

Submission to: Department of Infrastructure and Transport

Title: Review of Emissions Standards (Euro VI) for Heavy Vehicles Discussion Paper

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A. Introduction

In prefacing our views of the Department of Infrastructure and Transport's ('Department') Review of Emissions Standards (Euro VI) for Heavy Vehicles Discussion Paper ('Discussion Paper'), the Australian Trucking Association ('ATA') supports the Australian Government's emphasis on the need for evidence-based policy. Implicit in this practice is that evidence must be reliable and relevant to the policy context. Most evidence-based methodologies fit broadly within a cost-benefit (or at least a cost effectiveness) framework designed to determine an estimated payoff to society or a sector of society. It is particularly important that, as Minister Anthony Albanese has affirmed, this includes quantification of the more 'subjective' social or environmental impacts; or, where this proves impossible, that there is an explicit treatment of the nature of those impacts and the values imputed to them (2008). Yet, as the Productivity Commission's Chairman, Gary Banks AO, has observed in past policy development, financial costs are typically underestimated and non-financial benefits overstated (2009).

Where policy development does not align with the above principles, the resulting policies can go seriously astray due to complexities and interdependencies in our society and economy. One of the most common causes of policy failure is policymakers having an inadequate understanding of the problems they are trying to tackle. As Gary Banks has stated, 'sometimes this is an understandable consequence of complex forces, but sometimes it seems to have more to do with a wish for government to take action regardless' (2009).

In light of the above, ATA considers that the Discussion Paper has failed to establish the merits of introducing more stringent air pollution standards for heavy vehicles in Australia. As will be discussed in more detail below, ATA considers the Discussion Paper has relied on unsuitable data and has not provided adequate analysis of some issues. The Discussion Paper is not persuasive in its argument and has not satisfied ATA that regulatory change to emission standards is needed in Australia. Accordingly, ATA does not support any mandatory imposition of ADR 80/04 based on the Euro VI emission standards on heavy vehicles.

B. About the Australian Trucking Association (ATA)

By way of background, ATA is the peak body that represents the trucking industry. Its members include state and sector based trucking associations, some of the nation's largest transport companies, and businesses with leading expertise in truck technology.

C. ATA's responses to the Department's questions

1. Would you support the determination of a new ADR 80/04 based on the Euro VI emission standards?

ATA does not support any mandatory imposition of ADR 80/04 based on the Euro VI emission standards on heavy vehicles (and equivalent emission standards). Rather, ATA supports maintaining the existing ADR 80/03 as mandatory and have the proposed ADR 80/04 as an optional up-take for heavy vehicles based on the Euro VI emission standards, as well as the alternative US EPA 2010 and the JPNLT 2009 emission standards. This is because of the doubts about the veracity of claims made in the Discussion Paper, combined with a desire to provide operators the freedom to purchase the best technology in the marketplace.

2. What implementation timelines would you consider to be reasonable?

If ADR 80/04 does proceed, ATA considers 1 January 2016 a reasonable implementation start date for new model vehicles and 1 January 2017 a reasonable implementation start date for existing model vehicles.

3. Do you agree that the adoption of more stringent emission standards for new heavy vehicles could contribute to improvements in air quality in Australia?

Questions that should come before Question 3 are whether the current level of pollutants needs to be reduced and, if so, whether vehicle emissions should be specifically targeted. On these points, ATA makes a number of observations below.

The introduction of the Discussion Paper states that 'in recognition of the adverse health impacts of emissions from vehicles, Australia has been reducing air pollution from the transport sector by introducing increasingly stringent vehicle emission standards'. The evidence of adverse health impacts prefaced in the Discussion Paper to this statement is that 3000 people were estimated to have died prematurely from the effects of long-term air pollution in Australia in 2003. The Discussion Paper references a secondary source to this estimation – the *Australia State of the Environment 2011* report and this report references *The Burden of Disease and Injury in Australia 2003* report for the estimation. ATA is greatly concerned that the use of this 'headline' figure in the Discussion Paper is sensationalistic and misleading. The Discussion Paper will encourage the community to mistakenly believe that heavy vehicle emissions are causing 3000 deaths per annum.

There are a number of problems with relying on the claim of 3000 deaths linked to long-term air pollution in *The Burden of Disease and Injury in Australia 2003* report:

- The report is a generic report that examines 14 different health risks in Australia rather than being a specific report focusing solely on air pollution. ATA considers that an omnibus report into all health issues is not an appropriate evidence base for making very specific findings, in a policy context, on the cause of one small part of one type of health issue.
- In assessing the number of deaths caused by air pollution, the report merely relies on death certificates from 2003. Contrary to what is claimed in the Discussion Paper, the report states around 2000 deaths were attributable to long-term pollution and the other 1000 deaths were attributable to short-term pollution. Furthermore, it would appear there was no real assessment in the report of the veracity of the causal attributions documented in the death certificates and no specifically evidenced link between emissions from vehicles and the deaths. Consequently, this leaves a lot of unanswered questions. For example, could some of the individuals, whose deaths were attributed to long-term air pollution on their death certificates, lived near a coal mine or lived with smokers?
- The Discussion Paper's claim of 3000 deaths is based on a study that is based on data that is nearly 10 years old, making it significantly dated research. ATA notes the *Australia State of the Environment 2011* report stated, at page 10, 'despite substantial growth in population, expansion of industry and greatly increased use of motor vehicles, levels of carbon monoxide, lead, nitrogen and sulphur dioxide have declined in urban areas over the past 10 years'. Furthermore, as the Discussion Paper acknowledges, Australia's current urban air quality is better than the standards set by the World Health Organisation. It follows, then, when it comes to assessing adverse health impacts, the Department should really be relying on data that is not more than a couple of years old to determine whether deaths caused by long-term air pollution have dropped in proportion to the decreases in vehicle emissions over the

past 10 years. If there has not been a decrease, perhaps the Australian Government should put its resources towards addressing the actual specific causes of deaths linked to long-term air pollution.

The Discussion Paper also refers to general adverse health impacts caused by vehicle emissions, again relying on secondary sources (namely the *Australia State of the Environment 2011* report and the *National Pollutant Inventory* (undated)), rather than the primary sources. Due to ATA's time constraints, we have not had the opportunity to thoroughly analyse these primary sources, but if the Department decides to examine these primary sources (which we would recommend), we would suggest the Department keep in mind the following issues:

- For single city studies, ensure that the studies are free of bias and the statistical approaches are consistent so that comparisons are meaningful. Where sample population size studies are small, be aware that the estimates of mortality or morbidity will be very sensitive to the methodology used and will have higher levels of uncertainty.
- Where studies are around 10 years old, the reliance value will usually be highly questionable.
- When making claims that vehicle emissions (as a subset of long-term air pollution) can be attributed as a cause of adverse health impacts, ensure that the methodology used to assess causal attribution is sound and would stand up to academic scrutiny.
- When responding to claims in studies that there is no safe theoretical baseline for vehicle emissions, remember that such a baseline is not useful for practical application. Rather, a feasible goal needs to be set and achieved.

ATA would have appreciated the Discussion Paper being contextualised within a larger policy framework designed to reduce overall long-term and short-term pollution. For example:

- What is being done about indoor air quality? We note the *Australia State of the Environment 2011* report states, at page 117, that 'most Australians spend 90% of their time indoors, leading to concern over the possible impacts of indoor air quality on health'. Yet, at page 11, the report acknowledges that 'it is surprising that Australian data on indoor air quality [is] relatively scarce and that there are no specific national guidelines for indoor air quality'.
- What is being done about pollution caused by bushfire and dust storms? We note the *Australia State of the Environment 2011* report states, at page 117, that 'national health-based standards are rarely exceeded for prolonged periods, and very high levels of pollution are usually associated with short-lived extreme events such as bushfires and dust storms that generate very high levels of particulate pollution'.
- What types of more cost-effective alternative measures are being considered to address the emissions that the ADR 80/04 will target? We note the American Chemical Society (2012) has undertaken a study that shows that planting grass and ivy in urban areas results in the reduction of NO_x by 40% and PM by 60%. (By comparison, the Euro VI standard will reduce NO_x by 80% and PM₁₀ by 66% at a greater cost.)
- What is being done about particulate matter (and the secondary pollutant, ozone) outside the vehicle emission context? The *Australia State of the Environment 2011* report states, at page 10, that particulate matter and secondary pollutant ozone has not decreased over the past 10 years. Given that the Euro emission standards were introduced to Australia since around 2002 (which also targeted particulate matter), this lack of decrease suggests that vehicle contribution to particulate matter (and the

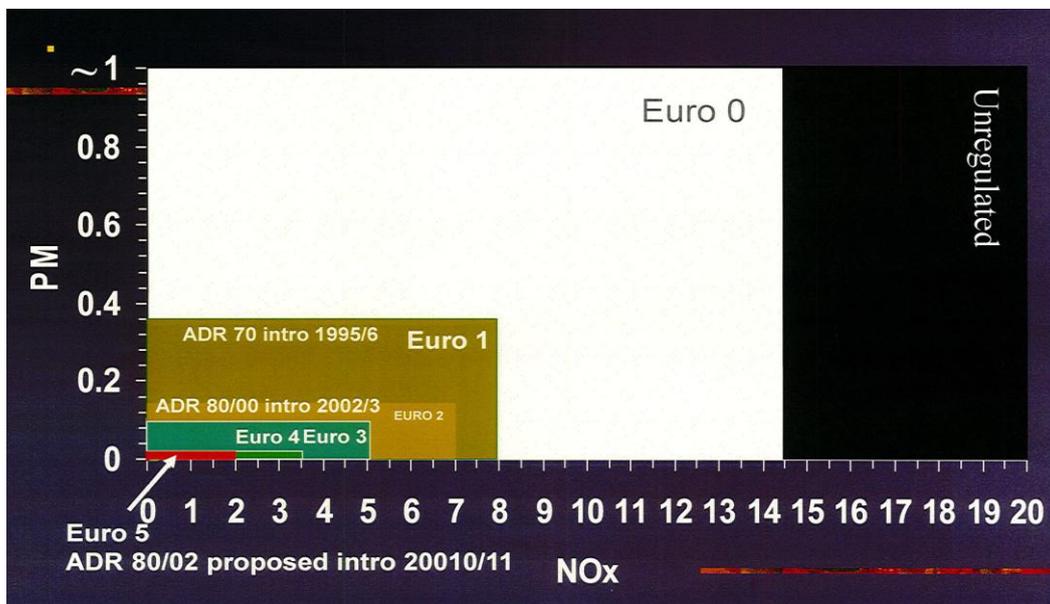
secondary pollutant, ozone) is negligible. Therefore, there must be other significant contributors to these pollutants, which are not being addressed.

4. Do you have any additional information or studies that the Department could consider in assessing the health and environmental benefits of implementing the possible new ADR 80/04?

See our discussion at Question 3. Due to ATA's time constraints, we are not able to seek additional information or studies for the Department to consider.

5. Do you have any additional information or studies that the Department could consider in assessing the costs associated with implementing the proposed new ADR 80/04?

The table below, created by ATA, shows the differences in NO_x and PM emissions with the introduction of each Euro standard. It is clear from these tables that the benefit of emission reductions between the Euro V and Euro VI is so small that it is doubtful as to whether it is worth the cost to go to the Euro VI standard.



The Discussion Paper acknowledges the truck industry's concerns about an increase in fuel consumption from the implementation of Euro VI due to the technology needed to decrease emissions to the required level and associated mass increases. This has definitely been the anecdotal evidence we have received from some trucking operators, such as those in our Industry Technical Council and some of our member organisations.

Essentially, the Department needs to be mindful, and undertake an analysis, of what the overall emission output is from oil extraction to refining to fuel use in an ADR 80/04 engine in order to ensure that the ADR 80/04 is not actually adding to emissions in the atmosphere, compared to earlier Euro standards.

The Discussion Paper states that 'the Department understands that some manufacturers have been able to avoid fuel consumption penalties'. ATA would appreciate the Department providing the names of these manufacturers to ATA and the products where this has been achieved. Otherwise, it is questionable for the Department to offer up a mere assertion without substantiation from publications.

6. Do you consider the proposed alternative standards to be sufficiently equivalent in stringency to Euro VI?

ATA considers the proposed alternative standards to be sufficiently equivalent in stringency to Euro VI, as the current evidence indicates we do not have a growing heavy vehicle emissions situation and the alternatives all still advance the outcome of emission reduction.

7. Do you consider the proposed alternative standards discussed above should be accepted in ADR 80/04?

ATA considers the proposed alternative standards should be accepted in ADR 80/04.

8. If the proposed alternative standards were not accepted, do you consider that this would significantly affect the ability of truck and/or bus manufacturers to supply vehicles to Australia? What would be the impact on compliance costs?

If the proposed alternative standards were not accepted, ATA considers this would significantly affect the ability of truck manufacturers to supply vehicles to Australia that are able to perform to acceptable standards for task efficiency, and meet the industry's expectations of durability and reliability.

In the heavy vehicle market, a million kilometres to first overhaul was previously an achievable outcome, but this is not currently the norm under ADR 80/03 requirements. Feedback received by ATA from industry members suggests that durability and reliability issues are more significant with current models of heavy vehicles than earlier vehicles that met lower emission standards.

It is widely accepted in the global marketplace that Australia has the toughest operating environment for heavy duty trucks. The market has two major sources of heavy duty trucks: European and American products. Each source has strong Australian trucking operator followings. Japanese manufactured heavy duty trucks continue to grow in its share of the marketplace. Trucking operators will not be happy about less market choice if alternative standards are not allowed, as it would not be commercially feasible for American and Japanese manufacturers to tailor their products to the Euro standard for the Australian market, given the size of the Australian market.

D. Conclusion

ATA cautions the Department to take time to consider the wider context for its policy, before being swept up with the international trends, particularly when Australia has a much smaller population, lower population density and a different environment. We would remind the Department that best practice public policy development requires the Australian Government to base its positions on reliable evidence and accurate analysis.

E. References

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