

27 June 2022

Chair of the Environment Select Committee
Committee Secretariat
Environment Committee
Parliament Buildings
Wellington
en@parliament.govt.nz

Dear Ms. Sage,

FEEDBACK ON NEW ZEALAND'S FIRST EMISSION BUDGET AND EMISSIONS REDUCTION PLAN

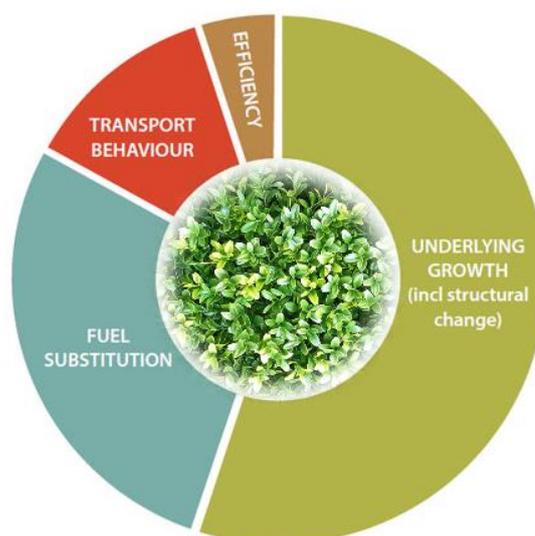
1. The BusinessNZ Energy Council (BEC) welcomes the opportunity to provide the Committee with feedback on New Zealand's first Emission Budgets and the Emissions Reduction Plan (ERP). The ERP is an important milestone helping New Zealanders to better understand how we can achieve carbon emission reductions. We were pleased to see many of our recommendations reflected in this plan.
2. We support the objective of transitioning New Zealand and the global economy to a net zero emissions future. Global emissions should be reduced, and business will play a significant role in achieving this aim. As a small nation, we must be careful with our resource allocation and need to focus on affordable pathways to achieve those emission reductions.
3. This letter and the attached document form our submission to the Committee. In this letter, BEC particularly would like to address two core questions the Committee has raised as part of the consultation process:
 - *"Is the emissions budget for 2022-25 achievable?"*
 - *"What additional actions or changes to the key actions in the Emissions Reduction Plan would make it more likely the budget was achieved?"*

RISK OF NOT ACHIEVING EMISSIONS REDUCTION BUDGET

4. Understanding the Government's core economic assumptions is critical to providing the Committee with constructive advice. However, there has been little impact analysis done on proposed actions and emissions (see for example p101 of the ERP where it states that *"Most of this additional mitigation comes from the energy and industry sector, with a moderate amount from transport. The impact of the actions set out in this chapter on emissions has not yet been quantified"*).
5. The 'technical information annex' consisting of 35 pages provides little indication of the underlying economic assumptions and detailed cost-benefit analysis that informed the emissions' budget and the likely impact of policies and measures, making it difficult to meaningfully comment. Instead, tables included refer to an estimate of anticipated reductions.
6. Therefore, we had urged the Ministry for the Environment (MfE) to provide us with the relevant underlying assumptions (data) that influenced the emissions' budget, requesting a similar degree of transparency as the Climate Change Commission's release of its modelling information.

7. Unfortunately, to date, the MfE has not provided any data. In the absence of further information, BEC primarily refers to its submission made to the draft ERP attached to this letter. Additionally, BEC would like to provide the Committee with recommendations to improve the information available that will inform policy and business decisions, and an outline of the risks of poor information and lack of transparency.
8. Business will play a significant role in achieving the suggested carbon emission reductions. Relying on businesses to make decisions in the face of incentives leaves the economy open to the risk that the carbon budgets will not be met.
9. Businesses need policy stability and predictability to make long-lived capital investments. There is a risk of emission reductions not being achieved if climate policy is unclear or changes from one extreme to another.
10. For over ten years, we have collaborated with businesses, academia, and government on a continuous basis to develop and improve the New Zealand Energy Scenarios – TIMES-NZ.¹ TIMES-NZ is a bottom-up model, customised to the New Zealand context, that identifies fuels and technologies that offer great potential to reduce emissions in an affordable, sustainable, and secure way out to 2060. It reflects supply and demand dynamics across the entire energy sector by inclusion of electricity generation and five end-use sectors: transport, industry, commercial, residential, and agriculture, forestry and fishing. The model is originally developed and used by the International Energy Agency (IEA) Energy Technology System Analysis Program.
11. How New Zealand might respond to climate change relative to the rest of the world is defined under Kea and Tūi:
 - **Kea (Cohesive)** represents a scenario where climate change is prioritised as the most pressing issue and New Zealand deliberately pursues cohesive ways to achieve a low-emissions economy.
 - **Tūi (Individualistic)** represents a scenario where climate change is an important issue to be addressed as one of many priorities, with most decisions being left up to individuals and market mechanisms.

Figure 1: Underlying factors influencing TIMES-NZ model output



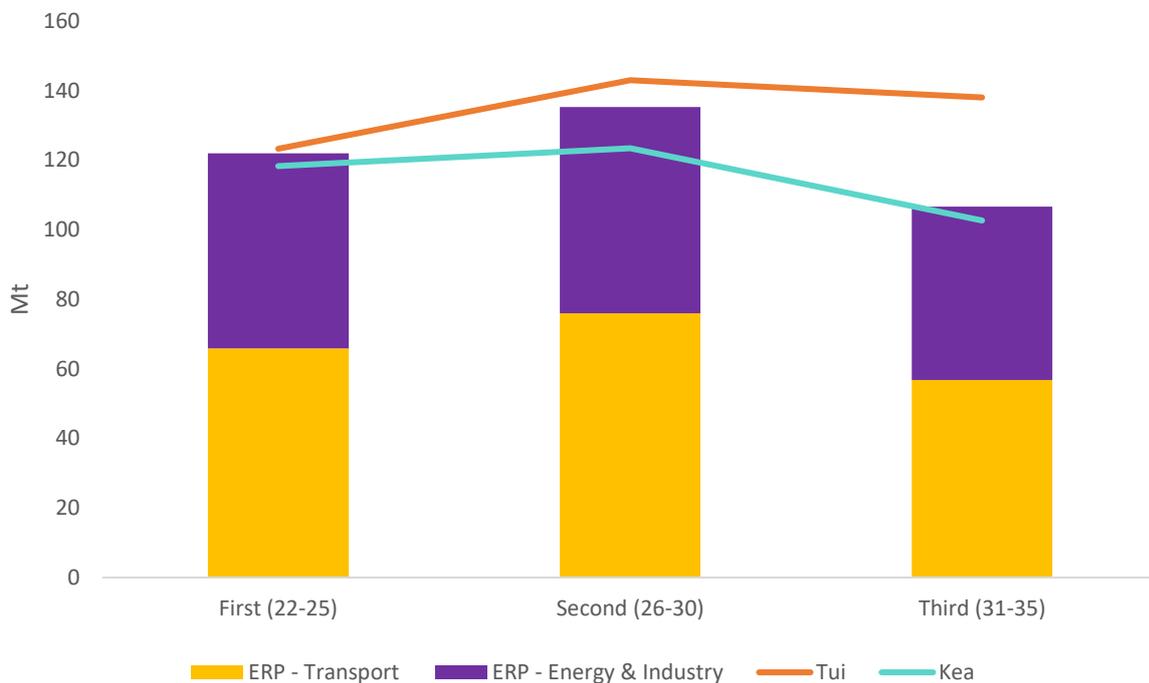
¹ Find all information here [TIMES | BEC Scenarios](#)

12. Our model shows that over 50% of carbon emission reductions is driven by underlying factors, such as economic growth, population growth, and structural shifts in the economy away from energy intensive industries. Fuel substitutions and behavior (particularly in transport) are also strong contributors to emission reductions in New Zealand. All those factors are highly uncertain, even more so in our current environment.
13. Assuming that this is similar in the model used by MfE to inform the ERP and emission budgets, there will be consequences for New Zealand if the suggested reductions aren't achieved. The ERP has been somewhat silent on how the government would respond should this occur. In other words, the more New Zealand relies on voluntary behavioral change, the more a plan has to factor in that future emissions reductions might not turn out as low as they were intended to.
14. The ERP should therefore, at least roughly, outline what the Government response will be should things turn out differently than expected. The current ERP does not outline its "plan B". For clarification, a plan B could be to plant more trees, CCUS, buy more international credits, strengthen incentives, or look at stronger policy measures.

POLICY IMPACT REINFORCES THE NEED FOR A PLAN B

15. While there is little to say about whether or not the emission budgets can be achieved (as underlying quantification was not available), they can nevertheless be compared to both, Kea (climate change is prioritized and the Government is more hands on) and Tūi (climate change is an important issue alongside others, with most decisions being left up to individuals and market mechanisms) at a high level (i.e., expected total emissions reductions in Transport and Energy & Industry).

Figure 2: ERP Emissions Budget vs Kea and Tūi



16. In the absence of further data from MfE, it is worth noting that Stuff recently asked the MfE for the five most effective policies over the next four years, shown in the table below. Those would lead to an estimated total emissions reduction of 8.93mt for the first budget period, assuming a high policy impact vs a total 3.94mt assuming low policy impact.

Table 1: Five most effective policies over the next four years

Increasing the price to pollute	Estimated savings: 0.94mt to 3.5mt
Agricultural research centre and wider education	Estimated savings: 0 to 2.33mt
New funding to switch out fossil-fuelled boilers	Estimated savings: 1.3mt
Biofuels mandate	Estimated savings: 1mt to 1.1mt
Existing funding to swap out fossil-fuelled boilers	Estimated savings: 0.7mt

17. In the interview with Stuff, MfE acknowledged that “*some policies in the plan will have a larger effect during future climate target periods, between 2026 and 2035. Other policies haven’t yet been through the modelling exercise.*”²

THREE KEY RECOMMENDATIONS

18. Given the urgency of the task ahead, we recommend putting together a plan B. If the Government has a plan B, it should provide more clarity, earlier rather than later, to give more stability and predictability, encouraging long-term capital investment decision-making.
19. Greater transparency and cost-benefit analysis are needed to better inform policy making. We therefore suggest strengthening the economic analysis skill within agencies.
20. The Government should work with the private sector and make good use of pre-existing, long-term, cross-sector modeling work to better inform policies needed to decarbonise the New Zealand economy (including transport, industrial, primary, commercial, and residential sectors). Using multiple scenarios will provide policy makers with greater insights on the effectiveness of policies regarding New Zealand’s journey to decarbonise its economy.
21. TIMES-NZ is one of those models that could be used to inform decision making. The most value to New Zealand will be gained by using such a model, moving boldly and smartly together to effectively engage with many diverse stakeholders about New Zealand transition.

Yours sincerely



Tina Schirr
Executive Director
BusinessNZ Energy Council

² [By the numbers: The Government's crunchiest carbon-cutting policies | Stuff.co.nz](https://www.stuff.co.nz/business/energy/123456789)