

# 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:	Taking action on fuel prices: reducing petrol excise duty and road user charges
Agency responsible for the Cabinet paper:	Te Manatū Waka Ministry of Transport
Date finalised:	19 May 2022
Short description of the policy proposal:	<p><i>This disclosure relates to (1) a decision by Cabinet on 14 March 2022 to reduce for three months the rate of petrol excise by 25 cents per litre and apply an equivalent reduction to all legislated rates of road user charges and (2) a decision by Cabinet on 11 April 2022 to extend the reductions for two months.</i></p> <p><i>Please note: this disclosure does not apply the proposed extension to the monitoring arrangements under the Fuel Industry Act.</i></p>

## Section 2: Greenhouse gas emission impacts

Sector & source	Changes in greenhouse gas emissions in tonnes of carbon dioxide equivalent (CO <sub>2</sub> -e)						Cumulative impact
	2020–25	2026–30	2031–35	2036–40	2041–45	2046–50	
Electricity							
Transport	54,000 to 99,000						
Industry							
Waste							
Agriculture							
Land use, land use change and forestry							

Sector & source	Changes in greenhouse gas emissions in tonnes of carbon dioxide equivalent (CO <sub>2</sub> -e)						Cumulative impact
	2020–25	2026–30	2031–35	2036–40	2041–45	2046–50	
Total	54,000 to 99,000						

## Section 3: Additional information

### Additional information

This analysis includes the impacts of the already agreed and implemented 3-month reduction. All emissions estimates are for 2022 only – it is assumed there are no longer-term behavioural changes as a result of this policy. It should be noted that the analysis took a simple, high-level approach and has a high degree of uncertainty in its results.

The analysis was done by estimating the potential increase in travel demand (measured in vehicle kilometres travelled) as a result of the reduction in travel costs (caused by reducing petrol excise duty and road user charges). We estimated the total running costs per kilometre for light petrol, light diesel, and heavy diesel vehicles before and after the reduction. The reduction in running costs was then multiplied by a price elasticity of -0.15 (+0.06) to get the estimated travel demand increase (**approximately 1-2 percent**). The average vehicle kilometres travelled (VKT) per month for each vehicle type in 2022 was estimated and multiplied by five months. The demand increase was applied to this, and the difference in VKT was then multiplied by each vehicle type's CO<sub>2</sub>/km to get the emissions increase.

A sensitivity analysis was performed using ranges for the running cost components and forecasted VKT. The sensitivity analysis results indicate that the emissions reduction will fall between 54-99 kilotonnes of CO<sub>2</sub>e at the 95% confidence level. However, these estimates fall short of CIPA's requirement of 500 kilotonnes of CO<sub>2</sub>e over ten years. The estimated increase is still significant in that the CIPA requirement averages out to be 50 kilotonnes of CO<sub>2</sub>e per year. The estimates for this policy surpass that with just five months.

## Section 4: Quality assurance

### Quality assurance

*The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements do not strictly apply to this proposal as the emissions threshold of 500,000 tonnes of CO<sub>2</sub>-e over ten years is not met. However, a CIPA disclosure has been provided as the estimated emissions impact is significant over the short time period of the proposal, surpassing the annual average of this threshold of 50,000 tonnes of CO<sub>2</sub>-e per year.*

*This proposal is estimated to increase emissions of around 54,000 to 99,000 tonnes of CO<sub>2</sub>-e over the five months that this policy is in place. This estimate includes the impact of the first three months already agreed to and the additional two-month extension of reduced petrol excise duty and road user charges. This estimated increase in emissions is due to an expected increase in total vehicle kilometres travelled as a result of a decrease in overall petrol vehicle travel costs.*

*The estimated impact does include the impact of decreasing public transport fares, as this is unable to be accurately quantified. However, we expect that this impact is likely to be minimal given that increased public transport use is likely substituting for a range of other modes, including active modes.*

Quality assurance

*The CIPA team has reviewed the estimates at a high level and considers the modelling for this proposal to follow good practice and use reasonable assumptions.*

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