

Submission by



WORLD
ENERGY
COUNCIL



to the

Transport and Infrastructure Select Committee

on the

Land Transport (Clean Vehicle) Amendment Bill

4 November 2021

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LAND TRANSPORT (CLEAN VEHICLE) AMENDMENT BILL SUBMISSION BY BUSINESSNZ AND BUSINESSNZ ENERGY COUNCIL¹

INTRODUCTION

1. The BusinessNZ and BusinessNZ Energy Council (BEC) are pleased to have the opportunity to provide a submission to the Transport and Infrastructure Select Committee on the Land Transport (Clean Vehicle) Amendment Bill (referred to as 'the Bill').
2. Decarbonising our transport sector is an of the obvious way for New Zealand to reduce its energy emissions. With transport emissions one of the country's fastest growing sources of greenhouse gas emissions we do not underestimate the challenges faced in moving to a net zero carbon economy.
3. In principle, we support the introduction of a Clean Car Standard. However, we have some concerns about the currently proposed emission targets. Among other matters we would like, in this submission, to address those concerns as well as alternative targets.
4. The submission will also refer to the further actions required to support the decarbonisation both of new vehicles entering the country and of our existing vehicle fleet and its associated emissions. Suggestions can be found at the end of the submission.
5. Members have been consulted in preparing this submission, but given the diversity of our membership, some members might not fully aligned with some of the points made. We have encouraged members to make their own submissions raising those issues specific to their areas of interest. This submission is not confidential.

CONTEXT

6. The transport sector is becoming increasingly interconnected. As the number of zero emission light vehicles (for example EVs and FCEVs) increases, we will see emerging connections between electricity markets and transport decision-making. Given these developments, anything transport policy makers are thinking about that requires or expects a response/investment by the electricity sector will benefit from a coordinated effort by affected parties.
7. 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 effects will be, any ripple effects considered inconsistent with future government aspirations will compel government intervention in these other sectors.
8. The prospect of increasing complexity suggests caution is needed in designing policy frameworks. Greater transparency and more data are required. For some time now, we have collaborated with

¹ Background information on BusinessNZ Energy Council (BEC) is attached as Appendix One.

businesses, academia, and government on a continuous basis to further develop and improve the New Zealand Energy Scenarios – [TIMES-NZ 2.0](#).

9. The purpose of this ongoing project is to provide the public and private sectors with an explorative analysis to get a better idea of how our future energy supply and use (including transport fuels and technologies) might look, and the range of trade-offs and choices we might need to make along the way. While most modelling defines a destination, indicating what needs to change to get there, our scenarios explore the 'what-if stories' rather than the 'what-musts'.
10. TIMES-NZ 2.0 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 particularly, how New Zealand responds to climate change relative to the rest of the world. This capability is critical to the development of resilient, durable long-term policy and investment decisions. The two stories are:

Kea – New Zealand is moving faster than the rest of the world when acting on climate change. Government acts to encourage a faster transition to non-fossil fuelled energy sources in passenger and freight transport.

- Tūi – New Zealand is moving more slowly than the rest of the world in acting on climate change. There are incremental technology advances and cost reductions for alternately fuelled transport options.

Chart 1: Carbon Price (NZD/tCO₂)

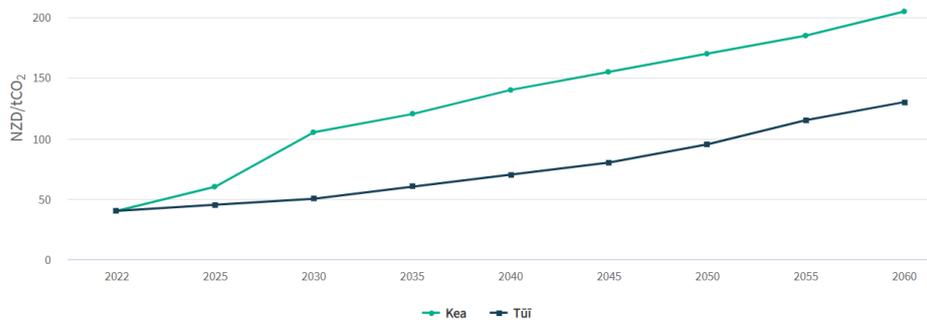
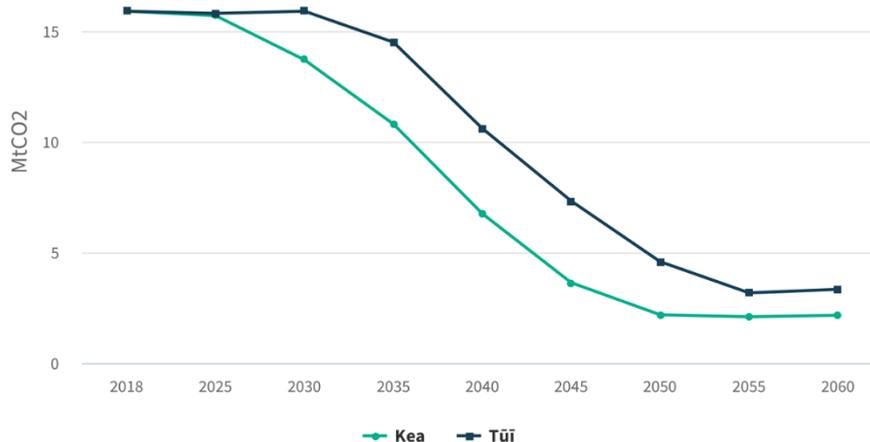


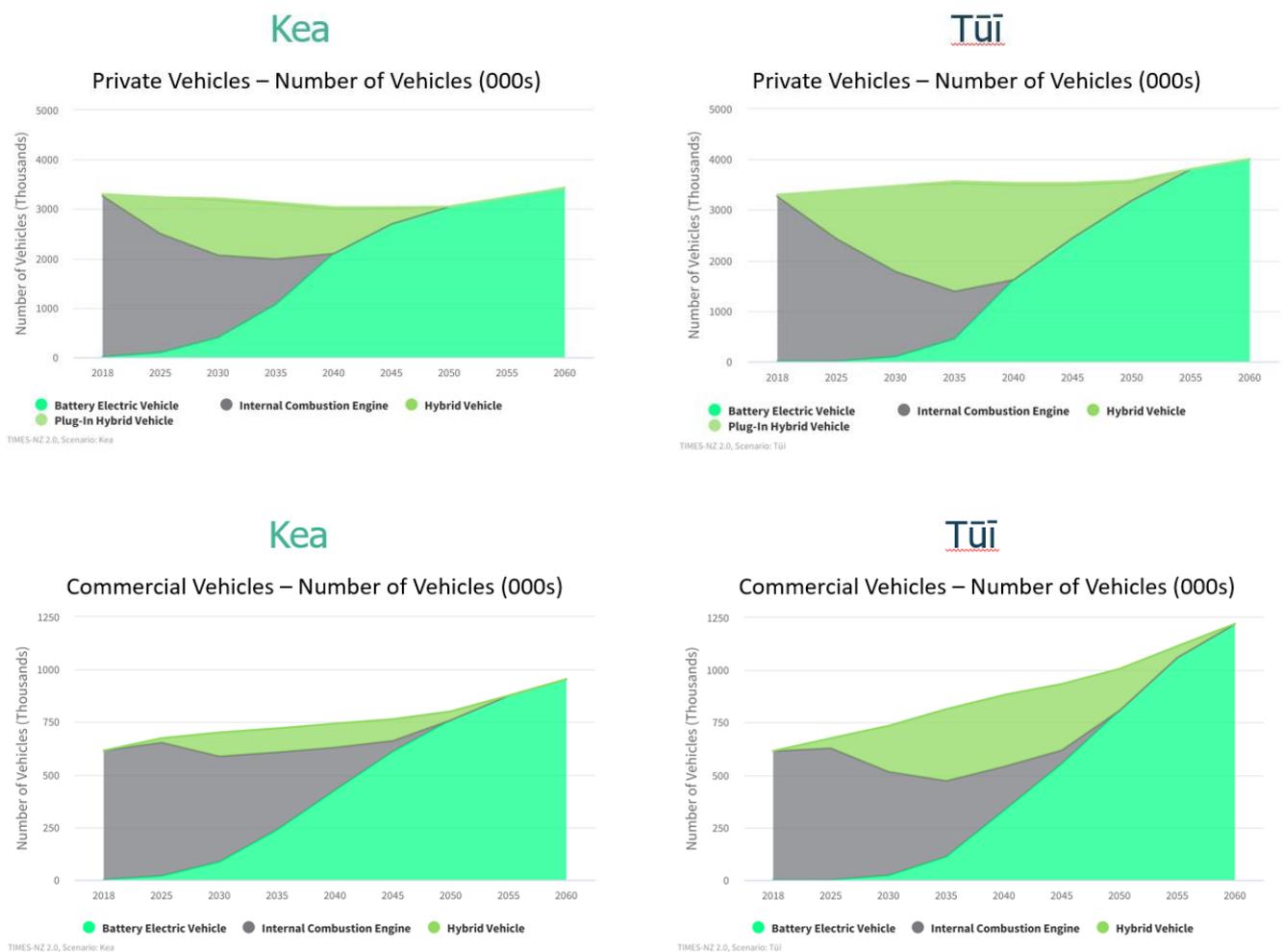
Chart 2: Carbon Emission in Transport (MtCO₂)



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

12. The model above shows transport emissions falling dramatically in line with the fall in fossil-fuelled road transport by 2050. Kea transport emissions fall **33%** by 2035 and Tūi fall **11%**. By comparison, in its final advice, the Climate Change Commission (CCC) suggested that transport emissions must fall around **40%** by 2035 to keep us on track to 2050.

13. Chart 3: Number of Light Vehicles – Private and Commercial



14. In Kea, zero emission light vehicles make up **34%** of the light fleet by 2035 (carbon price NZD 120). Under Tūi, zero emissions make up **13%** of the light fleet by 2035 (carbon price NZD 60). As a comparison, the recently published discussion document on the Emission Reduction Plans aims for a share of **30%** zero emissions light vehicles by 2035.

15. The steeper reduction in Kea’s transport emissions is driven by a faster uptake of EVs and lower growth in vehicle numbers compared with Tūi. Hybrid vehicles act as a transition technology,

peaking in 2030 before reducing to zero by 2050. Both internal combustion and hybrid vehicle emissions drop to zero by 2050. In Tūi, overall emissions remain steady to 2030. This plateau in Tūi is attributed to the reduction in emissions from electric and hybrid vehicles being offset by the increasing vehicle fleet.

16. New Zealand is a small player in the global auto market, with supply constraints limiting the availability of EVs. These conclusions have been determined using internal research that we have undertaken on the EV supply chain, as well as through industry engagement. Fewer than 0.17% of the vehicles globally manufactured in any one year arrive in New Zealand.

- In Kea we assume greater dedication and signalling to purchasing EVs, giving manufacturers the confidence to supply us with these vehicles.
- In Tūi the same curve is used but delayed by 5 years. Tūi sees full access to BEVs in 2040, whereas Kea reaches full access in 2035.
- Commercial vehicles follow a similar curve, but delayed another 5 years in each scenario, to reflect EV availability of commercial light vehicles.

Table 1: Modelled EV supply constraints for light passenger vehicles

Year	Tūi	Kea
2025	3%	11%
2030	11%	42%
2035	42%	100%
2040	100%	100%

17. All New Zealand’s light vehicles are imported, and the technology developed in new vehicles is designed to meet overseas standards and requirements. New Zealand recognises standards for Australia, Europe, Japan, and North America. New light vehicles are primarily manufactured in Japan (approximately 60% of annual sales), followed by Thailand, Europe, and South Korea.

18. The decarbonisation of the transport sector relies heavily on the switch from ICE to zero emission light vehicles, yet we see real risks in our ability to secure supply. Despite our market size, there are other supply constraints to be considered, for example:

- supply lines disrupted, shipping and freight logistics affected by the Covid pandemic (unlikely to return to normal before 2023);
- low stocks of chips for computers affecting car manufacturing;
- low volumes of manufacturing;
- low battery supply in general (currently only 10% battery demand can be supplied, and currently 70% of all batteries is provided by China); but also

- more countries are introducing a zero emissions light vehicle target which will further constrain the global supply chain (for example, India will ban ICE by 2023).

19. A Clean Car Standard is important as it assists New Zealand in attracting potential low emission vehicle suppliers. However, we also need to uncover and consider the key risks that come with greater ambition so that all actions fully take account of costs, benefits, and potential trade-offs.

PROPOSED CLEAN CAR STANDARD CALLS FOR ADJUSTMENT

20. We support the introduction of a Clean Car Standard in principle, however, more work on the current Bill is required. The following addresses four main areas of concern where changes are needed, particularly concerns around the proposed emission targets. It also suggests alternative targets.

More realistic targets required

21. The bill refers to the following targets:

175 Targets for reducing carbon dioxide emissions

- (1) The targets for the purposes of calculating the weight-adjusted target applicable to each vehicle importer in accordance with the regulations are,—
 - (a) for the calendar year beginning on 1 January 2023,—
 - (i) for Type A vehicles, 145 grams; and
 - (ii) for Type B vehicles, 218.3 grams; and
 - (b) for the calendar year beginning on 1 January 2024,—
 - (i) for Type A vehicles, 133.9 grams; and
 - (ii) for Type B vehicles, 201.9 grams; and
 - (c) for the calendar year beginning on 1 January 2025,—
 - (i) for Type A vehicles, 112.6 grams; and
 - (ii) for Type B vehicles, 155 grams; and
 - (d) for the calendar year beginning on 1 January 2026,—
 - (i) for Type A vehicles, 84.5 grams; and
 - (ii) for Type B vehicles, 116.3 grams and
 - (e) for the calendar year beginning on 1 January 2027 and, subject to **paragraph (f)**, any subsequent year,—
 - (i) for Type A vehicles, 63.3 grams; and
 - (ii) for Type B vehicles, 87.2 grams; and
 - (f) for any calendar year after 2027, any target set by regulations made under **section 167C(1)(i)(iv)**.
- (2) Every reference to **grams** in **subsection (1)** must be read as a reference to grams of carbon dioxide per kilometre.

22. Under the current proposal, vehicle importers would have to meet an emissions target of 63.3 (Type A: Passenger Light Vehicles) to 87.2 grams of CO₂ per kilometre (Type B: Commercial Light Vehicles) on average across their fleets by 2027. This is a sharp reduction of 56-60% between 2023 and 2027, particularly accelerated from 2025. Chart 4 shows what New Zealand is trying to achieve compared with certain other countries. The rate of drop for the New Zealand market appears extremely ambitious in comparison with, for example, Japan and the EU.

Chart 4: Light Passenger Vehicle CO₂ and Fuel Consumption Values, Normalized to NEDC²

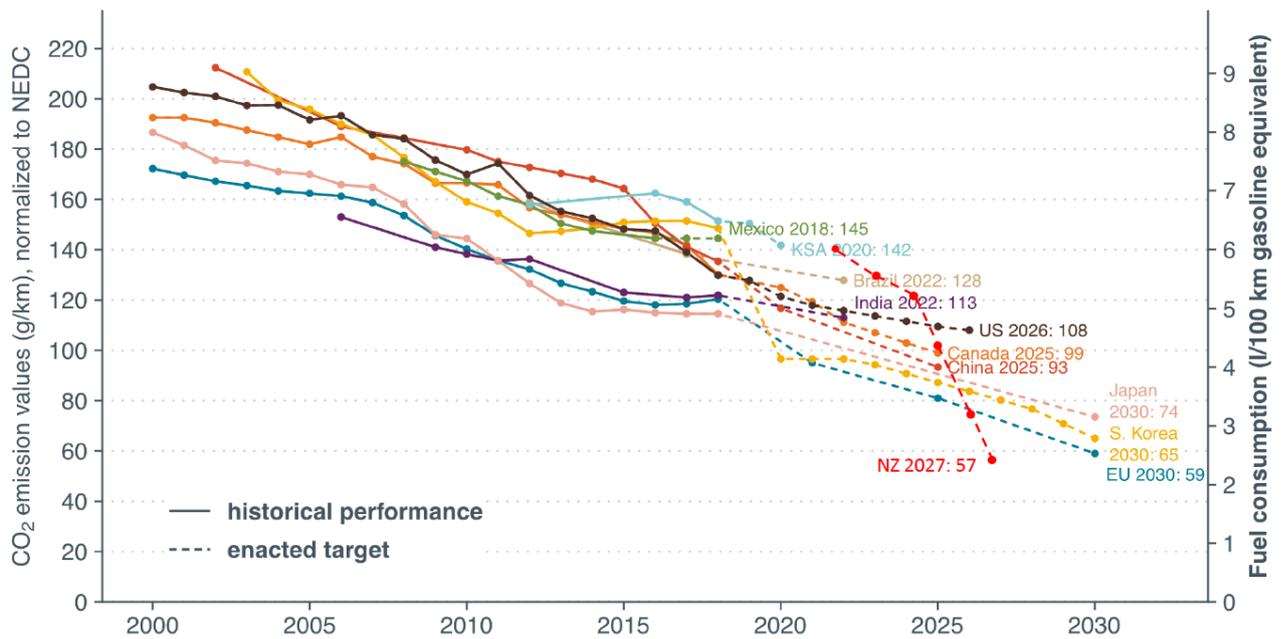
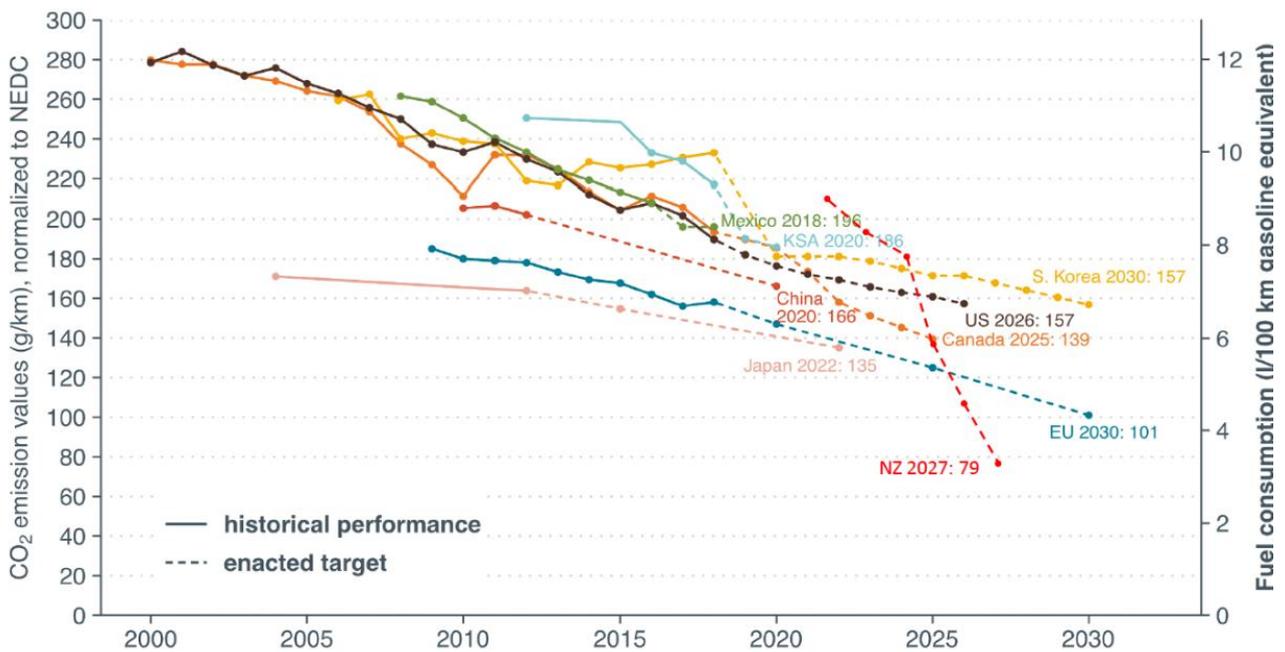


Chart 5: Light Commercial Vehicle CO₂ and Fuel Consumption Values, Normalized to NEDC³



23. While price signals are purposely designed to stimulate behaviour change, little is gained by setting a target so high that it is not achievable for most market participants. The current proposed targets come with an increased risk that penalties will translate into a tax on all new vehicles. The industry sector cautions that since low emissions vehicles cost more up front (lower

² Motor Industry Association (MIA), Details at www.theicct/chart-library-passenger-vehicle-fuel-economy, July 2021

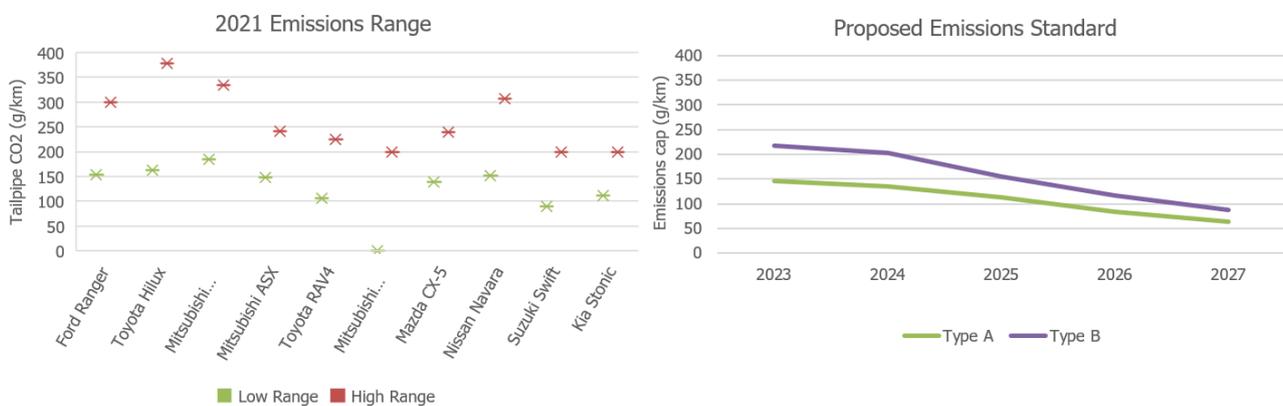
³ Motor Industry Association (MIA), Details at www.theicct/chart-library-passenger-vehicle-fuel-economy, July 2021

variable costs), that extra cost, combined with the cost of fees and penalties, could see the average price of vehicles go from \$40k to \$60 between now and 2027 in today's dollars.

24. Analysis undertaken by the Motor Industry Association (MIA) shows the proposed policies could result in an increase of around 15-20% in the price of light vehicles. The MIA is a voluntary trade association set up to represent the interests of the new vehicle industry specifically the official representatives of overseas vehicle manufacturers – accounting for over 98% of all new vehicles imported and sold in New Zealand across the passenger car, light and heavy commercial vehicle, and motorcycle (including on and off-road) categories.

25. Today, New Zealand's average for light vehicles is 161 grams of CO₂ per kilometre. Looking at the emission range of 2021's top selling cars in New Zealand (left in Chart 5) the emission targets (right in Chart 5) appear to require a too steep reduction, too quickly.

Chart 5: Emission Ranges of Top New Zealand Sales SUVs/UTES 2021 vs proposed targets⁴



26. To better understand the gravity of the currently proposed targets, the Motor Trade Association (MTA) has undertaken an assessment of the import numbers of zero emission light vehicles required to meet the usual import demand. MTA represents approximately 3,600 businesses within the New Zealand automotive industry and the automotive services sector.

27. For its calculation the MTA assumes a floating import volume of 250,000 light vehicles a year, as well as a fluctuating mix of used and new cars based on New Zealand's historical import trend.

- **2025 – WLTP target average of 117.9g on 250,000 light vehicle imports = total envelope of 29,475,000grams/km allowed**

- Requiring 195,199 ICE/Hybrid/PHEV light vehicles within the allowable envelope of CO₂. 54,801 zero emission light vehicles would be needed to meet the standard based on light vehicle demand.
- EVs therefore would need to make about 22% of the import mix to achieve the 2025 target. Based on industry forecasts, commercial light vehicles

⁴ [AA Top 10 bestselling vehicles 2021](#), August 2021

would comprise a maximum of 10% EVs, leaving passenger light vehicles to make about 30% EVs of the imported mix.

- **2026 – WLTP target average of 92g on 250,000 light vehicle imports = total 23,000,000grams/km allowed**
 - (a) Requiring 159,722 ICE/Hybrid/PHEV light vehicles within the allowable envelope of CO₂. This would mean importing around 90,278 zero emission light vehicles to balance the target.
 - (b) EVs would need to make about 36.1% of the import mix to achieve the 2026 target. Commercial light vehicles would comprise a maximum of 15% EVs, leaving passenger light vehicles to make up about 45% EVs of the imported mix.
- **2027 – WLTP target average of 69g on 250,000 imports = total 17,250,000grams/km allowed**
 - (a) Leading to 127,778 ICE/Hybrid/PHEV light vehicles within the allowable envelope of CO₂. This would require the importation of around 122,222 zero emission light vehicles to balance the target.
 - (b) EVs would need to make about 48.9% of the import mix to achieve the 2027 target. Commercial light vehicles would comprise a maximum of 25% EVs, leaving passenger light vehicles to make about 60% EVs of the imported mix.

28. To put this in perspective, the Climate Change Commission recommended that 50% of light vehicle imports should be EVs by 2029 and our own modelling work suggests the share of imported light vehicle EVs could be up to 11% (Tūi) and to 42% (Kea), but with the share of imported commercial light vehicle EVs only 3% (Tūi) and 11% (Kea) by 2030.

29. It is worth noting that MTA's calculations are about achieving the targets for each year, which in turn means that failing to do so will result in penalties. In other words, should New Zealand fail to import the specified amount of zero emission light vehicles, then the penalties and costs affecting importers will mostly likely be passed on to consumers.

30. We think the currently proposed emissions targets are too ambitious and rise too steeply. Instead, we believe the following alternative targets, while still ambitious, are much more realistic to achieve and will therefore lead to a greater success rate.

The MIA has done some analysis of what more realistic but still ambitious targets could look like – see Chart 6 and 7.

Chart 6: Light Passenger Vehicle CO₂ Rate of Change (WLT3P)⁵

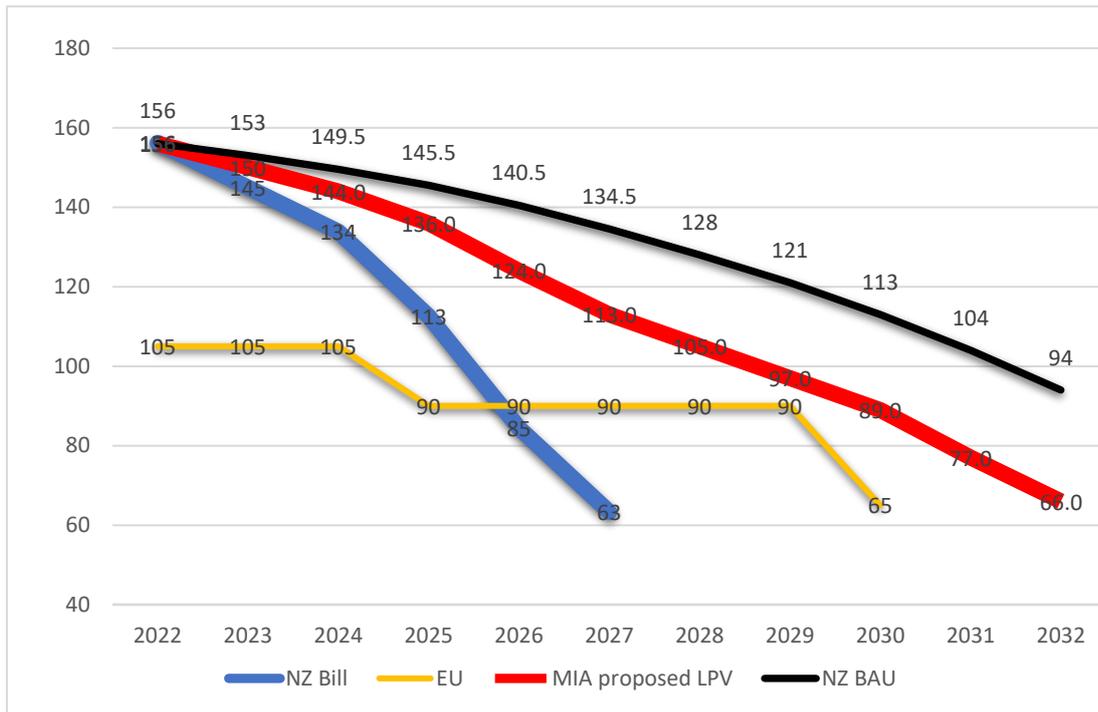
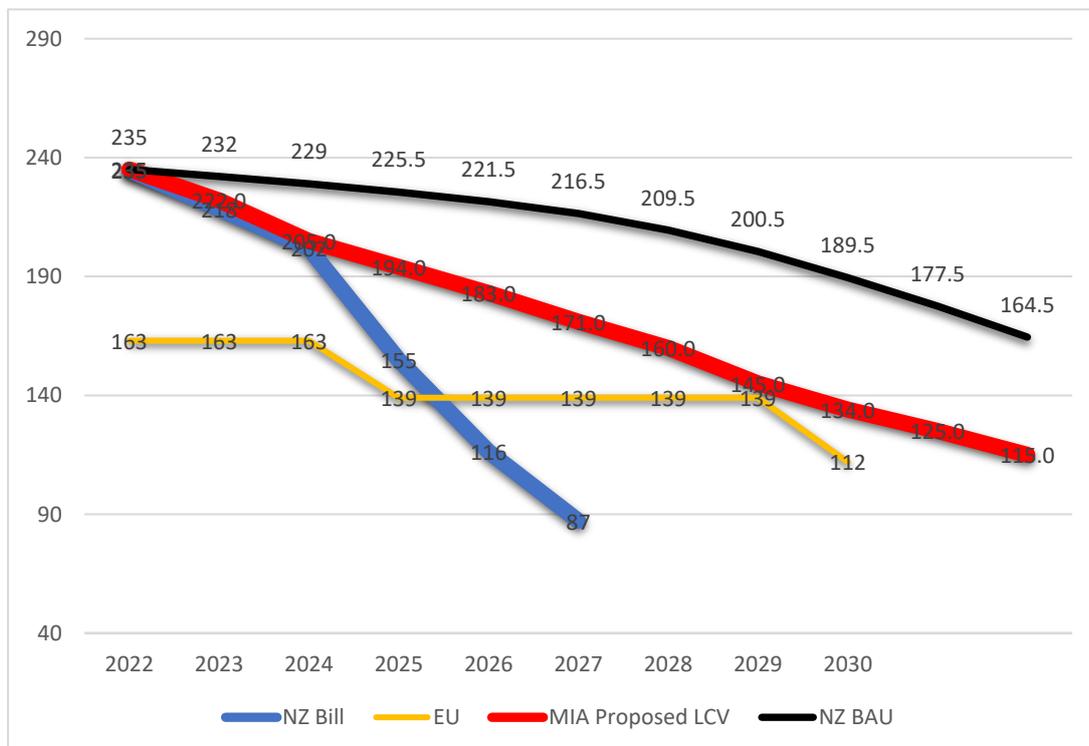


Chart 7: Light Passenger Vehicle CO₂ Rate of Change (WLT3P)⁶



⁵ Motor Industry Association (MIA), October 2021

⁶ Motor Industry Association (MIA), October 2021

More clarity is needed

31. The bill is not clear on whether there are to be minimum of zero emission light vehicle import requirements after 2027. The bill refers to the following:

- Subclause 167B(1) refers to '*Without limiting the generality of section 167(1)(j), regulations for the purpose set out in section 170 may be made under section 167(1)(j) setting fees and charges payable by vehicle importers for not including, among the vehicles they imported in any given year, the minimum proportion of vehicles with zero carbon dioxide emissions required under regulations made under section 167C(1)(m) and*
- Subclause 167C(1)(m) refers to '*The Governor General may, [...], require a minimum proportion of vehicles with zero carbon emissions.*'

32. Business is unsure about this initiative and its possible timing. Again, detail is lacking on how the proposed scheme might be introduced or what will cause the Governor General (i.e., the government) to set a further minimum zero emissions light vehicle target.

33. At the moment subclauses 167B(1) and 167C(1)(m) refer to an ICE ban by default when the practicalities of such a ban have not yet been considered nor what is proposed consulted upon. As mentioned earlier, there are limitations on the EV models available for the New Zealand market.

More details are needed on the design of the Clean Car Standard

34. We would also like to raise concerns relating to the design of the Clean Car Standard, which at present seems overly complex.

35. More clarity is required to enable a better understanding of how the proposed mechanisms – banking, defer and transfer – will operate.

36. While these mechanisms are intended to make it easier for importers to meet their annual emissions targets, with penalties for those who exceed the targets in combination with fines for failing to document, there is a real possibility that the extra costs imposed will simply be passed on to consumers, reducing the likelihood that low emissions vehicles will be purchased.

Industry should be given time to adapt

37. The suggested fines of up to \$75,000 for failing to collect and keep data, as well as to produce it along with a record of any other required information seem excessive. There is very little sense that the industry will be provided with time to adjust. This is a new procedure for the industry and time for adjustment will be essential if government proposals are to have any hope of success. We therefore urge that time for adjustment be provided.

THE CLEAN CAR STANDARD IS A GOOD STEP FORWARD BUT TO ACHIEVE SIGNIFICANT CHANGE IN OUR TRANSPORT EMISSIONS MULTIPLE LEVERS ARE REQUIRED

38. We need to stimulate interest and demand for low emission vehicles, for example:

- A reform of the Fringe Benefit Tax (FBT) to remove barriers. The FBT is currently higher for a low emissions vehicle due to the higher capital costs creating greater FBT liability. Inland Revenue is currently undertaking a stewardship review of the FBT regime. This review will consider whether the regime is still fit for purpose and will inform decision-making about whether policy changes may be required. We believe a full and comprehensive review of New Zealand's FBT rules is long overdue. Therefore, we would expect any discussion around changes to FBT involving cars to be part of that wider stewardship review, and not treated in isolation.
- Using education to make it clear and predictable that high emissions vehicles will become increasingly expensive to run. The total cost of ownership should be communicated better.

39. We need to deal with the emissions caused by our existing car fleet. A reduction could be stimulated by, for example:

- The provision of viable and appealing alternative modes of transport (convenient, faster, cheaper). There need to be good options for encouraging cars to be left at home.
- Ensuring that rules allowing for tax deductibility of, or the ability to provide non-taxable allowances to compensate for expenses incurred when working from home, are clear and consistent given the increased prevalence of working from home.

40. We need policies that support industries to deliver a decarbonised transport system, for example:

- Making it easy for renewable energy to expand. A clean, secure, and affordable energy supply will be essential for the transition of the transport sector.
- Digital management of charging infrastructure is important to increase the utilization of the network, reducing cost and supporting affordable electrification. This can be achieved through policies that support vehicle visibility, including a requirement to install smart charging infrastructure.
- Public charging infrastructure capacity needs to expand with the EV fleet. A good start has been made on establishing a minimum nationwide travel network. However, the rapid uptake of EVs needs to be matched with expanded capacity. Additionally, there will be some places where charging at home is not possible. There will need to be public alternatives available.

Appendix One - Background information on BEC and BusinessNZ

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
- [BusinessNZ Energy Council](#) of enterprises leading sustainable energy production and use
- [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](#)).

