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SUBMISSION OF THE NEW ZEALAND TAXPAYERS' UNION ON CLEAN CAR STANDARD AND DISCOUNT

Introduction

1. The Government plans to introduce a clean car standard and discount scheme in an effort to reduce emissions. We oppose each of these interventions.
2. The evidence provided by the Ministry of Transport (MoT) in favour of each of these interventions is wholly insufficient. The CBA specifically suffers from a number of problems, which fatally undermine the case for each policy.

About the Submitter

3. The *New Zealand Taxpayers' Union* was founded in 2013 by Jordan Williams and David Farrar. The *Taxpayers' Union* has more than 38,000 subscribed members and supporters.
4. The *Taxpayers' Union's* vision is a low-tax, prosperous New Zealand, with efficient, accountable government. Its mission is Lower Taxes, Less Waste, More Transparency.

Fuel price assumptions

5. More than 90 percent of the benefits in each CBA are attributable to consumer fuel savings. Unfortunately, MoT has used unrealistic and inaccurate fuel prices to calculate these benefits.
6. MoT cites a 2012 MBIE paper for the fuel price forecasts used to calculate the consumer benefits. However, fuel prices today are significantly lower than where MBIE forecast fuel prices to be in 2019. Instead of correcting for this forecast failure, MoT has simply plugged the old fuel price forecasts into its modelling.
7. Exclusive of tax, fuel prices today are between 40 and 50 cents per litre cheaper than MoT assumes. MoT's most conservative CBA forecasts assume that fuel prices will remain 40 to 50 cents per litre more

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expensive than current fuel prices. Less conservative price forecasts have fuel costing 150 cents per litre (exclusive of tax) by 2035.

8. Since 90 percent of the benefits in the CBA are directly attributable to consumer fuel savings, results will be extremely sensitive to fuel price assumptions. Consumer vehicle choice may also be sensitive to fuel prices, although without greater understanding of model operation, any sensitivity is difficult to evaluate.
9. In short, results from a CBA which assumes fuel prices are approximately 50 percent higher than reality (at minimum) are unreliable and should not be used as evidence to support policy.
10. MoT responded to these concerns when we raised them with officials through email correspondence. Officials acknowledged the issues and claimed they had commissioned work to update fuel price projections. Officials are also in the process of updating the CBAs, including a review of all key parameters.

Consumer behaviour assumptions

11. Almost all of the benefits from each policy intervention are attributable to consumers. Hence, they are private benefits which crystallise from the consumer's choice to drive more fuel-efficient cars.
12. Typically, an externality exists if social and private costs combined are greater than private benefits, which would imply there are certain costs to society not taken into account by consumers, causing 'overconsumption' of certain goods.
13. However, if – as the CBAs assume – almost all of the benefits to the intervention flow to consumers, there is no obvious externality which requires correcting. Instead, consumers should be willing to purchase more fuel-efficient cars and reap the rewards in absence of intervention – debunking the case for Government intervention, even if the ratio of benefits to costs exceeds one.
14. MoT tackle this concern by arguing that consumers do not take fuel savings over the long run into account when they purchase a car. This is a significant claim, as it assumes consumers are not acting in their rational self-interest. To support this claim, they cite "various studies" without referencing any actual studies.
15. There have been a range of specific studies to tackle the issue of fuel efficiency standards which assume consumers act irrationally.
 - (a) Alcott and Knittel (2017)¹ find that consumers do not suffer from misinformation with respect to fuel efficiency standards when considering purchasing a car.
 - (b) Sallee, West, and Fan (2016)² find *"that used automobile prices move one for one with changes in present discounted future fuel costs, which implies that consumers fully value fuel economy."*

¹ Alcott and Knittel (2017) "Are Consumers Poorly-Informed about Fuel Economy? Evidence from Two Experiments" CEEPR WP 2017-008e

² Sallee, West and Fan (2016) "Do Consumers Recognize the Value of Fuel Economy?" Journal of Public Economics

(c) Grigolon, Reynaert, and Verboven (2015)³ find that “*there is only modest undervaluation of fuel costs*” and so “*fuel taxes are unambiguously more effective in reducing fuel usage than product taxes based on fuel economy*”

16. There are other studies which show similar results. Unfortunately, there is no effort by MoT officials to review or cite this readily available evidence.
17. The mere assertion that “*individuals do not internalise the full operating cost of their preferred type and will only consider the total cost of operating the vehicle over one or two years*” should not be taken seriously as an economic argument in absence of theory or evidence to support the claim.

Failing to measure benefits

18. MoT assumes that we should treat total consumer fuel savings as a benefit. This is a bad approach which allows policy analysts to come to any conclusion they wish.
19. Consider, for example, if a CBA was written on the relative merits of banning the sale of ice cream. It would be inappropriate to merely attribute the total savings to consumers of not buying ice cream, without considering the benefits to consumers of enjoying ice cream.
20. The CBAs prepared by MoT seem to count gross costs, but only calculate net consumer surplus when calculating deadweight loss. This is a problem because when consumers purchase goods, the gross private benefits exceed the cost of goods sold by virtue of the successful transaction.
21. The effect of failing to account benefits to consumers from consumption is to significantly overstate benefits in the CBA.

Distributional effects

22. Irrespective of the CBA, the Clean Car Standard and Discount policies are likely to have suboptimal distributional outcomes.
23. Low income households are more likely to drive cars with poor emissions standards than high income households. The combined effect of the two policies would be to subsidise high income motorists who purchase electric and hybrid cars and impose costs on low income motorists who do not.

Conclusion

24. The CBAs prepared to support the Clean Car Standard and Discount policies suffer from a variety of problems which fatally undermine the case for either policy.
25. While it’s reassuring that MoT officials have acknowledged they are in the process of updating each CBA, officials need to examine underlying assumptions in the model regarding consumer behaviour and principles of CBA analysis in addition to parameter choice.

³ Grigolon, Reynaert, and Verboven (2015) “Consumer valuation of fuel costs and the effectiveness of tax policy: Evidence from the European car market” CEPR Discussion Paper No. DP10301

26. More generally, we have concerns regarding the distributional effects of the policy. Wealthier households are likely to benefit from subsidies for electric and fuel efficient vehicles, while low income households are likely to be hurt by taxing and restricting the supply of older, less fuel efficient vehicles.

Yours faithfully,
New Zealand Taxpayers' Union Inc.

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