Ministry of Transport
TE MANATŪ WAKA

Ministry of Transport

Moving the light vehicle fleet to low-emissions: discussion paper on a Clean Car Standard and Clean Car Discount

9 July 2019

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Ministerial Foreword

The Government is committed to taking decisive action to protect our climate by reducing greenhouse gas emissions. The first step is the Climate Change Bill to put New Zealand on a path to become a net-zero emissions economy.

We also need action in the major emitting sectors. The Interim Climate Change Committee has recommended that the Government prioritise reducing emissions in the transport sector. Transport contributes 20 percent of emissions in New Zealand. It is by far our fastest growing source of emissions.

The policies being consulted on in this paper are focused on reducing emissions in the light vehicle fleet (cars, SUVs, utes, vans, light trucks all of 3.5 tonnes gross vehicle mass or less). The Government is focused first on light vehicles as they account for almost two-thirds of transport emissions. Light vehicles have an average life of 19 years which means that the vehicles we import over the next five years will lock in emissions out to 2043.

New Zealand is one of only three developed countries that has no regulations, or meaningful incentives, to influence the fuel efficiency of light vehicles entering our country. As a result, the vehicles supplied into New Zealand are among the most fuel inefficient, and polluting, of any OECD country.

This means we end up pumping more pollution into the atmosphere and use more fuel to keep our cars moving. If our cars were as fuel efficient as the vehicles entering the European Union, we would pay on average $794 less per year at the pump.

The Government is proposing to introduce two proven policies to increase the supply and reduce the cost of fuel efficient and electric vehicles coming into New Zealand.

The first policy is the Clean Car Standard (which is a vehicle fuel efficiency standard). This policy would require vehicle importers to bring in progressively more fuel efficient and electric vehicles.

The second policy is the Clean Car Discount (which is a feebate scheme). This policy would make fuel efficient and electric vehicles more affordable for Kiwis to buy, potentially by a discount of up to $8000 for new vehicles and $2,600 on used vehicles.

The Clean Car Standard and Clean Car Discount would help us to significantly reduce the emissions from transport, and also result in fuel savings for motorists.

Both policies are aimed exclusively at improving the quality of vehicles entering New Zealand. The buying and selling of vehicles that are already in the existing vehicle fleet will be unaffected. Over time the cleaner, more fuel efficient vehicles will enter the second-hand domestic fleet benefiting a wider range of New Zealanders.

This consultation document outlines the details of the Clean Car Standard and Clean Car Discount and seeks your comments on them. I am committed to working with you to make these policies effective, fair and durable.

Hon Julie Anne Genter
Associate Minister of Transport

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Make a submission to make sure your views are heard

To make sure your views are heard, you can respond to our consultation questions by going to https://transport.cwp.govt.nz/clean-cars/.

Or you can write your response to the consultation questions and email the pdf or word document to cleancars@transport.govt.nz.

Submissions close on **20 August 2019**.

This document is asking for feedback from both the general public and the vehicle industry. Parts 2 (Clean Car Standard) and 3 (Clean Car Discount) have been split into two sections. Parts 2A and 3A contain general information about the proposals, while Parts 2B and 3B have more detailed information that may be more applicable to those working in the vehicle industry. But you are welcome to provide feedback on both sections.

Glossary

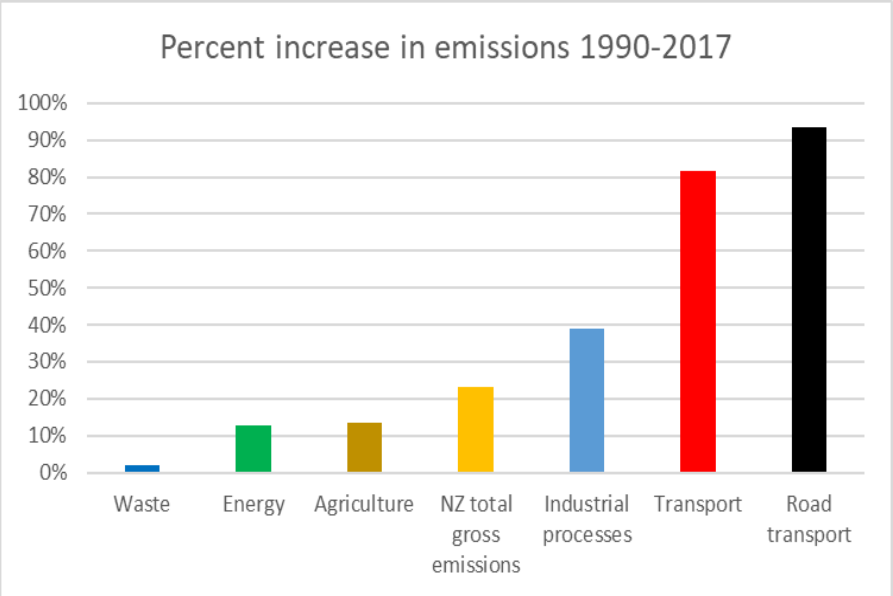
CO_2	Carbon dioxide
EV	Electric vehicle
gCO_2/km	Grams of CO_2 per kilometre
GHG	Greenhouse gas
MoT	Ministry of Transport
MVR	Motor Vehicle Register
NEDC	New European Driving Cycle
NZTA	New Zealand Transport Agency
OECD	Organisation for Economic Co-operation and Development
PHEV	Plug-in hybrid electric vehicle
WLTP	Worldwide Harmonised Light Vehicle Test Procedure

Part 1: Why these initiatives are important

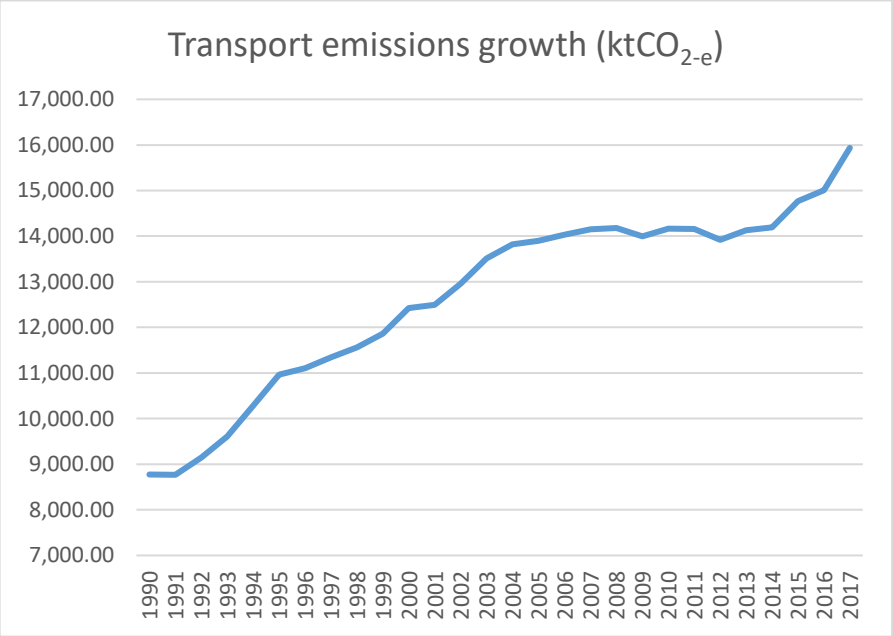
Transport and Climate Change

The Government is committed to taking action on climate change.

Greenhouse gas emissions from transport are nearly all carbon dioxide (CO_2). Globally, reducing CO_2 emissions to net-zero is the highest priority compared to other gases because it stays in the atmosphere for hundreds of years.



Transport accounts for 20 percent of New Zealand's domestic emissions and has been the fastest growing source of emissions by far.

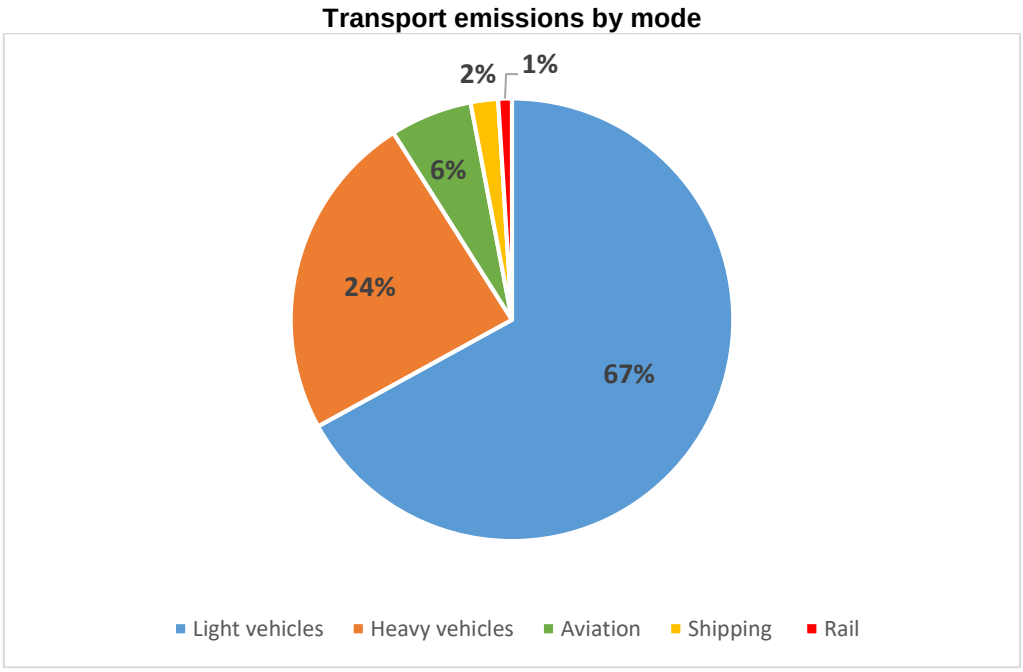


Transport emissions increased 82 percent over the period 1990-2017, with emissions from road transport increasing by 93 percent. This compares with 23 percent for emissions across the economy.

The New Zealand Productivity Commission and the Interim Climate Change Committee have both recommended prioritising action to reduce transport emissions. This action has to stop the annual increases in transport emissions and put the sector on a path to net zero carbon emissions.

Why are we focusing on the light vehicle fleet?

Light vehicles (cars, SUVs, utes, vans, light trucks all of 3.5 tonnes gross vehicle mass or less) produce two-thirds of transport emissions and contribute to 13 percent of total domestic emissions.



Fuel efficiency

Fuel efficiency is effectively how much fuel a vehicle uses per kilometre. Improving the efficiency of a vehicle means it uses less fuel to travel the same distance and is a primary way to reduce vehicle CO_2 emissions.

The preferred measure for vehicle fuel efficiency is grams of CO_2 per kilometre (gCO_2/km). This measure ensures all fuel types, for example petrol, diesel, biofuels, electricity, and hydrogen are treated in an equitable manner. It also focuses directly on the overarching goal of the vehicle fuel efficiency standard, which is to reduce CO_2 emissions.

The light vehicles imported into New Zealand today are among the most fuel inefficient of any OECD country. As a result, they produce more emissions and cost significantly more to run.

The table below shows the average annual fuel use cost to drive a light petrol vehicle in New Zealand, compared to other countries. On average, New Zealanders pay 65 percent more in vehicle fuel costs than the average person in the European Union, even though petrol prices are higher in Europe.

		New Zealand	United Kingdom	European Union	Japan	United States
Fuel efficiency - petrol equivalent	ltrs/100km	9.5	5.8	4.9	6.2	8.6
Petrol Price inclusive of duties & taxes[1]	NZ$/ltr	$1.92	$2.26	$2.25	$1.81	$1.05
Vehicle use	kms	11,000	11,000	11,000	11,000	11,000
Fuel Use Cost	NZ$	$2,007	$1,443	$1,213	$1,235	$995

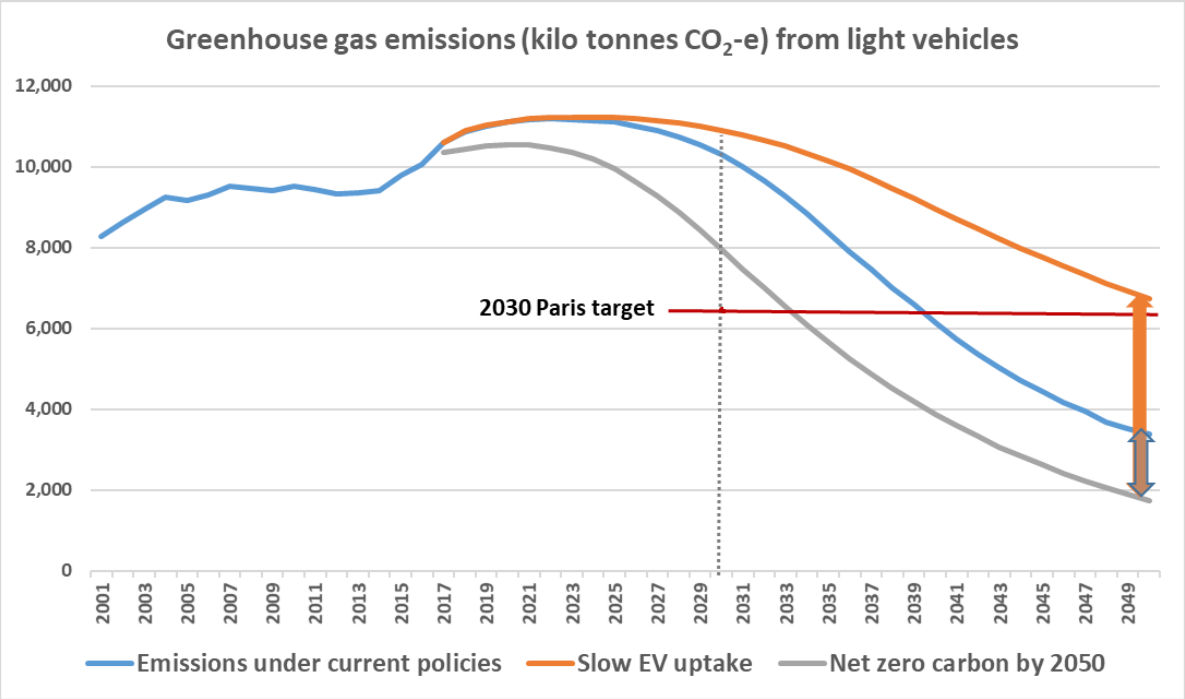
To allow international comparisons 2017 data has been used.

Kiwis are also missing out on many of the fuel efficient vehicle models sold overseas. For example, in the United Kingdom the top selling 17 new light vehicle models have on average 21 percent lower emissions that the most efficient variants available in New Zealand. This comparison is shown in Appendix 1.

While more electric vehicles (EVs) are being sold in New Zealand than ever before, there is also an increasing supply of larger, more higher-emission vehicles. As a result, the average vehicle fuel efficiency and emission intensity of vehicles coming into New Zealand is not improving[2].

Taking steps today to reduce light vehicle emissions is critical to ensuring that New Zealand plays its part in reducing climate damaging pollution in the coming decades. The light vehicles that enter New Zealand over the next five years will lock in emissions until at least 2043. This is because a new vehicle is driven until it is, on average, 19 years old.

Light vehicle emissions are projected to keep rising until around 2022. There is significant uncertainty about the contribution vehicle technology will make to reducing light vehicle emissions after this date. Even the best case projections for EV uptake do not result in light vehicle emissions reducing in line with our 2030 or 2050 climate targets. Today, New Zealand is not on track to meet the EV target for 2021 set by the previous Government.



[1] The international data is sourced from Oil Bulletin and Eurostat. It was converted to NZ dollars using a 90 day average, foreign exchange rate from xe.com. The New Zealand fuel price is from MBIE's weekly fuel prices.
[2] Ministry of Transport, 2017, *Annual Fleet Statistics 2017*, New Zealand.

One of the key reasons for this uncertainty is that New Zealand has no regulations, or meaningful incentives, to influence the fuel efficiency of light vehicles entering our fleet. We are an outlier in this respect, as one of only three OECD countries without vehicle fuel efficiency standards[3].

Electric vehicles

Electric vehicles will help New Zealand reduce climate damaging emissions and harmful local air pollution.

New Zealand is well-suited for EV uptake. Around 85 percent of electricity is generated from renewable sources and there is enough electricity supply for a widespread uptake of EVs, provided the majority are charged at off-peak times.

New Zealanders also have low average commuting distances. Average daily vehicle travel is less than 29 kilometres, and urban drivers only travel 22 kilometres. These distances are easily within the range of current EV batteries. As well, more than 85 percent of New Zealand homes have off-street parking, making overnight charging at home easy and convenient.

Challenges for EVs include high upfront purchase cost, travel range anxiety, availability of public charging infrastructure, and a limited variety of EVs.

There is considerable uncertainty about the possible pace of EV uptake. Even if there is a favourable uptake of EVs under business as usual, emissions will still be 12 percent above 2005 levels in 2030 and it would take until 2040 to reach 33 percent below 2005 levels. This pace of decline would not be consistent with a target of net zero emissions by 2050.

If future market conditions are unfavourable for EV uptake, as shown in the slow EV uptake projection on the previous page (the orange line), then the light fleet would not reduce emissions by 30 percent below 2005 levels until nearer to 2050.

If we want a largely electric fleet by 2050, nearly all newly registered vehicles would need to be electric by the early 2030s. The Ministry of Transport projections suggest that only around 40 percent of vehicles entering New Zealand will be electric in 2030 without further government intervention or incentives.

[3] The other two OECD countries being Russia and Australia. Note the Australian Government has been considering introducing a vehicle fuel efficiency standard.

Part 2: The Clean Car Standard

Part 2A: How the Clean Car Standard would work

To improve the quality of vehicles being imported into New Zealand, the Government is proposing to introduce a vehicle fuel efficiency standard, called the Clean Car Standard.

The Clean Car Standard would focus on improving the vehicles entering the light fleet (i.e. new and used imports). It would reduce vehicle fuel consumption and the amount of CO_2 emitted by vehicles. It will incentivise the supply of zero- and low-emission vehicles, such as EVs and petrol hybrids.

It would not apply to the re-sale of existing vehicles in the domestic market, which account for the majority of annual vehicle sales.

The proposed Clean Car Standard would require vehicle suppliers to lower the average CO_2 emissions of the vehicles they are bringing into New Zealand. It would apply to all new and used light vehicles entering the New Zealand fleet, including all cars, SUVs, vans, utes, and light trucks of 3.5 tonnes gross vehicle mass or less.

The Clean Car Standard would not apply to motorcycles, vehicles designed solely for military operations, or non-road registered vehicles such as farm tractors.

The proposed Clean Car Standard would have an emissions target that vehicle suppliers must meet, on average, across their vehicle fleets. An average fleet target means that vehicle suppliers can import vehicles with emissions over the target, so long as this is balanced by sufficient imports of vehicles that are under the target. This allows vehicle suppliers to decide how they will improve their fleets to meet the target.

We are proposing an emissions target of 105 grams of CO_2 per kilometre to be achieved by 2025. The emissions target would be phased in over five years. In 2021, vehicle suppliers would only be required to report the emissions of the vehicles they import. Over the period 2022–2025, vehicle suppliers would be required to meet annual emission targets.

We propose to vary the emissions targets with vehicle weight. Vehicles that are heavier than the average vehicle weight would attract a higher target. Vehicles that are lighter than the average attract a lower target. This will help maintain a diversity of vehicle types by allowing suppliers of heavier vehicles, for example utes and large SUVs, to meet higher emissions targets than for average sized vehicles.

Stricter targets would be set beyond 2025 to continue to drive the transition to a low-emissions vehicle fleet. These targets would align with future carbon budgets, when they have been set.

The Ministry's preliminary cost-benefit analysis of the proposed clean car standard indicates that it has a benefit-cost ratio of 3:1 and a net present value of $2.4 billion. That is, for every $1 of costs it would provide $3 in benefits. The largest share of the benefits comes from reduced transport costs to households.

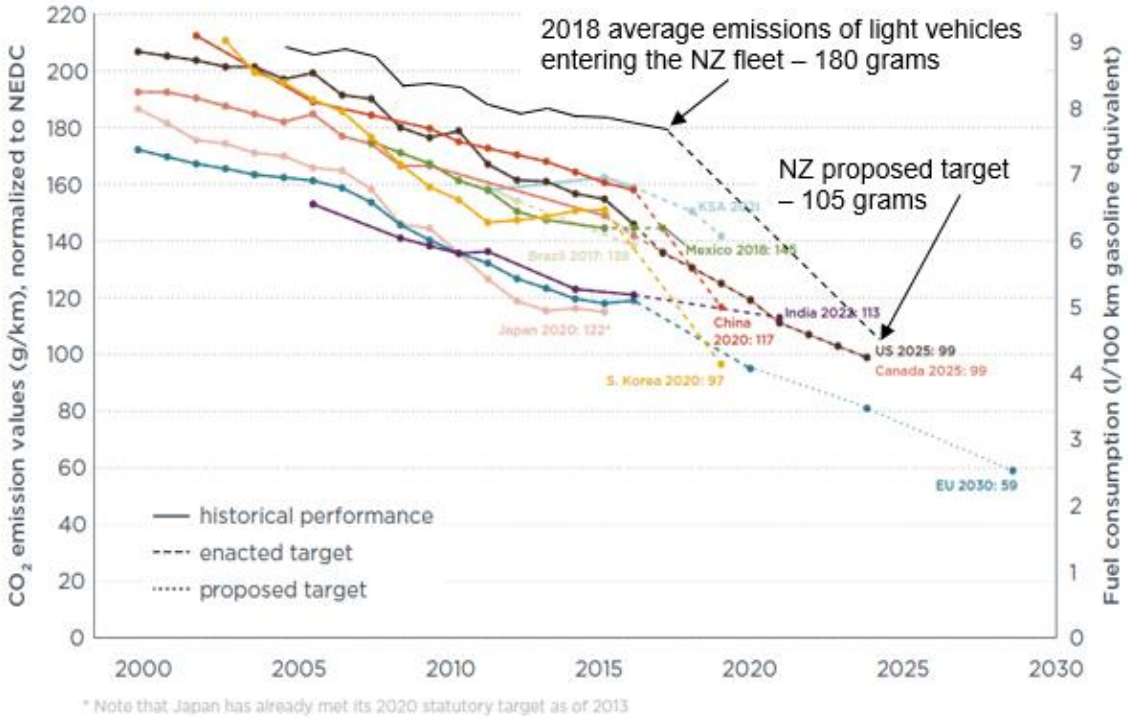
Why is a target of 105 grams of CO_2 per kilometre proposed for 2025?

This 105 gram target was chosen, in part, because it aligns with the standard that was recently investigated in Australia[4]. This target would not be as stringent as standards in Canada and the European Union. It would also not be as strong as the average emission profile of vehicles already entering the Japanese fleet.

As the graph shows below, New Zealand is currently near the back of the pack when it comes to the fuel efficiency of vehicles entering the market. That means that we have more ground to cover in a short space of time to improve the emissions profile of these vehicles.

A target of 105 grams of CO_2 per kilometre balances the need to make significant improvements while ensuring New Zealanders continue to be supplied with a wide variety of affordable new and used vehicles.

Comparison of global CO_2 regulations for new passenger vehicles



Source: ICCT (January 2019) *Policy update: CO_2 emissions standards for passenger cars and light-commercial vehicles in the European Union*. *Note: the Trump administration has removed the US 2025 target.*

What contribution would this target make to reducing emissions?

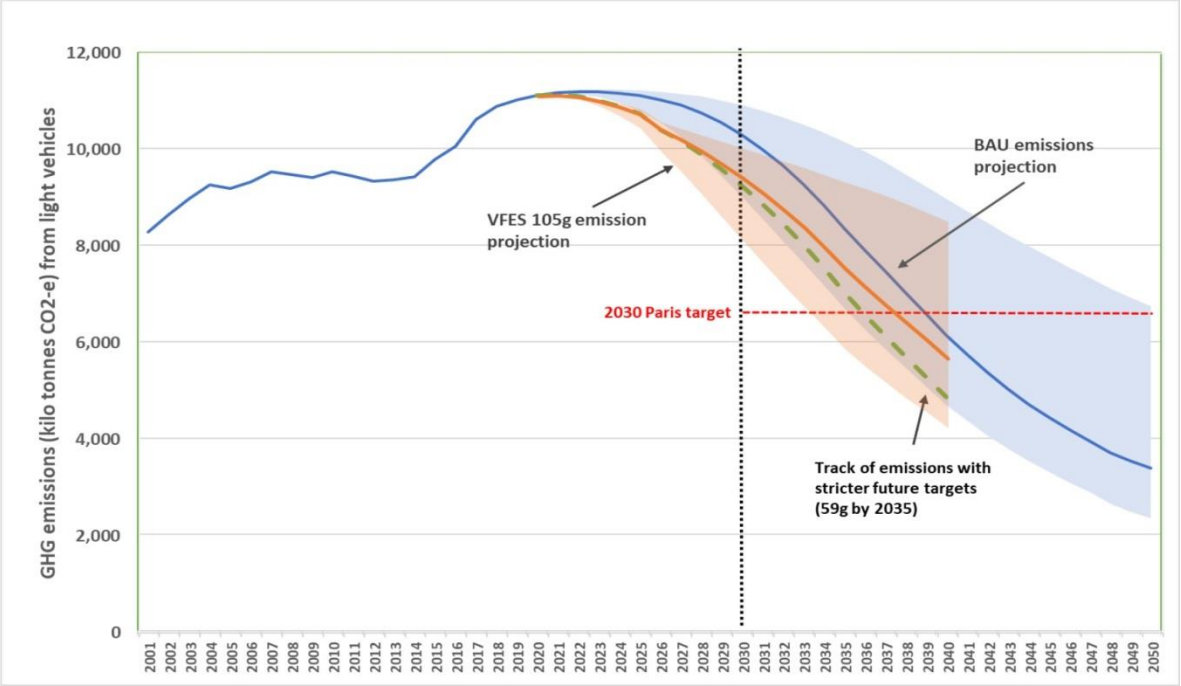
Internationally, vehicle fuel efficiency standards have been highly effective in reducing emissions from light vehicles.[5] In New Zealand, it is estimated that an emissions target of 105 gram CO_2/km in 2025 could reduce emissions by 5.1 million tonnes over 2020–2041. The contribution this level of CO_2 mitigation will make is shown in the graph following.

[4] *Improving the efficiency of new light vehicles*, Commonwealth of Australia, 2016.

[5] For example, a 2015 evaluation of the European Union's vehicle fuel efficiency standard for new light vehicles, found that it is likely to have accounted for 65–85 percent of the reductions that occurred in tailpipe emissions over 2009–2014. The standard achieved an estimated rate of annual improvement of 3.4 to 4.8 grams CO_2/km. This compared to the annual rate of improvement of 1.1 to 1.9 grams CO_2/km previously experienced under a voluntary industry standard.

The blue line shows the Ministry of Transport's base case emission projection with current policy settings. The orange line shows the base case emission projection for the Clean Car Standard with an emissions target of 105 grams CO_2/km in 2025[6]. Both sets of projections are subject to a level of uncertainty[7].

The impact of the vehicle fuel efficiency standard (VFES) on light vehicle emissions



What impact would this target have on the supply of vehicles into New Zealand?

A Clean Car Standard would likely result in a change in the type of vehicles sold in New Zealand, increasing the number and variety of low-emission new and used vehicle models.

The vehicle fuel efficiency of vehicles entering the Japanese market today is one indicator that there could be a sufficient supply of low-emission vehicles available to vehicle importers to comply with a standard of 105 grams CO_2/km in 2025.[8]

In 2014, the average emissions of new light vehicles manufactured and registered in Japan met the proposed target of 105 grams CO_2/km. This is 10 years ahead of the full phase in date for New Zealand's standard. The Japanese passenger vehicle fleet is now trending to achieve an average of 82 grams CO_2/km by 2020.[9]

The fact that Japanese vehicles have been compliant, on average, with a 105 gram standard since 2014 also provides confidence that by 2025 there could be a significant supply of

[6] To simplify interpretation, this graph assumes that stricter emissions targets are set beyond 2025. Such targets, however, would be subject to future policy decisions. This graph assumes future emissions targets of 80 gCO2/km in 2030 and 59 gCO2/km in 2035.

[7] The blue shaded area shows the range of uncertainty relating to the Ministry's emissions projections for EV uptake. The orange shaded area shows the range of uncertainty relating to the impact of an efficiency standard. This includes the potential for changes in the distance people travel, in vehicle import trends, in economic life of a vehicle, and the possibility that some people may choose to driver further if their vehicle become more fuel efficient (i.e. a rebound effect).

[8] In 2017, around 70 percent of new light vehicles and 95 percent of used light vehicles that entered the New Zealand fleet were sourced from Japan.

[9] ICCT, 2017. 2017 Global Update: Light duty vehicle greenhouse gas and fuel economy standards.

compliant used vehicles available to New Zealand. In 2018, only 43 percent of used vehicles that enter New Zealand are less than 10 years old.

The remaining demand for Japanese used vehicles older than 10 years, however, would have to be met from a more limited pool of vehicles, compliant with a 105 gram standard and manufactured prior to 2014.

Meeting the standard of 105 grams CO_2/km in 2025 may have implications for the supply of some larger, high-emitting vehicle models. Appendix 3 shows that some vehicles sold in New Zealand today sit above the proposed emissions targets from 2022-2025. This does not mean that these vehicles would not be sold in New Zealand, but in order to comply with the standard, vehicle suppliers would need to balance high emitting vehicles with the importation of sufficient numbers of low emitting vehicles.

Appendix 3 shows that there are already low-emission alternatives sold in the New Zealand market for most vehicle types. A notable exception is single and double cab utes.

However, over the next few years, low-emitting ute models may become more commonly available. Toyota has said that by 2025 it aims to have every model in the Toyota and Lexus line-up around the world available as either a dedicated electrified model or have an electrified option. Great Wall Motors is expected to unveil a fully battery powered ute this year.

What impact might the Clean Car Standard have on the cost of owning a vehicle?

The Clean Car Standard should help to significantly reduce transport costs to households.

The Ministry of Transport's Social Impact Analysis suggests that households would, on average, be significantly better off as a result of the Clean Car Standard. The Ministry estimates that the increased supply of fuel efficient and electric vehicles could result in average fuel savings of $6,800 to a vehicle owner over the life of a vehicle. This means the country could save about $3.4 billion on fuel over the life of the vehicles affected by the standard.

However, there is a risk that average vehicle prices could rise in the short term but then readjust over time.

A number of factors affect vehicle prices. Currently there is not enough information to know with certainty how average vehicle prices are likely to change due to the policy.

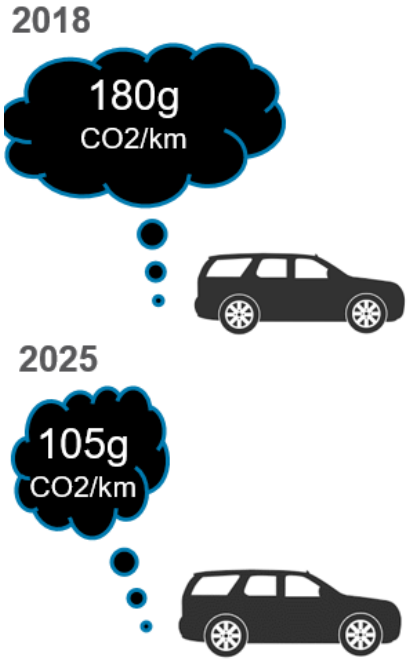
We expect the standard to result in higher uptake of newer vehicles, petrol hybrids, and electric vehicles. These vehicles tend to be more expensive than older vehicles and conventional vehicles. Yet, in the longer term, the market will adjust to minimise this price impact.

When the Australian Government investigated a 105 gram CO_2/km emissions target for its vehicle fleet, they estimated that the target could impose additional vehicle costs. These were estimated to be, on average, $747 for a new conventional vehicle in 2021 and $1,582 in 2025. The cost premiums for suppliers to provide EVs and hybrids could be $9,482 in 2021 and $7,548 in 2025[10].

[10] *Improving the efficiency of new light vehicles*, Commonwealth of Australia, 2016.

These cost estimates are likely to overstate what will be experienced here. This is because they only relate to new vehicles. Some commentators also predict that EVs will reach price parity with conventional vehicles sooner than the Australian estimates imply.

If these costs were to eventuate and be passed on to consumers, officials estimate that lifetime fuel savings could, on average, outweigh the costs by a factor of around three to one.



Impact of the Clean Car Standard
Fuel savings of around $3.4 billion
Average lifetime fuel saving per vehicle $6,800
CO_2 reduced by around 5.1 million tonnes
Benefit-cost ratio of 3:1

Please tell us what you think:

- Is the Clean Car Standard appropriate for New Zealand? If not, why?
- Is an average emissions target of 105 grams CO2 per kilometre by 2025 an appropriate target for New Zealand? If not, why?
- What effect do you think the Clean Car Standard would have on vehicle supply and prices?

If you work in the vehicle industry, or would like to have a say on the detailed design of the Clean Car Standard, please see the next section (How could the Clean Car Standard be implemented?).

Part 2B: How could the Clean Car Standard be implemented?

The Clean Car Standard would apply to all new and used light vehicles entering the New Zealand fleet, including all cars, SUVs, vans, utes, and light trucks of 3.5 tonnes gross vehicle mass or less.

It would apply to new vehicle distributors and motor vehicle traders in the used vehicle sector.

The term “motor vehicle trader” is defined in the Motor Vehicle Sales Act 2003. A motor vehicle trader means any person who carries on the business of motor vehicle trading including vehicle importers, wholesalers, and car auctioneers. A vehicle importer includes anyone that in any specified period, imports more than three motor vehicles for the purpose of gain.

As at 6 May 2019, there were 3,338 registered motor vehicle traders. We do not know how many of these traders would be required to comply with the Clean Car Standard. This is because we do not know how many traders only sell vehicles that are already in the domestic market. These traders would not be subject to the standard, as the standard would only apply to imported vehicles.

Vehicle suppliers would need to have systems to monitor and track their compliance against the Clean Car Standard’s emission target. Specifically, they would have to track the vehicles they have imported, or are planning to import, and monitor whether the average emissions of their fleet is on track to be, at the end of the year, equal to or less than the required emissions target for their fleet.

To assist small operators comply with the standard a free on-line based tool would be made available. The tool would help small operators track the average emissions of their fleets compared to the target averages they are required to meet. The tool could include a calculator that they could use before they bid on vehicles in auctions. The calculator would show how their fleet averages would change if they were to purchase particular vehicles.

For the used sector, vehicles will be deemed to be part of a supplier’s fleet at the point of first registration in New Zealand. This is when a vehicle is registered for use on New Zealand’s roads for the first time and number plates are issued. During the registration process the vehicle supplier’s trade name and motor vehicle trade number will be recorded and entered into the Motor Vehicle Register against the vehicle identification number.

For the new vehicle sector, the distributor would be identified by the vehicle make and the obligation to comply with the standard would be with the marque principal (e.g. Toyota New Zealand).

Overall we propose the following process:

1. As now, when an imported vehicle is being certified the entry certifier would enter the CO_2 emissions and vehicle weight, both gross and unladen (tare), into the Motor Vehicle Register.

2. When the vehicle is first registered for use on the road the data would require the addition of the vehicle supplier’s motor vehicle trader name and number to be entered into the Motor Vehicle Register.

3. To enable suppliers to calculate the required emissions targets for their fleets, the government would issue a 'limit line' that adjusts the national 105 gram target by vehicle weight.

4. At the end of each year, each supplier would provide vehicle emission and vehicle sales data to the NZ Transport Agency to show that the actual average[11] emissions of its vehicle fleet is equal to or lower than the required emissions target for its fleet.

5. The NZ Transport Agency would validate a supplier's data return against the vehicle specification and vehicle sales data pre-loaded into the Motor Vehicle Register. It would confirm whether or not the supplier had met the emissions target for its fleet.

6. Penalties would apply to a supplier that fails to meet its emissions target. The penalties would increase in proportion to the amount, in grams of CO_2, that the supplier's fleet exceeds the target.

There are a significant number of people who import three or less vehicles and so are not required to be registered as motor vehicle traders. The Government does not intend to apply the Clean Car Standard to their vehicles.

Please tell us what you think:

- Do you consider the overall process outlined for the Clean Car Standard is workable? If not, why?
- The Clean Car Standard will cover new vehicles and used vehicles being brought into New Zealand. Should people who import three vehicles or less be exempted? If not, why?

How could the emissions target of 105 grams CO_2 per kilometre be phased in?

There are choices in how the 2025 emission target could be phased-in. Two alternative approaches have been used internationally to phase in emission targets. We would like your view on which one you prefer.

The two options are:

1) multiple targets that progressively lower to 105 grams. For example, in 2022 the annual target could be 161 grams CO_2 per kilometre, reducing to 142 grams CO_2 per kilometre in 2023, 124 grams CO_2 per kilometre in 2024, and 105 grams CO_2 per kilometre in 2025; or

2) the single 105 grams CO_2 per kilometre target applied to an increasing percentage of suppliers' fleets. For example in 2022, 65 percent of a supplier's fleet would have to comply with the target. This proportion would increase to 75 percent in 2023, 85 percent in 2024 and 100 percent in 2025.

Having multiple targets could encourage vehicle suppliers to improve the efficiency of all their vehicles every year. This is because suppliers would have to consider the CO_2 emissions of all vehicles supplied, rather than initially considering only a proportion of them.

[11] This would be the weighted average emissions of the supplier's vehicle fleet rather than the simple average. This is to ensure that the average is truly representative of the vehicles in the fleet.

In comparison, phasing in a single target would keep the industry focused on moving towards one fleet target. This option could also increase the flexibility suppliers have to adjust their fleets.

In 2021, the first year of the proposed standard, only reporting obligations would apply. Vehicle suppliers would be required to report their vehicle imports, vehicle weights, CO_2 emission levels, and the weighted average emissions of their fleets. However, there would be no regulatory obligation to meet an annual emissions target.

Please tell us what you think:

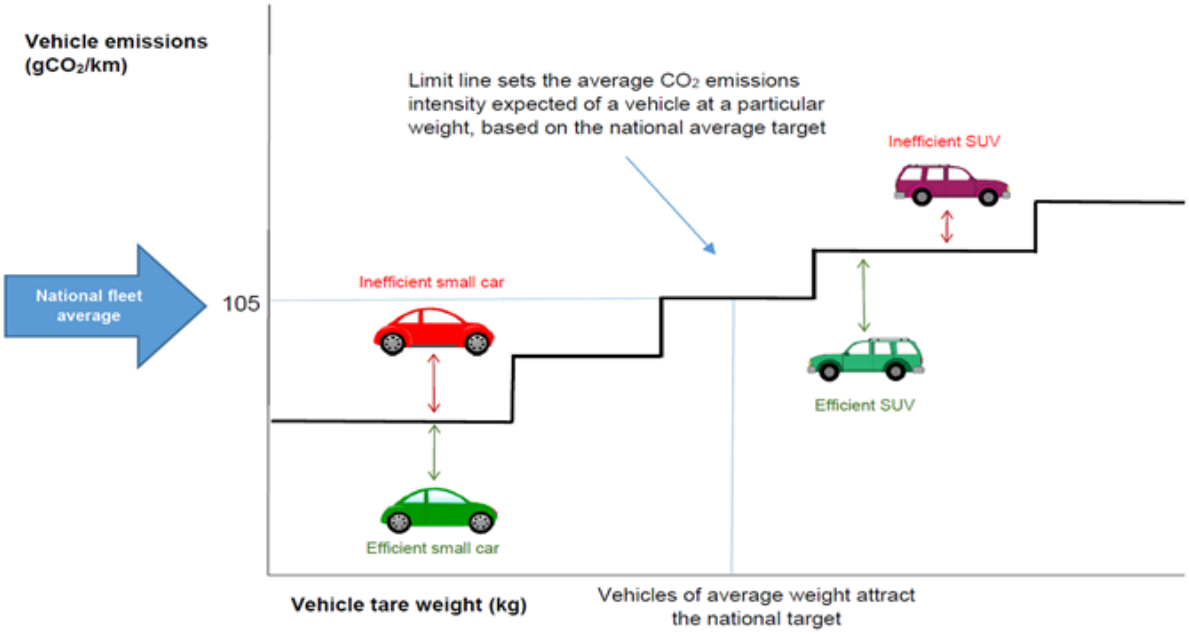
- Do you support phasing-in the 105 grams CO_2 per kilometre emissions target by:
  - adopting multiple targets that progressively lower to 105 grams? OR
  - using the increasing percentage of fleet approach?

  Please explain why you prefer the approach you have chosen.
- Do you support the timeframe for the phase in period? If not, why?

Why are we proposing having a weight-adjusted standard?

A weight-adjusted standard means the average emissions target of 105 grams of CO_2 per kilometre would vary with vehicle weight in the calculation of suppliers' fleet targets. This allows for the fact that the heavier a vehicle, the more fuel it takes to move it and the higher the CO_2 emissions.

With a national fleet target of 105 grams of CO_2 per kilometre, vehicles that are heavier than the average vehicle in the fleet would attract a higher target. Vehicles that are lighter than the average vehicle would attract a lower target. This is illustrated in the diagram below.



This adjustment by weight is done by the 'limit line'. This 'line' sets the target emission levels for vehicles of different weights. The 'line' is derived by:

- establishing the relationship between vehicle tare weight and CO_2 emissions in the fleet of vehicles entering the fleet. For the limit line used for the proposed Clean Car Standard, this was done by correlating tare weight and CO_2 emissions of the vehicles that entered the fleet in 2018

- applying the national fleet average target of 105 grams CO_2 per kilometre in 2025 to this 'line' so the average vehicle by weight attracts a target of 105 grams CO_2 per kilometre in 2025.

Internationally, a weight-adjusted emissions target is seen as the most cost-effective and equitable way to improve the emissions performance of all vehicle types.[12] This is because it:

- encourages vehicle suppliers to aim for improvement across all their vehicles irrespective of vehicle size

- avoids disadvantaging vehicle suppliers who offer a greater proportion of large vehicles and favouring suppliers who supply a greater proportion of small vehicles

- respects consumer choice

- more readily enables the adoption of safety and emissions control technologies that tend to add weight to vehicles.

With a weight-adjusted emissions target, each vehicle supplier would have a different fleet target to meet, depending on the mix of vehicles in their fleets. This better recognises that vehicle suppliers have different mixes of vehicle models depending on the consumer market they are targeting.

What weights would be used for the Clean Car Standard?

To simplify the application of the limit line in the setting of suppliers' fleet targets, it is proposed that the limit line be applied through a set of weight bands. The measure of vehicle weight would be tare weight, which is the weight of the vehicle with all fluids and components but without the drivers, passengers, and cargo.

The following weight bands are proposed. The emissions targets that would apply to each weight band are also shown for the 105 gram target:

Vehicle weight band (kilogram tare weight)	105 gram emission target adjusted by weight
Up to 1,000kg	80
>1,000kg to <=1,200kg	85
>1,200kg to <=1,400kg	95
>1,400kg to <=1,600kg	103
>1,600kg to <=1,800kg	112
>1,800kg to <=2,000kg	122
>2,000kg to <=2,200kg	130
>2,200kg	141
Weighted average	**105**

[12] Improving the efficiency of new light vehicles, Commonwealth of Australia, 2016.

If the multiple targets approach is used to phase-in the 105 gram target, the targets for each weight band would progressively lower to the values in the table above. To see the CO_2 emissions targets that could apply for each weight band over 2022–2024, go to Appendix 2.

If the 105 gram target is phased-in using an increasing percentage of fleet approach, then the values in the above table would apply each year. An increasing percentage of a supplier's fleet would have to comply with them each year.

What would vehicle suppliers have to do to show that their fleets comply with the weight-adjusted average emissions target?

At the end of each year, vehicle suppliers would provide data to the NZ Transport Agency on their vehicle imports, vehicle weights, and vehicle CO_2 emissions. As described above, this would be done for the agreed weight bands.

To comply, a supplier would have to ensure that its actual average CO_2 emissions of its fleet is less than, or equal to, the required target average for its fleet.

We propose that the calculation of a supplier's actual fleet average and its target fleet average be done to three decimal points and rounded to two. Below is a worked example for a supplier:

Model	Vehicle weight bands	Vehicle CO_2 emissions (g/km)	CO_2 emissions target adjusted by vehicle weight	No. of vehicles sold
A	Up to 1,000kg	75	80	20
B	>1,000kg to <=1,200kg	83	85	60
C	>1,200kg to <=1,400kg	95	95	100
D	>1,400kg to <=1,600kg	105	103	200
E	>1,600kg to <=1,800kg	110	112	400
F	>1,800kg to <=2,000kg	120	122	400
G	>2,000kg to <=2,200kg	128	130	300
H	>2,200kg	150	141	20
	Total			**1,500**

The supplier's **actual fleet** average is:

$$\frac{75x20 + 83x60 + 95x100 + 105x200 + 110x400 + 120x400 + 128x300 + 150x20}{1,500} = 113.59$$

The **target fleet average** the supplier has to achieve is:

$$\frac{80x20 + 85x60 + 95x100 + 103x200 + 112x400 + 122x400 + 130x300 + 141x20}{1,500} = 114.81$$

In this example, the supplier has met the target. Its actual fleet average of 113.59 gCO_2/km is 1.22 grams CO_2 lower than the target fleet average of 114.81.

Please tell us what you think:

- Do you support adopting a weight-adjusted Clean Car Standard? If not, why?

What penalties would apply for non-compliance with the emissions target?

We propose applying the following penalties where a supplier fails to meet its required fleet target:

- *New vehicle suppliers*: $100 for each gram CO_2 per kilometre that a supplier exceeds its fleet target (i.e. net excess grams CO_2 per kilometre that the fleet exceeds the target multiplied by $100)

- *Used vehicle importers*: $50 for each gram CO_2 per kilometre that a supplier exceeds its fleet target (i.e. net excess grams CO_2 per kilometre that the fleet exceeds the target multiplied by $50).[13]

The worked example below is for a supplier who imports 1,000 used-imports and exceeds its fleet target by 3.25 grams CO_2.

Number of vehicles x fleet average grams non-compliance x penalty

1,000 vehicles x 3.25 grams CO_2 per km x $50 = $162,500

These penalties are based on the penalty that applies in the European Union (NZ$157 per gram CO_2 per kilometre).[14] Internationally, a non-compliance penalty like this is influencing vehicle manufacturers in terms of their investments in technologies and decision-making around model offerings.

However, in applying the penalty to New Zealand we need to recognise our national circumstances. Realistically, New Zealand would not carry much weight as an influencer of global vehicle manufacturers. Instead, the purpose of our penalty regime would be to influence the selection of models that suppliers choose to import into New Zealand.

This is why we have set the proposed penalties at a lower rate than that applying in the European Union. The penalty that the Australian Government has been considering is AUS $100 (NZ$107 per gram).

We have also proposed a lower penalty for used vehicle imports, as generally less revenue is earned per vehicle in the used import sector compared with the new sector. A lower penalty would also recognise the reduced time used imports stay in the fleet compared to new vehicles.

Recognising these differences is important. Used vehicle imports are, and will continue to be, a significant source of additional vehicles to the New Zealand fleet.

Please tell us what you think:

- Do you support a penalty of $100 for each gram CO_2 per kilometre that a supplier of new vehicles exceeds its fleet target? If not, why?
- Do you support a penalty of $50 for each gram CO_2 per kilometre that a supplier of used imported vehicles exceeds its fleet target? If not, why?

[13] As discussed earlier, the standard would only apply to new and used imports, not existing vehicles already in the fleet.
[14] This is 95 euros per gram CO_2/km of excess emissions.

There would be a degree of flexibility in meeting the targets for a given year

For new vehicles, major improvements in efficiency tend to happen as part of model updates. These generally occur every 5 to 10 years.[15] To allow for factors like this, we could have the following mechanisms to lower the costs to vehicle suppliers of meeting their emission targets:

- Banking: any over-achievement of an annual emission target could be used to cover any under-achievement in the following three years.

- Borrowing: any under-achievement of an annual emission target could be made up by over-achieving the following year. This would apply to the new vehicle sector only. It would not apply to the used import sector as they can more easily adjust the vehicles they bring in.

- Grouping across suppliers: a new vehicle supplier could group with other new vehicle suppliers and comply as a group. Similarly, two or more used vehicle suppliers could group together. For example, a supplier with high-emission vehicles could enter into a commercial arrangement to pool their vehicles with a supplier specialising in low-emission vehicles.

For the grouping mechanism, we envisage the suppliers involved informing the NZ Transport Agency of their intention to comply as a group. They would also select one entity to be the contact for the group and to have responsibility for the administrative requirements of the Clean Car Standard, including paying any penalty.

We propose to not allow new vehicle suppliers and used vehicle suppliers to group together because of the different lengths of time that the vehicles are, on average, in the fleet. Used vehicles are in the fleet for a shorter period of time and consequently have lower lifetime emissions in New Zealand. This means that they can not offset the lifetime emissions of new vehicles, which have higher lifetime emissions in New Zealand.

Trying to take account of the difference in the economic life of new versus used vehicles would add significant complexity and increase compliance costs.

The worked example below shows a supplier who has over-achieved its emissions target. In total the supplier has over-achieved its target by 65,000 grams CO_2 per kilometre. With the mechanisms outlined above, the supplier could choose to bank these over-achievement "credits" and use them to cover any under-achievement in the following three years. Or it could opt to enter into a commercial arrangement with another supplier and effectively "sell" the "credits" to them.

While suppliers could make private commercial arrangements to trade their over-achievement credits, we are not proposing a government established trading scheme to facilitate the trade of credits across the vehicle industry. Such a scheme was being progressed when a vehicle fuel efficiency standard was considered over 2008–2009.

[15] Commonwealth of Australia, ibid, 2016

Worked example of a supplier's over- or under-achievement of its emissions target

Vehicle model	Vehicles by weight bands	Vehicle CO_2 emissions (g/km)	CO_2 emissions target adjusted by vehicle weight	No. of vehicles sold	Grams/km over/under target emissions	Total vehicle grams/km over/under emissions target
A	>1,200kg to <=1,400kg	105	95	1,000	10 over	10,000
B	>1,400kg to <=1,600kg	98	103	15,000	5 under	-75,000
C	>1,600kg to <=1,800kg	110	112	4,500	2 under	-9,000
D	>1,800kg to <=2,000kg	132	122	900	10 over	9,000
	Total			21,400		65,000 under

Please tell us what you think:

- Do you support the banking mechanism to provide flexibility for vehicle suppliers? If not, why?
- Do you agree that the new vehicle sector should have the added flexibility of borrowing? If not, why?
- Do you support an arrangement for suppliers to pool their vehicles together to comply as a group? If not, why?
- Do you agree that new and used vehicle suppliers should not be able to pool their vehicles and comply as a group? If not, why? If you think they should be able to comply as a group, how should the different lifetime emissions of new vehicles and used vehicles be measured and balanced?

Should a penalty apply for misreporting vehicle data?

Each year suppliers would have to provide data to the NZ Transport Agency to allow their actual weighted average fleet emissions to be compared to the required emission targets for their fleets. This data would be the volume of vehicles imported, coupled with the CO_2 emissions and weights of the vehicles.

It would be an offence to fail to keep the necessary accounts, or records, required to provide this data, or to provide an annual return that is incorrect or incomplete.

The penalty we propose for this offence would be the same as applies for the offence of failing to keep and provide records for the administration and enforcement of the regional fuel tax. These penalties are:

- for an individual, a fine not exceeding $15,000
- for a person or an organisation other than an individual, a fine not exceeding $75,000.

Alongside the penalty's deterrent effect, it would be difficult for vehicle suppliers to misreport their data, as the NZ Transport Agency would be able to use the data in the Motor Vehicle Register (MVR) to verify a supplier's return. The data in the MVR shows:

- every vehicle that is imported into New Zealand and its unique vehicle identification number
- the entity that registered each vehicle on import into New Zealand
- when each vehicle is sold. Fines of up to $1,000 for an individual and $5,000 for a company apply if the sale of a vehicle is not recorded.

In addition to the penalties, a supplier could face the sanction of disqualification from being a registered motor vehicle dealer if they deliberately attempt to evade meeting annual targets, for example, by disestablishing their company and setting up a new one.

Please tell us what you think:

- Do you support having the following penalties for misreporting data for the Clean Car Standard:
  - for an individual, a fine not exceeding $15,000
  - for a person or an organisation other than an individual, a fine not exceeding $75,000?

  If not, why?
- Do you support the sanction of disqualification form being a registered motor vehicle dealer if a supplier deliberately attempts to evade meeting annual targets? If not, why?

How could we ensure a valid comparison between vehicles assessed with different test procedures?

The emission values outlined in this document are New European Drive Cycle (NEDC) values.

For new vehicles, the Clean Car Standard, when implemented, would adopt the new Worldwide Harmonised Light Vehicles Test Procedure (WLTP) as the basis for measuring a vehicle's CO_2 emissions. The WLTP has been designed to achieve a better correlation between a vehicle's emissions when tested in laboratory conditions and that vehicle's real on-road performance.[16]

The WLTP will be adopted internationally with the exception of the United States. It was adopted in Europe in October 2017. Japan promulgated regulations adopting the test procedure in October 2017 and Korea is also expected to adopt the WLTP.

New Zealand has taken steps to adopt the WLTP in its vehicle certification and fuel efficiency regulation. For new vehicles the WLTP will replace the New European Drive Cycle (NEDC) procedure for type approval of light vehicles, with the full transition from NEDC to WLTP occurring after 2020.

As the proposed Clean Car Standard would be phased in from 2021, this timeline should ensure that all new vehicles supplied to New Zealand have CO_2 emissions values determined by the WLTP.

However, it will take some time before all used imports have WLTP determined CO_2 emissions values. Currently there are five standards to which the vehicles New Zealand

[16] For more information see http://wltpfacts.eu.

receives are tested. These are the WLTP, the NEDC, the Japanese JC08, the older Japanese 10/15 used for pre-2008 vehicles, and the American Federal Test Procedure.

The NEDC and JC08 have already begun being replaced by the WLTP, but the American Federal Test Procedure will continue to be used for American vehicles.

We propose to stop recognising vehicles assessed through the Japanese 10/15 test

To provide a valid alignment of emissions values derived from these different tests, internationally recognised conversion factors would be used. However, vehicle tailpipe emissions assessed through the old Japanese 10/15 test cannot reliably be converted.

In implementing the Clean Car Standard, we are proposing amending the Fuel Consumption Information Rule so that only vehicles tested to the WLTP, NEDC, the JC08, and the American Federal Test Procedure meet requirements for entry certification. In effect, this will mean that older used Japanese vehicles tested before 2008 using the Japanese 10/15 procedure could not be imported.

The number of vehicles affected would be very small. In 2021 these vehicles will be 14 years and older. Based on 2018 registrations, we estimate that in 2021 around 2 percent of the vehicles that could come into the fleet would be affected by this change.

Please tell us what you think:

- Do you support amending the Fuel Consumption Information Rule so that only vehicles tested to the WLTP, NEDC, the JC08, and the American Federal Test Procedure meet requirements for entry certification? If not, why?

How could future emissions targets be set beyond 2025?

Stronger emissions targets would be set beyond 2025, to continue the move to a low-emissions vehicle fleet.

The future targets would be signalled well in advance, so that market participants can take them into account in future investment and supply chain planning.

Inevitably there will be risks associated with setting future targets. For example, technological change and market uptake will be increasingly uncertain the further forward the emissions targets are set. This could be mitigated by being able to change a target even where it is already set.

The process and timeframes for setting future emissions targets would be aligned with the new Climate Change Commission's system of quantified greenhouse gas emissions budgets. This is because reducing emissions from the light vehicle fleet will be a significant part of the emissions reductions achieved in transport, and therefore a significant component of meeting New Zealand's emission reductions targets.

The proposed system will see a rolling set of three 5-yearly emissions budgets in place, providing a view for the next 15 years of how New Zealand should track towards its 2050 targets. The Climate Change Commission is proposed to also have a role in advising government on policies to achieve emissions budgets, and in monitoring progress and evaluating performance in each budget period.

We propose that the process for setting and reviewing the vehicle emission targets be managed by the Ministry of Transport as part of the government's overall response to the recommendations of the Climate Change Commission.

While the design of the legislation needed for the Clean Car Standard has not been finalised, it is likely that the future fleet emission targets would be set as a Transport Rule. This would be appropriate to enable the targets to be easily revised as required.

The approach to use could involve the following:

- setting the fleet emissions targets for three 5-year periods, for example 2025, 2030, 2035. This would align with the proposed New Zealand's emissions budget system

- the most immediate target, in this case for 2025, would be the set fleet emissions target with the two targets for 2030 and 2035 being 'indicative targets'. The indicative targets for 2030 and 2035 would be set in 2021

- notwithstanding the 15 year timeframe inherent in the three 5-year cycle, the system would need to allow for the possibility of revising the fleet emissions targets when critical factors necessitate change. The critical factors could include international trends in transport emissions standards, changes in vehicle technology, the effectiveness of other policies and measures on the uptake of low-emission light vehicles, and the distribution of impacts and equity implications.

Please tell us what you think:

- Do you agree with the proposed process for setting future emission targets? If not, what would you change and why?

Part 3: Clean Car Discount

Part 3A: How the Clean Car Discount would work

To support the Clean Car Standard, the Government is proposing the Clean Car Discount to influence consumer demand. The Clean Car Discount is a feebate scheme.

The Clean Car Discount aims to make fuel efficient and low-emission vehicles more affordable for New Zealanders to purchase.

It is expected to have a secondary effect of increasing the supply of low-emission vehicles. Vehicle suppliers will have more confidence to import fuel efficient and electric vehicles because the proposed discounts will make them more affordable and attractive to consumers.

With the proposed Clean Car Discount, consumers would either receive a discount or pay a fee, or avoid both, depending on the CO_2 emissions of the vehicle they are buying. The discounts and fees would be displayed on vehicles available for sale. Less emissions-intensive vehicles, including EVs, would receive discounts, while vehicles with higher emissions would incur fees. Mid-range emitting vehicles would face neither a discount nor a fee.

The discounts and fees would be structured around different bands of CO_2 emissions. Different vehicles within the same emissions band would receive the same fee or discount. Different fees and discounts will apply for new and used vehicles coming into the fleet, reflecting the lower purchase price of used vehicles, and their shorter remaining life.

Examples of what feebate schedules could be for new and used import vehicles, and how the fees and discounts could change over time, are in Appendix 4.

The Clean Car Discount would apply to new and used light vehicles sold for the first time in New Zealand, including all cars, SUVs, vans, utes and light trucks of 3.5 tonnes gross vehicle mass or less.

It would not apply to vehicles sold after they have already been used in New Zealand. Nor would it apply to motorcycles, vehicles designed solely for military operations, or non-road registered vehicles such as farm tractors.

The scheme would be self-financing with the discounts paid for from the fees. In effect, this means that people who buy high-emitting vehicles subsidise the cost of vehicles for people who opt for low-emission vehicles. The fee they pay recognises the increased environmental and economic costs imposed in purchasing vehicles with higher CO_2 emissions.

Vehicles with a retail price of $80,000 or more would not be eligible for discounts. This cut off is to prevent the scheme transferring wealth to New Zealanders who are able to buy vehicles that cost $80,000 or more. All vehicles with high-emissions would incur fees irrespective of their retail price.

The Clean Car Discount will be timed to replace the exemption from road user charges that applies to electric vehicles. For light vehicles the exemption applies until December 2021, or until they make up 2 percent of the light vehicle fleet.

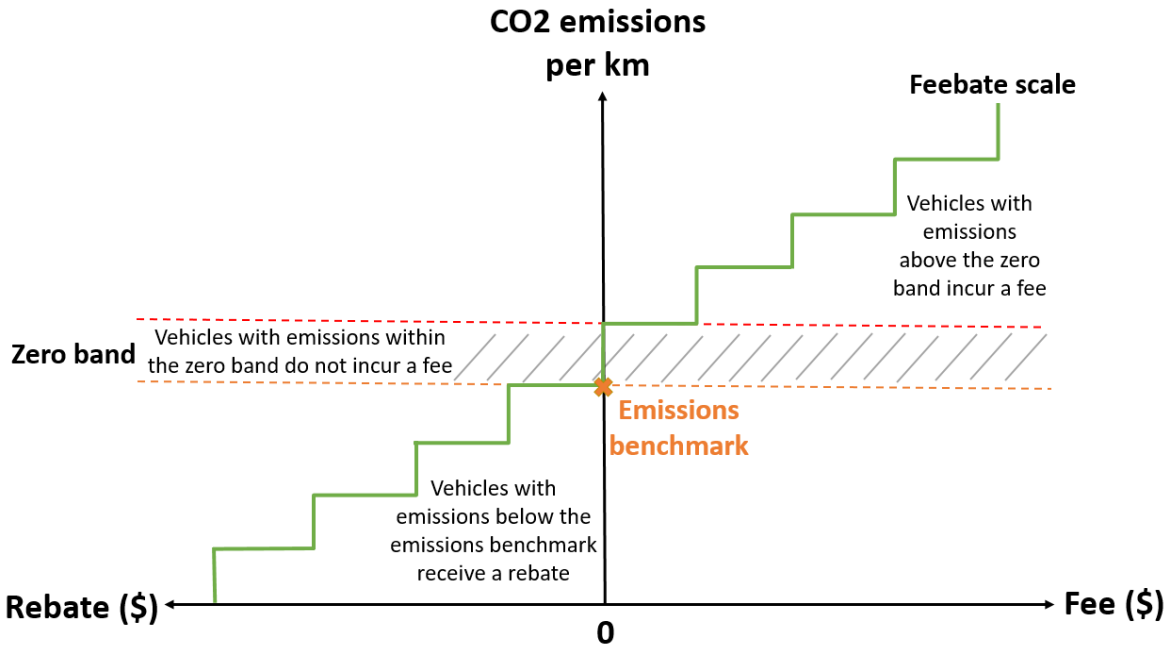
In practice, the Clean Car Discount will have a risk of over- or under-fee collection. The government would manage this risk from year to year through a reserve fund that would be

drawn on to balance overs and unders when needed. Funding would not be used for other purposes.

The Ministry's initial cost-benefit analysis of the proposed Clean Car Discount, estimates that it would have a benefit-cost ratio of 2.6:1 and a net present value of $413 million. Most of the benefit would be to motorists from fuel savings. It is estimated that motorists would enjoy the largest share of these benefits by saving about $627 million on fuel over the life of the vehicles affected by the scheme, or $5,200 per vehicle.

Impact of the Clean Car Discount
Fuel savings of around $627 million
Average lifetime fuel saving per vehicle $5,200
CO_2 reduced by around 1.6 million tonnes
Benefit-cost ratio of 2.6:1

The proposed Clean Car Discount



Please tell us what you think:

- Is the Clean Car Discount appropriate for New Zealand? If not, why?

If you would like to have a say on the detailed aspects of the design of the Clean Car Discount please see the information in the next section (How could a Clean Car Discount be implemented?).

Part 3B: How could the Car Discount be implemented?

The Clean Car Discount would replace the current exemption from road user charges for EVs.

There are choices in how the Clean Car Discount could be implemented. These choices concern:

- the level of the emissions benchmark. This is stated in grams CO_2 per kilometre and distinguishes what is viewed as a low-emissions vehicle, which receive discounts, from a high-emissions vehicle, which incurs fees
- the size of fees and discounts that would apply
- whether there should be a "zero band" where there are no fees even though the vehicles have emissions that are above the emissions benchmark, and if so, the range of emission levels the band would apply to
- how consumers would get their discounts and pay their fees.

We would like your views on these issues.

At what level would the emissions benchmark be set?

The proposed emissions benchmark needs to broadly align with the emissions fleet target for the Clean Car Standard. This is 105 grams CO_2 per kilometre by 2025.

However, a key difference is that the emissions benchmark would not be weight adjusted like the emissions target in the Clean Car Standard. This will have the effect that heavier conventional light vehicles, like vans, utes and large SUVs, will attract fees as they tend to have higher CO_2 emissions. Smaller vehicles are more likely to attract discounts as they tend to have lower emissions.

Encouraging consumers to buy smaller vehicles as a way to reduce CO_2 emissions is important. Part of the reason why the vehicles entering our light fleet have a relatively poor emissions performance is that the share of utes and large SUVs coming into our fleet has been increasing.

Like the emissions target in the Clean Car Standard, an emissions benchmark of 105 grams CO_2 per kilometre by 2025 would be phased in. The initial benchmark would be set higher, for example at 150 grams, and would progressively lower to 105 grams CO_2 per kilometre by 2025.

As the emissions benchmark progressively lowers, the fees and discounts will also change reflecting the desired move to low-emission vehicles, and the need to keep the scheme revenue neutral.

The emissions benchmark would be revised beyond 2025 to support continued improvements in fuel efficiency and reductions in emissions.

Please tell us what you think:

- Is the emissions benchmark of 105 grams CO_2 per kilometre by 2025 an appropriate one to have for the Clean Car Discount? If not, why?
- Would an initial emissions benchmark of 150 grams CO_2 per kilometre be suitable for the first year of the Clean Car Discount? If not, why?

What size fees and discounts should apply?

The feebate schedule sets the fees and discounts that would apply to vehicles based on the level of their CO_2 emissions. The level of the discounts and fees need to achieve a balance between providing sufficient incentives for people to buy low-emission vehicles, while being acceptable for fee-payers.

Examples of what feebate schedules could be for new and used import vehicles, and how the fees and discounts could change over time, are in Appendix 4. We are seeking feedback on these schedules.

In the example schedule for new vehicles, the schedule has maximum fees of $3,000 for the first year with maximum discounts of $8,000. The discounts reduce through time allowing for the expected uptake of low-emission vehicles.

For the purposes of the Clean Car Discount, a new vehicle would also include vehicles up to three years old sold for the first time in New Zealand.

For used vehicles (vehicles older than three years), the example schedule has maximum fees of $1,500 for the first year with maximum discounts of $2,600. As for new vehicles, the discounts reduce through time allowing for the expected uptake of low-emission vehicles.

The levels of fees and discounts and the emission benchmark would be reviewed through time to ensure that the:

- scheme continues to be effective in encouraging the purchase of low-emission vehicles. Where the emission benchmark sits in terms of the CO_2 bands will, over time, be influenced by factors in the vehicle market, including the availability of electric vehicles and hybrids in our market and the choices of consumers
- level of discounts paid out is largely in balance with the level of fees received.

Although the CO_2 levels for each band would not change, the discounts or fees associated with them would. Over time, as the emissions benchmark is moved to a lower emissions level, some vehicle models would shift from receiving discounts to getting no discount. Others may move to attracting a fee.

Please tell us what you think:

- Would the level of the fees and discounts in the example feebate schedules (Appendix 4) increase demand for low-emission vehicles? If not what changes would you make?
- In the example schedules the schedules change every year to lower the emissions benchmark and to keep the scheme self-financing. Do you think annual change is practical or should there be less change?
- Should new vehicles include near-new vehicles less than 3 years old?

How wide should the zero band be?

The zero band is where the fees are zero. This band applies to vehicles that are close to, but higher, than the emissions benchmark.

The zero band gives people some flexibility to adjust their vehicle preferences, without being penalised. It avoids penalising people for purchasing a vehicle that has a better emissions performance than today's average vehicle, which emits 180 grams of CO_2 per kilometre.

In the example schedules (see Appendix 3) the zero band is set at a width of three emission bands. This allows vehicles of up to 35 grams of CO_2 per kilometre above the emissions benchmark to incur no fees in 2025.

Please tell us what you think:

- Do you think a zero band is appropriate? If not why?
- Do you think the size of the zero band in the example feebate schedules is appropriate? If not why?

How would consumers get their discounts and pay fees?

We are proposing that the fees and discounts are applied directly at the point of vehicle purchase. With this approach consumers would pay the fees to the retailer, who would then forward the fees to the administrator. For the discounts, consumers could either apply to the administrator to have the discount paid to them, or the discount could be deducted from the purchase price by the retailer. The retailer would then apply to the administrator to have the discount reimbursed.

Having consumers apply for their discounts causes a delay that could weaken the incentive to buy a less emissions-intensive vehicle. This could be mitigated by the consumer choosing to receive the discount as a deduction from the purchase price. By giving consumers both options they could choose the incentive that works best for them.

The NZ Transport Agency will be the administrator of the Clean Car Discount.

An alternative would be to apply the fees and discounts to vehicles as they enter New Zealand. Vehicle suppliers would then pass on the discounts and recover the fees from consumers at the point of purchase.

This approach has the advantage that it provides an additional incentive for suppliers to offer more low-emission vehicles. However, its disadvantage is that there is a risk that some motor vehicle dealers may not pass on the full amount of the discounts, and could over-recover the fees. It also imposes costs on the vehicle industry in having to finance the cost of the fees before they are recovered from consumers.

To ensure the effective operation of the Clean Car Discount, vehicle suppliers would be required to display the specific fees and discounts that apply to vehicles available for sale. A proposed penalty of $5,000 would apply where fees and discounts are not displayed on a vehicle.

It would also be an offence for vehicle suppliers to pass on the discounts or collect the fees incorrectly. The proposed penalties are:

- for an individual, a fine not exceeding $15,000
- for a person or an organisation other than an individual, a fine not exceeding $75,000.

Please tell us what you think:

- Do you support the proposal to apply the fees and discounts directly at the point of vehicle purchase? If not, why?
- Do you support the penalties outlined in this section to ensure that fees and discounts are displayed on each vehicle and are correctly applied by vehicle suppliers? If not, why?

When could the Clean Car Discount come into effect?

The Clean Car Discount could come into effect in 2021. This would allow for the necessary legislation and administrative arrangements to be in place, as well as vehicle tailpipe CO_2 emissions to be collected and recorded in the Motor Vehicle Register as part of vehicle entry certification.

Part 4: How would the benefits and costs of these policies fall across society?

Ministry of Transport analysis suggests that businesses and households would, on average, be significantly better off as a result of the clean car policies. Households purchase 74 percent of the vehicles entering the fleet, with businesses purchasing the remainder.

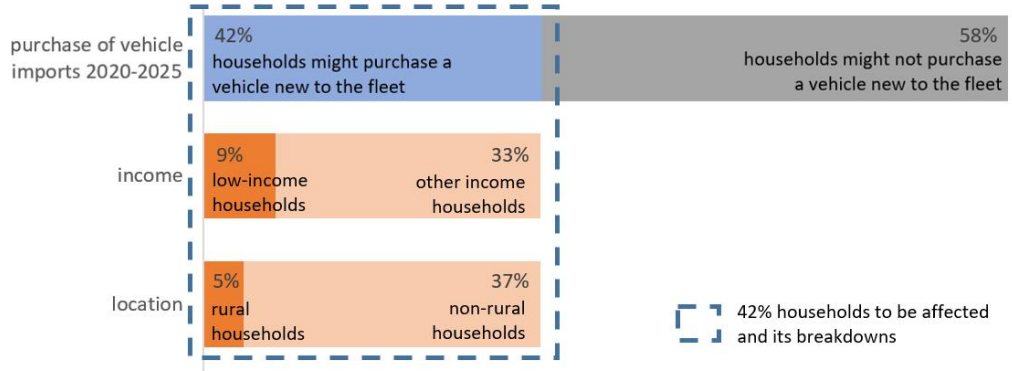
A standard of 105 g CO_2/km could deliver, on average, fuel savings of $6,800 to the owner over the economic life of vehicles purchased under the scheme. The clean car discount could deliver, on average, fuel savings of $5,200 to the owner over the economic life of vehicles purchased under the scheme.

While neither policy would directly apply to the re-sale of existing vehicles in the domestic market, they would induce a gradual phase-in of more low-emission vehicles into the domestic used vehicle market. This would benefit all used vehicle buyers, including low income households, through a wider choice of affordable low-emissions vehicles.

Officials estimate that 42 percent of all New Zealand households may purchase a vehicle new to the fleet over the 6 years to 2025[17]. This means that 42 percent of households may be directly affected by these policies over the next 6 years.

The graph below shows that the low income households expected to purchase new to the fleet vehicles make up 9 percent of all New Zealand households. Households with other incomes purchasing new to the fleet vehicles make up 33 percent of all New Zealand households. Rural households purchasing new to the fleet vehicles make up 5 percent of New Zealand households.

Estimated share of <u>households</u> to be affected by the clean car policies



How people will be impacted by the proposals will depend on how individuals, and the market respond. This makes it difficult to predict with any certainty what the impacts will be.

Average vehicle prices might increase in the short term as a result of the introduction of the Clean Car Standard. This may impact low income households more as it would consume a greater proportion of their income. However, any increase will be in part, or fully, mitigated through the Clean Car Discount.

[17] This estimate uses data from the three years to June 2018 and extrapolates it out over the 6 years to 2025.

In the medium term, the market is expected to adjust to the Clean Car Standard and minimise any price or choice impacts, particularly as the price of hybrid vehicles and EVs becomes on par with that of conventional vehicles.

In the first year of the Clean Car Discount, the estimated proportion of new to the fleet vehicles facing a fee is expected to be similar to those receiving a discount.

The graph below shows that 59 percent of households buying new to the fleet vehicles are expected to either receive a discount, or not incur a fee.

Of the low income households that purchase a new to the fleet vehicle, more are expected to receive a discount than pay a fee. This is because a lower proportion of their vehicle purchases are of high emitting vehicles.

All households will ultimately have the ability to avoid paying a fee by selecting a low emitting vehicle model.

Estimated shares of new and used light vehicle imports subject to fees, discounts, and exemptions by household type in 2021

Of the rural households buying a vehicle new to the fleet, slightly more than half are more likely to pay a fee than receive a discount. This is because a greater proportion of their vehicle purchases are of high emitting vehicles. However, there is the opportunity for these households to change their buying habits and avoid this fee.

The other impact of the Clean Car Discount could be for households that require a larger vehicle for work or other purposes. There is limited data available to assess how the Clean Car Standard or discount policies would affect these households. This is primarily because we do not have complete data and pricing information on all vehicles that are available in the market within these vehicle segments.

A simple analysis in Appendix C shows, however, that a number of larger SUVs and utes currently sold in New Zealand would face a fee under the Clean Car Discount policy. At the same time, there are some mid-range price new and used utes and new and used vans, SUVs, and people-movers that would be unaffected in 2021. Some SUVs and vans already sold in New Zealand would attract a discount in 2021.

The clean car reforms are designed to increasingly improve the supply and variety of low emission vehicles. At the same time, the price of EVs and petrol hybrids will become on par with that of conventional vehicles. This change in the overall mix and pricing of vehicles available in our market will make it easier for people (rural or urban, wanting smaller or larger vehicles) to opt for low emission vehicles and avoid paying a fee.

The proposed schedule of fees and discounts envisages reducing the vehicle emission bands eligible for discounts and the level of the discounts through time. In contrast, fees broaden to more emission bands and the maximum fees do not change through time. Over time, this would increase the share of vehicles that would be required to pay a fee. However, when the effects of the Clean Car Standard on vehicle purchasing choices are included, the actual share of vehicles to be subject to a fee is likely to be lower.

Appendix 1: Comparison of the best performing variants of top selling passenger vehicles in New Zealand with the best performing comparable variant sold in the UK (August 2017)[18]

Model	Best NZ variant	Tailpipe CO_2 (g/km)	Best UK variant	Tailpipe CO_2 (g/km)	Difference %
Toyota Corolla (sold as Auris in UK)	1.8L Petrol Hybrid	96	1.8L Petrol Hybrid	79	18
Toyota Rav4	GX 2.2D/4WD/6AT/SV/5DR/5S	176	Petrol Hybrid AWD 2.5 VVT-i Auto	118	33
Toyota Yaris	GX 1.3P/5MT/HA/5DR/5S	134	1.5 VVT-i hybrid Auto with 15 inch alloy wheels	75	44
Kia Sportage	Urban EX 2.0P/6AT/SV/5DR/5S	182	'1' 1.7 CRDi 114bhp ISG	119	35
Mazda CX-5	GSX DSL 2.2D/4WD/6AT/SV/5DR/5S	158	2.2 SKYACTIV-D (150PS) 4WD A6	144	9
Mazda 3	GLX 2.0P/6AT/HA/5DR/5S	136	1.5L Turbo Diesel, 6 Spd Manual	99	27
Mitsubishi Outlander	XLS 88KW/PHEV/4WD/AT/SV/5DR/5S	39	GX5h 2.0 PHEV	44	-13
Suzuki Swift	GL 1.2P/5MT/HA/5DR/5S	106	1.2 2WD	116	-9
Suzuki Vitara	SPORT 1.4P/6AT/SV/5DR/5S	138	1.6 2WD	106	23
Hyundai Tucson	2.0 CRDi LIMITED 2.0D/4WD/6AT/SV/5DR/5S	178	2.0l CRDi 4WD, 100kW Diesel A6	160	10
Hyundai i30	GD CRDI 1.6D/7AM/HA/5DR/5S	136	1.6L Turbo Diesel, 6 Spd Manual	94	31
Hyundai Santa Fe	DM 2.2D/4WD/6AT/SV/5DR/5S	205	2.2l CRDi 4WD 18" or 19" wheels	159	22

[18] This comparison has been derived from data sourced from the UK Vehicle Certification Agency http://www.dft.gov.uk/vca/ and from data routinely provided by distributors through the New Zealand Motor Industry Association's Model Information system.

Nissan Qashqai	N-TEC 2.0P/CVT/HA/5DR/5S	159	dCi 110 16/17 inch wheel	99	38
Nissan X-Trail	ST-L 2.5P/6CVT/SV/5DR/5S	188	dCi 130 2WD 17” wheel	129	31
Ford Focus	Trend Diesel 2.0D/6AT/HA/5DR/5S	115	1.5 Duratorq TDCi (105PS) with stop/start – 5 Door	88	23
Subaru Outback	2.0D SLT Premium 2.0D/4WD/6CVT/SV/5DR/5S	165	2.0D SE Lineartronic AWD CVT	159	4
HONDA HR-V	L 1.8P/CVT/SV/5DR/5S	160	1.6 i-DTEC S	104	35

This is a snapshot comparison using August 2017 data. The efficiency of vehicle variants available in the United Kingdom and New Zealand will have changed since this comparison was done.

Appendix 2: Emissions targets that would apply if the multiple target phase-in is used

2021 – Monitoring and reporting of fleet emissions commences

2022 – Annual national fleet target is 161 grams CO_2 per kilometre

Vehicle weight band	161 g emission target adjusted by weight
Up to 1,000kg	123
>1,000kg to <=1,200kg	131
>1,200kg to <=1,400kg	146
>1,400kg to <=1,600kg	159
>1,600kg to <=1,800kg	171
>1,800kg to <=2,000kg	187
>2,000kg to <=2,200kg	199
>2,200kg	216
Weighted average	161

2023 - Annual national fleet target is 142 grams CO_2 per kilometre

Vehicle weight band	142 g emission target adjusted by weight
Up to 1,000kg	108
>1,000kg to <=1,200kg	116
>1,200kg to <=1,400kg	129
>1,400kg to <=1,600kg	140
>1,600kg to <=1,800kg	151
>1,800kg to <=2,000kg	165
>2,000kg to <=2,200kg	175
>2,200kg	190
Weighted average	142

2024 - Annual national fleet target is 124 grams CO_2 per kilometre

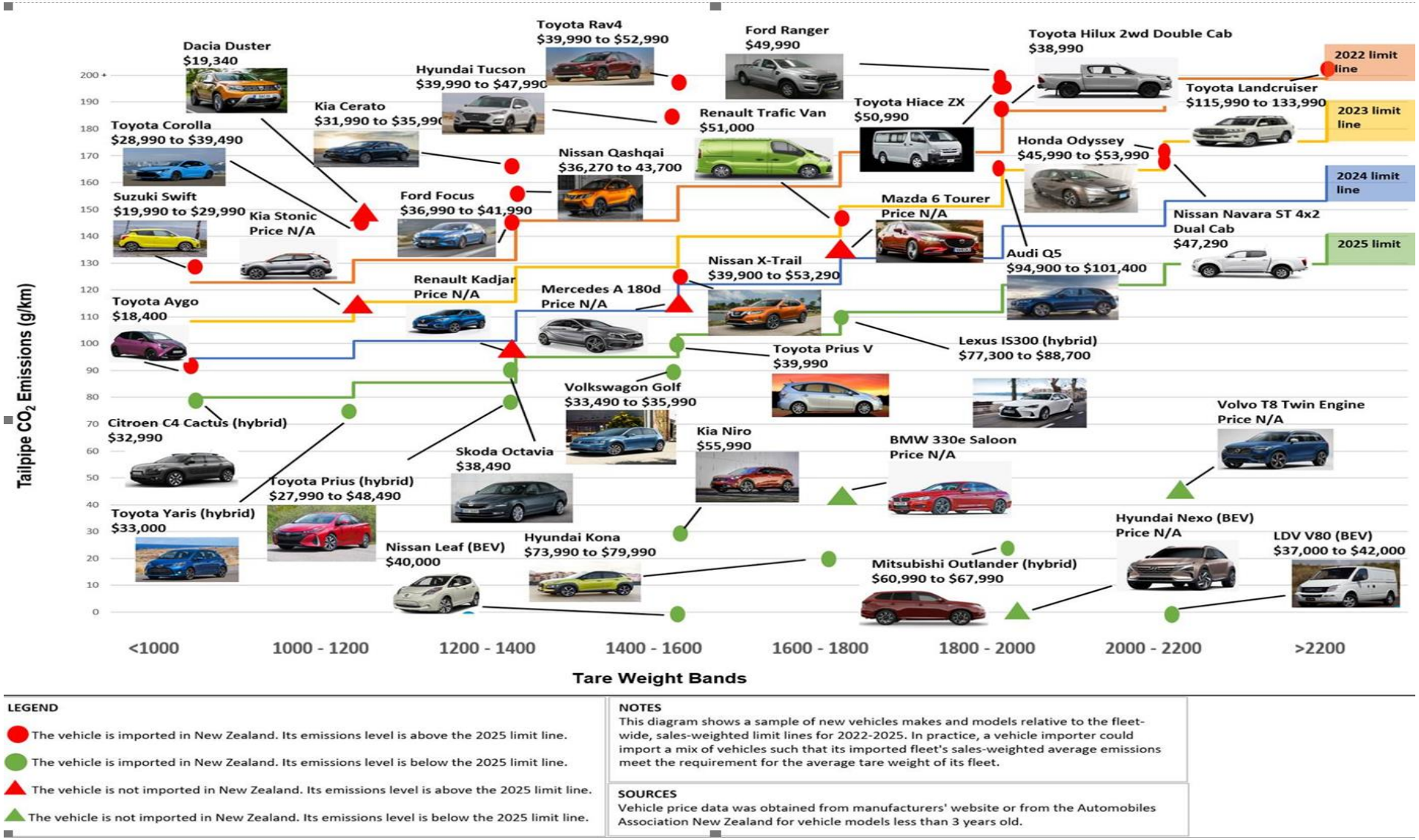
Vehicle weight band	124 g emission target adjusted by weight
Up to 1,000kg	95
>1,000kg to <=1,200kg	101
>1,200kg to <=1,400kg	112
>1,400kg to <=1,600kg	122
>1,600kg to <=1,800kg	132
>1,800kg to <=2,000kg	144
>2,000kg to <=2,200kg	153
>2,200kg	166
Weighted average	124

2025 - Annual national fleet target is 105 grams CO_2 per kilometre

Vehicle weight band	105 g emission target adjusted by weight
Up to 1,000kg	80
>1,000kg to <=1,200kg	85
>1,200kg to <=1,400kg	95
>1,400kg to <=1,600kg	103
>1,600kg to <=1,800kg	112
>1,800kg to <=2,000kg	122
>2,000kg to <=2,200kg	130
>2,200kg	141
Weighted average	105

Appendix 3: Selected vehicle makes and models by tare weight and limit lines 2022-2025 – new vehicle imports

(Note: this is a snapshot of vehicles available in April 2019)



LEGEND

- The vehicle is imported in New Zealand. Its emissions level is above the 2025 limit line.
- The vehicle is imported in New Zealand. Its emissions level is below the 2025 limit line.
- The vehicle is not imported in New Zealand. Its emissions level is above the 2025 limit line.
- The vehicle is not imported in New Zealand. Its emissions level is below the 2025 limit line.

NOTES

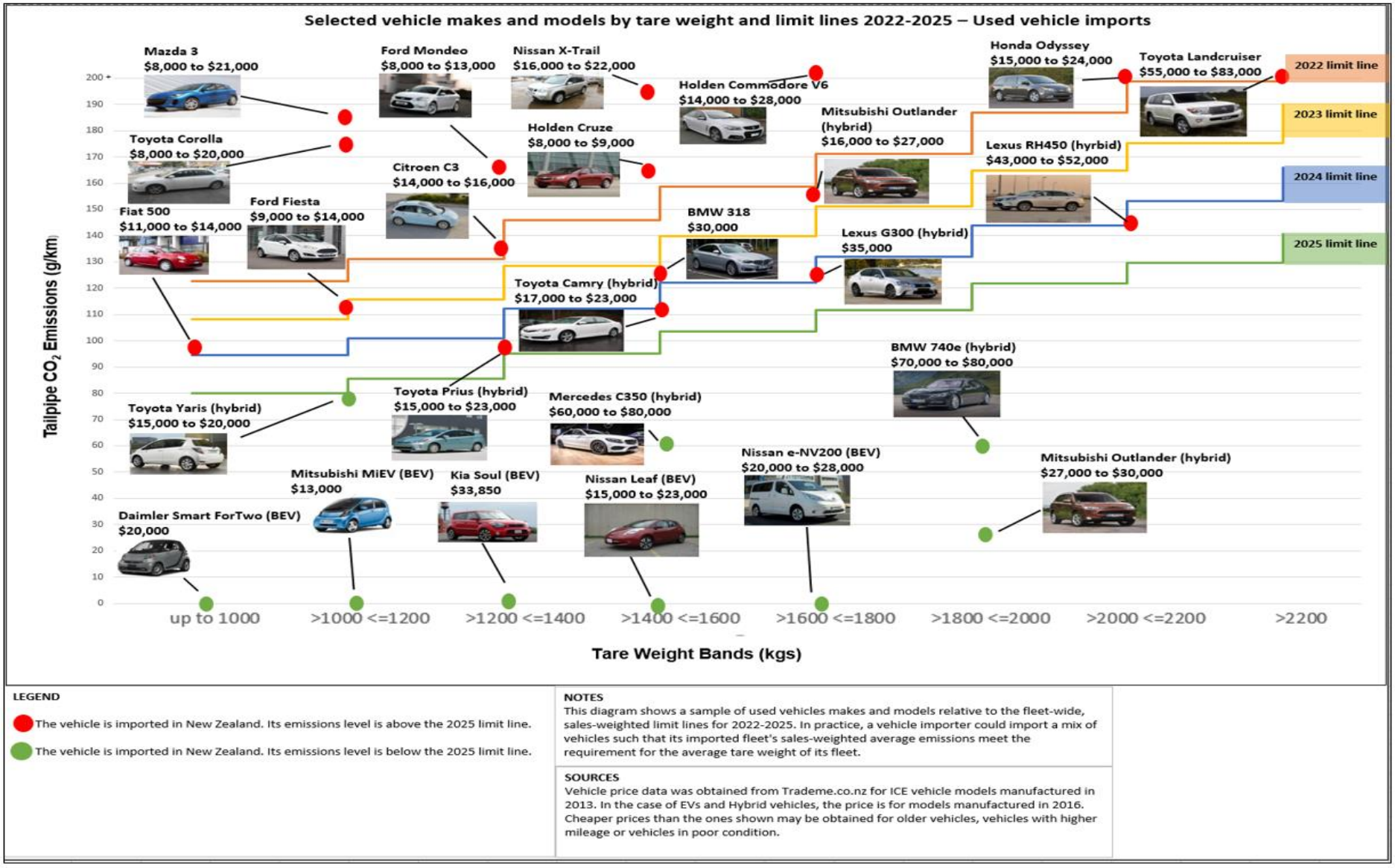
This diagram shows a sample of new vehicles makes and models relative to the fleet-wide, sales-weighted limit lines for 2022-2025. In practice, a vehicle importer could import a mix of vehicles such that its imported fleet's sales-weighted average emissions meet the requirement for the average tare weight of its fleet.

SOURCES

Vehicle price data was obtained from manufacturers' website or from the Automobiles Association New Zealand for vehicle models less than 3 years old.

Appendix 3: Selected vehicle makes and models by tare weight and limit lines 2022-2025 – used vehicle imports

(Note: this is a snapshot of vehicles available in April 2019)



Appendix 4: Proposed feebate schedule for new vehicles (includes vehicles up to and including three years old)

	NEW VEHICLES: CO_2 Emissions Band (gCO_2/km)																
	Hyundai Kona VW eGolf LDV EV80 van	Toyota Prius Prime (PHEV) Kia Niro (PHEV) Mitsubishi Outlander (PHEV)	Mini Countryman (PHEV) BMW 225xe (PHEV)	Toyota Prius (hybrid)	Toyota Camry (hybrid) Lexus CT200h (hybrid) Audi A1 (P)	Suzuki Swift (P) Lexus IS300 (hybrid)	VW Golf (1.4 P) Kia Rio (P) Nissan X-trail (D)	Suzuki Vitara (D) Ford Fiesta (1.5P) BMW 3 Series (P)	Toyota Corolla Ford Focus Suzuki Jimny Mazda CX-3	Mazda 6 Nissan Qashqai Audi Q7 (D)	Kia CERATO Mazda CX-5 Audi Q5 (P) Outlander (D) Outlander (P)	Mitsubishi ASX Ford Endura Honda Odyssey	Kia Sportage (P) Hyundai Tucson (P)	Mitsubishi Triton 4x4(4WD) Toyota RAV4 4x4	Toyota Hilux 4x4 Mazda CX-9 (AWD)	Ford Ranger 4x4 Holden Colorado 4x4 BMW 8 Series V8	Range Rover Nissan Patrol Toyota LandCruiser
Emissions	**0 to 4**	**5 to 49**	**50 to 69**	**70 to 89**	**90 to 105**	**106 to 120**	**121 to 130**	**131 to 140**	**141 to 150**	**151 to 160**	**161 to 170**	**171 to 180**	**181 to 190**	**191 to 200**	**200 to 225**	**226 to 250**	**over 251**
YEARS	**Discounts**									**Zero**			**Fees**				
2021	**$8,000**	**$6,800**	**$5,800**	**$4,800**	**$3,800**	**$2,800**	**$1,800**	**$800**	**$600**	**$0**	**$0**	**$0**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**
	Discounts								**Zero**			**Fees**					
2022	**$7,200**	**$6,200**	**$5,200**	**$4,200**	**$3,200**	**$2,200**	**$1,200**	**$200**	**$0**	**$0**	**$0**	**$1,750**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**
	Discounts							**Zero**			**Fees**						
2023	**$6,500**	**$5,600**	**$4,700**	**$3,800**	**$2,900**	**$2,000**	**$1,100**	**$0**	**$0**	**$0**	**$1,500**	**$1,750**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**
	Discounts						**Zero**			**Fees**							
2024	**$6,300**	**$5,200**	**$4,100**	**$3,000**	**$1,900**	**$800**	**$0**	**$0**	**$0**	**$1,250**	**$1,500**	**$1,750**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**
	Discounts					**Zero**			**Fees**								
2025	**$6,000**	**$4,700**	**$3,400**	**$2,100**	**$800**	**$0**	**$0**	**$0**	**$1,000**	**$1,250**	**$1,500**	**$1,750**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**
	Discounts				**Zero**			**Fees**									
2026	**$5,600**	**$4,100**	**$2,600**	**$1,100**	**$0**	**$0**	**$0**	**$750**	**$1,000**	**$1,250**	**$1,500**	**$1,750**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**
	Discounts				**Zero**			**Fees**									
2027	**$4,500**	**$3,300**	**$2,100**	**$900**	**$0**	**$0**	**$0**	**$750**	**$1,000**	**$1,250**	**$1,500**	**$1,750**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**
	Discounts			**Zero**			**Fees**										
2028	**$4,200**	**$2,500**	**$800**	**$0**	**$0**	**$0**	**$500**	**$750**	**$1,000**	**$1,250**	**$1,500**	**$1,750**	**$2,000**	**$2,250**	**$2,500**	**$2,750**	**$3,000**

Appendix 4: Proposed feebate schedule for used imported vehicles (vehicles older than three years)

	USED VEHICLES: CO_2 Emissions Band (gCO_2/km)																
	Nissan Leaf Mitsubishi MiEV	Holden Volt (PHEV) Mitsubishi Outlander (PHEV) Toyota Prius (PHEV)	2016 BMW 740e (PHEV) 2016 Mercedes C350 (PHEV)	Porsche Cayenne (PHEV) Toyota Yaris/Vitz (hybrid)	Toyota Prius (hybrid) Honda Insight (hybrid) Fiat 500 (P) 2016 Renault Megane (D)	Toyota Camry (hybrid) Ford Fiesta (P) Hyundai i30 (D)	Lexus GS300 (hybrid) BMW 318(D) Skoda Fabia (P)	Citroen C3 (1.4P) BMW 116 (P) BMW 3 (hybrid)	Ford Focus (D) Holden Cruze (D) Lexus RX450 (hybrid)	Mitsubishi Outlander (D) Honda Jazz (1.5P)	Holden Cruze (P) Ford Modeo (D) Nissan Pulsar (P)	Corolla (P) Skoda Superb (P) Mazda CX-5 AWD (P) Mitsubishi Outlander (P)	Camry (P) Nissan Tiida (P) Mazda 3 (P) Ford Kuga (P)	Ford Focus (P) Kia Sportage (D) Nissan X-trail (D) Nissan Dualis (P)	Ford Falcon 6 Holden Commodore SV6 Honda Odyssey	Ford Territory (D) Holden Colorado (D)	Holden Commodore V8 Range Rover Toyota LandCruiser
Emissions	**0 to 4**	**5 to 49**	**50 to 69**	**70 to 89**	**90 to 105**	**106 to 120**	**121 to 130**	**131 to 140**	**141 to 150**	**151 to 160**	**161 to 170**	**171 to 180**	**181 to 190**	**191 to 200**	**200 to 225**	**226 to 250**	**over 251**
YEARS	**Discounts**									**Zero**			**Fees**				
2021	**$2,600**	**$2,300**	**$2,000**	**$1,700**	**$1,400**	**$1,100**	**$800**	**$500**	**$200**	**$0**	**$0**	**$0**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**
	Discounts								**Zero**			**Fees**					
2022	**$2,400**	**$2,100**	**$1,800**	**$1,500**	**$1,200**	**$900**	**$600**	**$300**	**$0**	**$0**	**$0**	**$1,000**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**
	Discounts							**Zero**			**Fees**						
2023	**$2,200**	**$1,900**	**$1,600**	**$1,300**	**$1,000**	**$700**	**$400**	**$0**	**$0**	**$0**	**$900**	**$1,000**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**
	Discounts						**Zero**			**Fees**							
2024	**$2,200**	**$1,900**	**$1,600**	**$1,300**	**$1,000**	**$700**	**$0**	**$0**	**$0**	**$800**	**$900**	**$1,000**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**
	Discounts					**Zero**			**Fees**								
2025	**$2,100**	**$1,700**	**$1,300**	**$900**	**$500**	**$0**	**$0**	**$0**	**$700**	**$800**	**$900**	**$1,000**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**
	Discounts				**Zero**			**Fees**									
2026	**$2,100**	**$1,700**	**$1,300**	**$900**	**$0**	**$0**	**$0**	**$600**	**$700**	**$800**	**$900**	**$1,000**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**
	Discounts				**Zero**			**Fees**									
2027	**$2,100**	**$1,600**	**$1,100**	**$600**	**$0**	**$0**	**$0**	**$600**	**$700**	**$800**	**$900**	**$1,000**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**
	Discounts			**Zero**			**Fees**										
2028	**$2,100**	**$1,600**	**$1,100**	**$0**	**$0**	**$0**	**$500**	**$600**	**$700**	**$800**	**$900**	**$1,000**	**$1,100**	**$1,200**	**$1,300**	**$1,400**	**$1,500**

Appendix 5: How a selection of new vehicles would be affected in the first year of the proposed feebate schedule

(Note: this is a snapshot of vehicles available in April 2019)

Vehicles eligible for a discount in first year of scheme (2021) | **Zero band – zero fees** | **Vehicles that attract a fee in first year of scheme (2021)**

CO_2 Emission Bands																
0 to 4	5 to 49	50 to 69	70 to 89	90 to 105	106 to 120	121 to 130	131 to 140	141 to 150	151 to 160	161 to 170	171 to 180	181 to 190	191 to 200	200 to 225	226 to 250	Over 251
Discounts									Zero Band			Fees				
$8,000	$6,800	$5,800	$4,800	$3,800	$2,800	$1,800	$800	$600	$0	$0	$0	$2,000	$2,250	$2,500	$2,750	$3,000
VW eGolf $65,990	Mitsubishi Outlander $55,990 to $66,990	Mini Countryman PHEV $59,990	Toyota Prius h $27,990 to $48,490	Audi A1 $39,400 to $47,900	♥ Suzuki Swift $19,990 to $29,900	VW Golf $33,490 to $35,990	Vitara $28,790 to $37,990	Ford Focus $36,990 to 41,990	Mazda 6 $45,995 to $56,995	Kia Cerato $31,990 to $35,990	Mitsubishi ASX $36,690 to $45,990	Hyundai Tucson $39,990 to $47, 990	Land Rover Discovery (TD) $79,990	Toyota Hiace Van $41,000	♥ Holden Colorado $52,490 to $66,990	Range Rover $167,900 to $320,000
Hyundai Kona $73,990 to $79,990	Kia Niro $55,990	BMW 225xe $69,880		Toyota Camry h $41,490 to $49,490	Toyota Lexus IS300h $77,300	Kia Rio $22,490 to $26,990	Ford Fiesta $25,490	Suzuki Jimny $25,990 to $27,500	Nissan Qashqai $36,270 to $43,700	♥ Mazda CX-5 $40,995 to $61,495	Ford Endura $53,490 to $69,990	♥ Toyota Hilux $43,490 to $56,990	♥ Toyota RAV4 $39,990 to $52,990	Mazda CX-9 $59,695 to $67,895	BMW 8 $181,900	Nissan Patrol $107,500 to $127,500
Hyundai Ioniq $59,990 to $65,990	Toyota Prius Prime $48,490			Toyota Lexus CT200h $51,690 to $62,690	Nissan X-Trail Hybrid Price N/A	Nissan X-Trail $39, 900 to $53,290	♥ Toyota Corolla $28,990 to $39,490	Mazda CX-3 $31,395 to $41,690	Renault Trafic Van $51,000	Mitsubishi Outlander $43,990 to $54,490	Honda Odyssey $45,990 to $53,990	♥ Kia Sportage $35,990 to $45,990	♥ Ford Ranger 2wd single cab $37,990-$43,490	♥ Mitsubishi Triton $51,990 to $59,490	♥ Ford Ranger 4wd double cab $55,990-$84,990	Toyota Land Cruiser $115,990 to $133,990
BMW i3 $77,200	Hyundai Ioniq $53,990			Toyota Prius C/ Aqua H $21,990 to $27,990	Honda Jazz $21,990 to $26,790	Toyota Avalon Hybrid Price N/A	♥ Toyota RAV4 $34,990		Honda HR-V $29,990 to $39,990	♥ Nissan Navara 4x2 $27,990 to $40,990						
LDV EV80 van $69,990	Audi A3 e-tron $69,900					Toyota Estima Caldina 7 seater Hybrid Price N/A										
LDV EV80 chassis cab $64,990																
Renault KangooZE $77,900																
Nissan Leaf EV expected August $59,990																

Key

Writing in Green – pure electric vehicle

Writing in blue – plug-in hybrid electric vehicle

Writing in brown – hybrid

Writing in black – internal combustion engine

EVs and hybrids available in Japan but not (yet) sold 'new' in New Zealand

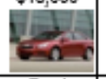
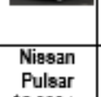
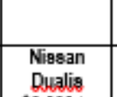
♥ = Top 10 models – 2018

Model	Units sold
Ford Ranger	9904
Toyota Hilux	8086
Toyota Corolla	7300
Toyota RAV4	4964
Mitsubishi Triton	4720
Holden Colorado	4583
Mazda CX-5	3695
Nissan Navara	3655
Kia Sportage	3289
Suzuki Swift	3034

Appendix 5: How a selection of used vehicle imports would be affected in the first year of the proposed feebate schedule

(Note: this is a snapshot of vehicles available in April 2019)

Vehicles eligible for a discount in first year of scheme (2021) | **Zero band – Zero fees** | **Vehicles that attract a fee in first year of scheme (2021)**

CO_2 Emission Bands																
0 to 4	5 to 49	50 to 69	70 to 89	90 to 105	106 to 120	121 to 130	131 to 140	141 to 150	151 to 160	161 to 170	171 to 180	181 to 190	191 to 200	200 to 225	226 to 250	Over 251
Discounts									Zero Band			Fees				
$2,600	$2,300	$2,000	$1,700	$1,400	$1,100	$800	$500	$200	$0	$0	$0	$1,100	$1,200	$1,300	$1,400	$1,500
Nissan Leaf $15,000 to $23,000 	Holden Volt PHEV $25,000 to $30,000 	BMW 740e PHEV $70-80,000+ 	Toyota Yaris H $15,000 to $20,000 	Toyota Prius H $14,000 to $23,000 	♥ Mazda Demio $9,000 to $13,000 	♥ Nissan Tiida $6,000 to $10,000 	Citroen C3 $14,000 to $16,000 	Ford Focus $8,000 to $15,000 	♥ Toyota Wish $7,000 to $14,000 	Holden Cruze $8,000 to $18,000 	Honda Odyssey $15,000 to $24,000 	Toyota Camry $7,000 to $16,000 	Ford Focus $8,000 to $25,000 	Mitsubishi Outlander $16,000 to $27,000 	Ford Territory $15,000 to $31,000 	Commodore V8 $23,000 to $50,000 
Mitsubishi MiEV $13,000 	Mitsubishi Outlander PHEV $27,000 to $30,000 	Mercedes C350 PHEV $60-80,000+ 		Toyota Prius 7 seater H $16,000 to $27,000 	Toyota Camry H $17,000 to $23,000 	♥ Suzuki Swift $6,000 to $11,000 	BMW 116 $13,000 to $22,000 	Holden Cruze $8,000 to $9,000 		Ford Mondeo $8,000 to $13,000 	Mazda CX-5 $15,000 to $30,000 	Ford Kuga $14,000 to $25,000 	Kia Sportage $23,000 		Holden Colorado $17,000 to $35,000 	Range Rover $52,000 to $95,000 
Nissan e-NV200 $11,000 to $20,000 	Toyota Prius PHEV $25,000			Honda Insight H $10,000 to $15,000 	Toyota Estima PHEV $9,000 to $25,000 	♥ Honda Fit $5,000 to $7,000 	BMW 3 H $25,000 to $35,000 	Lexus RX450H $43,000 to $52,000 		Nissan Pulsar $6,000 to $15,000 			Nissan Dualis $8,000 to $15,000 		Mazda MPV $10,000 to $22,000	Land Cruiser VX $55,000 to $83,000
Mitsubishi Minicab MiEV $13,000 to $20,000				Fiat 500 $11,000 to $14,000	Hyundai i30 $11,000 to $17,000	Skoda Fabia $15,000 to $19,000	Toyota Corolla $8,000 to $20,000						Subaru Legacy $7,000 to $17,000		Toyota Hiace $15,000 to $29,000	
Kia Soul $33,850					Toyota Vitz/Yaris $5,000 to $14,000	Lexus GS300 H $35,000										
Smart FourTwo $20,000																

Key

Writing in Green – Pure electric vehicle

Writing in Blue – Plug-in hybrid electric vehicle

Writing in Brown – Hybrid

Writing in Black – Internal combustion engine

♥ most popular vehicles for low-income households (July 2015 to June 2018)