the level of GDP in our advice. Some submitters expressed surprise about this figure, asked questions about how credible it was, and whether the modelling we used to reach this estimate was fit for purpose.

28 When discussing the cost and impact of the transition to a low-emissions Aotearoa, a number of submitters pointed to the co-benefits of climate action and suggested these needed to be weighed against costs.

29 Improved public health and reduced healthcare costs from plant-based diets, active transport, more energy-efficient and warmer housing, and reduced air pollution were co-benefits commonly highlighted by submitters. Others stressed benefits to the environment including cleaner waterways and increased and protected biodiversity.

30 Some submitters mentioned the need to support workers impacted by the transition to re-train, especially people on low incomes and working in high-emitting industries. Some businesses also emphasised how critical the education system will be in setting workers up with the skills needed in emerging and growing low-emissions industries.

- ³¹ Some submitters argued for more focus on consumption-based emissions over production-based emissions, also known as ‘whole-of-life’ embodied carbon to include emissions from mining, production, transportation and disposal. This also came through strongly in submissions on buildings, with people saying buildings should be constructed using designs and products that lower emissions.
- ³² Through our engagements, we heard from some that we should be considering cross-cutting themes more closely and thinking more broadly than climate change. Some submitters expressed a strong preference for us to drive a more coordinated approach to big issues like tourism, biodiversity, or how we plan and build cities.

How we responded:

We have re-examined our cost assessments. We have rerun our models and carried out additional sensitivity analysis to further understand the modelled cost of GDP. We have increased the coverage and emphasis on the co-benefits of climate change action and emphasised that GDP does not measure all of these costs and benefits. We have included an additional chapter that provides more detail on the distributional impacts of the climate change transition, increasing our emphasis on the need for education and skills to help with a fair and equitable transition.

We have also increased our emphasis on the cross-cutting themes, elevating recommendations on urban form and function, the circular economy, and the bioeconomy to sit in a chapter focused on cross-cutting policy. Recommendations in these areas have been reconsidered and revised in light of new information.

Equity and fairness

- ³³ A common thread through submissions was fairness – climate action or inaction should not entrench inequity or disadvantage some groups of society, or be at the expense of people’s economic, social, and cultural wellbeing. We heard support for a just transition. This is a transition that is equitable, fair, and inclusive. People said that the cost of the transition should fall on industries most responsible and not harm low-income communities.
- ³⁴ Submitters called for the Government to uphold its commitments and obligations under Te Tiriti o Waitangi/The Treaty of Waitangi in its response to climate change. Both Māori and non-Māori told us that all government action to address climate change should be underpinned by Te Tiriti o Waitangi/The Treaty of Waitangi and its principles of partnership, participation, protection, and equity.
- ³⁵ We heard that if climate action fails to comply with Te Tiriti o Waitangi/The Treaty of Waitangi and te ao Māori perspectives, Iwi/Māori will be further disadvantaged, and Aotearoa will fail to achieve an equitable transition to a low-emissions economy.
- ³⁶ Some submissions talked about global equity: the responsibility of richer countries such as Aotearoa towards poorer countries that are inequitably disadvantaged by climate change. Many said it was important for Aotearoa to show leadership for and support Pacific neighbours.
- ³⁷ We heard often through engagement and submissions about intergenerational fairness. A theme that emerged was that it would not be fair to leave the costs of climate change to young people and future generations.

³⁸ Submitters talked about socio-economic equity. Particular groups mentioned included Iwi/Māori, Pasifika, women, the elderly, people with disabilities, young people, and people on low incomes, living in poverty or in rural areas. We heard that we need to support people through the transition, particularly for affected workers and communities. Many noted that some groups would need extra support such as subsidies for EVs, public transport, sustainable housing materials and insulation; or different services for elderly and people with disabilities who cannot easily get around on public transport.

How have we responded:

We have carefully considered intergenerational equity, and surmise that the budgets we have proposed strike a fair intergenerational balance that would leave future generations with a country that is both low emissions and thriving.

We have added a chapter focused on policy direction for an equitable transition for Iwi/Māori. We have suggested in our final advice that transition planning is used more widely, particularly for different industries. This recognises how industry and regional economies are connected. We have strengthened our advice to reflect feedback on how important education and skills are in the transition to a low-emissions Aotearoa.

We heard often through consultation and submissions that we needed to recommend specific policies to address impact on people. We have been clearer that the Commission's role is to set the direction of policy, not develop specific policies themselves.

Ambition and pace of change

³⁹ Through submissions, we heard frustration from people who felt the Commission had been too cautious in our draft advice and wanted quicker and stronger action.

⁴⁰ Some submitters pointed out specific areas where they believed more ambition was achievable and affordable. This included:

- Increasing ambition for heavy freight
- Increasing ambition for low-emissions aircraft
- Being more ambitious around increasing walking, cycling, and public transport
- Higher rates of land use change and adoption of alternative agricultural production systems, like regenerative farming
- Reducing waste emissions through greater use of gas capture systems at landfills.

⁴¹ People suggested that starting now would save money later. They wanted immediate action to replace high-emissions infrastructure, shift towards low-emissions transport options, and plant and preserve native forests. They said inaction now would lead to higher costs later to deal with the same problem.

⁴² Many pointed out a responsibility to make changes now to lessen the burden on future generations. Equity for future generations came through in submissions from a broad range of groups. In addition, younger submitters expressed feelings that older generations had already burdened them with costs, and that these should not be added to in the future.

- ⁴³ Even with ambitious action now, people pointed to debts – financial and otherwise – that unborn generations would carry because of climate change: more storms, floods and other extreme weather, impacts on food and water supplies, loss and damage to housing and community infrastructure. Many said those who had historically benefited from earth’s resources and contributed to climate change should be the ones to pay for climate action.
- ⁴⁴ We also heard from those who thought that the pace we were suggesting was too swift, and that the recommendations in our draft advice went too far, too fast. We heard concerns about the ability of existing infrastructure to support the changes we were suggesting – particularly in agriculture and transport.
- ⁴⁵ Concern about the ability of the national grid to support rapid electrification came through in submissions. Concerns about our ability to import enough electric vehicles to meet the numbers suggested in our advice surfaced in our engagement with some stakeholders, and also appeared in submissions.
- ⁴⁶ Regarding agriculture, we heard that while there was support for lowering emissions, the reduction in stock numbers combined with increases in efficiency noted in our draft advice were not possible, as the agricultural sector in Aotearoa is already highly efficient.

How we responded:

We relooked at the evidence around what pace is possible in terms of technological and behavioural change. In some cases, we reduced the ambition or pace of our assumptions, for example the number of used EVs available in the early years or efficiency improvements on sheep and beef farms. In other cases, we increased the pace, for example the use of low-emissions fuels in heavy freight and the increase in gas capture systems for landfills.

The details of how we changed our assumptions are laid out in Table 7.3 in Chapter 7. The real-world opportunities and constraints to change that were highlighted through the submissions process have been reflected in *Chapter 7: Demonstrating emissions budgets are achievable*.

We made sure we were as ambitious as possible in each sector, while still ensuring the options were technically feasible and economically affordable. We rechecked the paths that would deliver our budgets would also put us on track to meet the 2050 emissions reduction targets (2050 targets). Overall, this added up to a similar level of ambition to our *2021 Draft Advice for Consultation*.

The role of government

- ⁴⁷ The coordination and effectiveness of the government approach to COVID-19 came through as a theme in submissions, with the response being seen as an example of what can be achieved when there is strong government leadership and investment. Submitters talked about the opportunity to take the same ‘go hard and go early’ approach to climate change.
- ⁴⁸ We heard that any government action to address climate change should be underpinned by Te Tiriti o Waitangi/The Treaty of Waitangi and give effect to the principles of partnership, participation, protection, and equity. We also heard very clearly that business, industry, local government, and community expect to co-design a transition alongside government to ensure the transition reflects their lived experience and their needs.

- ⁴⁹ People were clear that if they were part of designing the transformation to a low-emissions future, it would become something they can support. The business sector was particularly keen to partner with government and saw itself as a key player in the country's work to reduce emissions. The idea of a Citizen's Assembly was suggested as an option for bringing in diverse voices that represented the people of Aotearoa.
- ⁵⁰ We heard concern that a lack of cross-party support in Parliament could derail emissions reductions, particularly if there was no agreement on the emissions budget numbers.
- ⁵¹ To be able to innovate and invest, respondents said they needed to know that decisions and legislation would not change with every election cycle. This was a strong theme that came through in our engagements with business and industry during consultation. These groups highlighted the need for certainty across the next decade so that they could plan accordingly, setting the foundation for further change and investing in the infrastructure needed.
- ⁵² Some submitters called for government to rely on the market to reduce emissions, meet the country's 2050 targets through a strengthened New Zealand Emissions Trading Scheme (NZ ETS) and avoid any further policy intervention. However, we heard from others that addressing pricing barriers, using emissions pricing to drive choices, and investing in innovation were important policy interventions.

How we responded:

We have strengthened our recommendation for climate considerations to be included in all government decision making. Many submitters said we need to move beyond just including climate considerations, and that we need to state this should be adequately resourced, as well as included. This has been included where appropriate. We have also emphasised the need for collaboration and partnership with business and industry in many of our recommendations. This recognises how crucial these groups are in the transition.

We more strongly emphasised the importance of the NZ ETS in driving gross emissions reductions. We included more of the rationale and economic thinking that builds the case for policies alongside the NZ ETS. There is a strong body of work internationally which demonstrates that policies to remove barriers and support innovation are needed alongside pricing schemes.

The policy recommendations in this advice are now more clearly targeted towards the policy direction for the emissions reduction plan, and the types of policies the government should commit to in that plan.

In our final advice we have explained more clearly the frameworks we have used to arrive at our policy direction for the Government and how we have applied them. We have also more clearly explained what problems in the market are hindering progress and the types of policies that are needed to fix them. Government will need to do the detailed work to put these types of policies in place.

We have included more detail around the purpose of progress indicators and how we anticipate them being created and used.

Perspectives of tangata whenua

- ⁵³ In addition to meeting kanohi kitea with Iwi/Māori we received written submissions and surveys from Māori through our 100 Coastie Voices campaign.
- ⁵⁴ While there was overall support for addressing climate change challenges, Iwi/Māori submitters raised concerns that Māori would be disproportionately impacted by climate action if the Government does not uphold its commitments and obligations to Te Tiriti o Waitangi/The Treaty of Waitangi and the Crown-Māori partnership in its response to climate change.
- ⁵⁵ Māori and non-Māori were unified in their view that emissions reduction plans must be firmly rooted in the principles of partnership, participation, protection, and equity.
- ⁵⁶ Submitters talked about the need to recognise legacy issues, the potential to compound impacts of managing Māori collectively-owned land, and the importance of ensuring Iwi/Māori are adequately resourced to participate in an equitable transition.

How we responded:

We have included a new chapter in our final advice that highlights and addresses the key concerns raised by Iwi/Māori submissions. This new chapter outlines the key concerns and issues raised by tangata whenua through the consultation process. We have also emphasised the role of government to uphold Te Tiriti o Waitangi/The Treaty of Waitangi in a way that addresses climate change throughout the report.

Our final recommendations, throughout the advice, have been strengthened to assist government to support the Crown-Māori relationship by working closely with Iwi/Māori, and to enable an equitable transition by upholding Te Tiriti o Waitangi/The Treaty of Waitangi.

The role of forests and carbon dioxide removals

- ⁵⁷ Through our engagements during consultation, we heard broad acknowledgement that people do not want to continue using forests as the primary way to meet targets. We also heard about the wider benefits forests can deliver.
- ⁵⁸ Through submissions, we received positive support for establishing new native forests, and a number of submitters wanted to see more effort to protect carbon stocks in existing native forests. Conversely, some submitters disagreed with our draft advice shifting away from a focus on forestry to achieve our targets, and thought that fast-growing exotic species and using pines as nurse crops for natives have an important role to play.
- ⁵⁹ At the same time, we heard from submitters who were concerned about the potential impact on rural communities of new large-scale exotic forests, particularly those planted solely for carbon.

How we responded:

We maintained the principle that we need to decarbonise at source and to expand and protect native forests to create an enduring carbon sink.

While fast-growing exotic species have a role to play, we are clear that they cannot be used in place of reducing emissions. We looked more closely at our assumptions around native forests to make sure what we were proposing was feasible. We concluded it was, but that it would require a strong commitment, and policies, from the Government to support this happening. This includes a new recommendation for integrated pest control.

We also heard that submitters supported our advice on wetlands and peat soils, and we have strengthened our advice in this area.

We also increased our emphasis on the important role of the bioeconomy. We provided more detail on available biomass feedstocks and how this can best be used to reduce emissions across multiple sectors.

Agriculture

- ⁶⁰ Submissions on agriculture were diverse. Some submitters said stronger action is needed to lower emissions in the sector and, at the other end of the spectrum, others said agriculture should not be part of the Commission's recommendations at all.
- ⁶¹ One of the most common themes in submissions on agriculture was that faster action and more ambition for reducing agricultural emissions is needed, but that providing adequate support for farmers to transition will be crucial.
- ⁶² We heard from people who wanted an end to land conversions to dairy farming, and controls on the use of synthetic nitrogen fertiliser and feed such as palm kernel extract.
- ⁶³ We heard calls to support farmers to reduce on-farm emissions through management practices, and to help them shift to new farming technologies, more regenerative farming, organic farming and 'nature-based' solutions, including soil carbon sequestration. People wanted the Government to invest in rural digital connectivity, research and into technology that can reduce agricultural emissions.
- ⁶⁴ Submissions on the role of the primary sector climate action partnership He Waka Eke Noa were divergent, with some people strongly supportive and others sceptical of its voluntary nature.
- ⁶⁵ We heard strongly through engagements and submissions that our assumptions underpinning how much agricultural emissions could be reduced were overly optimistic.
- ⁶⁶ We heard from people that agriculture underpins the country's export economy and that agricultural emissions in Aotearoa are low, compared to other nations producing the same products - if Aotearoa produces less meat and dairy, higher emitters may step into the gap to produce more, with a negative overall impact for climate.

How we responded:

After re-examining the evidence, we adjusted our assumptions around how much emissions can be reduced currently through on-farm improvements. We now assume that it will be harder to achieve agricultural emissions reductions. We also tested paths with higher rates of land-use change to horticulture. Details of these assumptions can be found in *Chapter 7: Demonstrating emissions budgets are achievable*.

We considered the options around input controls on fertilizer, stocking rates, feed and land conversion to remove barriers. We have emphasised that a suite of policies – including pricing, extension services, and research and development – will be required to reduce emissions as set out in the Act.

We also explained more clearly the Commission’s upcoming role as set out in the Act in assessing the progress of the agricultural sector towards a pricing mechanism. The Commission can better assess what complementary policies might be needed, once it sees what that pricing mechanism could look like.

Waste

- ⁶⁷ Submissions on waste expressed that the approach set out in our *2021 Draft Advice for Consultation* was broadly on the right track. Submitters were positive to see the Commission endorse strong action to tackle the waste problem in Aotearoa. There were some submissions that called for more specific, directive and ambitious policy measures, and a few that opposed any direct measures on waste and expressed a view that waste emissions are best reduced through the NZ ETS.
- ⁶⁸ The Commission’s recommendation to reduce waste generated at source was broadly supported. The recommendation to extend product stewardship was also well received, with suggestions made as to what additional waste streams could be placed under product stewardship. Some submitters also called for the timeframes for product stewardship to be accelerated.
- ⁶⁹ There was less consensus on the issue of increasing waste recovery from landfill with some submitters wanting more aggressive targets to increase waste recovery and some submitters being concerned that more aggressive targets would create more transport emissions than it saved from landfill.
- ⁷⁰ Some submitters wanted various waste recovery options prioritised, with calls for more emphasis on waste to energy through options such as anaerobic digestors and more emphasis on composting.
- ⁷¹ Many supported the Commission’s call to extend and improve landfill gas capture, although some were concerned about the potential for the focus on improving landfill gas capture to distract from waste reduction and recovery.

How we responded:

We have increased and accelerated the ambition in our waste recommendations as a result of the themes and evidence gathered through consultation.

We have strengthened what we are recommending around reducing waste generation, increasing investment in resource recovery, and increasing landfill gas capture. The recommendations also have a focus around data collection in response to submissions feedback, which highlighted this gap.

We have also elevated the circular economy recommendation into a separate multi-sector recommendation. This is covered with more detail in *Chapter 8: Reducing emissions from waste* and *Chapter 19: Direction of policy across Aotearoa* of the *2021 Supporting Evidence*.

Energy, industry and buildings

- ⁷² Through consultation and submissions, we heard broad support for our recommendation that the Government develop a coordinated energy strategy, and that industry stakeholders are keen to be involved in designing this.
- ⁷³ We heard from many submitters about the proposed recommendation to phase out new connections to fossil or natural gas and LPG in buildings after 2025 and phase out use of these fossil gasses in buildings by 2050.
- ⁷⁴ We heard concerns about the need to maintain access to fossil gas for homes that are off-grid, or where it is used as a backup in emergencies. We also heard concern around the future of businesses that install fossil gas or rely heavily on it, especially restaurants – and for the people they employ. We heard that the impacts of large changes in fossil gas supply and demand need to be well thought out to ensure a low-emissions energy system is also reliable and affordable.
- ⁷⁵ Many submitters supported the 2050 target for phasing out fossil gas in buildings but were concerned the 2025 timeline for ending new connections was too soon. Some submitters called for phasing out fossil gas in buildings as early as 2022.
- ⁷⁶ Energy efficiency, particularly for buildings, was suggested as a quick win for reducing emissions and improving health outcomes. Submitters expressed a view that Aotearoa needs better, healthier homes and workplaces that are more energy efficient, and that buildings should be constructed using designs and products that lower emissions.
- ⁷⁷ There was widespread support for ending the use of coal to generate electricity and fire boilers. Some submitters wanted an end to the use of coal as soon as possible. Some highlighted that our assumptions around the rate of switching out these boilers was ambitious but achievable.
- ⁷⁸ Some were concerned that our modelled electricity prices were too low in the near term and did not reflect market conditions at the time of writing. There was also concern for the impact on electricity prices as a result of going to 100% renewable electricity, but widespread support for shifting to a renewable energy target.

How we responded:

We reiterated the importance of an energy strategy to decarbonise the energy system in a way that ensures access to affordable, secure, low-emissions electricity.

We re-ran our electricity model with new assumptions to check our electricity price results. We tested some additional scenarios and included these results in the report.

We re-checked our assumptions around the costs of new fossil gas connections. After reviewing the evidence, we still concluded that the continued expansion of the network for fossil gas was not warranted. We have acknowledged that low-emissions gases, such as hydrogen and biogas, may play a useful role in reducing emissions in the future. We have also recommended more work is needed to manage the diminishing role of fossil gas across the energy system and recognised that stakeholders want more input into how this will be achieved.

We further emphasised the importance of low-emissions buildings, both in terms of energy efficiency and embodied emissions.

We refined our assumptions around some of the larger industrial facilities and undertook sensitivity analysis as a robustness check. We call for a plan to decarbonise the industrial sector and have made clearer the need to identify and decarbonise industry that is strategically important to the Aotearoa economy.

Transport

- ⁷⁹ A large number of submissions focused on transport. The relative merits of transitioning from internal combustion engine (ICE) vehicles to electric vehicles (EVs) was a dominant theme. This often came with a call to put more emphasis on public transport and active transport.
- ⁸⁰ There was general support for the roll out of EVs, with some people wanting this to be accelerated, however, we also heard concerns that focusing on EVs creates new problems. This includes the need for charging infrastructure and the potential inability of the grid to meet EV demand, equity issues around the cost of EVs, and the social and environmental impacts of EVs and production of EV batteries. There were concerns around the short-term supply of EVs in a global market.
- ⁸¹ Some people thought emissions efficiency standards for ICE vehicles should be more demanding and introduced sooner while the supply of EVs increases. Others from the motor vehicle industry strongly supported the proposed emissions efficiency standard timing in our draft advice.
- ⁸² Early in our consultation, feedback from stakeholders identified concerns about the Commission's perceived lack of ambition for active transport. People indicated that more aspirational targets were being set through local government for regional public and active transport use.
- ⁸³ Many submitters echoed this and wanted less focus on cars and roads in favour of more public transport, cycling, and walking. They pointed to the co-benefits of public transport and active transport, such as savings on infrastructure and improved physical and mental health.
- ⁸⁴ We also heard from submitters about how important design and urban form are for driving changes in how, and how often, people travel. We have moved our recommendations around urban form and function to the multi-sector part of our final advice - recognising the importance urban form has at a system wide level.
- ⁸⁵ We also heard submitters ask us to further consider the role of international aviation and shipping in our advice on reducing transport emissions.

How we responded:

Our final advice places more emphasis on shifting the way we travel and supporting better infrastructure for walking and cycling. It places less emphasis on private vehicle use, although accelerating EV uptake remains key to achieving our emissions budgets.

In response to what we heard through submissions, we rechecked our assumptions against the targets being set by local government, and found that they were largely consistent. We have disaggregated how we present the public and active transport assumptions so that the four largest regions, which include the largest cities, have tailored assumptions. Public and active transport assumptions were updated and aligned with regional plans, where possible. Cycling assumptions were made more ambitious. Public and active transport assumptions have been set out in *Chapter 7: Demonstrating emissions budgets are achievable*.

We revised the assumptions around EV uptake, to reflect information provided through submissions around the likelihood of a slower uptake in the short term, and included more ambitious assumptions around ICE vehicle efficiency, heavy transport, and low-emissions aircraft. We also undertook sensitivity analysis around the cost of new EVs.

We significantly increased the amount of biofuels we assumed, and have assumed electrification of some short distance flights. We have taken a more holistic approach to heavy transport and freight that also considers efficiency and shifting to lower-emissions modes such as shipping and rail, rather than solely focusing on increasing the uptake of low-carbon fuels.

NDC and compatibility with the global 1.5°C effort

- ⁸⁶ There was broad support for recognising in our *2021 Draft Advice for Consultation*, that the Nationally Determined Contribution (NDC) is not compatible with the global efforts to limit warming to 1.5°C above pre-industrial temperatures (the global 1.5°C effort). A recurrent theme from submitters was the need for the NDC to be a 'fair share' target and represent the obligation Aotearoa has as a developed country to do more.
- ⁸⁷ Some submitters wanted us to go further and provide recommendations on what the revised NDC should look like.
- ⁸⁸ Many were opposed to the use of offshore mitigation, either wanting none to be included or for its use to be minimised, because of concerns around it delaying action within Aotearoa and doubts about its legitimacy.
- ⁸⁹ A small number of submitters engaged on the approach taken to assess compatibility with contributing to the global effort. Some submitters also thought that the approach used to account for forests in targets is misleading.

How we responded:

We have added a chapter in our final advice that looks specifically at the questions that were raised during consultation about the contribution Aotearoa makes to the global 1.5°C effort. We have re-examined the rules for accounting for targets and forests, and still conclude that they are appropriate for Aotearoa.

We have looked at the implications of meeting the NDC with domestic action alone, with no offshore purchasing, and concluded that the pace of change required to do so would have substantial impacts on many people.

After considering the feedback from submitters on the need for us to provide recommendations on what a revised NDC should look like, we still maintained our view that this is a political and ethical question. Elected representatives need to weigh up the relative importance of factors beyond compatibility with contributing global efforts to limit warming to 1.5°C. These include the cost Aotearoa is willing to bear, social and economic impacts, international expectations and reputation, relative comfort with climate risk, and the balance of how much is done in Aotearoa versus how much is done internationally.

Changing behaviour

- ⁹⁰ Submitters discussed the changes to individual, collective and business behaviour that will be needed, and the role of government in enabling behaviour change. They stressed it was not up to individuals to drive the transition, and government needed to create an environment where the low-emissions choice is the easiest and default choice.
- ⁹¹ Again, submitters brought up the way the 'team of five million' responded to the COVID-19 pandemic. Many people said they wanted to see the same sort of political leadership, community education, and cooperation for climate action.
- ⁹² We heard calls for community education and engagement in schools and across all sectors to increase understanding of climate science, the impacts of climate change, and what people can do. People wanted to see climate change education made compulsory.
- ⁹³ Others said education alone is not enough, and highlighted the importance of investing in infrastructure to support behaviour change. The message was to create better infrastructure for things like EV charging and public transport, recycling and composting, then help people understand how important it is.

How we responded:

As a result of what we have heard through consultation, we have been more specific in our recommendation on behaviour change. It has been amended to state that Government should establish a dedicated fund for behaviour change initiatives and nominate a lead agency.

Lack of clarity in some of our recommendations

⁹⁴ A number of submissions included feedback on recommendations that were not contained in our draft advice, or misinterpreted our recommendations. In particular, the following misconceptions have come through consistently in consultation:

- **Commission setting emissions targets:** some submitters called for the Commission to strengthen emissions reduction targets. Parliament set the 2050 targets in 2019 by passing the Climate Change Response (Zero Carbon) Amendment Act - which also led to the Commission's establishment. Our current role is not to advise on the 2050 targets, but to advise on how to achieve the 2050 targets that have been legislated.
- **Our advice as policy, or a central plan:** some submitters confused the Commission's advice with specific policies or plans. Some thought our advice was a 'central plan'. The Commission does not set policy, develop law, or draft the emissions reduction plan, but advises on policy direction.
- **Recommending a ban on fossil gas:** while our draft advice proposed a ban on new fossil gas connections for buildings, some submitters interpreted this as a 'ban' on fossil gas and LPG. Many submitters were concerned the advice would mean a 'ban on gas barbecues' and strongly opposed that. No recommendations were made about banning fossil gas barbecues.
- **For agriculture, mandatory livestock rate reduction targets/individual targets:** some submitters were concerned that discussion of reducing livestock rates was a mandatory target being recommended in our advice, or that it was a target that would be applied to individual farms. No recommendations were made about individual farms or animal numbers.
- **'Our path':** some submitters read our path as either the only trajectory for reducing emissions in Aotearoa, or as a way of setting sector targets or budgets. As there are many potential paths to reach budgets and targets, we have renamed the path as the 'demonstration path' and included alternative paths.

Feedback on what was missing

⁹⁵ Through our conversations during consultation and submissions received, people identified areas where they would like the Commission to put more attention.

⁹⁶ Themes included the emissions sources and sinks associated with oceans, wetlands, and biodiversity. There was also strong interest in consumption-based emissions accounting, particularly for buildings and EVs, and reducing consumption as a way to reduce emissions. People wanted to see more investment in innovation through supporting research and development that is specific to Aotearoa.

How we responded:

We have increased our emphasis on the importance of innovation and now have a specific recommendation.

We were clearer in our recommendation on low-emissions buildings around the importance of reducing embodied emissions. We undertook further analysis and added additional information on the environmental costs and benefits of EVs and their supply chains. We have added recommendations on avoiding further degradation of wetlands and peatlands to stop their loss of carbon.

We note the increasing discussion on oceans. However, as the evidence base is still developing, robust accounting for ocean sinks is not yet possible.

While we have not been in a position to expand our advice to include all of these areas, some of them have been addressed in our supporting evidence, and others provide a useful context for us as we consider our future work programme.

The Commission's role

- 97 We acknowledge that sometimes the wide range of views we have received are in conflict with one another. Our independent advice, while supported by evidence, must always involve judgement by our Commissioners trading off the different things the Act requires us to have regard to.
- 98 The relationship between the Crown and Iwi/Māori, the impact on current and future generations, land-use change, and the cost of transition are just some of the many things that must all be taken into account.
- 99 Some submissions showed people have interpreted the role of the Commission and our advice in different ways. This is understandable as the Government established the Commission relatively recently, in November 2019. In the coming months we will do more work to explain our role.
- 100 Independent of government, the Commission's role is to provide impartial advice, and to monitor and hold the Government to account on climate action. Government's role is to make decisions and put the policies in place on the back of those recommendations.
- 101 This report provides our final advice on the emissions budgets for Aotearoa out to 2035, and provides guidance on the direction of the emissions reduction plan – which includes recommendations on the types of policies the Government could develop to achieve the emissions budgets they will set.
- 102 Our independence means we are responsible for exercising judgement in making trade-offs when developing our advice, on the basis of the sound information we have.
- 103 The Government's role is to make decisions on the recommendations we make and determine the emissions budgets to give effect to those recommendations. There is much more work to be done by the elected leaders of Aotearoa and by government agencies.
- 104 By the end of this year, the Government is required to adopt emissions budgets and an emissions reduction plan.
- 105 Once the emissions budgets and emissions reduction plan have been set by the Government, the Commission has responsibility for monitoring the Government's progress and reporting on that progress to all New Zealanders.