

New Vehicle Efficiency Standard (NVES)

Submission from the [Centre for Safe Air](http://www.SafeAir.org.au) (NHMRC CRE)

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About the Centre for Safe Air

The Centre for Safe Air is a Centre of Research Excellence funded by the National Health and Medical Research Council. The Centre brings together more than 20 researchers at the forefront of their fields, based in 13 of Australia's leading research institutions. The Centre supports multidisciplinary research across epidemiology, exposure assessment, toxicology, climate and air science, biostatistics, respiratory medicine and health economics to pursue collaborative projects and to develop capacity. The vision of the Centre is *"to achieve substantial improvements in population health, safety, and resilience in the face of existing, emerging, and escalating airborne hazards through evidence-based policy and practice interventions"*.

5. Please rank the proposed options in order of preference:

1st	2nd	3rd
Option C	Option B	Option A

6. Briefly, what are your reasons for your choice? (optional, 500 words)

The health and economic impacts of air pollution are high and underestimated. Australian estimates to date have placed fine particulate matter (PM_{2.5}) air pollution related mortality costs at AUD \$6.2 billion annually.¹ However, the costs of other pollutants (e.g. nitrogen dioxide from traffic emissions) and non-health costs like labour, productivity, welfare, and other societal costs, are largely unaccounted for in existing economic analyses on air pollution. A recent study from Centre for Safe Air researchers attributed 916 (95% CI: 323, 1459) premature deaths annually to traffic-related NO₂ pollution among urban Australians.² As such, the Centre for Safe Air advocates for a stringent FES emissions reduction strategy to confer the greatest health benefits for Australians.

The Consultation Impact Analysis found that the health benefits of cleaner air associated with Option C (\$6.75 billion) are nearly 20% greater than Option B (\$5.53 billion). Even subtracting the predicted costs, Option C provides the greatest aggregate benefit to Australians: \$18.44 billion more than Option B.

The specific health benefits associated with air pollution are worth prioritising as they can have lasting health and social consequences for an individual over their life course. For example, exposure to air pollution affects the growth, development, and overall health of unborn babies. These influences can contribute to the risk of developing non-communicable diseases later in life^{2,4} and may be associated with poorer cognition and educational outcomes in children.⁵⁻⁷ The health impacts of air pollution disproportionately impact the most vulnerable in our community—older adults, pregnant people and unborn babies, children, people with pre-existing chronic conditions, socially disadvantaged populations, and Aboriginal and Torres Strait Islander people. As such, the health benefits of Option C represent a unique opportunity to reduce health inequity in Australia and improve the health of communities that are often left behind.

7. Do you support the Government's preferred option (Option B)? (optional)

No

8. Do you have any feedback on the analysis approach and key assumptions used? (optional, 500 words)

The consultancy report that forms the basis of the estimated annual health benefits of the NVES scenarios—'Fuel quality standards implementation: cost benefit analysis'—does not appear to be available for review. As such we are unable to comment on the appropriateness of the assumptions used. There is a risk that the health benefits of cleaner fuel could be underestimated by failing to take into account the entire range of health impacts from air pollution which should include metabolic disease (particularly diabetes)⁸, neurodevelopment and neurocognitive decline⁹, premature birth¹⁰ and impaired development leading to an increased risk of chronic disease later in life¹¹. If the health impact assessment was restricted to respiratory disease, cardiovascular disease and cancer, as was the case in the 2022 '[Better fuel for cleaner vehicles: draft regulation impact statement](#)', the health benefits associated with Option C are likely to even greater relative to Option B. However, in the absence of detail we are unable to comment further on this. As an aside, we note a discrepancy on page 46 of the *Cleaner, Cheaper to Run Cars* report where the health benefits associated with Option C are stated to be \$19.65 billion rather than \$6.75 billion.

9. Briefly, describe how the NVES might impact your organisation (optional, 500 words)

NA

10. Who should the regulated entity be? (optional, 500 words)

The Centre for Safe Air supports the Government's proposal for a comprehensive regulatory coverage to reduce the possibility of avoidance.

References

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Organisation questionnaire response

Privacy Setting: I agree for my response to be published with my name and position.

What organisation do you represent? (required)	The Centre for Safe Air
What is your name? (required)	Dr Bill Dodd
What is your position at the organisation? (required)	Senior Communications Officer, Knowledge Translation
Please rank the proposed options in order of preference. (optional)	Option A - 3rd, Option B - 2nd, Option C - 1st
Briefly, what are your reasons for your choice? (optional, 3000 character limit)	<p>The health and economic impacts of air pollution are high and underestimated. Australian estimates to date have placed fine particulate matter (PM2.5) air pollution related mortality costs at AUD \$6.2 billion annually.¹ However, the costs of other pollutants (e.g. nitrogen dioxide from traffic emissions) and non-health costs like labour, productivity, welfare, and other societal costs, are largely unaccounted for in existing economic analyses on air pollution. A recent study from Centre for Safe Air researchers attributed 916 (95% CI: 323, 1459) premature deaths annually to traffic-related NO₂ pollution among urban Australians.² As such, the Centre for Safe Air advocates for a stringent FES emissions reduction strategy to confer the greatest health benefits for Australians.</p> <p>The Consultation Impact Analysis found that the health benefits of cleaner air associated with Option C (\$6.75 billion) are nearly 20% greater than Option B (\$5.53 billion). Even subtracting the predicted costs, Option C provides the greatest aggregate benefit to Australians: \$18.44 billion more than Option B. The specific health benefits associated with air pollution are worth prioritising as they can have lasting health and social consequences for an individual over their life course. For example, exposure to air pollution affects the growth, development, and overall health of unborn babies. These influences can contribute to the risk of developing non-communicable diseases later in life^{2,4} and may be associated with poorer cognition and educational outcomes in children.⁵⁻⁷ The health impacts of air pollution disproportionately impact the most vulnerable in our community—older adults, pregnant people and unborn babies, children, people with pre-existing chronic conditions, socially disadvantaged populations, and Aboriginal and Torres Strait Islander people. As such, the health benefits of Option C represent a unique</p>



	opportunity to reduce health inequity in Australia and improve the health of communities that are often left behind.
Do you support the Government's preferred option (Option B)? (optional)	No
Do you have any feedback on the analysis approach and key assumptions used? (optional, 3000 character limit)	The consultancy report that forms the basis of the estimated annual health benefits of the NVES scenarios—'Fuel quality standards implementation: cost benefit analysis'—does not appear to be available for review. As such we are unable to comment on the appropriateness of the assumptions used. There is a risk that the health benefits of cleaner fuel could be underestimated by failing to take into account the entire range of health impacts from air pollution which should include metabolic disease (particularly diabetes) ⁸ , neurodevelopment and neurocognitive decline ⁹ , premature birth ¹⁰ and impaired development leading to an increased risk of chronic disease later in life ¹¹ . If the health impact assessment was restricted to respiratory disease, cardiovascular disease and cancer, as was the case in the 2022 'Better fuel for cleaner vehicles: draft regulation impact statement', the health benefits associated with Option C are likely to even greater relative to Option B. However, in the absence of detail we are unable to comment further on this. As an aside, we note a discrepancy on page 46 of the Cleaner, Cheaper to Run Cars report where the health benefits associated with Option C are stated to be \$19.65 billion rather than \$6.75 billion.
Briefly, describe how the NVES might impact your organisation (optional, 3000 character limit)	NA
Who should the regulated entity be? (optional, 3000 character limit)	The Centre for Safe Air supports the Government's proposal for a comprehensive regulatory coverage to reduce the possibility of avoidance.