

# Regulatory Impact Statement

## EXECUTIVE SUMMARY

The attached paper proposes changes to the Road User Charges Act 1977 via a Road User Charges Amendment Bill to be introduced into the House as a priority two in early-mid June.

This Bill is designed to achieve two distinct outcomes that will be looked at separately. The first is to give an exemption to road user charges (RUC) for electric vehicles. The second is to provide notice of increases to RUC to all diesel vehicle owners.

The Ministry of Transport does not anticipate that either outcome is likely to have a significant effect on economic growth.

## ADEQUACY STATEMENT

The Treasury's Regulatory Impact Analysis Team agrees that the policy proposals outlined in the attached paper do not trigger the significance criteria and adequacy should be assessed internally.

## STATUS QUO AND PROBLEM

### *Electric vehicle exemption*

Electric vehicle technology can make a significant contribution to improving the efficiency of the vehicle fleet. Increasing the proportion of electric vehicles in the fleet decreases our reliance on imported fossil fuels and improves our energy security. Combining highly efficient electric motors with our competitive advantage in renewable electricity generation will reduce the greenhouse gases produced by the transport sector, as well as the harmful emissions affecting air quality. Electric vehicles are also much cheaper to operate per kilometre than conventional vehicles.

The global market for electric vehicles is already severely constrained and is expected to remain this way over the next decade due to low production volumes of first generation electric vehicles. Until economies of scale start to reduce prohibitive battery costs, early electric vehicles will also have a price premium of roughly double to quadruple that of a conventional vehicle (ie \$20k conventional becomes \$40-\$80k electric). New Zealand is not initially viewed as a priority market with manufacturers focusing on large subsidised markets that can absorb the technology premium, so hastening the transition to larger scale production and a more accessible product.

Although New Zealand is not a vehicle manufacturer, the government plays an important role in the uptake of electric vehicle technology. Part of this role is to remove barriers that could prevent or delay the uptake of a market for electric vehicles in New Zealand. One such impediment is a perceived disincentive for owners, of what are effectively zero-emissions vehicles, having to pay RUC. This view was reinforced by 2008 Energy Efficiency and Conservation Authority market research where 52 percent of 524 respondents stated that having to pay RUC would affect their decision to purchase an electric vehicle.

RUC funds road use and is paid by all vehicles not eligible for an exemption under section 4 of the Road User Charges Act 1977. As electric vehicles are not exempted under section 4,

they are required to pay RUC. The current RUC rate for a light electric vehicle (weighing less than 3.5 tonnes) is \$36.07 per 1000 km. This costs the owner of an electric vehicle approximately \$432 per annum, based on an average travelling distance of 12,000 km/year. In comparison to the up-front capital cost of early electric vehicle technology, RUC would appear to have a very minor influence on the purchasing decision of an individual or a business. However, general negative perception about RUC, particularly from owners of petrol vehicles that have not previously paid it, makes it a barrier to the uptake of electric vehicle technology. The National party promised in the lead up to the 2008 election that electric vehicles would be exempt from paying RUC. The proposed exemption is transitional and limited in scope and is not intended to set a precedent for RUC exemptions.

#### *Notification of RUC increases*

In 2008, RUC rates were increased without notice to operators at a period that coincided with high fuel prices. Operators were unable to pass the increases on to customers straight away and publicly demonstrated against the increases.

For heavy vehicle operators, RUC represents a major cost of doing business. Changes in RUC rates that cannot be passed on to consumers in a timely manner will significantly decrease marginal profitability. Notification will improve businesses ability to operate by providing them with time to pass on the costs of any RUC increases. However, notification carries the risk of revenue leakage through large scale pre-purchasing of RUC. Officials estimate that notification of the 2008 RUC adjustment would have amounted to a revenue reduction of approximately \$14 million. However, quantifying pre-purchase risk varies from year to year in relation to the size of the increase, the amount of credit available for pre-purchase and the cost of that credit. The level of anticipated leakage from notifying the October 2009 RUC adjustment is not known.

The Ministry also acknowledges that RUC is a pre-purchase system and there is a benefit associated with paying the government money ahead of time. Revenue leakages from notification are further offset by improved equity and stability in the market for heavy road freight. The Ministry supports the introduction of a statutory notice period in time for the next RUC increases scheduled for 1 October 2009.

RUC increases for light vehicle owners are proportionately small, representing less than half the \$9.50 transaction fee and providing less incentive to game the system. The level of anticipated revenue leakage from notifying the next RUC increases for light vehicles scheduled for 1 October 2009 is not known. However, light vehicle owners have also historically not pre-purchased significant quantities of RUC. Although notification of RUC increases will also be given to light vehicle owners, pre-purchasing is expected to make little impact on revenue.

## **OBJECTIVES**

### *Electric vehicle exemption*

The objective of the legislative amendments described in the attached paper is to mitigate a perceived barrier to electric vehicle uptake imposed by the requirement to pay RUC. Non payment of RUC will provide electric vehicles with a comparative advantage in operating

costs and also signals the government's broad support of electric vehicle technology to the emerging market. However, RUC is a primary method of funding land transport infrastructure and any exemption must not undermine the long-term sustainability of the National Land Transport Fund. RUCs are the government's key mechanism that recovers the costs that road users impose on the roading network regardless of how their vehicles are powered. The exemption of light vehicles is therefore not to be seen as a setting a precedent for RUC exemptions. The proposed incentive for light electric vehicles is therefore transitional and limited in scope.

#### *Notification of RUC increases*

The objective of the legislative amendments described in the attached paper is to improve equity and stability in the heavy road freight market by notifying operators of proposed RUC increases in advance. However, these amendments also aim to balance increased transparency against security of National Land Transport Fund revenue streams.

### **ALTERNATIVE OPTIONS**

#### *Electric vehicle exemption*

To ensure the long-term sustainability of the National Land Transport Fund, any RUC exemption for electric vehicles is designed to be temporary. It was considered that eligible vehicles be plug-in hybrid and battery-electric vehicles that weigh less than 3.5 tonnes and are certified and registered for use on New Zealand roads.

Changing the length of time or number of vehicles eligible for an exemption has direct implication for lost revenue. It was first proposed to look at an exemption lasting five years from 1 July 2009 to 1 July 2014. After five years about 500 electric vehicles would be in the fleet, causing lost revenue of \$190,000 (net present value). Consideration was also given to an exemption lasting four years from 1 October 2009 to 1 July 2013, by when about 300 electric vehicles would be in the fleet, and an expected revenue loss of \$88,000 (net present value) would be incurred.

Another cut-off option is when one percent of the fleet is electric (approximately 30,000 vehicles). Based on short-term industry indications and long term policy estimations, the Ministry has modelled this point being reached at 2020. The net present value of this exemption is \$14 million. Revenue forgone for all cut off points between 2009 and 2020 is modelled on the chart below.

Fleet projections		Plug in hybrid and electric vehicle revenue forgone for kilometres driven in years of exemption indicated below (\$)											
Year	PI+EV	1	2	3	4	5	6	7	8	9	10	11	12
2007	20												
2008	20												
2009	23	10,972											
2010	29		13,870										
2011	40			19,052									
2012	127				60,466								
2013	292					139,160							
2014	545						259,306						
2015	1,174							559,132					
2016	2,224								1,059,070				
2017	5,134									2,444,492			
2018	9,946										4,735,545		
2019	16,702											7,952,382	
2020	25,441												12,112,903
Revenue per year		10,973	13,872	19,055	60,470	139,165	259,312	559,139	1,059,078	2,444,501	4,735,555	7,952,382	12,112,903
Discounted per year		10,973	12,844	16,337	48,003	102,291	176,484	352,353	617,962	1,320,688	2,368,957	3,683,492	5,195,016

There are also two separate methods of implementing an exemption, through regulation and prepayment. The NZ Transport Agency has indicated that prepaying RUC would be relatively simple for small numbers of eligible vehicles. However, administration costs will increase proportionately as the number of electric vehicles in the fleet increases.

Although prepayment may be appropriate in the short-term, a more transparent and useful option is to amend the Road User Charges Act 1977 to enable regulations exempting electric vehicles from paying RUC for a specified amount of time. The attached paper outlines the necessary amendments that would enable such a policy to be implemented.

The last option for minimising the barrier imposed by RUC is not to exempt the financial cost, but to address the issue of negative consumer perception by methods such as promotional campaigns. However, RUC has been applicable to heavy vehicles and vehicles not powered by petrol (as defined by the Act) for over 30 years. The perceptions about RUC may be ill-founded, but are ingrained. It is unlikely that a campaign to portray RUC in a different light would have any tangible effect on prospective electric vehicle purchasers.

#### *Notification of RUC increases*

Notification of RUC increases will improve the equity and stability for the road freight industry. However, as RUC represents a substantial operating cost for the heavy vehicle industry, notification will increase prepayment of licences at the cheaper rate. Notice provisions must be balanced against potential to leak revenue. Notification will affect heavy and light vehicle owners differently and alternative options can be designed to reflect this.

To minimise revenue leakage, an additional provision could be made to cancel licences purchased prior to an increase. Such a provision would substantially increase administration costs associated with reimbursing and reissuing licences. However, light vehicles constitute roughly 90% of the RUC-paying fleet and light vehicle owners have also historically been much less inclined to pre-purchase RUC. Only cancelling the pre-purchased licences of the heavy fleet would substantially reduce administration costs and potential revenue leakage.

## **PREFERRED OPTION**

### *Electric vehicle exemption*

The preferred option is to exempt electric vehicles from paying RUC until 2013. It is recommended that the exemption be made via regulation, following a legislative amendment to the Road User Charges Act 1977. The required amendments are outlined in the attached paper.

The exemption should apply to light electric and plug-in hybrid electric vehicles. Eligible vehicles should comply with fleet entry requirements and be registered for use on New Zealand roads. The exemption should also apply to electric vehicles already in the fleet, as well as those entering the fleet.

It is anticipated that the enabling amendment will not be completed until August, with potential to take longer if regulations cannot be created simultaneously. As such, it is recommended that the exemption occur for vehicles already in, or entering, the fleet from 1 October 2009 when the statutory exemption takes effect.

### *Notification of RUC increases*

The preferred method of implementing compulsory notification of RUC increases is to notify all vehicle owners who pay RUC. This includes both heavy and light vehicles. It is recommended that notification occur at least six weeks before any intended RUC increase.

To minimise revenue loss, it is recommended that there is an additional provision that licences purchased prior to the date of a RUC increase would expire within one month of the increase and licence holders would be able to seek refunds. However, this provision would only apply to heavy vehicles owners. Light vehicles owners would still be able to pre-purchase RUC, although it is anticipated that this would create less revenue loss than administration costs associated with cancelling, refunding and reissuing approximately 400,000 light RUC licences.

## **IMPLEMENTATION AND REVIEW**

### *Electric vehicle exemption*

It is anticipated that the Road User Charges Amendment Bill outlined in the attached paper will pass through the House around mid-August 2009. This will enable regulations to be made under the Road User Charges Act 1977 for the purposes of temporarily exempting eligible electric vehicles from paying RUC.

Regulations are expected to be enacted by 1 October 2009 with a termination date of 1 July 2013. The proportion of electric vehicles in our fleet can then be reassessed at this time and extended further if necessary.

### *Notification of RUC increases*

It is anticipated that the Road User Charges Amendment Bill outlined in the attached paper will pass through the House around mid-August 2009. This allows sufficient time for the minimum six week notice period proposed in amendments to section 20 of the Act to come into force before the next RUC increase is scheduled for 1 October 2009. Addition of the requirement to reissue licences within one month after the increase will prevent revenue

leakage from large scale pre-purchasing before the increases. Notification will be done by Gazette notice.

## **CONSULTATION**

The Treasury, the Department of Prime Minister and Cabinet, the Ministry of Foreign Affairs and Trade, the Ministry of Social Development, the Ministry of Economic Development, the Ministry for the Environment, the Energy Efficiency and Conservation Authority and the NZ Transport Agency have been consulted throughout the development of this document.