

Call for evidence

We are calling for evidence on options available to reduce greenhouse gas emissions over the period 2022 to 2035.

Why are we doing this?

The Interim Climate Change Committee is the precursor to the proposed Climate Change Commission, expected to be established in late 2019 under the Zero Carbon Bill. The Bill provides a framework to help New Zealand deliver on the objectives of the Paris Agreement.

A key part of the proposed Commission's work will be to advise the Government on emissions budgets.

Emissions budgets set the total emissions of all greenhouse gases permitted in the relevant budget period. The Government will set emissions budgets based on the proposed Commission's advice.

Why are we doing this now?

We are running this call for evidence now as foundation work for the proposed Climate Change Commission to enable it to start work immediately as soon as it is set up.

It will help identify relevant information for developing these emissions budgets, and to maintain a broad, robust and transparent approach in developing the proposed Commission's evidence base.

We have been asked to do this through our [Terms of Reference](#). This work is also outlined in our letter to the Minister for Climate Change on 7 May 2019 [here](#).

What are we looking for?

We are looking for high-quality, credible, evidence that will support the proposed Commission's work on emissions budgets. This is likely to include knowledge and evidence of technologies and options to reduce emissions, and the economic, environmental, cultural and social impacts of them. We are not looking for personal views or opinions.

What if I have already made submissions on similar topics?

If you have already submitted evidence as part of consultation run by Government agencies, such as the Zero Carbon Bill or the Ministry of Transport's Clean Car Standard and Discount, then we are happy for you to point us to those submissions, noting the key information or material that relates to our call for evidence.

What will we do with the evidence we gather?

We will use this information to inform our initial work on emissions budgets and add to the evidence base the proposed Commission will draw upon.

Confidentiality and data protection

All or part of any written response (including the names of respondents) may be published on our website www.iccc.mfe.govt.nz. Unless you clearly specify otherwise, we will consider that you have consented to both your name and response being published.

Please be aware that any responses may be captured by the Official Information Act 1982. Please advise us if you have any objection to the release of any information contained in your response, including commercially sensitive information, and in particular which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, responses to this document under the Official Information Act.

The Privacy Act 1993 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Interim Climate Change Committee. It governs access by individuals to information about

themselves held by agencies. Any personal information you supply to the Committee in the course of making a response will be used by the Committee only in relation to the matters covered by this document. Please clearly indicate in your response if you do not wish your name to be included in any summary of responses that the Committee may publish.

Call for evidence: response form

We are looking for responses that are evidence-based, with data and references included where possible. Please limit your response to each question to a maximum of 400 words, plus links to supporting evidence, using the template provided. Please answer only those questions where you have particular expertise or experience.

We recommend that you refer to the Climate Change Response (Zero Carbon) Amendment Bill when considering your answers, which can be found [here](#).

If you have any questions about completing the call for evidence, please contact us via feedback@ICCC.mfe.govt.nz. Please include a contact number in case we need to talk to you about your query.

Please email your completed form by **12 noon, Friday 15 November 2019** to feedback@ICCC.mfe.govt.nz. We may follow up for more detail where appropriate.

Contact details

Name and/or organisation	Oliver Bruce,
Postal Address	
Telephone number	
Email address	

Submissions on similar topics

Please indicate any other submissions you have made on relevant topics, noting the particular material or information you think we should be aware of.
While I have not made any specific public submissions, my background is that I was originally in operations at Uber in Australia/NZ between 2015-2018 working on strategic projects in mobility-as-a-service and transport integrations. I left to set up the Micromobility Podcast and Conference series. The podcast has had 750,000+ downloads, and is listened to by operators, regulators and investors globally, while the conference

has become the industry standard event for micromobility vehicles/services in Europe and North America.

I am also the subject matter expert in the team at Beca on the NZTA research project 'Non-Traditional Modes of Travel', which was commissioned in response to the rise of e-scooters/micromobility to understand the safety and infrastructural implications of this new disruptive technology. The research is expected to be finalised in Q2/3 2020.

Commercially sensitive information

Do you have any objection to the release of any information contained in your response, including commercially sensitive information?

If yes, which part(s) do you consider should be withheld, together with the reason(s) for withholding this information.

Answer: No. All of this is publicly available information at time of submission, though there is further research underway that will supplement it that is not yet public.

Questions for consideration:

Section A The first three emissions budgets

Under the proposed Zero Carbon Bill, the proposed Commission will have to provide advice to government on the levels of emissions budgets over the coming decades.

Currently, the Zero Carbon Bill requires budgets to be set from 2022-2035 (three separate budgets covering 2022-2025, 2026-2030, and 2031-2035). When preparing this advice the proposed Commission will have to consider the implications of those budgets for meeting the 2050 target. The Commission will also need to consider the likely economic effects (positive and negative) of its advice.

Question 1:

In your area of expertise or experience, what are the specific proven and emerging options to reduce emissions to 2035? What are the likely costs, benefits and wider impacts of these options? Please provide evidence and/or data to support your assessment.

Answer:

Framing: The below data is specifically in the field of land transportation, and specifically within that, urban transportation. The opportunity is to encourage mode-shift across to new forms of lightweight electric vehicles (classified as [micromobility](#) - anything in weight from 5-500kgs).

Context: There is limited data on this emergent sector at this stage, but NZTA has currently commissioned a piece of research on 'Non traditional modes of Travel' which is due to be published in August 2020 which will examine the pipeline for these new types of 'micromobility' technologies such as electric bikes and scooters, likely rates of adoption and corresponding impacts on emissions.

The emergent options to reduce emissions through 2035

- More than 74% of Kiwi's live in urban areas.
- 56% of all commute trips (mode agnostic) are less than 5km, and it is likely even higher in cities (but not broken out in the data).
- Further, we suffer from some of the most congested cities in the ANZ region and have the highest levels of car ownership in the OECD largely due to our sparse built environment and lack of alternative transport options.
- Privately owned electric scooters and bikes have an emissions profile of around [1-3% of that of the standard VKT of a car on a well to wheel comparison](#).
- Even when full lifecycles are taken into account, there is also early independent research that suggests that with forthcoming improvements to shared systems, [these vehicles could be the cleanest option available to travel \(other than walking\) 96% of the time](#), and this is further backed up by industry commissioned research.
 - [Lime](#) showed that scooters **achieved modal share shift of up to 1.9% within the first 12 months of its launch in Paris**, driving down emissions by 340 tons due to reduced car travel.
 - Bird commissioned a [report from Carbone 4](#) entitled "The Role of e-scooters and Light Electric Vehicles in Decarbonizing Cities" in which **'the analysis found that biking and LEVs could feasibly account for around 21% of all trips in Paris, supporting an overall reduction of emissions from energy consumption of 68%'**, when paired with other shifts in transport policy.
- While these vehicles are still relatively nascent/small % mode share, [sales for ebikes/e-scooters are currently growing at 100% a year](#), most large cities in New Zealand are seeing double digit % growth of active modes (including electric scooters etc.) in the last two years. It is plausible that we could see a fleet of [700k+ vehicles like this by the mid-late 2020s that could account for +10% of urban travel VMT](#), while also enabling more use of public transport etc. If this growth was realised, it is plausible would substantially impact the emissions profile of short distance trips.

Question 2:

In your areas of expertise or experience, what actions or interventions may be required by 2035 to prepare for meeting the 2050 target set out in the Bill? Please provide evidence and/or data to support your assessment.

Answer:

- This would need to be further studied and is likely an output from the NZTA's 'Non-traditional modes of Travel', but the early indications are that there are a number of specific interventions that would support the growth of these modes:
 - [Better infrastructure to provide safety](#).
 - The likelihood is that this mode shift would be able to achieved with minimal additional cost to government beyond building better/more comprehensive bikelane infrastructure around New Zealand cities (that is already planned, but could be sped up)
 - Better tax treatment of these vehicle mode types and competing options that are highly polluting (ie. [no fringe benefit tax on employee parking which encourages car use](#) etc.)
 - Extension of the forthcoming feebate scheme to include lightweight electric vehicles such as scooters/ebikes.

Question 3:

In your areas of expertise or experience, what potential is there for changes in consumer, individual or household behaviour to deliver emissions reductions to 2035? Please provide evidence and/or data to support your assessment.

Answer:

- This would be driven by the adoption rates of these new vehicle types. This data will be an output from the NZTA's 'Non-traditional modes of Travel' publication, but the early indicative data is very supportive. In the 12 months since e-scooters were introduced to New Zealand, [20% of Christchurch residents have used an e-scooter, and 2% now own their own one](#), while in Paris, [e-scooters reached a modal share of 2%](#) within the first year of operation.

Question 4:

When advising on the first three emissions budgets and how to achieve the 2050 target, what do you think the proposed Commission should take into account when considering the balance between reducing greenhouse gas emissions and removing carbon dioxide from the atmosphere (including via forestry)?

Answer:

- No comment as it's not applicable to my area of expertise.

Question 5:

What circumstances and/or reasons do you think would justify permitting the use of offshore mitigation for meeting each of the first three emissions budgets? And if so, how could the proposed Commission determine an appropriate limit on their use?

Answer:

- No comment as it's not applicable to my area of expertise.

Section B Emissions reduction policies and interventions

The proposed Commission will also need to consider the types of policies required to achieve the budgets it proposes. This consideration should include:

- sector-specific policies (for example in transport or industrial heat) to reduce emissions and increase removals, and
- the interactions between sectors and the capability of those sectors to adapt to the effects of climate change.

Question 6:

What sector-specific policies do you think the proposed Commission should consider to help meet the first emissions budgets from 2022-35? What evidence is there to suggest they would be effective?

Answer:

Per above, the NZTA's 'Non-traditional modes of Travel' publication will make more full recommendations in this area, but there is clear evidence of policies that have worked outside New Zealand to drive a rapid and cost-effective mode share shift, including, but not limited to:

- [Better infrastructure to provide safety](#), with a particular focus around schools (to support school runs with children) and commuting corridors.
- Feebate schemes to 'micromobility' vehicles beyond simply standard automobiles.
- Increased caps for shared micromobility operators in cities around New Zealand, paired with adequate infrastructure.

Question 7:

What cross-sector policies do you think the proposed Commission should consider to help meet the first emissions budgets from 2022-35? What evidence is there to suggest they would be effective?

Answer:

The below are again based on clear evidence of policies that have worked outside New Zealand to drive a rapid and cost-effective mode share shift away from automobiles to alternative modes of transport:

- Remove discriminatory tax treatment of these vehicle mode types vs competing options that are highly polluting (ie. [no fringe benefit tax on employee parking which encourages car use](#), allow these vehicles to claim taxetc.)
- A removal of minimum car-parking requirements within all district plans to remove the market distortion of real estate for car-parking.
- Develop new data collection mechanisms so that electric bike/scooter use can be accurately captured by councils/government to understand use and be integrated into transport planning models. At the moment, the data is exceedingly patchy. The NZTA is making progress on this with the Urban Cycleway Counter programme (as can be [seen here for Wellington](#))
- Develop an integrated ticketing system that permits integration of shared micromobility fleet operators.
- Develop a 'Micromobility' stream in the National Land Transport Funding, initially as an experimental grant programme and then expanding into providing ongoing subsidies for operators in specific areas that drive transport outcomes (ie. for support for first/last mile trips etc.).

Question 8:

What policies (sector-specific or cross-sector) do you think are needed now to prepare for meeting budgets beyond 2035? What evidence supports your answer?

Answer:

- This is not yet clear. This would need to be further studied and is likely an inferrable output from the NZTA's 'Non-traditional modes of Travel' study.

The proposed Commission will need to consider the potential social, cultural, economic and environmental impacts of emission budgets on New Zealanders, including how any impacts may fall across regions and communities, and from generation to generation. Potential impacts may be either positive or negative.

Question 9:

What evidence do you think the proposed Commission should draw upon to assess the impacts of emissions budgets?

Answer:

- No comment as it's not applicable to my area of expertise.

Question 10:

What policies do you think the proposed Commission should consider to manage any impacts of meeting emissions budgets? Please provide evidence and/or data to support your assessment.

Answer:

- No comment as it's not applicable to my area of expertise.

Section D Other considerations, evidence or experience

Question 11:

Do you have any further evidence which you believe would support the future Commission's work on emissions budgets and emissions reduction policies and interventions?

Answer:

- Yes. I am working with a representative at the World Economic Forum who is also working on research into the emissions profile and potential of micromobility adoption. We are actively collaborating, however the findings will not be made available till next year.

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