

NATIONAL HEALTH AND CLIMATE STRATEGY CONSULTATION PAPER

Asthma Australia submission

July 2023

ABOUT ASTHMA AUSTRALIA

Asthma Australia is a for-purpose, consumer organisation that has been improving the lives of people with asthma since 1962. Asthma affects one in nine Australians or 2.7 million people. Asthma is an inflammatory condition of the airways, restricting airflow, and it can be fatal. There is no cure, but most people with asthma can experience good control.

Our purpose is to help people breathe better so they can live freely. We deliver evidence-based prevention and health strategies to more than half a million people each year. Asthma Australia has an ambitious goal to halve avoidable hospital presentations for asthma by 2030, with an initial focus on reducing preventable hospitalisations in children aged 5-9.

ASTHMA AND CLIMATE CHANGE IN AUSTRALIA

Asthma is a chronic health condition that is heavily influenced by environmental conditions: it can be both caused and exacerbated by exposure to environmental triggers. Asthma is deeply linked with climate change; an adverse feedback loop exists in which the emissions that cause climate change increase the risk of developing asthma and trigger asthma symptoms in people with asthma, which in turn increases the need for healthcare utilisation, generating additional emissions. At the same time, climate change-driven events and conditions further increase the risk of developing asthma and trigger symptoms, continuing the adverse feedback loop.

The high prevalence of asthma in Australia makes the links between asthma and climate change particularly concerning. Asthma affects 1 in 9 Australians, or 2.7 million people. It is the 9th leading contributor to the overall burden of disease in Australia,¹ having risen from 10th place in 2003 to 9th place in 2018.² Asthma is the leading cause of burden of disease for people aged 5–14 years.³ People with asthma experience poorer health outcomes and quality of life.⁴ They may live for a long period of time with its associated disability, and experience reduced participation in paid employment, education, care responsibilities, sports and social events. Further, asthma mortality⁵ and hospitalisations⁶ in Australia are high by international standards. Approximately 400 people die each year in Australia due to asthma⁷ and there were 351 deaths due to asthma in 2021.⁸ In 2021-22, there were 25,480 hospitalisations for asthma, of which 90% were considered potentially preventable.⁹ A 2015 report, the Hidden Cost of Asthma, found asthma cost the healthcare system

\$1.2 billion, lost productivity due to asthma cost \$1.1 billion, and the burden of disease amounted to a cost of \$24.7 billion.¹⁰

There are numerous climate change pathways that can cause and exacerbate asthma in Australia, including air pollution from bushfires, exposure to mould caused by heavy rainfall and flooding, increased ground level ozone, increased pollen production, thunderstorm asthma epidemics, and extreme heat events.¹¹ This means people with asthma – and those at risk of developing the condition – are particularly vulnerable to the risks associated with climate change. Asthma is also unique among chronic conditions as many of the inhalers used to deliver medicines to treat asthma contain potent gases, which contribute significantly to health sector carbon emissions.¹²

Consumer attitudes to health and climate change: Asthma Australia’s Bushfire Smoke Impact Survey¹³

Asthma Australia surveyed 12,000 people during the catastrophic 2019–20 bushfires about the impacts they experienced as a result of exposure to bushfire smoke. When asked what the government, Asthma Australia or other organisations could do to reduce the impact of poor air quality on their day-to-day life, more than 1,000 respondents provided open text responses that linked the bushfire smoke crisis with climate change. Common suggestions included taking action to mitigate climate change and supporting individuals and communities to respond to bushfire smoke, for example by providing people with air purifiers and implementing building improvement programs to prevent smoke from entering homes, commercial buildings and schools. These results demonstrated that many people with asthma, and their carers, recognise the impact of climate change on their health and wellbeing, and want action taken to address it.

ASTHMA AND THE NATIONAL HEALTH AND CLIMATE CHANGE STRATEGY

The high asthma prevalence, growing asthma burden resulting from climate change and contribution of asthma to health sector emissions combine to present a concerning future for asthma in Australia. However, the development of the National Health and Climate Change Strategy (the Strategy) presents an opportunity to break the adverse feedback loop between asthma and climate change.

There is huge potential to improve health and wellbeing – and reduce health system use – in the short term by addressing the factors that make around 90% of asthma hospitalisations potentially preventable, and implementing adaptation actions that support people with asthma (and those at risk of developing it) to reduce their exposure to climate-related triggers. Additionally, reducing emissions across society, including the health system, will deliver immediate benefits for asthma by improving air quality, as well as contributing to global efforts to limit temperature increase.

To achieve these outcomes, **the Strategy must prioritise the protection of health and wellbeing as its purpose and commit to meaningful actions to strengthen the ability of vulnerable communities and individuals to adapt to the inevitable impacts of climate change**, while also committing to fast and effective health sector decarbonisation.

Unfortunately, the Consultation Paper fails to recognise protecting health and wellbeing in its objectives. Further, the Consultation Paper does not commit to specific community adaptation actions that would protect people with asthma, and those at risk of developing the condition. Instead, the Consultation Paper largely focuses on health system mitigation and adaptation, and working with healthcare providers to address these challenges. **Asthma Australia is disappointed that our comments addressing these omissions from the 2022 Discussion Paper have not been addressed.** While commitments to health sector decarbonisation and adaptation in the Consultation Paper are important, **the final version of the Strategy will need to expand its scope and reorient its focus towards protecting health and wellbeing, to avoid becoming a narrow national health sector and climate strategy.**

Given the importance of this Strategy to the health and wellbeing of everyone in Australia as climate change progresses, Asthma Australia is commissioning a nationally representative survey of 2,000 people in Australia to understand the current level of knowledge of the health impacts of climate change, how this knowledge differs by population groups and whether and how people believe climate change is affecting, or will affect, their health. We will be happy to share the results of this survey with the National Sustainability Health and Climate Unit once finalised.

Asthma Australia has responded to the questions within the Consultation Paper that are most relevant to asthma in the hope of contributing to a strategy that genuinely commits Australia to improving health and wellbeing outcomes in the face of the climate crisis. We appreciate the opportunity to provide these comments. However, we also note the relatively short consultation period and the lack of clarity around the next steps of the consultation, including whether we will have an opportunity to see a revised draft of the Strategy. Given the Strategy's current skewed focus on health sector decarbonisation, **we strongly recommend that Government extends the timeframe for the Strategy's finalisation to enable stakeholders to review the subsequent draft and ensure that it appropriately responds to the current and future health needs of people in Australia as climate change progresses.**

RESPONSES TO CONSULTATION QUESTIONS

Introduction

1. How could these objectives be improved to better support the vision of the Strategy?

Asthma Australia notes the Consultation Paper does not detail a "vision" of the Strategy. The Consultation Paper states an overarching purpose of the Strategy, which is "protecting the health and wellbeing of Australians from the impacts of climate change", and we assume this is the vision. However, this purpose/vision is not supported by the objectives in the Consultation Paper as they do not recognise the need to improve human health outcomes or reduce adverse health outcomes relating to climate change. Asthma Australia therefore suggests the addition of a clearly defined vision statement, alongside objectives that reflect and support its realisation.

Further, the Consultation Paper does not specify measurable goals or timelines for achieving the Strategy's objectives and actions, which makes it difficult to comment on their feasibility. The Strategy should be supported by an Implementation Plan that sets measurable goals and timelines.

Asthma Australia makes the following comments on the objectives stated in the Consultation Paper:

- **Objective 1 (Measurement):** Asthma Australia notes and agrees with the Climate and Health Alliance's (CAHA) position that measurement is an enabler rather than an objective, and that an objective around measuring emissions reductions from the health system should specify what will be measured.
- **Objective 2 (Mitigation):** Health sector decarbonisation is an important objective in the Strategy, but it should be secondary to supporting human health and wellbeing. We note and support CAHA's position that this objective should be reframed as a net zero health and aged care system. The Strategy should include targets for mitigating emissions in line with evidence from the Intergovernmental Panel on Climate Change. Additionally, we note that mitigation across all sectors is critically important to protecting human health and wellbeing because fossil fuel emissions worsen air quality, as well as causing climate change.
- **Objective 3 (Adaptation):** Increasing community and health system resilience in responding to the health impacts of climate change is a worthy objective. However, this objective would require very different actions and it should be separated into discrete objectives for: a) building community resilience, and b) increasing health system resilience. Additionally, there should be a specific objective around supporting the adaptation needs of priority populations at greater risk of climate change health impacts.
- **Objective 4 (Health in All Policies [HIAP]):** A HIAP approach will be critical if the Strategy is to achieve the broad purpose of protecting the health and wellbeing of Australians from the impacts of climate change. Asthma Australia also welcomes the recognition of the importance of the determinants of health. However, this objective focuses on lessening the impact of climate change on the determinants of health, when the primary motivation should be improving human health outcomes.

Lastly, Asthma Australia notes the word "Australians" excludes people living in Australia who are not citizens. This is particularly important in the health context with the challenges faced by culturally and linguistically diverse communities in navigating complex healthcare systems to access care.¹⁴

RECOMMENDATION 1. An objective should be added around protecting human health and wellbeing and strengthening the social, cultural and environmental determinants of health.

RECOMMENDATION 2. Objective 3 (adaptation) should be separated into three objectives, with standalone objectives for:

- a) Strengthening resilience in communities to anticipate and respond to the health impacts of climate change.***
- b) Supporting priority populations to respond to the increased health and wellbeing risks they face due to climate change.***
- c) Strengthening resilience in the health system to anticipate and respond to the health impacts of climate change.***

RECOMMENDATION 3. The objectives, and any other areas of the Strategy where this is appropriate, should refer to "people in Australia" rather than "Australians".

2. How could these principles be improved to better inform the objectives of the Strategy?

Asthma Australia welcomes the principles that centre Aboriginal and Torres Strait Islander leadership in policy decisions on climate and health, recognise the importance of health inequities in addressing climate health impacts and recognise the need for a holistic approach to the challenges we face through a paradigm like One Health.

However, Asthma Australia is concerned the principles focus disproportionately on health sector mitigation and adaptation and inadequately recognise the importance of protecting human health and wellbeing against climate change impacts. While Principle 3 is titled “Population health and prevention”, the text suggests the motivation behind this principle is further action on mitigation and adaptation. Asthma Australia recommends that the principles, like the objectives, recognise and support a primary focus on improving human health and wellbeing, and preventing the adverse health impacts of climate change.

In 2022, the United Nations (UN) General Assembly passed a resolution recognising a clean, healthy, and sustainable environment as a human right and called upon nations, businesses and other stakeholders ‘to scale up efforts’ to uphold this right.¹⁵ This recognition responds to the global public health crisis resulting from climate change, pollution, environmental degradation and biodiversity loss. The ACT Government is in the process of embedding this right into the Human Rights Act and we consider that this right should be incorporated into all human rights legislation in Australia. The environment is integral to human health and ongoing environmental damage is compounded by climate change. The Strategy should include a principle that recognises the right to a healthy environment to acknowledge the critical link between the environment and human health, and to help ensure environmental health is prioritised in government responses to climate change.

Asthma Australia also suggests the Strategy should include a principle around person-centredness. Incorporating this principle would embed the need to involve consumers in the implementation of the Strategy’s actions that affect them, such as changes to healthcare practices or climate adaptation actions that support health and wellbeing. The value of a person-centred approach is exemplified by the transition to low-carbon inhalers: currently, the Consultation Paper (2.4.3) only refers to working with primary care stakeholders to reduce prescribing and dispensing pressurised metered dose inhalers, and only notes clinical appropriateness as a factor influencing choice of inhaler. A person-centred approach would include people who use inhalers and their carers, ensuring that their preferences, needs and values are considered in designing a program to transition towards low-carbon inhalers. This approach not only respects consumers and their input, it increases the likelihood of a successful program as consumers are more likely to support it.

While Asthma Australia welcomes the inclusion of a principle of evidence-informed decision-making, we suggest cost-effectiveness analysis may not be an appropriate approach for all decisions and that alternative types of economic evaluation may be more suitable. We also note that as the effects of climate change compound and cascade,¹⁶ policy responses will need to be nimble to protect health and wellbeing.

Further, Asthma Australia suggests that Principle 6 should recognise not only the need to work across *levels* of government, but also across *portfolios* within levels of government to accommodate a HIAP approach.

RECOMMENDATION 4. *The Strategy should include principles that support the new objectives in Recommendation 1 around improving human health and wellbeing, preventing and reducing adverse human health outcomes related to climate change and recognising climate change as a focus area for preventive health policy.*

RECOMMENDATION 5. *The Strategy should include a principle that recognises the right to a healthy environment to acknowledge the critical link between the environment and human health and wellbeing.*

RECOMMENDATION 6. *The Strategy should include a principle around person-centredness to embed the importance of involving consumers in the implementation of the Strategy's actions.*

RECOMMENDATION 7. *Principle 5 should be amended to remove the specification of cost-effectiveness analysis and recognise the importance of responsive policymaking.*

RECOMMENDATION 8. *Principle 6 should be amended to recognise the need to work across portfolios within levels of government (as well the need to work across levels of government).*

3. Which of the various types of greenhouse gas emissions discussed above should be in scope of the Strategy's emission reduction efforts?

Asthma Australia supports the inclusion of Scope 1, 2 and 3 emissions as defined in the Consultation Paper, including emissions from pressurised metered dose inhalers (pMDIs) used in hospitals or other healthcare facilities. However, this approach as detailed in the Strategy is too limited as it focuses on emissions linked to organisations, and reflects the focus evident throughout the Consultation Paper on the health system.

The Strategy should include emissions that originate in the community in the scope of its emissions reduction efforts, particularly where actions have the potential to improve health outcomes, as exemplified by a transition to low carbon inhalers. As the Consultation Paper currently explains Scope 3 emissions in relation to organisations, it is not clear that this would capture inhalers used in the community purchased over the counter or prescribed by primary care providers, for example.

Transitioning to low carbon inhalers exemplifies the need for a comprehensive approach to reducing emissions. pMDIs use propellant gases that contribute significantly to health sector greenhouse gas emissions.¹⁷ In contrast, dry powder inhalers (DPIs) not only have a smaller carbon footprint but also offer improved asthma management compared with pMDIs for most people with asthma.¹ It is likely there are low levels of understanding in the Australian community around the contribution of asthma inhalers to greenhouse gas emissions.

Any actions in the Strategy around transitioning to low carbon inhalers must be co-designed with people with asthma and their carers, with input from relevant consumer and peak bodies. These actions must be supported by adequate resourcing to raise consumer and healthcare professional awareness around the benefits of DPIs for asthma management as well as reducing emissions. Further, cost impacts on consumers should be considered and minimised. Consumer research should

¹ Asthma Australia notes these inhalers are used to treat conditions other than asthma and it is important to consult with consumers with those conditions, their carers, and the organisations that represent them.

be conducted to understand the likely response to initiatives to increase low carbon inhaler use. Asthma Australia is well placed to contribute to the design of policy measures and public education around low carbon inhalers and is undertaking work with key stakeholders on this issue currently.

Additionally, inhaler waste should be included in the scope of the Strategy's emissions reduction efforts. This is particularly important for pMDIs as they can release potent greenhouse gases when they are disposed of in landfill.¹⁸ An inhaler recycling scheme would allow for the capture and appropriate reuse of propellant gases from discarded pMDIs, as well as the reuse or appropriate disposal of the remaining component parts of pMDIs and DPIs.

Another area where emissions reduction actions under the Strategy could contribute to immediate health impacts is by reducing emissions that contribute to localised air pollution. These emissions should be prioritised for action.

RECOMMENDATION 9. The Strategy should include emissions that originate in the community, particularly where policy measures can influence both emissions reduction and positive health outcomes.

RECOMMENDATION 10. The Strategy should include an action around transitioning to low carbon inhaler use in the community and healthcare settings, which should be co-designed by people with asthma and their carers.

RECOMMENDATION 11. The Strategy should include inhaler waste as a priority for reducing emissions.

RECOMMENDATION 12. The Strategy should prioritise emissions reduction actions that will reduce localised air pollution and lead to short term health benefits.

4. What existing First Nations policies, initiatives, expertise, knowledge and practices should the Strategy align with or draw upon to address climate change and protect First Nations country, culture and wellbeing?

Aboriginal and Torres Strait Islander people have a critical role to play in the development and implementation of the Strategy. As recognised by the Consultation Paper, they have significant knowledge and policies that they can contribute to mitigate against, and adapt to, climate change impacts. However, many Aboriginal and Torres Strait Islander people feel they have not been sufficiently included in national conversations about climate change and most reporting on climate change does not include their local assessments.¹⁹

Aboriginal and Torres Strait Islander organisations have developed a range of policies on health and climate change, such as the Lowitja Institute's report on Climate Change and Aboriginal and Torres Strait Islander Health²⁰ and the Indigenous Peoples Organisation report Heal Country, Heal Climate: Priorities for climate and environment.²¹ These policy documents have a range of findings, objectives and actions that should be integrated within the Strategy. The Strategy should also seek to integrate objectives and actions that have been developed through other Government processes including the Measuring What Matters Framework community consultation²² and the objectives of the Australian Centre for Disease Control related to Aboriginal and Torres Strait Islander communities.²³

Climate change not only disrupts spiritual and cultural connections to Country by degrading the land, waters and air on Country, causing physical, emotional, cultural and spiritual ill-health, but also compounds existing health inequities in Aboriginal and Torres Strait Islander communities.²⁴ For example, the prevalence of asthma – which, as we have noted, is greatly affected by climate change impacts – is significantly higher among Aboriginal and Torres Strait Islander people (18%) than the general population (11%), and asthma mortality rates for Aboriginal and Torres Strait Islander people are 2.5 times higher than for non- Aboriginal or Torres Strait Islander people.²⁵ In addition, Aboriginal and Torres Strait Islander people living in remote communities have lower life expectancy than their peers in urban areas and non- Aboriginal or Torres Strait Islander communities, which climate change compounds when health services and health workers are disrupted by significant climate change weather events.²⁶

Aboriginal and Torres Strait Islander leadership is key to developing meaningful and sustainable approaches to health for populations affected by climate change in rural, remote and urban settings. The Strategy should foster this leadership with climate change viewed as an opportunity to:

- Address health inequalities and the social determinants of health that affect Aboriginal and Torres Strait Islander people, seeing Country as a key determinant of health for Aboriginal and Torres Strait Islander people,
- Improve health outcomes for Aboriginal and Torres Strait Islander people and empower Aboriginal and Torres Strait Islander people to improve their health and wellbeing through awareness, education and engagement,
- Integrate Aboriginal and Torres Strait Islander knowledge with Western science to address climate change – ‘two-way seeing’ - centring Aboriginal and Torres Strait Islander people as leaders in protecting Country,²⁷
- Develop culturally appropriate healthcare services equipped to meet increased demand resulting from climate change,
- Strengthen partnerships between Aboriginal and Torres Strait Islander communities and mainstream health care providers, and
- Foster greater self-determination and empowerment for Aboriginal and Torres Strait Islander communities.

RECOMMENDATION 13. The Strategy should reflect the needs, experiences and knowledge of Aboriginal and Torres Strait Islander people by:

- a) Fostering their leadership within communities and in protecting Country in the Strategy’s development and implementation,***
- b) Developing culturally specific health services designed to reduce existing health inequalities and meet increased demand resulting from climate change, and***
- c) Integrating and drawing from existing policy on health and climate change developed by, and with, Aboriginal and Torres Strait Islander people.***

5. What types of governance forums should be utilised to facilitate co-design of the Strategy with First Nations people to ensure First Nations voices, decision-making and leadership are embedded in the Strategy?

Asthma Australia welcomes the intention to co-design the Strategy with Aboriginal and Torres Strait Islander people as they are among the groups most vulnerable to the effects of climate change in Australia, through impacts on Country and on social, emotional and cultural wellbeing. To ensure this co-design is meaningful, Aboriginal and Torres Strait Islander groups across the nation must determine the most appropriate governance forums to support this work. The current consultation process risks a tokenistic approach to the Strategy's co-design and requires well-defined opportunities for all Aboriginal and Torres Strait Islander people to identify their priorities in relation to addressing climate change health impacts and how best to address these priorities.

The Strategy should recognise the need for a strengths-based approach to co-design with Aboriginal and Torres Strait Islander groups and ensure they remain critical, ongoing partners throughout the development and implementation of the Strategy so that the health system appropriately learns from and adapts to their needs, views, knowledge and experiences.

RECOMMENDATION 14. The Strategy should provide well-defined opportunities for Aboriginal and Torres Strait Islander people to identify their priorities in relation to addressing climate change health impacts and meaningfully lead or co-design responses to addressing these priorities.

PROPOSED OBJECTIVE 1: Measurement

6. Beyond the schemes already noted above, is your organisation involved in any existing or planned initiatives to measure and report on health system emissions and/or energy use in Australia?

No.

7. What additional data and information is required to support targeted emissions reduction efforts within health and aged care?

It will be necessary to capture data and information on health system use to understand the health services delivered which cause the current emissions footprint, and compare this with health services maintained and health gains achieved for the emissions avoided through future mitigation actions.

It will also be important to collect data around emissions avoided due to preventive health actions and improved care models. The Consultation Paper proposes prevention and optimising models of

care as a focus area in the Strategy, recognising that keeping people healthy avoids healthcare use and the associated emissions.

Asthma provides an excellent case study for measuring health gains from avoided emissions, given the multiple climate-related pathways associated with asthma onset and exacerbations, and reducing emissions from healthcare use as around 90% of asthma hospitalisations are considered potentially preventable.²⁸

Finally, it will be important to ensure all health-related emissions outside health facilities are measured under scope 3, as noted in our response to Question 3.

RECOMMENDATION 15: Data and information on health system use should be collected to understand the gains in avoided emissions achieved by the Strategy.

PROPOSED OBJECTIVE 2: MITIGATION

8. What do you think of these proposed focus areas for emissions reduction? Should anything else be included?

Asthma Australia supports the proposed focus areas for health system emissions reduction. However, we refer to our comments in response to Question 1, that this objective should be reframed as a net zero health and aged care system, and that mitigation across all sectors is needed to protect health and wellbeing. We note that this is not only important from a climate change mitigation perspective, but would also improve air quality and prevent adverse health impacts caused by exposure to fossil fuel emissions. Additionally, we note and agree with CAHA's position that the mitigation objective should set clear targets for decarbonisation of the health and aged care sectors.

9. Which specific action areas should be considered relating to the built environment and facilities (including energy and water), over and above any existing policies or initiatives in this area?

(No comment.)

10. Which specific action areas should be considered relating to travel and transport, over and above any existing policies or initiatives in this area?

(No comment.)

11. Which specific action areas should be considered relating to supply chain, over and above any existing policies or initiatives in this area?

(No comment.)

12. Which specific action areas should be considered relating to medicines and gases, over and above any existing policies or initiatives in this area?

Asthma Australia refers to our response to Question 3 regarding the inclusion of inhaler emissions. We reiterate that while inhalers should be included in the medicines and gases focus area, any efforts to transition to low carbon inhalers must be co-designed with consumers, with input from relevant consumer and peak bodies. Prescribers must also be included in such efforts and are a key stakeholder in implementing a transition to low carbon inhalers.

Asthma Australia is concerned that the action proposed in the Consultation Paper regarding inhaler dispensing (2.4.3) does not recognise the need to consult with people with asthma, their carers, or peak bodies. Instead, it focuses on primary care providers, suggesting a top-down approach, rather than a consumer-centred approach.

We note that other jurisdictions have undertaken work to transition to low carbon inhalers.²⁹ Any actions in Australia should refer to these efforts and seek to understand both strengths and weaknesses of these approaches. It is also important to recognise the unique conditions in Australia, such as the availability of reliever medicines over the counter (and most are pMDIs, which have higher emissions), and to understand how the local context presents different challenges that need to be addressed.

RECOMMENDATION 16: The Strategy should include an action to consult with consumers, consumer and peak bodies, and healthcare professionals on the development of a program to transition to low carbon inhalers, noting the importance of referring to international examples and understanding local conditions.

13. Which specific action areas should be considered relating to waste, over and above any existing policies or initiatives in this area?

The majority of asthma medicines are delivered via devices that cannot be refilled and present challenges for disposal. As noted in response to Question 3, pMDIs contain powerful propellant gases that contribute to greenhouse gas emissions. Disposing of used inhalers in landfill risks these gases leaking, while incineration wastes a potential opportunity to repurpose the remaining gas.³⁰

Asthma Australia supports the introduction of a pilot inhaler recycling scheme to explore the feasibility, challenges and benefits of recycling inhaler devices. We are aware of interest from pharmaceutical companies in exploring the potential for inhaler recycling in Australia, and note that recycling programs have been introduced internationally.³¹ Any Australian recycling scheme should

include consumer consultation and co-design, and Asthma Australia is well placed to contribute to the design of a scheme and seek consumer input.

In addition, we note and support the Lung Foundation Australia's position on the need to minimise the environmental harms of nicotine vaping products that contain hazardous waste, plastic and batteries.

RECOMMENDATION 17: The Strategy should include an action to consult with consumers, consumer and peak bodies, and other stakeholders on the development of an inhaler recycling scheme.

14. Which specific action areas should be considered relating to prevention and optimising models of care, over and above any existing policies or initiatives in this area?

Asthma Australia welcomes the inclusion of prevention and optimising care models as a focus area for health system mitigation since efforts to prevent asthma and improve care models will greatly benefit people with asthma – and those at risk of developing it – in addition to reducing health system emissions. While primary prevention of asthma is complex, there is a growing body of evidence around risk factors and protective factors for the development of asthma.³² Addressing many of the risk factors, such as reducing smoking, improving maternal health, and supporting healthy diets, would achieve additional health benefits beyond asthma. Further, risk factors for asthma development such as outdoor air pollution, moulds and pollens³³ are becoming more prevalent due to climate change. This means that implementing environmental protection measures that mediate pollution, extreme weather and pollen proliferation will reduce the asthma burden.

Tertiary prevention in the asthma context means managing asthma to reduce symptoms and prevent flare-ups. For most people, asthma can be well-managed by the individual or their carer under the guidance of a primary healthcare professional by using medicines and avoiding triggers. However, we know that asthma care is often suboptimal, and around 90% of asthma hospitalisations are considered potentially preventable.³⁴

Areas for improvement include increasing the proportion of people who receive good quality, personalised healthcare as set out in the Australian Asthma Handbook,³⁵ including effective inhaled preventer therapy, alongside risk management and multi-disciplinary care approaches for those with complex disease. Ineffective tertiary prevention leads to the massive, avoidable burden of asthma, which in turn leads to excessive use of higher carbon pMDIs and emergency health services, which have significant carbon footprints. Investing in models of care and asthma management health promotion can improve health outcomes and disrupt this adverse feedback loop, also reducing emissions and climate change impacts.

Trigger management is also critical. Asthma Australia's consumer research on common triggers in Australian homes found that many people – including priority populations – face considerable barriers to reducing their exposure to triggers in the home.³⁶ Increasing health literacy and empowering consumers to manage triggers are critical to optimising asthma care.

Asthma presents an excellent case study for both increasing prevention activities and improving models of care. Asthma Australia is well placed to collaborate on any actions that would improve

asthma outcomes and reduce the burden of asthma on the health system as we are already committed to our overarching strategic goal of halving avoidable asthma hospitalisations by 2030.³⁷

Asthma Australia also notes that rapidly accelerating the transition to renewable and non-emitting sources of energy and transport will benefit asthma prevention, as fossil fuel emissions can contribute to the development of asthma and its exacerbation.³⁸

Finally, Asthma Australia supports proposed action 2.6.1 to encourage social prescribing and patient education. Implementation of this action should be co-designed with consumers and would require adequate resourcing.

RECOMMENDATION 18. Prioritise asthma as a case study for prevention and optimising models of care by investing in improving asthma management and empowering people to minimise their exposure to risk factors for the development and exacerbation of asthma.

15. What can be done to involve private providers within the health system in the Strategy's emissions reduction efforts?

(No comment.)

16. Where should the Strategy prioritise its emissions reduction efforts?

a. How should the Strategy strike a balance between prioritising emissions reduction areas over which the health system has the most direct control and prioritising the areas where emissions are highest, even if it is harder to reduce emissions in these areas?

Asthma Australia supports developing and implementing actions across sectors and carefully prioritising these actions based on considerations including emissions reduction potential, resources required, and timeframes. Further, we support prioritising emissions reduction actions that will significantly reduce air pollution and the associated adverse health impacts. This would necessarily include emissions outside the health system, such as coal fired power stations and vehicle emissions.

In considering whether to prioritise actions to reduce emissions from inhalers, we again state that any efforts should be co-designed with consumers with input from consumer and peak bodies.

RECOMMENDATION 19. Emissions reductions actions should be developed and implemented across sectors with careful prioritisation, including consideration of the potential to reduce air pollution and the associated adverse health impacts.

b. Which of the six sources of emissions discussed above (on pages 13 to 18 of the Consultation Paper) are the highest priorities for action?

Asthma Australia does not support an approach in which these areas compete for importance in taking action. Action plans should be developed and implemented across the 6 focus areas for emissions reductions in a holistic approach to decarbonising the healthcare sector.

RECOMMENDATION 20: The Strategy should place equal priority on each of the 6 emission sources and develop action plans for each area with realistic timeframes for implementation.

17. What 'quick wins' in relation to emissions reduction should be prioritised for delivery in the twelve months following publication of the Strategy?

Asthma Australia is currently exploring a low carbon inhaler transition. While this should be a priority for action, we emphasise that it should not be seen as a 'quick win'. It is critical to include consumers in developing and implementing an inhaler transition program. Further, it may take time to shift towards low carbon inhaler use while maintaining consumer choice and improving asthma management.

RECOMMENDATION 21: A low carbon inhaler transition should be a priority action but it should not be considered as a 'quick win'.

PROPOSED OBJECTIVE 3: Adaptation

18. What health impacts, risks and vulnerabilities should be prioritised for adaptation action through the Strategy? What process or methodology should be adopted to prioritise impacts, risks and vulnerabilities for adaptation action?

Asthma Australia refers to our response to Question 1, where we recommend separating out the adaptation objective in the Consultation Paper to create standalone objectives for strengthening health system resilience, strengthening community resilience and supporting priority populations to respond to climate change. We note the latter two proposed objectives overlap with the current Objective 4 on Health in All Policies (HIAP) and suggest HIAP is more appropriate as a principle that informs the Strategy, its actions and its implementation, rather than as a standalone objective.

We note the disproportionate focus in the adaptation section of the Consultation Paper on adaptation within the health system, and the lack of detail on the adaptation actions needed to minimise population health impacts.

Asthma Australia recommends that the adaptation section of the Strategy should identify priority population groups that are at increased risk of adverse health outcomes resulting from climate change. The approach in the Consultation Paper, presenting a long list of health impacts and asking

stakeholders to prioritise these impacts for adaptation action, is not helpful. Further, we support the prioritisation of adaptation actions that holistically support population groups at greater risk of multiple adverse health outcomes caused by climate change, such as improving housing conditions and supporting adaptation to poor air quality (discussed in more detail below), as these actions are likely to deliver broader health benefits than actions focused on specific impacts.

While Asthma Australia does not support an approach that prioritises some health outcomes above others, we recognise there are populations who will require more support and their need for health care is likely to increase due to climate change, including people with asthma. Asthma is a highly prevalent chronic condition that is both caused and exacerbated by the emissions that lead to climate change, and the conditions created by climate change. Asthma disproportionately burdens some population groups including Aboriginal and Torres Strait Islander people, people with disabilities and people living in low socioeconomic areas.³⁹ Additionally, comorbidity of other chronic conditions is common among people with asthma,⁴⁰ which further reinforces the need for holistic adaptation actions.

Prioritising Aboriginal and Torres Strait Islander people and communities for adaptation actions

Asthma Australia notes the particular importance of the first principle around First Nations leadership in prioritising and planning adaptation actions. Climate change impacts adversely affect the social, emotional and cultural wellbeing of Aboriginal and Torres Strait Islander people, as well as existing health inequities, which include higher prevalence of asthma.⁴¹ Aboriginal and Torres Strait Islander people should therefore be considered a priority population for climate adaptation actions in the Strategy. Assessment, planning and decision-making about responding to risks, vulnerabilities and health impacts must prioritise Aboriginal and Torres Strait Islander knowledges and experiences.

While a broad range of adaptation actions would protect people with asthma and those at risk of developing asthma, there are two critical areas for prioritisation that would protect these populations as well as all others against a range of other climate-related health impacts: improving housing conditions and empowering people to protect themselves against air pollution.

d) Improving housing conditions

Housing is a critical focus area for adaptation because we are increasingly required to shelter in our homes to protect ourselves against climate change-driven conditions such as bushfires, heatwaves, storms and infectious diseases. However, homes are not healthy places for all people in Australia, harbouring triggers that can increase the risk of developing asthma or trigger symptoms.⁴² Priority populations at greater risk of exposure to these triggers include Aboriginal and Torres Strait Islander people, people living in social housing, renters, people with low incomes and people with asthma.⁴³

The Strategy must therefore commit to actions to ensure everyone lives in a safe and healthy home that protects against climate driven conditions. Actions should include remediating social housing, improving building standards, incentivising landlords to improve rental properties without disadvantaging tenants, and supporting people to make their own homes healthier.

e) Addressing the health impacts of air pollution

Responding to air pollution is an adaptation priority as many impacts of climate change involve unhealthy air, including prolonged bushfire smoke, thunderstorm asthma events, elevated pollen levels, increased ground level ozone and airborne infectious diseases. In 2018, 1.3% of the total disease burden in Australia was due to air pollution,⁴⁴ while estimates suggest air pollution from vehicle emissions alone results in:⁴⁵

- 11,105 premature deaths in adults per year.
- 12,210 cardiovascular hospitalisations per year.
- 6,840 respiratory hospitalisations per year.
- 66,000 active asthma cases per year.

The financial cost of premature deaths due to air pollution is estimated to around \$11 billion to \$24 billion per year.⁴⁶

Asthma Australia has developed and piloted an AirSmart public education campaign that aims to empower people with the knowledge and tools they need to protect themselves against air pollution.⁴⁷ However, we have struggled to secure Commonwealth funding for a national rollout of AirSmart, despite multiple inquiries into the catastrophic 2019-20 bushfires recognising the need for improved air quality education.

Additionally, many communities lack access to local air quality information as air quality monitoring largely relies on expensive monitoring stations. An urgent climate change adaptation action should be using low-cost air quality sensors to fill gaps in the monitoring network, particularly for regional and rural communities, which are often closest to bushfires and the smoke they produce.

Finally, vulnerable population groups exposed to air pollution, including people with asthma on low incomes, urgently need assistance with the costs of purchasing and running air purifiers. These populations include people exposed to emissions from coal fired power stations, transport and industrial sites, as well as people exposed to pollution from climate-driven events such as bushfires and dust storms.

RECOMMENDATION 22: People with respiratory conditions, including asthma, should be recognised as a priority population for climate change adaptation actions in the Strategy.

RECOMMENDATION 23: Aboriginal and Torres Strait Islander people should be recognised as a priority population for climate change adaptation actions in the Strategy given the health impacts of climate change and existing disparities in social, emotional and cultural wellbeing.

RECOMMENDATION 24: Improving housing conditions should be an adaptation priority in the Strategy given the importance of having a healthy home in which to shelter against climate change impacts. Housing improvement actions should be prioritised for the populations at greatest risk, including:

- a) Aboriginal and Torres Strait Islander people.***
- b) People living in social housing.***
- c) People living in private rental housing.***
- d) People with low incomes.***
- e) People with asthma and other chronic conditions that increase their risk of adverse health outcomes related to climate change.***

RECOMMENDATION 25: The health impacts of air pollution should be an adaptation priority in the Strategy given fossil fuel emissions cause health impacts and climate change reduces air quality. Priority actions should include:

- a) **A national air quality education campaign, such as Asthma Australia's AirSmart campaign.**
- b) **Expanding air quality monitoring coverage so that all communities can access local air quality information, including the use of low-cost air quality sensors.**
- c) **Supporting vulnerable population groups exposed to air pollution with the costs of purchasing and running HEPA air purifiers, including people with asthma and people exposed to emissions from coal fired power stations, transport and industrial sites, and people exposed to pollution from climate-driven events.**

19. Should the Australian government develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan? If yes:

Yes. The World Health Organisation (WHO) has provided guidance on undertaking health vulnerability and adaptation assessments since 2013, and 50 countries and settings have used the tool to help prepare their healthcare systems and services locally for climate change, and to inform their contributions to UN Climate Change frameworks.⁴⁸ A National Health Vulnerability and Adaptation Assessment and Plan are key parts of the Health and Climate Strategy that can help identify weaknesses in health care systems and populations who are most vulnerable to climate change effects to help inform local health service preparedness and resilience. However, the development of this Plan should not delay the Government from taking prompt action.

RECOMMENDATION 26: The Australian government should develop a National Health Vulnerability and Adaptation Assessment and National Health Adaptation Plan.

a. What are the key considerations in developing a methodology?

Asthma Australia again urges that any efforts to assess and plan for health vulnerability and adaptation focus on population health and wellbeing impacts of climate change, with health system adaptation supporting protection of health and wellbeing. We additionally urge that these efforts identify and consult with priority population groups at greatest risk of health impacts caused by climate change.

RECOMMENDATION 27: Efforts to assess and plan for health vulnerability and adaptation should focus on the population health and wellbeing impacts of climate change, with healthy system adaptation efforts supporting those outcomes.

b. How should their development draw on work already undertaken, for example at the state and territory level, or internationally?

Asthma Australia is aware that many jurisdictions are undertaking work to assess vulnerability and adaptation challenges and plan their responses to these challenges. We are not aware of specific

examples, nor whether these examples comprehensively capture the challenges climate changes presents not just to health systems, but also population health and wellbeing.

c. What are the key areas where a national approach will support local/jurisdictional vulnerability assessment and adaptation planning?

Air quality and housing are two key areas for climate change vulnerability and adaptation planning in which a national approach has strong potential to improve local responses. Please refer to Asthma Australia's response to Question 18 for more detail, where we stated that housing is a critical focus area for adaptation because we are increasingly required to shelter in our homes to protect ourselves against climate change-driven conditions, yet homes are not always healthy places to seek refuge. A national approach to housing adaptation could ensure consistency among jurisdictions and increase equity in ensuring priority populations are a focus for assessment and planning.

We also stated in our response to Question 18 that responding to air pollution is another adaptation priority, as many impacts of climate change involve unhealthy air. We noted the potential for Asthma Australia's AirSmart public education campaign to empower people with the knowledge and tools they need to protect themselves against air pollution, and that this would ideally be funded and its implementation supported by all levels of government in a coordinated campaign. Further, a national approach to addressing gaps in air quality monitoring through the use of low-cost air quality sensors would increase consistency in monitoring and reporting, as well as allowing jurisdictions to share their knowledge and experience.

20. Would there be value in the Australian government promoting a nationally consistent approach to vulnerability assessment and adaptation planning for the health system specifically, for instance by issuing guidance and associated implementation support tools for states, territories and local health systems? If yes, what topics should be covered to promote a nationally consistent approach? What examples of existing guidance (either from states/territories or internationally) should be drawn from?

The WHO guidance on developing Health Vulnerability and Adaptation Assessments has been used to inform the assessments of many countries to date and should form a good basis for the development of assessments by the Australian governments and local health systems.⁴⁹

21. What immediate high-priority health system adaptation actions are required in the next 12 to 24 months?

Asthma Australia notes the absence of a question in the Consultation Paper around prioritising adaptation actions that increase community resilience to anticipate and respond to climate health impacts, which is recognised in Objective 3 alongside health system resilience. We suggest the actions listed in our recommendation below should be top priorities for community adaptation measures to support health and wellbeing.

RECOMMENDATION 28: Include the following actions as top priorities for community adaptation measures to support health and wellbeing in response to challenges presented by climate change:

- a) Strengthen Australia's air quality standards by aligning with the World Health Organisation's Global Air Quality Guidelines.**
- b) Align the next National Clean Air Agreement work plan with the National Climate and Health Strategy, ensuring the work plan responds to risks to air quality presented by climate change and the Strategy recognises and responds to the health impacts of poor air quality.**
- c) Introduce a national air quality public education campaign, such as Asthma Australia's AirSmart campaign.**
- d) Ensure all communities can access local air quality information by supporting jurisdictions to incorporate low-cost air quality sensors into monitoring networks.**
- e) Improve housing standards, particularly for priority population groups.**
- f) Support priority populations at greater risk of health problems caused by climate change-related air pollution with the costs of purchasing and running air purifiers.**

PROPOSED OBJECTIVE 4: Health in All Policies

22. What are the key areas in which a Health in All Policies approach might assist in addressing the health and wellbeing impacts of climate change and reducing emissions?

Asthma Australia refers to our response to Question 18, where we suggest HIAP is more appropriate as a principle that informs the Strategy, its actions and its implementation, than as a standalone objective. Further, while we support the principles underlying HIAP, we question whether it is realistic that HIAP will be implemented over the course of a short-term strategy given the lack of collaboration and integration between government departments. The failure of governments to adequately respond to the health impacts of air pollution presents an example of the challenges encountered when health risks are generated outside the remit of health policy.

If HIAP is to be retained as an objective, Asthma Australia suggests the following as key areas where a HIAP approach would help to address climate change health and wellbeing impacts, particularly for people with asthma, or those at risk of developing asthma:

- Air quality.
- Housing.
- Planning.
- Transport.

Further, if HIAP is to be retained as an objective, the Strategy will need to ensure that responsibility and timelines for actions are clearly identified and are supported by appropriate monitoring and evaluation to ensure that the departments and agencies responsible for implementation deliver on these commitments.

RECOMMENDATION 29: Health in All Policies (HIAP) should be a principle which informs the Strategy and its implementation. However, if HIAP is retained as an objective, the key areas in which a HIAP approach would support climate change health and wellbeing impacts should include air quality, housing, planning and transport.

23. What are the most effective ways to facilitate collaboration and partnerships between stakeholders to maximise the synergies between climate policy and public health policy? What are some successful examples of collaboration in this area?

Asthma Australia’s AirSmart public education campaign is an example of a successful collaboration between for-purpose, government and corporate stakeholders that responded to one of the largest climate health challenges Australia has faced: the 2019-20 bushfire smoke crisis. Asthma Australia took the lead on developing and piloting the public education campaign and air quality app after the need for improved community education and guidance around air quality was identified by the bushfire crisis. This need was recognised by the Royal Commission into National Natural Disaster Arrangements, among other inquiries. Asthma Australia formed an expert advisory committee with representatives with expertise in air quality standards, public health, environmental health and technology who contributed to the design of the AirSmart campaign and planning its implementation and evaluation.

While Asthma Australia received funding from the NSW Government for the pilot AirSmart campaign, our efforts to secure further funding for a wider rollout have had limited success. We have observed a general lack of responsibility among government agencies to address air quality health impacts. Yet this is a critical area where a HIAP approach would be beneficial, given responsibility is shared between portfolio areas.

The need for access to air quality information and guidance will only grow as climate change continues to increase the frequency and severity of events causing poor air quality. One of the key findings of the State of the Environment Report for 2021 was that better information can reduce the impact of poor air quality.⁵⁰ The report stated that communities needed real-time local information during periods of poor air quality.

ENABLERS

24. How could these enablers be improved to better inform the objectives of the Strategy? Should any enablers be added or removed?

Asthma Australia generally supports the enablers included in the Consultation Paper but we set out below a number of ways in which they could be strengthened.

- **Workforce, leadership and training**

The health workforce has a pivotal role to play in implementing the actions arising from this Strategy to help adapt and prepare for climate change health impacts, and to reduce the healthcare sector carbon emissions and environmental impact. Adequate training is therefore important to prepare the workforce to meet these challenges. As climate change is a public health issue, there is also a need for a national, interdisciplinary continuing professional development program on health and climate change within the health, social and other relevant policy sectors. Additionally, existing communities of practice for sustainable healthcare that facilitate the sharing of achievements and common challenges should be invested in and scaled up.

In addition to training, treatment guidelines will have to be reviewed to ensure they incorporate climate change preparedness to guide the work of healthcare professionals. To this end, Asthma Australia can help to advance the Strategy through advocating for more content relating to health and climate change in future iterations of the Australian Asthma Guidelines.

During climate emergencies and disasters, healthcare workers will often be supporting immediate family and friends or unable to reach their workplace so the Strategy must incorporate the development of workforce contingencies when there are shortages in extreme weather events.

- **Research**

More research on health and wellbeing outcomes relating to climate change is needed to ensure the health sector, its workforce and the wider policy environment appropriately adapts to and mitigates against the impacts of climate change and uses evidence to guide program investment and disinvestment.

- **Communication and engagement**

Consumer organisations, like Asthma Australia, play an important role in educating consumers and other stakeholders (e.g. healthcare professionals) about a range of issues relating to asthma treatment, triggers and emergencies. Consumer engagement is an important enabler (and should be viewed as a separate enabler in the Strategy) in terms of how they respond to efforts made by the health sector to reduce emissions and to any changes they may personally have to make to managing their condition or interacting with healthcare services. Working with consumer organisations, including Asthma Australia, will be an important step to ensuring reasons for change are effectively and appropriately communicated with different consumer groups and to ensuring that any concerns or barriers they encounter are captured and accommodated.

An example of how Asthma Australia engages with consumers and responds to their needs in relation to climate change is our AirSmart public health campaign, which aims to empower people with the knowledge and tools they need to protect themselves against air pollution, as we set out in our response to Q18. The need for access to air quality information and guidance will only increase as climate change continues to increase the frequency and severity of events causing poor air quality. Funding is required to roll-out this campaign nationally, which would fill a notable gap in relation to current health and climate change events.

- **Collaboration**

The Strategy needs to foster collaboration within the health sector and with other federal and state/territory departments where their policies, such as air quality, housing, planning and transport, intersect with health and climate change. For significant headway to be made on the social determinants of health and climate change **interdepartmental work is key**. However, resources to develop mechanisms for collaboration are lacking and Government leadership in supporting collaboration has until now been missing. Government investment is required to scale up the outcomes of the health sector's self-organised activities to date as well as to develop and expand collaboration efforts with stakeholders across government, policy areas and, as noted in our response to questions 4 and 5, with Aboriginal and Torres Strait Islander leaders and communities.

- **Monitoring, evaluation and reporting**

Regular assessment and forecasting of climate-related, health impacts across the country is vital and this should be core work of the National Climate Risk Assessment (NCRA),⁵¹ to which the health sector must contribute in terms of monitoring climate health presentations, outcomes and trends. The Strategy must work with the NCRA to ensure that long-term, robust indicators on health and climate change are included, which will help governments and services understand and respond to climate change risk, identify vulnerabilities, highlight regional climate mitigation and adaptation challenges, and track responses.

Climate change is inextricably linked to air quality, with its adverse impacts such as increasing bushfire smoke, ground level ozone and pollen contributing to air pollution, which have known health effects. Below, we set out the importance of improving air quality monitoring in Australia and the need for national indoor air quality standards as enablers to improving health.

Monitoring air quality

The UN has deemed air pollution as 'the most important environmental health risk of our time', with it being responsible for 1 in 9 deaths globally.⁵² For people with asthma, air pollution is a notable concern since certain air pollutants can trigger asthma symptoms and exacerbations and increase the risk of developing asthma. For example, findings from our survey on the 2019-20 bushfire crisis showed people with asthma reported higher rates of serious health outcomes than people without asthma, including attending the emergency department, hospitalisation and requiring oral or injected corticosteroid medication.⁵³ The unprecedented levels and duration of exposure to bushfire smoke during this period also had significant impacts on mental health, including new and increased symptoms of anxiety and depression. The survey revealed that beyond health impacts, people with asthma disproportionately suffered financial strain and reduced participation in everyday activities.

Air quality monitoring is therefore a critical aspect of health and climate change preparedness. The 2021 State of the Environment Report found that better information could reduce the impact of poor air quality,⁵⁴ concluding that harmful pollutants are only assessed by Australian jurisdictions at 211 fixed air quality monitoring stations across Australia, leaving sensitive populations living in other areas with an absence of information and unable to protect their health. The report also notes that new networks of low-cost sensors are helping to fill in gaps between monitoring stations.

Regional and rural populations commonly lack local air quality monitoring facilities, which can be particularly problematic during bushfires and hazard reduction burns as people in these communities are disproportionately affected by smoke. Even in metropolitan areas, air quality monitoring stations span many suburbs, meaning localised peaks of air pollution are neither detected nor reported on.

Recommendations 25 and 28 include the need to improve Australia's monitoring of outdoor air quality.

National indoor air quality standards

There are currently no standards for indoor air quality, which is of concern for people seeking refuge at home, school, work or even within health services during extreme weather climate change events. During the 2019/20 bushfire season, for example, the air quality in Canberra's hospitals – including the neonatal intensive care unit, the emergency ward and the respiratory and sleep disorders, were found to be unhealthy for everyone.⁵⁵ A patient with asthma was reportedly advised to go home due to the poor indoor air quality in the hospital.⁵⁶ Hospitals were found to be equipped with air conditioners that failed to filter out the smoke, while machinery failed and sterilised equipment was contaminated.⁵⁷ To ensure health care services are equipped to improve, not worsen, health during climate disasters, Asthma Australia recommends that the Australian Government develops, implements and monitors indoor air quality standards that cover the air quality of public buildings, work and education environments and homes.

RECOMMENDATION 30: Include in the Strategy the development, implementation and monitoring of indoor air standards for all public buildings, work and education environments, and homes.

25. For each of these enablers:

a. What is currently working well?

As discussed in our response to question 24, Asthma Australia's AirSmart public health campaign is an example of an effective communication and engagement enabler.

b. What actions should the Strategy consider to support delivery?

Funding is required to enable a national roll-out of the AirSmart, which would help empower people with the knowledge and tools they need to protect themselves against air pollution during extreme weather events.

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<https://soe.dcceew.gov.au/air-quality/introduction>

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