

Climate Implications of Policy Assessment: Disclosure Sheet

This disclosure sheet provides the responsible department’s best estimate of the greenhouse gas emissions impacts for New Zealand that would arise from the implementation of the policy proposal or option described below. It has been prepared to help inform Cabinet decisions about this policy. It is broken down by periods that align with New Zealand’s future emissions budgets.

Section 1: General information

General information	
Name/title of policy proposal or policy option:	Extending the exemption of light Electric Vehicles from Road User Charges
Agency responsible for the Cabinet paper:	Ministry of Transport
Date finalised:	28 May 2021
Short description of the policy proposal:	<i>This initiative proposes extending the existing exemption from Road User Charges for light Electric Vehicles (EVs) from December 2021 to March 2024. The objective is to increase EV uptake by lowering ownership and running costs, which will reduce greenhouse gas emissions from on-road travel. More information can be found in the RIS Extending the Light Electric Vehicle Road User Charges Exemption (28 May 2021).</i>

Section 2: Greenhouse gas emission impacts

Sector & source	Changes in greenhouse gas emissions in tonnes of carbon dioxide equivalent (CO ₂ -e)						Cumulative impact
	2020–25	2026–30	2031–35	2036–40	2041–45	2046–50	
Electricity							
Transport	-25,316	-43,867	-41,651	-39,921	-38,966	-38,600	-228,322
Industry							
Waste							
Agriculture							
Land use, land use change and forestry							

Sector & source	Changes in greenhouse gas emissions in tonnes of carbon dioxide equivalent (CO ₂ -e)						Cumulative impact
	2020–25	2026–30	2031–35	2036–40	2041–45	2046–50	
Total	-25,316	-43,867	-41,651	-39,921	-38,966	-38,600	-228,322

Section 3: Additional information

Additional information

- The above reductions were estimated as part of a Cost-Benefit Analysis (CBA) conducted on the policy. This analysis factors in the vehicle fleet profile forecasted for the Clean Car Discount policy and assumes that extending the extension results in people substituting EVs in place of Internal Combustion Engine Vehicles (ICEVs). It also estimates reductions for harmful emissions. All change in emissions are based on vehicle use (manufacture or generation of energy sources are excluded).
- Extending the exemption lowers the ownership costs for EVs. We use an elasticity to estimate how much uptake increases by as a result of this cost change, which results in about 3,600 additional EVs. While other factors affect the cost difference – it is the elasticity that is the largest determinant of uptake. A breakeven analysis was performed to find the minimum increase in uptake to make this policy viable by changing the elasticity. This came to about 600 EVs and a reduction of 36,993 tonnes of carbon dioxide equivalent (CO₂-e).
- An alternative scenario has the exemption ending in March 2025, which results in an estimated reduction of 383,315 tonnes of carbon dioxide equivalent (CO₂-e) resulting from 6,337 additional EVs. The breakeven uptake for this is 1,000 additional EVs resulting in an estimated reduction of 60,429 tonnes of carbon dioxide equivalent (CO₂-e).
- The above estimates are based on average vehicles kilometre travelled, and fuel use assumed for different fuel types for light vehicles. The ICEVs substituted out are petrol and diesel vehicles (other fuel types were excluded due to small numbers) and the numbers for these were estimated base on their share of the light fleet.

Section 4: Quality assurance

Quality assurance

- The Climate Implications of Policy Assessment (CIPA) team at the Ministry for the Environment has been consulted and confirms that the CIPA requirements apply to this proposal, as a key objective of the proposal is to reduce emissions.
- This proposal is expected to have a relatively small impact on emissions from transport through supporting the uptake of light-EV vehicles. This is estimated to result in a cumulative 230 thousand tonnes of CO₂-e avoided by 2050, which reflects an estimated 3,000 additional EVs by 2024 as a direct result of the policy.
- Full quality assurance of the emissions analysis was unable to be completed due to a lack of time. However, the scale of estimated emissions reduction appears reasonable, and the CIPA team has no general concerns with the modelling methodology employed. While the point-estimates provided may not reflect the uncertainty inherent in this analysis, this is mitigated somewhat by the relatively small impact of the policy.
- Ministry of Transport officials will work with the CIPA team to assess the emissions impact of further RUC proposals as they are advanced, as appropriate.