The Fuel Efficiency Standard – Cleaner, Cheaper to Run Cars for Australia

Austroads' response to the discussion paper

Austroads

1 Introduction

Austroads welcomes the opportunity to provide a response to the Department of Infrastructure, Transport, Regional Development, Communications and the Arts' consultation paper entitled ***The Fuel Efficiency Standard – Cleaner, Cheaper to Run Cars for Australia***. Our response provides an overview of Austroads and relevant services, and addresses select questions from the consultation paper.

Austroads is the peak body for Australasian road transport and traffic agencies. As an organisation owned by all Australia's roads or transport departments, Waka Kotahi the New Zealand Transport Agency and the Australian Local Government Association, Austroads assists our members and Australia's local government agencies to adopt harmonised road design, construction, management and safety practices.

1.1 Purpose of this response

The purpose of this response is to help inform the Department of Infrastructure, Transport, Regional Development, Communications and the Arts' consultation on a fuel efficiency standard for Australia.

The response focuses on:

- relevant services offered by Austroads, and
- specific questions raised in the consultation paper.

The response does not necessarily represent the views of our member organisations.

1.2 Who we are and what we do

Austroads is a not-for-profit company owned by the transport and roads departments of all Australian governments and Waka Kotahi. Austroads' owners are our members. We serve our members by:

- supporting safe and effective management and use of the road system
- developing and promoting national practices, and
- providing professional advice to member organisations and national and international bodies.

Austroads members are collectively responsible for the management of over 900,000 kilometres of roads valued at more than $250 billion, representing the single largest community asset in Australia and New Zealand.

Austroads' core activities are delivered using a program management approach. Our activities are arranged into five program areas, each focused on an operational area of the road system and managed by a program manager with extensive knowledge and experience in road transport matters. Our program areas are supported by Task Forces that each comprise experts representing our members.

Austroads' outputs include:

- Guides which are a reference for transport and roads departments and promote national consistency and harmonisation. Austroads' member organisations have agreed to adopt Austroads Guides as the basis of their operation.
- Research reports and technical reports which are designed to share newly-generated knowledge about a topic.
- Applications which are computer-based tools designed to help member organisations.
- Other tools and services which are a collection of miscellaneous activities to improve asset performance and road safety.

A particularly relevant service is Austroads' National Exchange of Vehicle and Driver Information System (NEVDIS), which includes an up-to-date record of vehicles registered for use on Australian roads.

1.3 Potential for NEVDIS to support an Australian Fuel Efficiency Standard

Austroads understands the proposed Australian Fuel Efficiency Standard to be a fleet-average emission intensity (gCO_2/km) obligation specific to each light vehicle suppliers based on a standard fuel economy drive cycle test, the mix of vehicles it supplies for use on Australian roads and an attribute-based limit curve.

Austroads' NEVDIS service is a centralised database of vehicles registered for use on Australian roads. The success of a regulated Australian Fuel Efficiency Standard depends upon a reliable and authoritative source of data on the vehicles supplied for use on Australian roads – a role NEVDIS could fulfil.

It is for the Australian Government to decide the policy including what point in the vehicle supply and lifecycle triggers a particular vehicle to contribute to a supplier's emission obligations, and NEVDIS could provide support for an Australian Fuel Efficiency Standard either as:

- a benchmark check to provide additional assurance on suppliers' fleet data, or
- the data source by which a vehicle is recognised as being supplied for use on public roads for the purposes of the Australian Fuel Efficiency Standard.

Austroads would be pleased to work with the Department on the practicalities of using NEVDIS in one of these ways to support an Australian Fuel Efficiency Standard.

2 Responses to select questions

2.1 GENERAL Guiding principles

Austroads believes the guiding principles presented are sound. Austroads also suggests that pragmatism should be a guiding principle, in the sense that:

- fleet-average fuel efficiency standards have been used in other parts of the world for some time, and Australia need not 'reinvent the wheel' in designing one for use in this country, and
- a FES in Australia should be based on existing mechanisms and data sources where available.

2.2 GENERAL Design assumptions

The design assumptions do not appear to compromise FES implementation for Australia. On the contrary, they are sensible and pragmatic.

Austroads agrees a FES should only be applied to vehicles entering the fleet. The purpose of a FES is to drive down fleet-wide emissions. Vehicles already in service, such as those sold as used cars, are already present in the vehicle fleet and therefore a FES cannot drive down vehicle emissions by being applied to used car sales.

Focusing the FES on light vehicles, with specialised vehicle exclusions, is a pragmatic solution. Light vehicles intended for general use on the road represent the majority of road vehicle emissions, and a FES designed to target those vehicles will allow simplicity of design, and therefore an early commencement with associated emissions savings.

2.3 GENERAL FES Design features

Austroads suggests the FES design should provide for substantial emissions reductions at low administration cost for the scheme, and without introducing up-front consumer costs that compromise the transition of the fleet to newer, lower-emission vehicles.

The gCO_2/km target level and horizon, therefore, should consider the targets for other right-hand-drive vehicle markets (for example India, Singapore, Japan and the UK) as well as the current fleet makeup and emissions profile of our own new light vehicle market.

Austroads suggests that flexibility mechanisms and bonus credits, for example, are included if they support the primary purpose of the FES at acceptable cost. For example, banking, pooling and trading options allow greater flexibility for vehicle suppliers and should facilitate more stringent emissions targets than if these mechanisms weren't available.

Austroads suggests that encouragement of innovation and new technologies is provided outside of a FES, allowing the FES to focus on reducing vehicle emissions on a level playing field for suppliers regardless of their preferred emissions reduction strategies. The alternative risks artificially advantaging some suppliers over others. Additional schemes could support innovation while keeping a FES relatively simple and, importantly, representing realistic fleet average emissions that are directly comparable over time.

Austroads contends a FES should start as early as is feasible, which is why we suggest a FES should be kept simple. The Australian vehicle fleet is slow to turnover (see figure 1) and early commencement of a FES has been modelled to offer deeper emissions cuts in the medium term than a later-starting, more stringent FES (see figure 2).

Figure 1: Turnover of the Australian Passenger Vehicle Fleet[1]

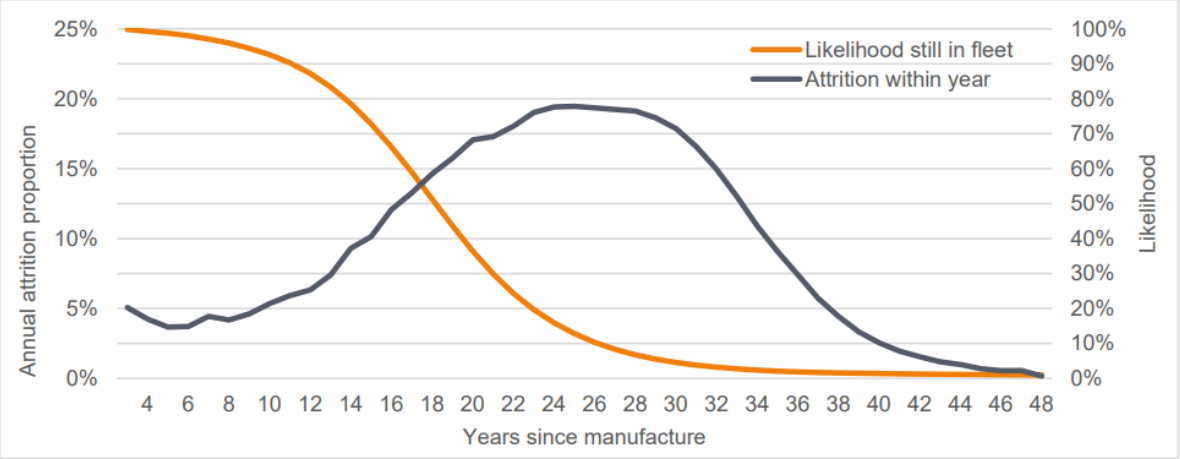
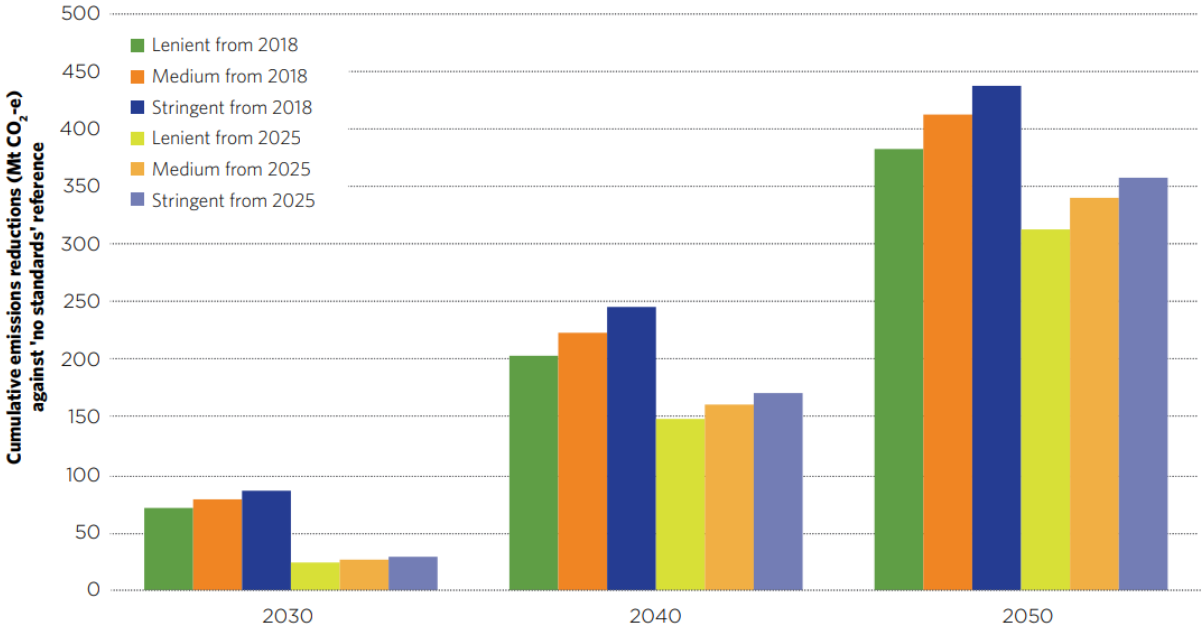


Figure 2: Emissions reduction opportunities of a FES modelled by the Climate Change Authority[2]



[1] Figure 4.1, *Future Vehicles Forecasts Update 2031 Addendum to Future Vehicles 2030*, publication AP-R654-21, Austroads 2021
[2] Figure D.21, *Targets and Progress Review Final Report*, Appendix D, Commonwealth of Australia (Climate Change Authority) 2014

2.4 GENERAL Starting emissions level limit and approach

To set targets for a local FES, Australia should consider the targets for other right-hand-drive vehicle markets (for example India, Singapore, Japan and the UK) as well as the current fleet makeup and emissions profile of our own new light vehicle market.

Austroads notes that starting a FES as soon as practical will likely have a substantive effect on overall emissions reduction, whether the limit level is more or less stringent. A case could be made for a less stringent start if mechanisms such as credit banking, pooling or trading are introduced later to the FES.

2.5 GENERAL Adjustments of limit level

The limit level horizon must balance the tension of longer-term certainty for suppliers with the risk of picking an inappropriate target in the later years, whether too stringent or too lenient.

Austroads suggests the FES targets should be set and reviewed considering benchmark limits in other right-hand drive vehicle markets, including the time horizons for those targets.

2.6 TECHNICAL Attribute-based emissions limit curve

Vehicle mass data may be more readily available than vehicle footprint data and, therefore, may prove more practical to use a vehicle's mass as the attribute for a gCO_2/km limit. The New Zealand approach of using a non-linear curve to encourage mass reduction as an emissions reduction strategy, as described in the consultation paper, could be an effective tool for an Australian FES.

2.7 TECHNICAL Credit banking, transferring and pooling

Credit banking, pooling and trading options allow greater flexibility for vehicle suppliers and should facilitate more stringent emissions targets than if these mechanisms weren't available.

The tension to be balanced is that these mechanisms add complexity to the FES, which may delay its commencement. It might be possible to add these to the FES over time to support an earlier commencement of the FES.

2.8 TECHNICAL Multipliers for LZEVs

In line with earlier comments, Austroads suggests multipliers are not used. Longer term direct comparability of fleet emissions over time and supplier competitive neutrality could be compromised by using multipliers.

Innovative vehicle technologies, including innovative drivetrains, could be incentivised with other mechanisms that could be established and concluded as appropriate, independently of a FES.

2.9 TECHNICAL Off-cycle credits

Including off-cycle credits would require development of suitable robust methodologies for quantification. These methodologies could take time to develop. Austroads suggests that, in the interests of an early commencement of a FES, off-cycle credits be considered as a potential future addition to the FES.

2.10 TECHNICAL Air conditioning refrigerant gas credits

Air conditioning refrigerant gas credits present a similar challenge as off-cycle credits. Other targeted mechanism could be used to support the use of lower-warming potential refrigerant gasses.

2.11 TECHNICAL When should a FES start?

An early start for a FES would offer the greatest medium-term emissions reductions.

2.12 TECHNICAL Information that suppliers will need to keep and supply

Austroads' NEVDIS could be used to either provide additional assurance to supplier data or, potentially, to reduce the burden on suppliers to provide sales data by making use of first-registration data from NEVDIS as the trigger for inclusion of a vehicle in FES calculations.