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Ministry of Transport
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BusinessNZ Energy Council (BEC) submission on the LEV consultation paper

1. The BusinessNZ Energy Council (the 'BEC') is pleased to have the opportunity to provide a submission to the Ministry of Transport (the 'MoT') on its consultation paper proposing a 'Clean Car Standard and Clean Car Discount', published on 9 July 2019.¹

Introduction

2. Transport emissions are around 20% of New Zealand's total GHG emissions. Road transport is the fastest growing source of emissions and studies undertaken by the Interim Climate Change Commission (the 'ICCC') and the Productivity Commission have shown that transport will be critical to achieving a low-emissions economy.
3. The BEC supports an effective and efficient decarbonisation of New Zealand's economy. Decarbonisation doesn't stop with transport and should not be looked in isolation from other sectors. It is important to look at the entire economy. The BEC supports an economy-wide carbon price as a first-best solution.
4. This submission focuses on a systemic approach, but also comments on the two specific proposals – to introduce a 'Clean Car Standard' and/or a 'Clean Car Discount' as contained in the consultation document.
5. Given the BEC's broad membership, our members have a range of views on the two options set out in the consultation paper. Some may provide their own separate submissions to the MoT on matters of concern or where the individual organisation has a particular expertise.

¹ Background information on the BusinessNZ Energy Council is attached in Appendix One.

A systemic approach – our first-best option

6. The future is uncertain, and we need look no further than to overseas experiences for lessons in what to avoid in New Zealand in terms of applying targets, policies, and interventions to only some parts of the energy supply chain. These lessons are illustrative of the results that are emerging from the modelling being undertaken by the BusinessNZ's Energy Council in its BEC2060 Energy Scenarios project.
7. The energy sector is becoming increasingly interconnected. We are already seeing the hallmarks of the connectivity between the natural gas and electricity markets. Now, as electric vehicles increase in number, we will see emerging connections between electricity markets and transport decisions. If hydrogen develops as a fuel, via electrolysis (an electricity-intensive process), the impact of electricity prices on the production of hydrogen will take on increasing significance. And hydrogen, if it emerges, is likely to form part of the transport network: more interconnections.
8. While it is tempting to isolate a part of the energy sector (e.g. transport) and apply targets, it is almost inevitable that this will affect other parts of the supply chain. As we cannot anticipate what these will be, any ripple effects considered inconsistent with future government aspirations will compel governments to intervene in these other sectors, to 'fix' such incentives and behaviours. This might lead to a nested web of interventions that is impossible to predict, and from which we may not be able to extract ourselves. One need only look at the electricity market of Ontario, Canada, for an example of the risks involved.²
9. The prospect of increasing complexity in energy markets, including transport, exemplifying the broader complexity of the desired economic transition, suggests caution in designing policy frameworks. Reliance should be primarily on policy instruments that act at the system-level (e.g. the carbon price), which then allow various markets within that system to collectively adapt to find the most efficient response. While governments can express aspirations for various parts of the system, any actions likely to change incentives in that part, in isolation, should be approached with extreme caution, and - at the very least - be subject to rigorous cost-benefit tests which consider in detail the consequential effects on other sectors.
10. The BEC2060 TIMES-NZ model is uniquely placed to assess the complex interactions in the New Zealand energy system. The project has generated a set of modelling results for two quite different stories about the future that are based around combinations of factors about which we are highly uncertain (for example, the price of carbon, and the extent to which government wishes to intervene in pursuit of emission reductions). How New Zealand responds to climate change relative to the rest of the world is one of these combinations. The purpose of our modelling and storytelling is to encourage the asking of the 'what-if' questions and to be open to alternative futures that might come to pass. This capability is critical to the development of resilient, durable long-term policy and investment decisions. The two stories are:
 - a. *Cohesive* – New Zealand is moving faster than the rest of the world when acting on climate change. The carbon price is \$10/tCO₂ higher than the global price. Governments act to encourage a faster transition to non-fossil fuelled energy sources in passenger and freight transport rather than relying solely on a carbon price and trends in vehicle manufacture. They use strong road pricing, environmental charges

² For more information on the Ontario market, see <https://www.fraserinstitute.org/studies/understanding-the-changes-in-ontarios-electricity-markets-and-their-effects> .

on fuel at the pump, environmental costs on the purchase price of the internal combustion engine (ICE) and, eventually, by 2040, a ban on the importation of ICE technology for light duty vehicles.

- b. *Individualistic* – New Zealand is moving more slowly than the rest of the world in acting on climate change. The carbon price is \$10/tCO₂ lower than the global price. There are incremental technology advances and cost reductions for alternately fuelled transport options. The government remains concerned about picking technology “winners” and therefore doesn’t push consumers and businesses to switch away from fossil fuelled transport options, preferring instead to allow individual preferences to dictate the pace of change and allow a diversity of options to come to the fore.

11. As shown in charts 1 and 2, whether we lead or lag the rest of the world in climate change ambition has implications for the modelled economic and emissions outcomes. The scenarios allow us to think critically about the differences between them, the drivers, the policy and investment levers required to achieve them, and the trade-offs, explicit or implied between them and their acceptability.

Chart 1 – Carbon Price Trajectories

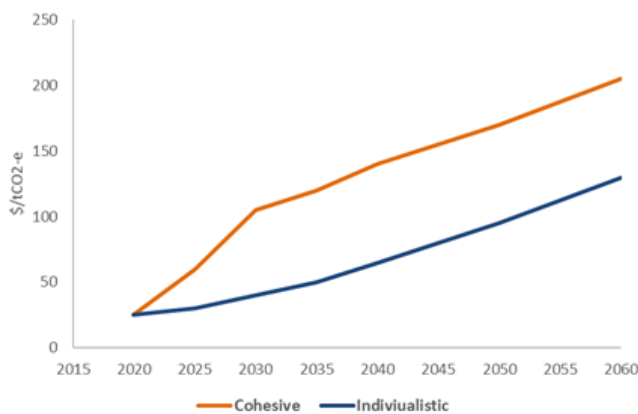


Chart 2 – Transport Sector Emissions

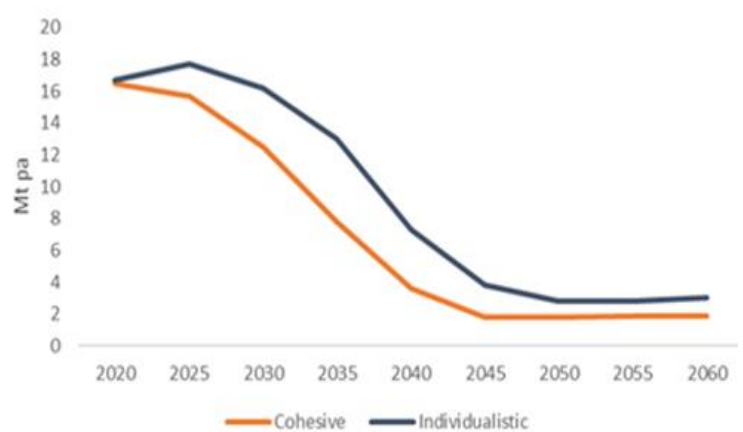
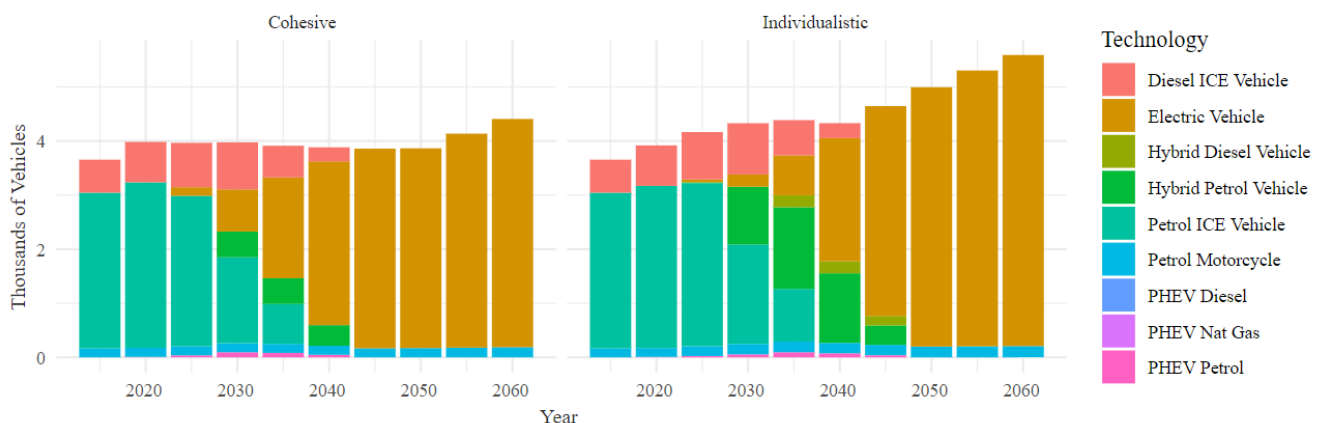
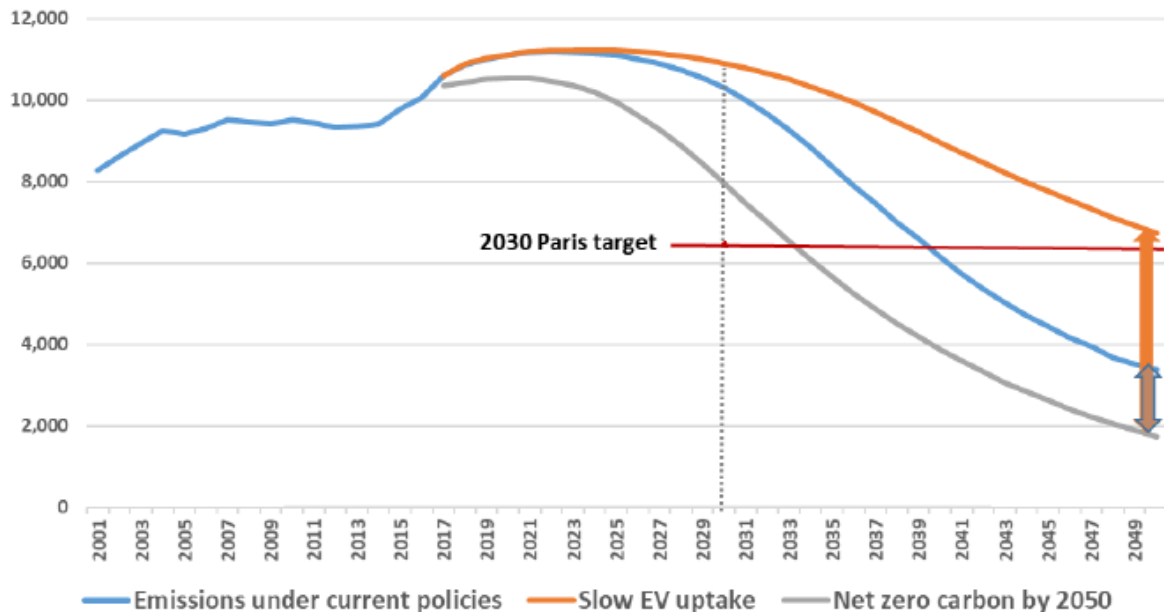


Chart 3 – Fleet numbers (light vehicle)



12. Chart 3 shows a transition to 100% electric of the light vehicle fleet will be complete in 2045 under Cohesive (\$150/tCO₂) and by 2050 in Individualistic (\$95/tCO₂).

Chart 4 – Greenhouse gas emissions (kilo tonnes CO²) from light vehicles



13. Chart 4 (page 8 of MoT’s consultation paper), model work undertaken by MoT, shows that neither its ‘emissions under the current policies’ nor ‘slow EV uptake’ scenarios will lead to the decarbonising of the light vehicle fleet by 2050. The MoT model assumes the carbon price will increase 5 \$/tonne CO₂ per year to reach about 185 \$/tonne CO₂ per year in 2050 in the ‘emissions under the current policies’ scenario, and 3 \$/tonne per year to about 120 \$/tonne CO₂ in 2050 in the ‘slow EV uptake’ scenario. The projected light vehicle GHG emissions are based on assumptions including vehicle fleet size, travel and future energy efficiency. The EV uptake projection is a key part of the modelling, including assumptions such as battery prices, supply constraints, fuel prices etc.
14. It is important, that we don’t overlook the macro-economic impacts. Comparing the MoT model result with the more conservative ‘individual’ scenario of the BEC2060 project, it is not clear why MoT’s results do not lead to a decarbonisation of the light vehicle fleet by 2050.
15. While it is tempting to look only at one part of the sector, the broader complexity of the desired economic transition suggests caution in designing policy frameworks. Reliance should be primarily on policy instruments that act at the system-level (e.g. the carbon price). The BEC2060 scenarios can help to better understand these interconnections. The emissions trading scheme will be the main tool used to drive the low emissions transition so that estimates of the pass-through costs at various prices of carbon can be made.
16. Consistent with the IPCC approach which recommended not only investigating the electricity sector but looking more widely to transport and process heat, we similarly believe it is important to source emission reductions from their most efficient location, wherever in the economy that may be.

Comments on the two specific proposals

17. As discussed above and in our submission to the Productivity Commission's low-emissions economy report³, while we agree with the challenges posed by transport sector emissions, we caution against the use of multiple and cumulative interventions without first implementing and assessing the impact of changes to the emissions trading scheme (ETS), before moving to other more aggressive interventions. For these reasons, combined with the significant uncertainty surrounding the nature and pace of the technologies, introducing the Clean Car Discount or Clean Car Standard is not our first best option.
18. However, we acknowledge it is debatable that a carbon price cannot, over time, deliver on the set emission reduction targets and there are legitimate arguments that the ETS doesn't do enough in the transport space. For example, the limited ETS impact on fuel cost, kiwis buying based on upfront costs rather than fuel costs and owning cars for a long time and EVs being the best available technology to reduce emissions.
19. Should the government consider that a market intervention is needed to bring forward the uptake of low emission vehicles then we consider the Clean Car Discount to be the preferred but second-best option.
20. The BEC would like to provide some more specific comments on the Clean Car Discount and Clean Car Standard.

Clean Car Discount

21. Under the proposed Clean Car Discount, consumers would either receive a discount or pay a fee, or avoid both, depending on the CO₂ emissions of the vehicle they are buying (page 26).
22. The BEC appreciates the fiscal neutrality of the proposed scheme as rebates would be paid from fees. However, we note that fiscal neutrality should not be the sole or primary criterion for success, rather a cost benefit analysis and incidence or distributional impact. We acknowledge that for many of our members, the prospect of a Clean Car Discount is for them fiscally and environmentally positive. As such they support this intervention.
23. The BEC also appreciates the idea that the emissions benchmark, fees and rebates will be reviewed annually (page 28). However, there needs to be a connection with the bigger picture. How is the proposed initiative part of a coherent approach to emissions reduction? If the price of carbon increases with time does this initiative become redundant, yet we continue to carry the cost of the institutional infrastructure supporting it? Piece-meal policy analysis needs to feature wider connections with the energy/economic system as a whole.⁴ It is important that the review aligns with the uptake of the carbon price under the ETS as well as with the five-yearly carbon budget review undertaken by the ICC. However, we also note that such an assessment will be complex as, again, carbon price increases won't necessarily show up as a reduction of emissions in the transport sector if there are other cheaper carbon emission reduction options elsewhere.

³ Submission to the Productivity Commission on its draft report entitled 'Low-emissions economy', dated April 2018, see https://www.bec.org.nz/_data/assets/pdf_file/0009/149589/Productivity-Commission-Climate-Change-Inquiry-Draft-Report-Submission-FINAL.pdf

⁴ For example, if prices go up then will consumers retain their old inefficient car, the impact on electricity prices with more EVs (we have benefit of renewables, what assumptions to make on retail electricity prices, what additional infrastructure will be needed), is there likely to be a problem with battery disposal and how will this be handled and the impact on the economics of existing infrastructure, etc.

24. Knowing how consumers will get their discounts and pay their fees is essential. Transparency is important for consumers to make informed decisions (page 30). Applying the discounts directly at the point of vehicle purchase, as proposed, is preferred. But how do we make sure that the system is robust? Despite, the proposal to display the discounts and fees on vehicles (page 26), how do we make sure that the prices for all cars will not simply go up?

Clean Car Standard

25. Under the current proposal (pages 10-11), vehicle suppliers would have to meet an emissions target of 105 grams of CO₂ per kilometre on average across their fleets by 2025. In 2018 the average emissions of light vehicles entering New Zealand was 180 grams of CO₂ per kilometre. We believe that the emissions target in the Clean Car Standard is too steep and too fast. Five years is not enough time to reach 105 grams.
26. The proposed mechanisms – banking, borrowing, and grouping – to make it easier for suppliers to meet their annual emissions targets, with penalties for suppliers exceeding their annual emissions targets, need more modelling to better understand their impact. There is a risk of penalties not meeting the target just being passed on to consumers. We are also unclear how the Clean Car Discount, if implemented, will not result in more emissions efficient vehicles being demanded, and therefore imported as a matter of course, without a Clean Car Standard.
27. We acknowledge that the Ministry's preliminary cost-benefit analysis of the proposed clean car standard indicates a slightly higher benefit-cost ratio of 3:1 compared with the 2.6:1 ratio of the Clean Car Discount but both, the Clean Car Standard and the Clean Car Discount will stimulate consumer behaviour. However, the design of the Clean Car Standard is complex and getting it right is more important than doing it fast.

Summary

28. We prefer an economy wide solution. However, we can see there might be merits to intervene in the transport sector should the government consider that the reliance on a carbon price alone will not deliver the transport sector emission reductions at the pace that it wishes to achieve them.
29. If there is anything, we can do to assist the MoT, please let us know. We are happy to expand or further explain on the detail of this submission if it wishes additional information.

Yours sincerely



John A Carnegie
Executive Director
BusinessNZ Energy Council

APPENDIX ONE: ABOUT THE BUSINESSNZ ENERGY COUNCIL

The BusinessNZ Energy Council (BEC) is a group of New Zealand's peak energy sector organisations taking a leading role in creating a sustainable energy future. BEC is a division of BusinessNZ, New Zealand's largest business advocacy group. BEC is a member of the World Energy Council (WEC). BEC members are a cross-section of leading energy sector businesses, government and research organisations. Together with its members BEC is shaping the energy agenda for New Zealand.

Our vision is to support New Zealand's economic wellbeing through the active promotion of the sustainable development and use of energy, domestically and globally. With that goal in mind, BEC is shaping the debate through leadership, influence and advocacy.

BusinessNZ is New Zealand's largest business advocacy body, representing:

- Regional business groups [EMA](#), [Business Central](#), [Canterbury Employers' Chamber of Commerce](#), and [Employers Otago Southland](#)
- [Major Companies Group](#) of New Zealand's largest businesses
- [Gold Group](#) of medium sized businesses
- [Affiliated Industries Group](#) of national industry associations
- [ExportNZ](#) representing New Zealand exporting enterprises
- [ManufacturingNZ](#) representing New Zealand manufacturing enterprises
- [Sustainable Business Council](#) of enterprises leading sustainable business practice
- [Buy NZ Made](#) representing producers, retailers and consumers of New Zealand-made goods

BusinessNZ is able to tap into the views of over 76,000 employers and businesses, ranging from the smallest to the largest and reflecting the make-up of the New Zealand economy.

In addition to advocacy and services for enterprise, BusinessNZ contributes to Government, tripartite working parties and international bodies including the International Labour Organisation ([ILO](#)), the International Organisation of Employers ([IOE](#)) and the Business and Industry Advisory Council ([BIAC](#)) to the Organisation for Economic Cooperation and Development ([OECD](#)).



www.businessnz.org.nz