



3 November 2021

Committee Secretariat
Transport and Infrastructure Committee
Parliament Buildings
Wellington

RE: Drive Electric Submission Land Transport (Clean Car) Amendment

Bill Executive Summary

1. Drive Electric supports the Land Transport (Clean Vehicles) Amendment Bill ('the Bill') and encourages New Zealand to be ambitious.
2. Given New Zealand's reliance on personal light vehicles, accelerating the uptake of e-mobility is an essential part of reducing emissions from transport. The technology is ready and available to make this transition in the light vehicle fleet.
3. International evidence demonstrates that a Clean Vehicle Standard and Clean Vehicle Discount, including the feebate mechanism, should rapidly accelerate the uptake of zero emissions vehicles in New Zealand.
4. The interim Clean Car Discount, which is already in the market, is showing promising signs of success.
5. New Zealand should use Europe, not Australia, as the source of homologation vehicle standards in this Bill. We support tying our homologation standards to Europe because it has the most robust and stringent emissions standards. By using these standards, we can better access vehicles manufactured in and for the United Kingdom, a far larger right-hand-drive EV market.
6. We encourage New Zealand to be ambitious when setting future emissions standards from 2025. We are a technology-taker and want to position ourselves as a fast-follower to European standards. As such, we propose a building in a potential review of the emissions standards beyond 2025, in 2024. The purpose of this review would be to ensure the standards remain aligned to Europe and there will be satisfactory electric vehicle availability for New Zealand consumers.
7. The Select Committee should also consider whether this Bill can be used to:
 - Improve safety of the fleet; and/or
 - Accelerate other forms of e-mobility, notably bikes and scooters.

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8. We would welcome the opportunity to present to the Committee. PO Box 3899, Auckland 1140

1. Introduction

Drive Electric is a not-for-profit advocacy organisation supporting the uptake and mainstreaming of e-mobility in New Zealand, a key part of decarbonising transport.

Drive Electric represents a member base comprising new car OEMs, used car importers and distributors, infrastructure organisations (electricity generators, distributors and retailers, electric vehicle service equipment suppliers), e-bike/scooters, heavy vehicle importers, finance, fleet leasing and insurance companies, along with electric vehicle users.

Drive Electric supports the Land Transport (Clean Vehicles) Amendment Bill ('the Bill'), and encourages New Zealand to be ambitious.

2. Principles

Our submission is framed around our membership mandate to promote the uptake of e-mobility in New Zealand. We have assessed this proposed Bill through the following principles.

Principle	Comment
Ambition	New Zealand has a proposed target to reach 30% of the light vehicle fleet as electric by 2035 in the Government's Emissions Reduction Plan Discussion Document. Measures will be required to stimulate electric vehicle uptake to reach this target. This will require around 1 million new and used EVs to be brought into New Zealand over the next 13 years.
Certainty	New and used vehicle importers, fleet companies, the electricity sector, other supporting industries and consumers need certainty about government climate and transport policy over the long-term.
Technology-taker	New Zealand is an automotive technology taker, and a very small right hand drive market. We must position ourselves as a fast-follower.

Achievable The Bill must be ambitious, but achievable and avoid perverse or unintended consequences.

3. Support for the Land Transport (Clean Vehicles) Amendment Bill

Transport makes up 21 per cent of New Zealand's total emissions. Our transport emissions have nearly doubled over the last 30 years and our entire transport system is almost exclusively dependent on imported fossil fuels.

There are 3.5 million passenger vehicles in New Zealand. We have one of the highest car ownership rates in the world and one of the oldest light vehicle fleets, with an average age of close to 15 years compared to Australia's average of 10 years; the EU's average of 11 years; and the UK's 8 years.

The New Zealand light vehicle fleet, including light commercial vans and trucks, makes up 80 per cent of our transport emissions.¹

The number one opportunity in substantially and rapidly cutting New Zealand's emissions lies in electrifying the light vehicle fleet. Moving to zero emissions vehicles, as the cliché goes, is the low hanging fruit in New Zealand's fight against climate change.

That said, we acknowledge that accelerating the transition to EVs is only one part, albeit an important one, when it comes to decarbonising transport by 2050. There needs to be a massive uptake in active and public transport, as well as the provision of Mobility-as-a-Service (MaaS), changes to urban development, and the way we work. Less travel and mode shift are essential. Affordable, convenient, safe and sustainable transport choices should be available for all New Zealanders.

4. Drive Electric supports the Land Transport (Clean Vehicles) Amendment Bill

4.1 Context

The Clean Vehicle Discount and the Clean Vehicle Standard, proposed by this Bill, are two powerful tools to stimulate the uptake of electric vehicles.

This objective of this Bill must be seen as part of the wider plan to decarbonise transport in New Zealand. That plan is currently under development in the form of the Emissions Reduction Plan.

There are other levers that need to be pulled to accelerate the uptake of e-mobility in New Zealand. These include, but are not limited to:

- A national public and private charging infrastructure plan and associated investment;
- The transition of the public sector fleet;
- Supportive policies to transition private sector fleets (e.g. FBT, depreciation); and
- Scrappage schemes.

4.2 Drive Electric members' views

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Drive Electric's OEM members tell us that this legislation, which enables a consumer incentive on low emissions vehicles, by applying penalties on high emissions vehicles, enables New Zealand importers of new vehicles to engage their international headquarters and order cleaner vehicles, including more electric vehicles. Presently, there is a limit to global EV supply and preferential supply is going to markets with strict emissions standards and consumer incentives.

4.3 International evidence

International evidence demonstrates that emissions standards, particularly when coupled with a consumer incentive, drive down average emissions in the fleet and stimulate the uptake of electric vehicles.²

The consumer incentive will reduce the purchase price of zero emissions vehicles, which encourages suppliers to provide these choices to meet new consumer demand. The emissions standards and penalties will provide a further strong incentive to suppliers to provide zero emissions vehicles at scale.

The European Commission put in place emissions standards starting in 2012. In every year up to and including 2019, the average emissions of new passenger cars entering the European fleet have been materially below the standard (of 130 gCO₂/km).³

New Zealand is the only OECD country without emissions standards, besides Russia. If we do not have standards in place, then New Zealand is at risk of becoming a dumping ground for the world's dirtiest right-hand drive vehicles. This would make achieving emissions reductions from transport extremely difficult.

4.4 The Clean Vehicle Discount is already having an impact

The impact of the Clean Vehicle Discount can be seen in light vehicle sales. Since its inception on 1 July 2021, MOT figures show that the monthly electric and hybrid light vehicle registrations have increased rapidly. In September, these vehicles

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constituted 12.5 per cent of sales. More Teslas were sold than Toyota Hiluxes.

There has also been a decrease in the average emissions of imported light vehicles, from 173g/km in June to 147g/km in September. This decrease is equal to the improvement in emissions intensity in the past eight years.

4.5 E-mobility has many co-benefits

Transpower analysis shows that the economics of electrification of transport are on the "cusp of being overwhelming". They estimate that this could result in \$1.6 billion

² https://www.concept.co.nz/uploads/1/2/8/3/128396759/ev_study_rept_1_v1.0__1_.pdf

³ *ibid*

<https://www.transport.govt.nz/statistics-and-insights/fleet-statistics/sheet/monthly-ev-statistics>

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of annual economic benefits and 6.1 MtCo₂-equivalent of annual emissions reductions by 2035.⁵

In New Zealand air pollution contributes to the premature deaths of 27 deaths per 100,000 people. Electric vehicles have zero tailpipe emissions.⁶

Powering New Zealand's transport system via electricity reduces our dependence on imported fossil fuels, allowing NZ to become more energy independent over time.

4.6 International supply

New Zealand is a technology taker when it comes to e-mobility. However, we are not on this transition alone.

Globally, 500 EV models are now on the market, ranging from compact cars and two-seaters through to large sedans, SUVs, and sportscars. The first EV utes are now coming to market.

Mainstream brands like Honda, GM, Volvo, VW Group, Ford (Europe) have committed to going all EV, and recently Toyota announced a strong move in this direction also. It is expected that EVs will account for more than half of all US passenger car sales by 2030.⁷

Globally, over 750,000 plug-in EVs are in right-hand drive countries' vehicle fleets (mostly in the UK and Japan), with that number growing by over 200,000 in 2020 (including 175,000 in the UK, and 29,000 in Japan).

Policies such as those in the Bill enable New Zealand to attract this supply, be it new and/or used.

5. Commentary on the Bill

5.1 Aligning emissions standards to Europe

New Zealand should use Europe, not Australia, as the source of homologation vehicle standards in this Bill. We support tying our homologation standards to Europe because it has the most robust and stringent emissions standards. By using these standards, we can better access vehicles manufactured in and for the United Kingdom, a far larger right-hand-drive EV market.

<https://www.transpower.co.nz/about-us/transmission-tomorrow/electrification-roadmap#Vehicle%20emissions>

⁶ <https://environment.govt.nz/assets/publications/our-air-2021-preliminary-data-release.pdf>

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<https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/a-turning-point-for-us-auto-dealers-the-unstoppable-electric-car>

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The vast majority of new vehicles, a little over 80% by volume, imported into New Zealand are currently built to Australian Design Rules (ADR) standards. However, Australia no longer manufactures vehicles, so it's no longer clear why there's a need for these standards.

Further, in 2020, the Australian car industry signed up to a new voluntary agreement to reduce vehicle CO2 emissions between 2021 and 2030. These targets are weaker than European standards, and split light vehicles from heavier vehicles like utes and 4WD, instead of an entire fleet average.

It does not make sense to align our standards to a market that has weak voluntary standards and does not produce automobiles. This will make it more difficult for New Zealand importers to source the cleanest vehicles.

Instead, it makes more sense for New Zealand to align our homologation standards to Europe, where vehicles are manufactured for a large right hand drive market, the United Kingdom. The United Kingdom applies the EU emissions standards.

For the period 2020-2024, the EU fleet-wide CO2 emission targets are :⁸

- Cars: 95 g CO2/km
- Vans: 147 g CO2/km

The emissions target of 105g we are setting for 2025 was already achieved by Europe in 2020. This means the 2025 standards being proposed in the Bill are highly achievable.

Further, the United Kingdom is a large right-hand drive market, from which we can potentially source both new and used vehicles. Industry figures show over 650,000 new plug-in cars registered in the UK since 2010, and over 1 in 7 cars sold so far in 2021 had a plug.⁹

Below is a comparison of the number of Hybrid EV, Battery EV and PlugIn Hybrid EV model variants available in both New Zealand and the UK, as at 31 August 2021:

HEV BEV PHEV TOTAL

United Kingdom 36 49 74 159 New Zealand 36 28 28 92 Drive Electric Analysis-

UK SMMT Data & MIA NZ Data (E&OE)

This demonstrates that there are already more electric vehicle models available in the United Kingdom than in New Zealand, which we can theoretically access. Plug-in

⁸ These target levels refer to the NEDC emission test procedure. From 2021 onwards, the emission targets for manufacturers will be based on the new WLTP emission test procedure

⁹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1026655/net-zero-strategy.pdf

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sales in September 2021 were 21.7 per cent of the UK market. Aligning ourselves to Europe best positions New Zealand to attract supply.

5.2 Implementing the Clean Vehicle Standard

We encourage New Zealand to be ambitious when setting future emissions standards from 2025. We are a technology-taker and want to position ourselves as a fast-follower to European standards.

We have members, including some OEMs, that support the trajectory contained in the Bill. After all the emissions standards are fleet averages, not dictates for individual vehicles, and can be banked and transferred. We have other members, including other OEMs, that support the purpose and intent of the Bill but believe the downward trajectory after 2025 is too steep, because the standards get ahead of Europe.

Members also note that in Europe the emissions standards are set for periods of longer than one year, as automobile engines are not re-designed on an annual basis. EU emissions standards are set over periods of five years, 2020-2025 and 2025-2030. (See below).



Figure 1. Schematic illustration of new car average CO₂ emission levels in the EU in the 2014-2030 timeframe, assuming a 3.9% per year and a 6.8% per year CO₂ reduction scenario.

Given the above, a number of members suggested that the emissions restrictions could be tied to the European Union standards from 2030, and follow these by a maximum of two years. In other words New Zealand would aim to reach 59 (WLTP), by 2032 at the latest.

¹⁰ <https://theicct.org/news/2020-2030-co2-standards-cars-lcvs-eu-20161121-pr>

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Drive Electric has considered the pace of change in the Bill from our foundational stance, which is accelerating the uptake of e-mobility. Drive Electric's view is that the trajectory should be as ambitious as possible, without triggering unintended consequences. We want to position ourselves as a fast follower, as we are a

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technology taker.

That said, if new and used models of zero emissions vehicles cannot be sourced to meet the future targets, because of international supply constraints, this could mean that New Zealanders hold onto their older fossil fuel vehicles for longer periods of time and trade them domestically. This could be counter-productive to decarbonisation.

For this reason, we are supportive of the provisions of the Bill that allow importers flexibility to meet the standards, including:

- Section 178/Section 183 (Bank)
- Section 179 (Defer)
- Section 180/Section 184 (Trade)

We are also supportive of the criteria set out in Section 167(A)6 that the Minister must consider before setting regulations post 2027.

Finally, we recommend retaining the current ambition in the Bill, but adding a potential review of the emissions standards beyond 2025, in 2024. The purpose of this review would be to ensure the standards beyond 2025 remain aligned to Europe and there will be electric vehicle availability for New Zealand consumers.

5.3 ICE ban

We recognise that this legislation puts a sinking cap on emissions, which will in effect result in the phase-out of new ICEs, and then eventually hybrids, over time. We support this direction, particularly if it is aligned to other markets like the United Kingdom.

The UK will end the sale of new petrol and diesel cars and vans by 2030. To provide certainty the UK intends to introduce a zero-emission vehicle mandate setting targets requiring a percentage of manufacturers' new car and van sales to be zero-emission each year from 2024. They are consulting on this proposal now.

We would recommend signalling a phase-out date for between 2030 and 2032 in the Emissions Reduction Plan, and confirming that in law around 2024/2025. This would give the standards and incentives in the Bill time to start to shift the fleet; allow for further advances in technology; monitor international developments; and inform/educate New Zealanders about the direction of the market so they can make

¹¹ To be clear, when we talk about unintended consequences we are referring to increasing emissions from the fleet, or increasing the average age of the fleet. We recognize that market players in the fleet may evolve over time in response to these standards, e.g. through new entrants.

¹² *ibid*

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informed decisions about purchasing new vehicles.

5.4 Consumer education

When it comes to implementing this Bill, consumer communications and education programmes will need to be put in place. This will be important to educate the public about how the new schemes work, but also support people to understand the advantages of choosing zero emissions alternatives. The future of light vehicles is zero emissions, and it is fair to signal that this change is coming.

5.5 Safety

We encourage the Committee to consider whether this Bill could also be used to improve the safety of New Zealand's light vehicle fleets, by requiring vehicles to meet certain safety thresholds before qualifying for the Clean Vehicle Discount.

5.6 E-bikes / e-scooters

We encourage the Committee to consider whether this Bill, or similar policy, should be extended to include e-bikes and e-scooters.

E-bike imports are already close to 50,000 per year, according to importers. Given the right conditions (e.g. Copenhagen) it's possible for cycling/active transport modes to make up half or more of commuter trips in urban environments.

E-bikes can play a significant role in reducing VKTs, especially as a replacement for a second or third car in a household. There are two key barriers to e-bike uptake: infrastructure and cost.

- Infrastructure: Separating cyclists from cars is paramount. The real test of whether cycling is a viable mode of transport is whether parents feel safe cycling with their children from A to B. New Zealand has not reached that threshold in almost all areas.
- Upfront cost: An e-bike can cost between \$2k and \$5k (or more). This is cheaper than a vehicle, but still costly upfront. There are examples in other

countries of incentivising the uptake of E-bikes. This [link](#) shows details of all such schemes in Europe.

A Clean E-bike Discount scheme could help address the upfront

cost. END

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Appendix

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