

New Vehicle Efficiency Standard Proposed Options

Asthma Australia Submission, March 2024

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

If you do not support any of the proposed options, please proceed to question 6

Option C	FIRST
Option B	SECOND
Option A	THIRD

6. Briefly, what are your reasons for your choice? (optional, 3000 character limit)

Asthma Australia supports Option C because, of the three options, it will produce the greatest health benefits most rapidly. There is no safe level of air pollution, which means that health impacts can occur at relatively low levels of pollution.¹ The most recent State of the Environment Report recognised that vehicles are a major source of air pollution in urban areas. Vehicles produce a range of pollutants which can harm health, including particulate matter and nitrogen dioxide.² Research has demonstrated that relatively low levels of nitrogen dioxide are associated with the onset of asthma in children, as well as respiratory symptoms.³ Nitrogen dioxide can also cause asthma exacerbations in adults and a range of additional respiratory health problems.⁴

Australia has high asthma prevalence and mortality compared to other countries.⁵ One in nine people in Australia have asthma and in 2022, there were 467 asthma deaths.⁶ Asthma is the leading cause of disease burden among children aged 5-14 years old in Australia. A rapid improvement in fuel efficiency standards can contribute to reducing the burden of asthma in Australia.

Vehicle emissions indirectly increase health risks by contributing to climate change. As the Consultation Impact Analysis notes, cars contribute 13% of greenhouse gas emissions in Australia. Climate change is increasing the frequency and severity of a range of airborne hazards associated with asthma onset and symptoms, including smoke from bushfires and prescribed burns, mould caused by storms, heavy rainfall, and flooding, ground level ozone, pollen and thunderstorm asthma.⁷ Again, rapidly improving fuel efficiency standards is a critical step in mitigating climate change and improving asthma outcomes.

Asthma Australia notes and support the submission from the Centre for Safe Air, which states that the health and economic impacts of air pollution are high. The submission also notes that air pollution impacts are underestimated as economic evaluations typically do not include costs associated with pollutants other than fine particulate matter or non-health costs. This means the costs associated with nitrogen dioxide from traffic emissions are typically unaccounted for in these evaluations, as are broader costs such as productivity and welfare. The submission notes a study by Centre for Safe Air researchers that attributed 916 premature deaths annually to nitrogen dioxide

pollution from traffic in Australian cities. Lastly, the submission recognises the wide-ranging health impacts of air pollution, and the concomitant potential for broad benefits by reducing air pollution.

1. Centre for Safe Air (formerly CAR - Centre for Air pollution, energy and health Research) (2021). 'No level of air pollution is safe': Commitment to continuous emissions reduction through an alternative model for the AAQ NEPM.
2. Asthma Australia and Lung Foundation Australia (2021). Joint submission to the NSW Parliament Public Works Committee's Inquiry into the impact of the Western Harbour Tunnel and Beaches Link.
3. Knibbs et al. (2018). The Australian Child Health and Air Pollution Study (ACHAPS): A national population based cross-sectional study of long-term exposure to outdoor air pollution, asthma, and lung function. *Environment International* 120:394-403.
Achakulwisut et al. (2019). Global, national, and urban burdens of paediatric asthma incidence attributable to ambient NO₂ pollution: estimates from global datasets. *The Lancet*. Volume 3(4).
4. Dean and Green (2017). *Climate Change, Air Pollution and Health in Australia*. UNSW Sydney, Grand Challenges.
5. Australian Centre for Asthma Monitoring (ACAM) (2011). *Asthma in Australia 2011*.
Global Asthma Network (2018). *The Global Asthma Report*, New Zealand.
6. Australian Institute of Health and Welfare (AIHW) (2020). *Asthma Web report*. 25 Aug 2020 update. Cat. no. ACM 33.
Australian Bureau of Statistics (ABS) (2018). *National Health Survey: First Results 2017-18*. ABS Cat no. 4364.0.55.001.
ABS (2023). *Causes of Death, Australia, 2022*.
7. Asthma Australia (2022). *Policy Position Statement: Climate Change*.

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

Yes

8. Do you have any feedback on the analysis approach and key assumptions used? (optional, 3000 character limit)

Asthma Australia is not able to provide feedback on the analysis approach or assumptions used as the Consultation Impact Analysis document did not provide any detail on the health outcomes, costs or assumptions used in the benefit-cost analysis. We note and support the response to this question from the Centre for Safe Air, which states that the health benefits used in the analysis may have been underestimated if the full range of air pollution health impacts were not included in the analysis.

9. Briefly, describe how the NVES might impact your organisation (optional, 3000 character limit)

Air pollution and climate change are priority issues for Asthma Australia because, through a range of pathways, these interlinked issues increase the risk of developing asthma and cause asthma

symptoms and exacerbations. Australia's asthma prevalence is high by international comparison, as are our rates of asthma hospitalisation and mortality.¹ People with asthma experience poorer health outcomes and quality of life and they may live for a long period of time with its associated disability. They experience reduced participation in paid employment, education, care responsibilities, sports and social events.

There is no safe level of exposure to air pollution,² which means that any reductions in air pollution can lead to health benefits. Reducing air pollution from human activities is increasingly urgent as climate change is increasing the frequency and intensity of natural sources of airborne hazards that harm health, including bushfire smoke, mould, dust, and pollen.³ Reducing anthropogenic air pollution can also benefit health in the longer term by reducing greenhouse emissions and limiting climate change.

Vehicle emissions are a major contributor air pollution and climate change in Australia. This means that strong, urgent action to reduce vehicle emissions has the potential to significantly improve health outcomes. While Australia lags comparable countries in addressing vehicle emissions, this also means we have a valuable opportunity to improve air quality and reduce greenhouse gas emissions. A National Vehicle Efficiency Standard (NVES) can significantly reduce vehicle emissions and the associated burden of asthma, along with the additional adverse health and societal impacts caused by vehicle emissions. While the Commonwealth Government's preferred option for the NVES would be an important step towards reducing vehicle emissions, Asthma Australia urges adoption of Option C to deliver the greatest health benefits most rapidly.

1. Australian Centre for Asthma Monitoring (ACAM) (2011). Asthma in Australia 2011. Global Asthma Network (2018). The Global Asthma Report, New Zealand.

2. Centre for Safe Air (formerly CAR - Centre for Air pollution, energy and health Research) (2021). 'No level of air pollution is safe': Commitment to continuous emissions reduction through an alternative model for the AAQ NEPM.

3. See eg D'Amato et al. (2014). Climate change and respiratory diseases Eur Respir Rev; 23: 161–169; Salas and Solomon (2019). The Climate Crisis – Health and Care Delivery. N Engl J Med 2019; 381:e13.

10. Who should the regulated entity be? (optional, 3000 character limit)

See section 7.2 of the impact analysis

(No response).

11. If you wish to provide any further information, you can upload a submission by using the button below (optional, 10MB file limit)

(No response).



Organisation questionnaire response

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

What organisation do you represent? (required)	Asthma Australia
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>Asthma Australia supports Option C because, of the three options, it will produce the greatest health benefits most rapidly. There is no safe level of air pollution, which means that health impacts can occur at relatively low levels of pollution.</p> <p>1 The most recent State of the Environment Report recognised that vehicles are a major source of air pollution in urban areas. Vehicles produce a range of pollutants which can harm health, including particulate matter and nitrogen dioxide.</p> <p>2 Research has demonstrated that relatively low levels of nitrogen dioxide are associated with the onset of asthma in children, as well as respiratory symptoms.</p> <p>3 Nitrogen dioxide can also cause asthma exacerbations in adults and a range of additional respiratory health problems.</p> <p>4 Australia has high asthma prevalence and mortality compared to other countries.</p> <p>5 One in nine people in Australia have asthma and in 2022, there were 467 asthma deaths.</p> <p>6 Asthma is the leading cause of disease burden among children aged 5-14 years old in Australia. A rapid improvement in fuel efficiency standards can contribute to reducing the burden of asthma in Australia. Vehicle emissions indirectly increase health risks by contributing to climate change. As the Consultation Impact Analysis notes, cars contribute 13% of greenhouse gas emissions in Australia. Climate change is increasing the frequency and severity of a range of airborne hazards associated with asthma onset and symptoms, including smoke from bushfires and prescribed burns, mould caused by storms, heavy rainfall, and flooding, ground level ozone, pollen and thunderstorm asthma.</p>



	<p>7 Again, rapidly improving fuel efficiency standards is a critical step in mitigating climate change and improving asthma outcomes.</p> <p>Asthma Australia notes and support the submission from the Centre for Safe Air, which states that the health and economic impacts of air pollution are high. The submission also notes that air pollution impacts are underestimated as economic evaluations typically do not include costs associated with pollutants other than fine particulate matter or non-health costs. This means the costs associated with nitrogen dioxide from traffic emissions are typically unaccounted for in these evaluations, as are broader costs such as productivity and welfare.</p> <p>The submission notes a study by Centre for Safe Air researchers that attributed 916 premature deaths annually to nitrogen dioxide pollution from traffic in Australian cities. Lastly, the submission recognises the wide-ranging health impacts of air pollution, and the concomitant potential for broad benefits by reducing air pollution. (References in attached file.)</p>
<p>Do you support the Government's preferred option (Option B)?</p> <p>(optional)</p>	<p>Yes</p>
<p>Do you have any feedback on the analysis approach and key assumptions used?</p> <p>(optional, 3000 character limit)</p>	<p>Asthma Australia is not able to provide feedback on the analysis approach or assumptions used as the Consultation Impact Analysis document did not provide any detail on the health outcomes, costs or assumptions used in the benefit-cost analysis. We note and support the response to this question from the Centre for Safe Air, which states that the health benefits used in the analysis may have been underestimated if the full range of air pollution health impacts were not included in the analysis.</p>
<p>Briefly, describe how the NVES might impact your organisation</p> <p>(optional, 3000 character limit)</p>	<p>Air pollution and climate change are priority issues for Asthma Australia because, through a range of pathways, these interlinked issues increase the risk of developing asthma and cause asthma symptoms and exacerbations. Australia's asthma prevalence is high by international comparison, as are our rates of asthma hospitalisation and mortality.</p> <p>1 People with asthma experience poorer health outcomes and quality of life and they may live for a long period of time with its associated disability. They experience reduced participation in paid employment, education, care responsibilities, sports and social events. There is no safe level of exposure to air pollution,</p> <p>2 which means that any reductions in air pollution can lead to health benefits. Reducing air pollution from human activities is increasingly urgent as climate change is increasing the frequency and intensity of natural sources of airborne hazards that harm health, including bushfire smoke, mould, dust, and pollen.</p>



	<p>3 Reducing anthropogenic air pollution can also benefit health in the longer term by reducing greenhouse emissions and limiting climate change. Vehicle emissions are a major contributor air pollution and climate change in Australia. This means that strong, urgent action to reduce vehicle emissions has the potential to significantly improve health outcomes. While Australia lags comparable countries in addressing vehicle emissions, this also means we have a valuable opportunity to improve air quality and reduce greenhouse gas emissions.</p> <p>A National Vehicle Efficiency Standard (NVES) can significantly reduce vehicle emissions and the associated burden of asthma, along with the additional adverse health and societal impacts caused by vehicle emissions. While the Commonwealth Government’s preferred option for the NVES would be an important step towards reducing vehicle emissions, Asthma Australia urges adoption of Option C to deliver the greatest health benefits most rapidly.</p> <ol style="list-style-type: none">1. Australian Centre for Asthma Monitoring (ACAM) (2011). Asthma in Australia 2011. Global Asthma Network (2018). The Global Asthma Report, New Zealand.2. Centre for Safe Air (formerly CAR - Centre for Air pollution, energy and health Research) (2021). ‘No level of air pollution is safe’: Commitment to continuous emissions reduction through an alternative model for the AAQ NEPM.3. See eg D’Amato et al. (2014). Climate change and respiratory diseases <i>Eur Respir Rev</i>; 23: 161–169; Salas and Solomon (2019). The Climate Crisis – Health and Care Delivery. <i>N Engl J Med</i> 2019; 381:e13.
<p>Who should the regulated entity be?</p> <p>(optional, 3000 character limit)</p>	<p>(No comment.)</p>