

12 February 2021

OC201018

Hon Michael Wood
Minister of Transport

Action required by:
Monday, 1 March 2021

PROPOSED AMENDMENTS TO THE ROAD USER CHARGES LEGISLATION TO INCREASE THE UPTAKE OF LOW EMISSION VEHICLES

Purpose

1. To provide you with advice on a range of potential changes to the Road User Charges Act 2012 (the RUC Act) and its associated regulations to help increase the uptake of low emission vehicles.
2. It asks that you agree:
 - 2.1. to seek Cabinet's agreement to consult on a proposal to extend the end date for the light electric vehicle (EV) RUC exemption until 31 March 2025, through a new regulation made in 2021 and that this proceed separately from the rest of the matters discussed in this paper
 - 2.2. which other possible changes to the RUC Act you wish to seek Cabinet's agreement to publicly consult on in order to increase the uptake of low carbon fuels such as hydrogen

Key points

- RUC rates are currently set based on distance travelled and vehicle weight. They are set to recover the costs of maintaining the land transport system and to pay for the damage to roads that heavy vehicles cause. There is interest in changing the RUC system to also allow environmental costs to be considered when setting RUC rates. This change in approach would require substantive amendments to the purpose and body of the RUC Act.
- The briefing is structured to cover several major issues:
 - making a regulation to extend the end date for the existing RUC exemption for light EVs
 - amending the RUC Act to enable an extension of the end date for the existing RUC exemption for heavy EVs
 - amending the RUC Act to enable the creation of a RUC exemption for vehicles using low carbon fuels other than electricity, such as hydrogen

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- amending the RUC Act to enable the setting of reduced (partial) RUC rates for vehicles using a low carbon fuel including electricity, hydrogen or biofuels, rather than a complete exemption.
- Revenue foregone from a RUC exemption (or from reduced RUC rates) directly affects the amount of funds available to be spent on other parts of the transport system. RUC exemptions need to be considered in the context of other spending priorities as set out in the Government Policy Statement on Land Transport.
- This briefing paper recommends you agree that the Ministry should prepare a Cabinet Paper seeking agreement to extend the end date for the light EV RUC exemption until 31 March 2025. This change needs to be implemented before the end of 2021 and should proceed separately from other recommendations outlined in this briefing paper. The new end date reflects when we expect the number of light EVs to reach two percent of the light vehicle fleet. It is also consistent with the recent Cabinet decision to establish a light vehicle CO₂ emissions target for 2025.
- The briefing paper notes that the legislative changes to enable new exemptions from paying RUC for low carbon vehicles, such as those powered by hydrogen, are significant. There is currently a lack of good evidence for many of the policies. It therefore proposes that Cabinet agreement is sought to consult on these and other changes through a discussion document, rather than progressing immediately to draft legislation.
- Government support for vehicles using low carbon fuels, other than electricity, can be provided more rapidly through direct financial support from existing and newly developed funds while vehicle numbers are low. It is therefore appropriate to take time to thoroughly consider the implications of making changes to the RUC legislation.
- If the RUC Act is to be amended, there are a range of other amendments to improve the RUC system more generally that could be considered at the same time. We have provided you a companion briefing on these matters [OC210080 refers].
- We propose preparing two Cabinet papers. The first would be for you to take to Cabinet in April 2021 for agreement to consult on the proposed change to the light EV RUC exemption end date. We would expect consultation to occur for the usual six weeks in May or June and regulations to be ready for submission to Cabinet by July 2021.
- The second Cabinet paper would seek Cabinet's agreement to consult on the other proposed changes, both in this paper and its companion which discusses potential technical amendments. It would be difficult to provide the second paper by April as we require additional time to prepare the planned discussion document and other necessary materials. We would expect to provide this material to you for submission to Cabinet by July 2021. At that time, you would ask Cabinet's agreement to release the discussion document for public consultation.
- Consultation on such a complex package of changes to the RUC System is expected to take at least six months. We would expect to provide advice on a final package of amendments in early 2022. We would then expect that any resulting legislative

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changes would be implemented in 2023, but this is dependent on the speed with which Parliament is able to consider the legislation.

- Because the intent is to carry out public consultation before moving to draft any legislation, final decisions are not needed on the detail of the policy issues raised in this paper at this time.

Recommendations

3. We recommend you:

- 1 **note** that in 2016 Cabinet agreed that the RUC exemption for light EVs would remain in place until two percent of the light vehicle fleet was electric and that this was expected to be in 2021. This target is now expected to be reached in 2024 or 2025
- 2 **agree** that the Ministry of Transport should prepare a Cabinet paper seeking agreement to prepare an amendment regulation to change the light EV RUC exemption end date, so the regulation can be implemented before the end of 2021 Yes / No
- 3 **agree** that the proposed extended end date for the light EV RUC exemption in the Cabinet paper should be 31 March 2025 Yes / No
- 4 **note** that the proposed Cabinet paper will also include other minor and non-controversial amendments to RUC rates that we will brief you on separately
- 5 **agree** that the remaining proposed changes set out in this briefing be subject to public consultation through a discussion document Yes / No
- 6 **agree** that the Ministry prepares a second Cabinet paper to seek Cabinet's agreement to release this discussion document for public consultation in July 2021 Yes / No
- 7 **agree** that the discussion document include the following matters for consultation:
 - 7.1 that the end date for the heavy EV RUC exemption be able to be extended for more than five years Yes / No
 - 7.2 that the end date for the heavy EV RUC exemption is set for 31 March 2030, once the RUC Act is amended Yes / No
- 8 **note** that it would be inconsistent with the RUC Act's current purpose to exempt hydrogen fuel cell electric vehicles (HFCEVs), or vehicles using other low carbon fuels, from paying RUC and it would be preferable to amend this before any other changes are made
- 9 **note** that changing the purpose of the RUC Act would be a significant policy change
- 10 **note** that Government support for vehicles using low carbon fuels, other than electricity, can be provided through direct financial support from existing and newly developed funds (including the Low Emission Vehicles Contestable Fund) and that changes to RUC legislation to support these fuels are not needed immediately

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- 11 **agree** that the discussion document include the following matters for consultation:
- 11.1 that the purpose of the RUC Act is amended to be: to impose charges on RUC vehicles for their use of the roads that are in proportion to the costs that the vehicles generate while also considering their contribution to meeting the emissions reduction target in the Climate Change Response Act 2002 Yes / No
- 11.2 whether other environmental costs associated with RUC vehicles, such as harmful emissions, should be able to be considered when setting RUC rates Yes / No
- 12 **note** that exempting hydrogen powered vehicles, or those using other low carbon fuels, from paying RUC raises a range of practical matters that make implementation of this policy more complicated than for EVs
- 13 **agree** that the discussion document include the following matters for consultation:
- 13.1 that hydrogen powered vehicles be exempted from paying RUC in order to promote the use of low carbon fuels Yes / No
- 13.2 a proposed end date for a hydrogen powered vehicles RUC exemption of 31 March 2030 Yes / No
- 13.3 Waka Kotahi be able to exempt heavy trailers that are towed by vehicles using low carbon fuels that are exempted from paying RUC Yes / No
- 13.4 whether it is necessary, and technically feasible, to use RUC exemptions or partial rates to promote the use of biofuels Yes / No
- 14 **note** that vehicles (known as plug-in hybrid electric vehicles) that use both petrol that is subject to fuel excise duty (FED) and are also powered by an external source of electricity are considered EVs and are currently exempt from RUC. These would be taxed twice and face high compliance costs to claim back the costs of FED paid once the RUC exemption ends
- 15 **agree** that discussion document include the following matters for consultation:
- 15.1 allow a lower rate of RUC for specified light vehicles to offset any FED paid as part of the vehicle's normal operation Yes / No
- 15.2 allow partial rates of RUC (for example 50 percent) to be charged as an alternative to providing a full (100 percent) exemption from paying RUC in order to recognise lower emissions of specified types of vehicles (for example light EVs) Yes / No
- 16 **advise** the Ministry if you would like to make any public announcements on these decisions, in advance of their being considered by Cabinet Yes / No

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17 refer this briefing to Hon Megan Woods, Minister of Energy and Resources

Withheld to protect the privacy of Natural Persons



Marian Willberg
Manager, Demand Management and Revenue

Hon Michael Wood
Minister of Transport

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..12/02/2021.

Minister's office to complete:

- Approved
- Declined
- Seen by Minister
- Not seen by Minister
- Overtaken by events

Comments

Contacts

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TE MANATU WAIKA MINISTRY OF TRANSPORT

PROPOSED AMENDMENTS TO THE ROAD USER CHARGES LEGISLATION TO INCREASE THE UPTAKE OF LOW EMISSION VEHICLES

Background

Road user charges are an integral source of land transport revenue

1. Under the Road User Charges Act 2012 (the RUC Act), operators of all vehicles that do not use a fuel that is charged fuel excise duty (FED)¹ (primarily diesel vehicles), or are heavy vehicles with a gross vehicle mass (GVM) greater than 3.5 tonnes (primarily trucks, buses and some trailers), are subject to road user charges (RUC). Currently, almost all RUC vehicles are diesel powered vehicles, but vehicles using other fuels such as electricity, hydrogen and biodiesel² are also subject to RUC. Light EVs are currently exempt from paying RUC until 31 December 2021 and heavy EVs are exempted until the end of 2025 as part of measures to encourage people to buy them.
2. The purpose of RUC, as set out in the RUC Act, is to impose charges on vehicles for their use of the roads that are in proportion to the costs that the vehicles generate. Vehicles paying RUC must purchase and display RUC licences, which are bought in advance of travel and in units of 1,000 km. The cost of a RUC licence increases with the vehicle's weight and varies with the number of axles (See Table 1 below). To date, the costs that RUC vehicles face have related to the vehicles' use and damage to the road network³.
3. In the 2019/20 financial year RUC contributed \$1.8 billion in revenue to the National Land Transport Fund out of a total of \$3.9 billion revenue. Of this, 800,000 light RUC vehicles contributed \$700 million, while 190,000 heavy vehicles (including trailers towed by heavy vehicles) contributed \$1.2 billion.
4. During 2019 and 2020 we provided advice on the use of RUC exemptions to support the greater use of EVs⁴. Except for a few matters discussed further in this paper, these did not result in Ministerial decisions. None of the matters raised in this paper have been considered or agreed by Cabinet.

RUC exemptions could contribute to decarbonising land transport

5. Greenhouse gas emissions from transport are nearly all carbon dioxide (CO₂) and transport is responsible for 47 percent of total domestic CO₂ emissions.⁵ New Zealand

¹ Petrol, CNG and LPG fuels include Fuel Excise Duty (FED) in the price when sold.

² Ethanol, a biofuel, is the only transport fuel that is not subject to RUC or FED.

³ As well as weight, RUC rates a portion to cover common costs for things like road markings and damage from non-vehicle related events, such as weather-related damage. Common costs make up most of the costs of RUC for light vehicles. Vehicles need to have a GVM over about 10 tonnes before damage to the road, and therefore weight costs, become important.

⁴ [OC190747](#), [OC200060](#), [OC200211](#), [OC200520](#) and [OC200526](#).

⁵ For all greenhouse gases transport accounts for 21 percent of total domestic emissions. The other major emitting sectors are agriculture (47.8 percent), energy (19.6 percent), industrial processes (6.5 percent) and waste (5.1 percent).

cannot achieve its net zero carbon target by 2050 in the 2019 amendment to the Climate Change Response Act 2002, without largely decarbonising transport.

6. The Government Policy Statement on Land Transport 2021 (the GPS) makes climate change a strategic priority. This recognises the need for investment decisions in the land transport system to align with the targets in the Climate Change Response Act 2002, which require carbon dioxide (CO₂) emissions and other greenhouse gases⁶, except biogenic methane, to reach net zero by 2050. It means investments that reduce emissions and transition the transport system to lower emissions will be prioritised for funding from the National Land Transport Fund.
7. The Government has been promoting the use of EVs specifically, and low emission vehicles including hydrogen powered vehicles more generally, as a key part of a transition away from fossil fuels for the transport sector. In the absence of any other direct financial incentives, the RUC exemptions for light and heavy EVs have been the primary tool to support the uptake of low carbon fuel technology to date. We estimate that in 2019 around \$10 million and in 2020 approximately \$15 million of revenue was foregone due to the EV RUC exemptions⁷.
8. Vehicles powered by low carbon fuels are currently more expensive than their fossil fuel counterparts. They either require the use of fuels that are more expensive to purchase, such as biofuels, or require the purchase of new and more expensive vehicles, as in the case of EVs. In the case of hydrogen, both the vehicles and the fuel are significantly more expensive than diesel or electric alternatives. These costs are expected to reduce as global production increases and technology matures, but at this stage that timing is very uncertain. Providing an exemption or reduced rate of RUC could help support these fuels while this transition is occurring. It could form part of a broader package of measures that will be considered for the first whole-of-government Emissions Reduction Plan under the Climate Change (Zero Carbon) Response Act 2019. An exemption also signals that the Government is prioritising the issue of climate change.

But changing the RUC system comes with costs and risks

9. Although the light EV RUC exemption has been in place since 2009⁸ and the heavy EV exemption has been in place since 2016, there has not been a formal assessment of the effectiveness of RUC exemptions at promoting the uptake of EVs.
10. RUC exemptions, on their own, are a relatively inefficient tool to reduce carbon emissions. The cost in foregone RUC revenue per tonne of carbon dioxide avoided varies by fuel type and vehicle weight. As shown in Table 1, the costs of replacing a fossil fuelled vehicle with an electric vehicle ranges from around \$260 per tonne of carbon for a light diesel vehicle to over \$430 per tonne of carbon for a large diesel truck towing two trailers⁹.

⁶ In 2018 gross greenhouse gas emissions were made up of 44.5 percent carbon dioxide, 43.5 percent methane 9.6 percent nitrous oxide, and 2.4 percent fluorinated gases.

⁷ At the end 2019 there were roughly 19,000 and at the end of 2020 there were roughly 24,000 EVs in the fleet.

⁸ Light EVs were originally exempted from paying RUC in 2009 through an amendment to the then Road User Charges Act 1977. The exemption was extended again in 2012 due to relatively low uptake and extended again in 2016.

⁹ The calculations for tonnes of carbon avoided do not include any CO₂ emissions from the electricity sector (for example, from coal or geothermal plants used to generate electricity). Including these would raise the costs per tonne of CO₂ avoided further.

Table 1 Costs to reduce CO₂ emissions through a RUC exemption.

	Light petrol vehicle	Light two diesel axle truck (GVM 9-12 T)	Two axle diesel passenger bus (GVM > 12T)	Very heavy diesel truck with two trailers (GVM 55T)
Average travel (km per annum)	11,000	20,000	50,000	150,000
Fuel use (l/100 km)	9.5	25	40	55
Fuel used (L per annum)	1,045	5,000	20,000	82,500
CO ₂ emitted (T per annum)	2.6	13.4	53.5	220.7
Cost of RUC (per 1,000 km)	\$76.00	\$172.00	\$315.00	\$630.00
Total RUC revenue foregone (per annum)	\$836.00	\$3,440.00	\$15,750.00	\$94,500.00
Cost per tonne of CO₂ avoided (in foregone RUC revenue)	\$326.53	\$257.20	\$294.39	\$428.21

11. We have not been able to assess whether there are other opportunities where it would be more efficient or effective to expend National Land Transport Fund (NLTF) revenue directly to reduce carbon emissions rather than forego RUC revenue.
12. Extending the RUC exemption for EVs for a further period, or broadening it to cover other fuel types:
- 12.1. comes at a cost in terms of reduced revenue for the NLTF. Any revenue loss from RUC exemptions will increase the pressure on the NLTF. The revenue not collected (foregone) from a RUC exemption will need to be balanced against the Government's existing GPS investment priorities that may need to be deferred or delayed as a result of the reduced revenue.
- 12.2. risks undermining the key principle of the RUC system, that vehicle owners should pay for the use of roads including pavement damage.
13. Over the next two to three years while the numbers of EVs are still a small proportion of the vehicle fleet, the foregone revenue from RUC exemptions is unlikely to be large, relative to the total NLTF revenue (foregone revenue was around \$10 million in 2019 and \$15 million in 2020). However, the amount foregone is expected to increase over time as the number of exempted vehicles increases (see Table 2 below). We expect that the rate of increase of low emission vehicles will also be affected by the presence (or absence) of other actions by the Government to support low emission vehicles. The other actions will also affect the levels of RUC revenue foregone.
14. As well as risking revenue loss and long term revenue stability, broadening the types of vehicles that are exempt from RUC may risk the current consensus with the road transport sector on RUC. Broadly, road users have accepted almost annual increases to RUC (and fuel taxes) as well as the idea that heavier vehicles should pay more because they cause more damage to the roads. This consensus is in stark contrast to other jurisdictions where there can be significant protests and unrest when fuel taxes are raised, or where taxes have not been able to be raised, often for decades.
15. The Road Transport Forum, which represents a large part of the road transport industry, advises it would not support extending the RUC exemption to other fuels because it would undermine the principles of the RUC system that vehicle owners should pay for the use of roads. It is also concerned at a potential decline in funds

available for building and maintaining transport infrastructure and the likelihood of additional increased costs for its members to offset the expected revenue loss.

Structure of this paper

16. This paper covers a wide range of topics relating to possible amendments to the RUC Act and is necessarily quite lengthy. To help with readability, it is structured into distinct parts.

16.1. Extending the end date for the existing RUC exemption for light EVs

This section discusses the relatively minor change to the end date for the light EV RUC exemption. This change can be made by regulation and needs to be implemented before the end of 2021 to give sufficient notice to potential EV purchasers. If an extension to the exemption is to be made, amendment regulations should proceed separately from the other matters outlined in this paper.

16.2. Amending the RUC Act to enable the end date for the existing RUC exemption for heavy EVs to be extended

This section discusses a relatively minor amendment to the RUC Act to enable the end date of the heavy EV RUC exemption to be set more than five years in advance.

16.3. Amending the RUC Act to enable the creation of a RUC exemption for vehicles using low carbon fuels other than electricity, such as hydrogen

This section discusses a range of possible substantive changes to the RUC Act, including to its purpose, to allow hydrogen powered vehicles to be exempted from paying RUC. These changes would allow exemptions from paying RUC to be enabled for vehicles using fuels other than electricity.

16.4. Amending the RUC Act to enable the creation of partial RUC rates for vehicle using low carbon fuels

This section discusses a possible substantive change to the RUC Act to enable setting RUC rates that take into account the carbon content of the fuel being used. This would enable rates to be set lower for vehicles using low carbon fuels, rather than fully exempting them from RUC.

17. With the exception of the amendments to the light EV RUC exemption, which we propose proceeds immediately, we propose that all other aspects in this paper are first subject to public consultation through a discussion document, rather than proceeding directly to consult on draft legislation. If you agree, we would prepare a discussion document for public consultation that covers the matters set out in this paper (and its companion). You would then seek agreement from Cabinet to publicly release this discussion document.

18. In many cases this paper does not make strong recommendations on if, or how, the possible amendments (other than the amendments to the light EV RUC exemption) would be implemented. Instead the content of this briefing is intended to show that there is justification for considering amendments that could be consulted on. Final recommendations for changes and confirmation of the detail of the possible amendments would then be subject to a separate report back to Cabinet at a later

date. This report back would also include a cost-benefit analysis of options, impacts on revenue collection and implementation costs.

19. Under this proposed approach we would expect to have any recommendations for a RUC amendment Bill for you to take to Cabinet by mid-2022. We expect the final package of amendments would be ready to put in place in 2023, though timing depends on Parliament’s prioritisation of the Bill. An initial bid for a RUC bill to be introduced in 2022 has been made [OC210006 refers].

[Redacted]

20. We have worked with several departments in preparing this paper. Waka Kotahi, the Ministry of Business Innovation and Employment – Energy team, and the Energy Efficiency and Conservation Authority support the proposals and recommendations.

PART 1: EXTENDING THE END DATE FOR THE EXISTING LIGHT EV RUC EXEMPTION

There have been several extensions to the light EV RUC exemption since it was introduced in 2009

21. As noted, light EVs were originally exempted from paying RUC in 2009. In 2016, as part of a wider package of measures to promote EVs, the light EV RUC exemption¹⁰ was extended again and, unless amended, will end on 31 December 2021.
22. The number of light EVs in our fleet has been rising steadily since 2016, but at around 0.6% of the light vehicle fleet, numbers are still well short of the uptake target of EVs being two percent of the light vehicle fleet by 31 December 2021.

Electric motor vehicle fleet size

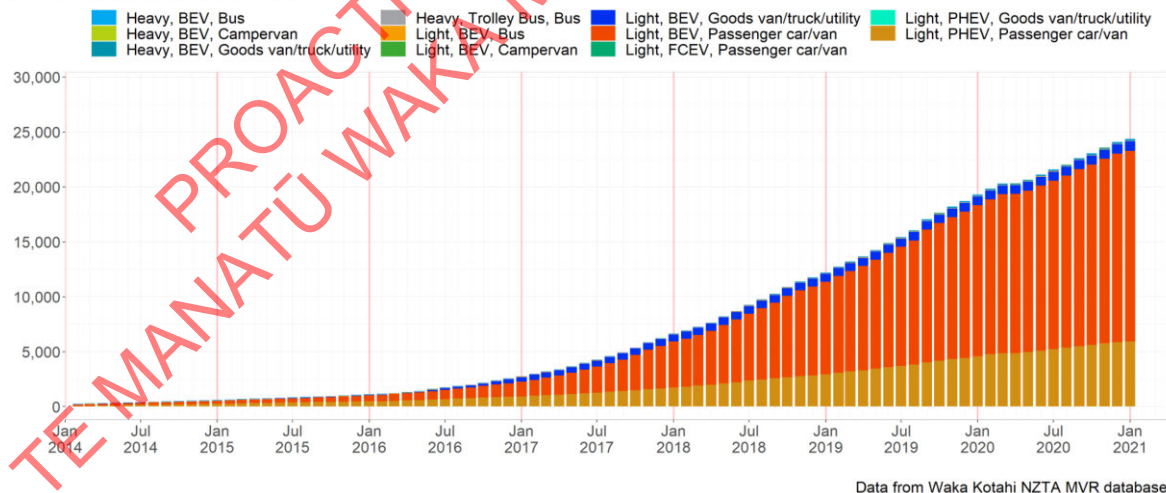


Figure 1 Number of electric vehicles in NZ

23. When Cabinet set the current end date for the light EV RUC exemption in 2016 [CAB-16-MIN-0108.01 refers] it agreed that light EVs be exempt from RUC until they comprise two percent of the light vehicle fleet with a target that this would be reached by the end of 2021. Although the goal for when the exemption would end is frequently

¹⁰ Heavy EVs were also exempted from paying RUC as part of the 2016 package, with an initial end date for the heavy EV RUC exemption of 31 December 2025. The legislative ability to exempt heavy EVs from RUC is separate from light EVs. Heavy EVs are discussed separately below.

described as when the fleet reaches 64,000 vehicles, this figure is not mentioned in the Cabinet Paper or decision. For simplicity, the RUC regulations used the date of 31 December 2021 for the exemptions to end for light EVs.

24. The 2016 Cabinet Paper recognised the uncertainty of when a two percent target would be reached for both light and heavy EVs and agreed that there would be a report back in 2019 on the need for further changes to the end dates for the RUC exemption. We provided advice to Ministers on options for amending the light EV RUC exemption in 2019 [OC190747 refers] but no changes were agreed at that time and no report back was made to Cabinet. The decision not to make changes to the exemption end date for light EVs reflected Ministers' expectations at that time that the Clean Car reforms would replace the RUC exemption for light vehicles. The Clean Car reforms were not implemented and the EV RUC exemption remains the only form of direct financial incentive to encourage EV uptake.
25. It is very unlikely that the size of the EV fleet will be close to two percent of the light vehicle fleet by the end of 2021. We expect that there will be around 30,000 to 34,000 light EVs in the fleet by the end of 2021 (see Table 2 below), which would be less than one percent of the light vehicle fleet.
26. Because the fleet continues to increase in size, two percent of the light vehicle fleet in 2021 would be around 80,000 vehicles, not 64,000. By 2026, two percent of the light vehicle fleet would be almost 90,000 EVs. Not accounting for any further economic disruption caused by COVID-19 and not considering the impact of other policy changes (such as the Clean Car reforms or potential extensions to the RUC exemptions themselves), the Ministry projects we would reach 90,000 light EVs in 2024 or 2025. The recent Cabinet decision [CAB-21-MIN-0004 refers] to establish a light vehicle CO₂ target for 2025, together with the potential for incentives to be implemented in the coming year, would be expected to increase EV uptake. We cannot yet estimate the potential scale of the impact on EV uptake until decisions on the scheme's design are made.

Table 2 Ministry projections for light EV uptake 2020 – 2030 and impacts on revenue loss and CO₂ emissions

Year	Number of EVs (range)	EV Percentage of fleet (Slow case)	EV Percentage of fleet (Base case)	Travel (millions of km)	Expected RUC foregone ¹ (\$ million)	Tonnes of CO ₂ not emitted (Base case only) ²
2016	2,473		0.07%	9	\$0.60	2,000
2017	6,130		0.18%	31	\$2	7,000
2018	11,590		0.33%	70	\$5	16,000
2019	18,447		0.50%	121	\$10	28,000
2020	24,000		0.63%	200	\$15	51,000
2021	30,000 to 34,000	0.76%	0.86%	300 to 350	\$20 to \$25	76,000
2022	37,000 to 47,000	0.89%	1.13%	350 to 450	\$25 to \$30	107,000
2023	47,000 to 63,000	1.10%	1.48%	450 to 650	\$35 to \$45	150,000
2024	59,000 to 81,000	1.35%	1.86%	650 to 900	\$45 to \$60	208,000
2025	72,000 to 104,000	1.62%	2.34%	850 to 1,200	\$60 to \$85	283,000
2026	89,000 to 135,000	1.98%	3.00%	1,150 to 1,650	\$80 to \$115	382,000
2027	108,000 to 175,000	2.38%	3.86%	1,450 to 2,200	\$100 to \$155	514,000
2028	132,000 to 227,000	2.89%	4.98%	1,800 to 2,900	\$125 to \$210	681,000
2029	164,000 to 292,000	3.58%	6.37%	2,300 to 3,850	\$160 to \$275	891,000
2030	206,000 to 373,000	4.48%	8.12%	2,900 to 4,950	\$205 to \$360	1,152,000

¹ Foregone RUC revenue figures for 2016 – 2019 reflect actual vehicle data for those years. 2020 data is an estimate. Calculations use the actual RUC rates applying in that year. Data from 2020 onwards assumes no change in RUC rates from 2020 rate of \$76/1,000 km

² Foregone CO₂ emissions estimates assume EVs replace average mix of petrol and diesel entering the fleet that year

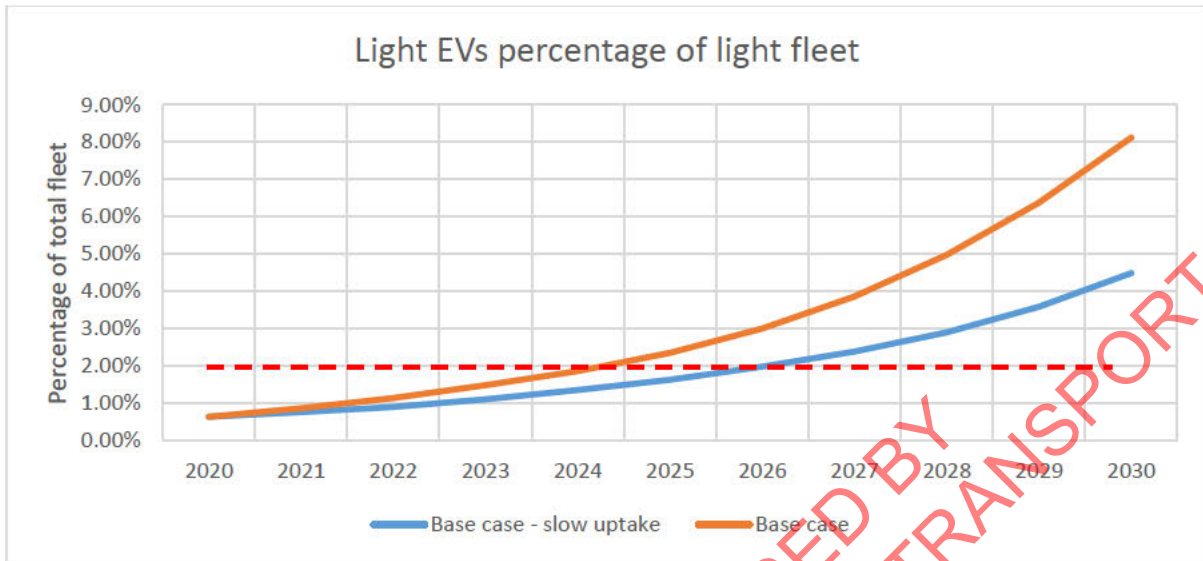


Figure 2 Predicted uptake of light EVs.

Changing the end date for the existing light EV RUC exemption is legislatively straightforward

- 27. Extending the date for the end of the RUC exemption for light EVs is straightforward. It only requires a new regulation. This can be done by Cabinet approval and does not require an amendment to the RUC Act. While the legislation allows the end date for the exemption to be extended by any period, we need to consider how other policies, and especially the Clean Car reforms would impact on expected uptake of EVs and whether any other direct financial incentives are provided to encourage the purchase of EVs. In the absence of any other financial incentives, it would be appropriate to extend the RUC exemption to encourage the uptake of EVs at least until the Clean Car programme is in place.
- 28. We propose extending the current light EV RUC exemption until 2025. This is when we expect the two percent of the fleet target to be reached. Extending the deadline provides additional time for EV purchase prices to reduce and be closer in price to internal combustion vehicles. It will provide a long runway for buyers so they can make choices now with certainty over RUC rates. A 2025 end date aligns with the Government’s ambition under the Clean Car Standard for the light vehicle fleet to reach 105g CO₂ per kilometre by 2025. It would also align with the target for lowering emissions in the first carbon emissions budget (2022-2025) established under the Climate Change Response Act 2002.
- 29. While the end date for the exemption has previously been set for 31 December this is a very impractical date to implement new policies as it falls during the holiday season. A 31 March date would ensure EV owners are able to commence payment of RUC from that date and ensures staff at Waka Kotahi and any other relevant organisations are on hand to implement the move to payment of RUC.

30. We propose that the end date for the light EV RUC exemption is extended until 31 March 2025, which is when we expect light EVs to reach two percent of the light vehicle fleet. This regulation change would need to be in place before the end of 2021, and preferably sooner. This is so as to not discourage EV uptake in the interim and to allow potential EV purchasers greater certainty around future operating costs.
31. We propose that this amendment regulation is progressed earlier and separately from the rest of the proposals in this paper, as the other proposals require more substantive amendments.

32. There is a separate issue as to what the appropriate RUC rate for light EVs is once the exemption ends and EVs are required to pay RUC.¹¹ Decisions on this do not need to be made at this time if the exemption is extended. However, to charge a different rate from the sole existing light vehicle RUC rate (currently \$76/1,000 km) would require a change to the RUC Act. This is discussed separately below

We propose to make two minor changes to RUC rates in regulations at the same time

33. There are two non-urgent and minor changes to the RUC rates paid by individual classes of heavy vehicles that we recommend are made by regulation at the same time as the light EV exemption end date is amended. These changes are part of general RUC stewardship and only affect a small number of vehicles.
34. We will brief you separately on the detail of these minor changes to RUC rates, once you confirm that you wish to amend the light EV RUC exemption regulation.

35. We recommend that consultation on two minor changes to RUC rates is undertaken as part of the process to amend the end date for the light EV RUC exemption.

PART 2: EXTENDING THE END DATE FOR THE EXISTING HEAVY EV RUC EXEMPTION

There are different issues for the heavy EV RUC exemption and extending this exemption requires a change to the RUC Act

36. There are currently less than 150 heavy EVs operating in the fleet (out of about 170,000 powered heavy vehicles, or less than 0.1 percent). While the numbers of heavy EVs are growing, they are not growing significantly. As with light vehicles, we do not have any research on what impact, if any, the heavy EV RUC exemption has had on heavy EV uptake. Also as with light EVs, the Cabinet decision in 2016 was that heavy EVs should remain exempted from RUC until they made up two percent of the heavy vehicle fleet.
37. Because of the very low rates of heavy EV uptake, both here and internationally, our projections for future uptake of heavy EVs remain highly uncertain. We expect the total heavy vehicle fleet to grow to approximately 215,000 powered vehicles by 2030. Of these, we estimate there may be between 1,000 and 3,300 heavy EVs in the fleet by 2030, which would be between 0.5 and 1.5 percent of the total heavy vehicle fleet.
38. Because RUC rates for heavy vehicles increase significantly with weight, the amount of RUC paid (or foregone) by an individual vehicle can be significant. Not having to

¹¹ We provided detailed advice on this in 2019, OC190747 refers.

pay RUC can make a significant difference to the viability of heavy EVs in commercial uses. This is particularly the case for electric buses, which are significantly heavier than their diesel counterparts and so would face higher RUC costs for the same task. For example, a two-axle double decker electric bus should pay up to \$750/1,000 km in RUC, and most single deck electric buses would pay around \$500/1,000 km compared to \$320 per 1,000 km for most single deck diesel buses.

39. While the RUC saving is important, if a vehicle travels 50,000 km and pays \$500/1,000 km a year that implies a \$25,000 saving per annum. This is beneficial, but is still a relatively small amount against an e-buses' expected purchase price *premium* of \$300,000 – \$400,000¹² over a diesel bus, unless the exemption is extended past 2025.
40. Unlike with the light EV RUC exemption, the power to extend the end date for the heavy EV RUC exemption is constrained in the RUC Act. The Select Committee that considered the Bill in 2016 modified the provisions from those that apply to the light EV RUC exemption. The Select Committee's changes mean that the end date for the heavy EV RUC exemption can only be extended by up to five years from the date the new regulation (Order in Council) is made. This has the effect that a regulation made on 31 March 2021 would extend the exemption end date until 31 March 2026. This is less than a year later than the current end date of 31 December 2025. Delaying making an amendment until closer to 2025 remains an option, but would not give certainty to those purchasing heavy EVs now.
41. In August 2020 [OC200211 refers]¹³ the then Minister of Transport agreed the Ministry should develop a Cabinet paper and related documentation to amend the RUC Act in order to enable the heavy EV RUC exemption end date to extend past 2025. Since the Minister's decision, funds to decarbonise the bus fleet and to expand the existing Low Carbon Vehicle Contestable Fund have been proposed. If these funds are established we would need to consider if a RUC exemption for heavy EVs remains the most effective way to support heavy EV uptake.

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| 42. We propose to consult on an option that the RUC Act is amended to enable the heavy EV RUC exemption to be extended for more than five years. |
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An end date for the new heavy vehicle RUC exemption would need to be agreed

43. Assuming the Act is amended, then a separate regulation would be needed to set the new date that the exemption for heavy EV RUC would cease. If the heavy EV RUC exemption is to provide a meaningful incentive, it needs to be extended for more than the period proposed for light vehicles. We advised the previous Minister that an exemption of less than five years is not likely to have a significant impact on the uptake of heavy EVs. This is because electric trucks and buses have a lead time of up to two years from ordering to starting operation and require a longer period to offset the higher upfront costs. However, the longer the RUC exemption stays in place, the greater the risk to revenue for the NLTF.
44. We propose to consult on an option that the end date for the heavy EV RUC exemption is extended to 2030. This would be nine years from 2021 effectively giving a five year extension. A 2030 date would balance businesses' need for certainty over long term costs of operation, against the risks to foregone revenue for the

¹² A conventional two-axle diesel bus costs around \$400,000 while an electric bus costs around \$700,00 - \$800,000.

¹³ Although it was submitted in May 2020 OC200211 was discussed in several meetings it was not signed until August 2020.

Government. The end date would still be able to be reviewed and amended again closer to 2030 if this was considered necessary.

45. It is very difficult to estimate the amount of revenue that would be foregone as a result of extending the heavy EV RUC exemption end date until 2030. It depends on the types of heavy EVs that are purchased (heavier vehicles pay more) and how far they travel (larger vehicles tend to travel more). We expect that because of the physical size of battery packs and the limited range of heavy EVs compared to diesel vehicles, heavy EVs built with current technology will be relatively light (less than 20T GVM) and travel less distance than average heavy diesel vehicles.
46. We roughly estimate that an extension to the RUC exemption to 2030 for heavy EVs (not including trailers which are discussed below) would lead to between \$10 and \$30 million of NLTF revenue being foregone in the year 2030 (see Table 3 below). This equates to a cumulative total of foregone RUC of between \$30 million and \$95 million by 2030. These amounts are in addition to the anticipated revenue that will be foregone from the existing heavy EV exemption between 2020 and 2025 which we estimate will total between \$3.5 and \$8.4 million in 2025.
47. We propose to consult on an option that the heavy EV RUC exemption is extended to 31 March 2030.

PART 3: BROADENING THE RUC EXEMPTION TO INCLUDE OTHER LOW CARBON FUELS

Broadening the RUC exemption to include hydrogen vehicles requires fundamental changes to the RUC Act

48. Along with EVs there is increasing interest that vehicles that use low carbon fuels, and especially hydrogen fuel-cell electric vehicles¹⁴ (HFCEVs), should also be exempt from RUC. This exemption is not possible without amending the RUC Act as only EVs charged from an external source of electricity are covered by the wording of the existing exemption.
49. The 2016 Cabinet paper stated that the EV RUC exemption was a “transparent and efficient way of providing a financial incentive to encourage consumers and businesses to opt for EVs over equivalent conventional vehicles”. The RUC exemption was intended to temporarily promote the uptake of EVs until their purchase cost fell to a level closer to conventional internal combustion engine vehicles. Cabinet did not extend the RUC exemption to include HFCEVs at that time, as they were considered experimental technology. There are only three HFCEVs in use in New Zealand at this time. All are light vehicles.
50. HFCEVs currently have very limited supply and they are not yet available commercially in New Zealand. As well as facing a shortage of supply HFCEVs have high purchase prices and higher fuel costs compared with conventional petrol and diesel vehicles or equivalent sized EVs. This, combined with other technical and financial obstacles to deploying the fuelling infrastructure, means that HFCEVs are expected to require a high degree of support and for longer than EVs, before they

¹⁴ Wikipedia defines a fuel cell vehicle (FCV) or fuel cell electric vehicle (FCEV) as an electric vehicle that uses a fuel cell, sometimes in combination with a small battery or super-capacitor, to power its on board electric motor. Fuel cells in vehicles generate electricity generally using oxygen from the air and compressed hydrogen. In principle, a hydrogen fuel cell functions like a battery, producing electricity, which can run an electric motor. Instead of requiring recharging, however, the fuel cell can be refilled with hydrogen.

become commercially viable. RUC exemptions alone are unlikely to increase the uptake of HFCEVs, especially in this early phase of deployment given the other constraints. In addition, and unlike heavy EVs, hydrogen vehicles are not likely to be significantly heavier than diesel vehicles and so would not face higher RUC costs for the same task.

51. Although HFCEVs were not made eligible for a RUC exemption in 2016, they were made eligible for support from the Low Emission Vehicles Contestable Fund (LEVCF). The LEVCF was established as part of the 2016 amendments and is administered by the Energy Efficiency and Conservation Authority (EECA). The HFCEV bus being built for Ports of Auckland has received support from this fund as part of a \$250,000 package. In addition, several hydrogen projects have received support from the Provincial Growth Fund, although none of the projects have supported the transport sector directly.
52. If the intent of creating a new RUC exemption is to provide assistance to the newly establishing hydrogen industry, then direct financial assistance from funds such as the LEVCF (and the funds referred to in para 41) could be provided more rapidly than support that requires the Government to amend the RUC Act before it can be provided. RUC exemptions are also expected to be more important as a tool to support uptake when technologies are nearing commercial viability, but costs are not quite at parity with fossil fuel (or electric) vehicle costs. We consider this gives us time to consider the advantages and disadvantages of a RUC exemption for HFCEVs before making such a major change to the RUC Act.
53. If it is intended that HFCEVs should be eligible for an exemption from RUC because they are essentially EVs (though the electricity is provided via a fuel cell charged from hydrogen rather than stored mains power), the most straightforward option would be to amend the definition of EVs in the RUC Act. This would broaden the definition of both light and heavy electric "RUC vehicle" to include vehicles where the electricity is created from hydrogen. This would enable HFCEVs to be exempt from RUC under the same conditions and timing as EVs. While simple, this approach would not allow a different timeline for the exemption for HFCEVs than for EVs. Because HFCEVs are not expected to be economically viable on the same timescale as EVs, we do not recommend this approach.

Broadening the RUC exemption to include HFCEVs would need a clear rationale and public consultation

54. Creating a broader power to exempt HFCEVs (or a vehicle using any other low carbon fuel) from paying RUC independently from EVs would require a substantive amendment to the RUC Act. This is because creating a wider exemption would not be consistent with the Act's current purpose, which relates to recovering costs that are in proportion to the costs that the vehicles generate¹⁵. We also consider that the rationale agreed by Cabinet in 2016 for creating the EV RUC exemption (paragraph 49) would not apply. An exemption from RUC would not be expected to enable businesses and consumers to opt for HFCEVs over conventional vehicles, or EVs, while the technology remains in extremely limited global supply.
55. It would be more sensible to allow for the consideration of matters such as CO₂ emissions generally when setting RUC rates, rather than seeking to create a specific exemption for hydrogen. This would enable the Government, when setting RUC rates, to consider any low carbon fuel or technology. This type of amendment would

¹⁵ The existing EV RUC exemption may also be considered to be inconsistent with the Act's purpose, but the exemption has already been agreed by Parliament. Further extending the scope of RUC exemptions, without providing a clear mandate in the purpose, would be considered poor practice.

improve long term policy coherency. To achieve this, an extra criterion to consider when setting RUC rates would be needed.

56. The purpose of the RUC Act could be amended to include wording such as: to impose charges on RUC vehicles for their use of the roads that are in proportion to the costs that the vehicles generate *while also considering the contribution to meeting the emissions reduction target in the Climate Change Response Act 2002.*

57. We propose to consult on amending the purpose of the RUC Act to state that it is to impose charges on RUC vehicles for their use of the roads that are in proportion to the costs that the vehicles generate *while also considering the contribution to meeting the emissions reduction target in the Climate Change Response Act 2002.*

58. The key risk from a change to the RUC Act's purpose to consider CO₂ emissions, or similar language, in setting RUC rates is the long term risk to RUC revenue. If the policy worked, and led to a greater percentage of travel by vehicles using low carbon fuels, it would lead to decreased revenue (unless costs to other vehicle types were raised). As noted, there is likely to also be opposition from the road transport sector about the move away from a damage-based cost model, as road damage is not affected by fuel type.

59. NLTF funding is already expected to be under pressure to deliver all of the priorities signalled in GPS 2021. Any revenue lost from an exemption will increase the pressure on the NLTF and therefore an exemption should be balanced against the GPS 2021 investment priorities that may be deferred or delayed as a result. This suggests that if a new power is created to enable the Minister to set differential rates according to the emissions contribution of a vehicle, there should also be explicit consideration of the impacts on expenditure in the GPS from the foregone revenue.

60. Consulting on a discussion document, rather than draft legislation, would allow an opportunity to gather further information for a cost benefit analysis before preparing final legislation.

61. We propose to consultation on amending the purpose of the RUC Act, along with the other amendments discussed in this paper, will be subject to consultation through a discussion document. This will ensure that the changes are workable and have a degree of public support before any changes are recommended to the RUC Act.

62. Potentially, the approach of setting RUC rates could also enable rates to be set at a higher level for some vehicle or fuel types to discourage their use. It would also be possible to consider factoring in other damage costs, such as those from noise or air pollution, when setting RUC rates. This is not proposed at this time due to the potential complexities of agreeing such costs, but we do propose that the idea of creating the ability to be able to consider a range of environmental costs, other than CO₂ emissions, is included in the options for consultation.

63. If environmental costs were to be considered when setting RUC rates we would also need to consider how such costs could be recovered from vehicles paying FED in order to ensure equity between fuel types.

64. We also propose to consult on whether other costs associated with RUC vehicles, such as noise or harmful emissions, should be able to be considered when setting RUC rates.

Providing a RUC exemption for HFCEVs requires a range of decisions

65. As with the discussion above about extending the heavy EV RUC exemption, there is a separate question of what dates an exemption from RUC should apply to HFCEVs if they are exempted. Decisions on the timing of the end date for any exemption and whether the exemption would apply separately to light and heavy vehicles, as happens now with EVs, would need to be made. While such matters are expected to be set in regulations that are enabled by the Act, it is likely the policies will need to be developed in parallel.
66. We have modelled the costs of extending the RUC exemption for HFCEVs and for heavy EVs and these are set out in Table 3 below. We have little information to predict HFCEV uptake as they are not yet for sale on a commercial basis. The upper bound figures are based on a scenario created by Hiringa Energy Ltd (Hiringa). Hiringa is a Taranaki-based company that is very actively involved in promoting hydrogen and plans to manufacture and use hydrogen including as a transport fuel in New Zealand. The lower figures are based on a scenario that assumes HFCEVs follow the same uptake path as heavy EVs. Under present understanding, both scenarios are likely to be optimistic. If a RUC exemption was to be provided, these scenarios suggest that it would be appropriate to consult on exempting both light and heavy HFCEVs until 2030, in line with the proposed heavy EV RUC exemption extension. It is very difficult to predict when HFCEV technology will become commercially viable and so exemptions may need to be amended later.

Hiringa has proposed that trailers towed by exempted vehicles also be exempt from RUC

67. Heavy trailers (those with a GVM over 3.5 tonnes) that are towed by trucks are required to pay RUC separately from the truck¹⁶. The RUC exemption for heavy EVs only applies to the powered vehicle and not to a trailer being towed by an exempt vehicle.

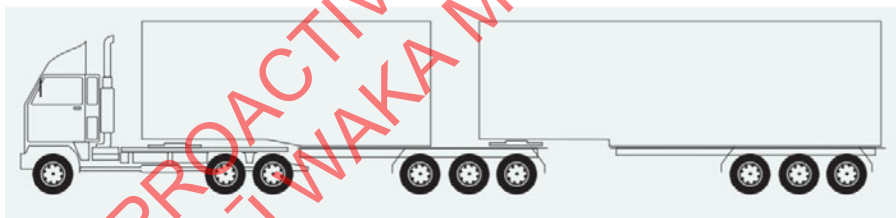


Figure 3 Example of typical combination of truck with two heavy trailers

68. To date, only one¹⁷ heavy EV is being used to tow a heavy trailer, but it is expected that especially in the initial stages of deployment, HFCEVs will be large trucks towing one or two trailers. Hiringa has publically proposed that the trailers being towed by exempted HFCEVs should also be exempted from paying RUC. This would make the use of HFCEVs more commercially viable. We would expect that without an exemption, a vehicle combination with two trailers, similar to that shown in Figure 3, would pay RUC of around \$300/1,000 km for the truck unit and a further amount of roughly \$300/1,000 km for each of the trailers. An exemption from RUC for the trailer units, whether towed by a heavy EV or HFCEV, would therefore provide significant RUC savings to the operator.

¹⁶ Depending on the number of axles and GVM, heavy trailers of the type commonly used for carrying freight pay RUC in the range of \$70 - \$350/1,000km.

¹⁷ An Auckland firm, ContainerCo tows a 40ft trailer with its EV (www.scoop.co.nz/stories/BU1911/S00235/first-electric-heavy-vehicle-ehv-for-nz-roads.htm).

69. A RUC exemption for unpowered trailers being towed by vehicles that were exempted from RUC would require a separate amendment to the RUC Act. This exemption would be significantly more complex to administer than an exemption for the powered vehicle as, in normal operation, trailers are regularly switched between trucks.
70. It is difficult to assess whether an exemption for a trailer being towed by an exempted vehicle would lead to any additional reduction in greenhouse gas emissions, than if only the towing vehicle was exempted. Un-powered trailers, by definition, emit no greenhouse gases themselves and so there is no reason to incentivise their uptake on their own.
71. If it was agreed that the exemption should be extended, it may be appropriate to put in place safeguards. These could include a requirement to digitally link the truck and the trailer units so that exemptions were only provided to HFCEVs (or other RUC exempt vehicles) that towed trailers fitted with approved electronic RUC devices. Administering such safeguards would be reasonably straight forward while there were only a few HFCEVs in the fleet, but could become increasingly complicated and expensive to administer as the numbers of exempted vehicles increased. It would also move the RUC system further away from the principle of recovering the costs of damage imposed by vehicles.

72. We propose to consult on an option to enable RUC exemptions to be provided to vehicle combinations that include heavy trailers, where the motive power is from a vehicle otherwise exempted from paying RUC.

73. Table 3 shows the likely scale of revenue loss if an exemption was also extended to include heavy trailers.

Table 3 Summary of findings for potential amount of revenue foregone from different options for RUC exemptions

Exemption ending	Exemption includes	Maximum difference from status quo (lower range)	Maximum difference from status quo (upper range)	Cumulative difference (lower range)	Cumulative difference (upper range)
2025	Electric (Status quo)	0	0	0	0
2025	Electric + Hydrogen	-\$2M	-\$5M	-\$2M	-\$5M
2025	Electric + Hydrogen + Trailers	-\$2M	-\$5M	-\$5M	-\$10M
Five additional years of RUC exemptions					
2030	Electric	-\$10M	-\$30M	-\$30M	-\$95M
2030	Electric + Hydrogen	-\$15M	-\$50M	-\$45M	-\$155M
2030	Electric + Hydrogen + Trailers	-\$15M	-\$55M	-\$55M	-\$185M
Ten additional years of RUC exemptions					
2035	Electric	-\$25M	-\$65M	-\$115M	-\$345M
2035	Electric + Hydrogen	-\$40M	-\$115M	-\$195M	-\$595M
2035	Electric + Hydrogen + Trailers	-\$50M	-\$135M	-\$225M	-\$700M

The source of the hydrogen should be relevant to an exemption

74. If the purpose of creating a RUC exemption for HFCEVs is to reduce climate change emissions from the transport sector (as opposed to providing direct financial support to an industry developing a new fuel), then the source of the hydrogen should be

relevant. One method of producing hydrogen uses fossil fuels as the source, rather than renewable electricity. Although HFCEVs using fossil fuel based hydrogen would still be zero emitters during their operation, unless combined with carbon capture and storage this option would not meet the test of reducing greenhouse gas emissions expected to be in the proposed revised purpose.

75. If an HFCEV RUC exemption was modelled on the existing EV RUC exemption, it would be universal. It would not be possible to determine the source of fuel for each vehicle. For this reason, at least in the initial phase of deployment, when sources of hydrogen cannot be ensured, individual licences may be required if this is considered important. Licences would be more complicated to implement than a generic exemption.

76. We propose to consult on how to ensure only HFCEVs using hydrogen manufactured from low or zero carbon sources are exempted from RUC.

Biofuels could also be subject to a RUC exemption or reduced rates if the purpose is amended

77. If the overarching reason to reduce RUC for EVs and HFCEVs is to reduce carbon emissions, it is reasonable to assume that there is a case for also exempting or providing reduced RUC rates for vehicles using biofuels¹⁸. While biodiesel can be used in pure (100 percent) form it is more likely to be sold as a blend with a relatively low level (5 or 7 percent) of biodiesel blended with mineral diesel.

78. Because biodiesel is expected to be sold in blends at a retail level, we do not propose extending any RUC exemption to also include biofuels at this time. However, the proposed amendment would enable this at a later date if desired. It would still be worthwhile to seek feedback on this matter as there are currently no other forms of direct support to encourage the use of biodiesel.

79. We propose to consult on whether vehicles using biofuels such as biodiesel should be exempted from RUC (or potentially pay a lower rate), and if so under what circumstances.

PART 4: ENABLING THE SETTING OF PARTIAL RUC RATES

Partial RUC rates would help with the transition out of exemptions and address concerns with dual fuel vehicles

80. RUC rates vary widely between vehicle classes, with the rates set based on key variables that affect damage to the roads such as weight (GVM) and number of axles. However, the legislation does not enable the rate to be set at a different (partial) rate for a subset of vehicles based on fuel type within that class. The most likely reason to want to set a partial rate would be to recognise the benefits to reducing CO₂ emissions of using a low carbon fuel, but to not provide a full exemption.
81. By enabling partial RUC rates, it would allow vehicles such as EVs to move in the future from the complete exemption (paying nothing) to paying RUC by, for example,

¹⁸ Bioethanol is also a biofuel. It is generally used in blends with petrol, and is exempted from fuel excise duty when used as a transport fuel. However a heavy vehicle using bioethanol would still be required to pay RUC. Bioethanol is not normally used as a replacement for diesel. However experimental heavy vehicles in Europe are reported to use 100 percent bioethanol as a fuel in modified diesel engines. If these were used in NZ then the same policy issues would arise as with biodiesel.

raising rates by twenty percent each year over five years. A graduated transition to paying the full level of RUC is likely to minimise any backlash from EV owners. It would also reduce the risk of deterring EV uptake during the transition.

82. Being able to set partial RUC rates for specific classes of vehicles would also address a concern with plug-in hybrid electric vehicles (PHEVs)¹⁹. PHEVs operate on both petrol and batteries charged from an external source of electricity. PHEVs are currently exempt from paying RUC as they are considered EVs, though they pay FED on the petrol they use. Around a quarter of the light EV fleet (5,864 out of 23,877 vehicles as at December 2020 (see Figure 1)) are PHEVs. Owners of PHEVs would be 'double taxed' if they paid RUC and FED, once EVs are required to pay RUC.
83. Under the current legislation²⁰ any FED paid by a PHEV owner is able to be refunded if the vehicle also paid RUC. However, the refund process requires applicants to collect and submit receipts and is a manual process. This is time consuming for both the applicant and Waka Kotahi. To simplify this, PHEVs could be charged a reduced rate of RUC, reflecting an average FED payment. Any reduced RUC rate for PHEVs would be set to be revenue neutral over all and solely intended to reduce compliance costs for these types of vehicles.
84. Providing a reduced RUC rate to PHEVs to offset the FED payment would be separate from any provision of a reduced rate intended to support EVs more broadly (if one was established).

85. We propose to consult on the option of enabling partial rates of RUC to be charged to a specified class of vehicle and for specified periods of time (for example, to ease the transition from exemption to paying RUC), where the vehicles are using fuels that lead to reduced CO₂ emissions. Partial rates would be either to reflect the vehicle class's contribution to meeting the emissions reduction target, or the vehicle being subject to both FED and RUC.

PART 5: CONCLUSIONS AND NEXT STEPS

86. We have not discussed the proposals in this paper with stakeholders outside of Government and there is likely to be a high degree of interest in the proposals in this paper.
87. Public interest in possible changes to RUC exemptions will be heightened by the release of the Climate Change Commission's draft package of advice to Government on 1 February 2021. For this reason you may wish to make a press release about which policy options you wish to seek Cabinet's agreement to consult on. Early advice on possible changes to the light EV RUC exemption will be especially important for the uptake of light EVs. We can provide advice on preparation of a press release if requested.
88. If you agree we will prepare two Cabinet papers. The first would be for you to take to Cabinet by April 2021. This paper would seek Cabinet's agreement to consult immediately on the proposed amendments to the end date for the current light EV RUC exemption and make two minor changes to RUC rates. Waka Kotahi would then arrange for public consultation on these matters through its normal regulation development processes. This usually takes six weeks to conduct. Subject to the

¹⁹ PHEVs are distinct from 'conventional' hybrid vehicles such as the Toyota Prius. Conventional hybrid vehicles cannot plug in to recharge their batteries and so are solely powered by petrol.

²⁰ Land Transport Management (Apportionment and Refund of Excise Duty and Excise-Equivalent Duty) Regulations 2004.

outcome of consultation, we would expect to be ready to submit the necessary documentation for Cabinet's agreement to the resulting regulation in July 2021.

89. We will also commence preparing a second Cabinet paper and draft discussion paper to address the other issues set out in this paper and its companion on possible technical amendments. Under the Cabinet Office Manual, Cabinet agreement is required before we can publicly release a discussion document. The second Cabinet paper would therefore seek Cabinet's agreement to publicly release a discussion document. This would allow us to consult on the other proposals to amend the RUC Act that are discussed in this paper and potentially identify any other changes that may be desirable. We would expect that this Cabinet paper and discussion document would be ready to provide to Cabinet in July 2021.
90. Once Cabinet has agreed to its release, we will work with Waka Kotahi to publicly consult on the discussion document. This consultation is likely to require extensive engagement with stakeholders, including meetings and workshops. We anticipate that it will take at least six months to develop and refine the final package of proposed amendments.
91. We would then return to Cabinet in 2022 to seek Cabinet's agreement to a final package of recommendations for changes to the RUC Act (and its regulations as necessary). Once Cabinet has agreed the changes any decision on the timing of the amendments to the RUC Act is subject to agreement by Parliament. An initial bid for a RUC bill has been made for it to be ready for drafting by Parliamentary Counsel Office in 2022. We would anticipate the Bill would take around 12 months to be considered by Parliament, including a 6 month select committee process.
92. Table 4 below sets out a suggested timeline for the two processes.

Table 4 Indicative timeline for policy development and legislative amendments

	Light EV RUC exemption	Uptake of low carbon vehicles and other matters
Initial Cabinet Paper to agree consultation can occur	April 2021	July 2021
Consultation on draft regulation	6 weeks	
Cabinet paper to seek agreement to make regulation to amend exemption end date	July 2021	
Regulation amending light EV RUC exemption end date signed	August 2021	
Consultation on discussion document carried out		4 – 6 months
Briefing to Minister on outcome of consultation and agreement to any policy matters		Early-2022
Cabinet paper to agree final package of amendments to RUC Act and regulations		Early-2022
Drafting instructions be sent to the Parliamentary Counsel Office or other drafter.		Mid-2022
Select Committee considers Bill		2022 -23
Bill passed into law		2023 - 24