

# Working towards a National Clean Air Agreement

**Discussion paper** 

March 2015

© Copyright Commonwealth of Australia, 2015.



Working Towards a National Clean Air Agreement: Discussion Paper is licensed by the Commonwealth of Australia for use under a Creative Commons Attribution 4.0 Australia licence with the exception of the Coat of Arms of the Commonwealth of Australia, the logo of the agency responsible for publishing the report, content supplied by third parties, and any images depicting people. For licence conditions see: <a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>

This report should be attributed as 'Working Towards a National Clean Air Agreement: Discussion Paper, Commonwealth of Australia 2015'.

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the Australian Government or the Minister for the Environment.

While reasonable efforts have been made to ensure that the contents of this publication are factually correct, the Commonwealth does not accept responsibility for the accuracy or completeness of the contents, and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this publication.

### **EXECUTIVE SUMMARY**

Australian Environment Ministers have agreed to work towards establishing a National Clean Air Agreement by 1 July 2016 to ensure that the community continues to enjoy clean air and to address impacts on human health and the environment.

It is well recognised that Australia's air quality remains very good by world standards. Australian governments have over a number of years successfully implemented measures including strategies to reduce the levels of carbon monoxide, nitrogen dioxide, sulfur dioxide and lead which have significantly improved Australia's air quality with positive environmental and health impacts.

While, by world standards, Australia has very clean air, there are ongoing challenges and governments, businesses and the community need to be active to ensure a clean air future.

- Governments have over a number of years grappled with the development of emissions standards for new wood heaters and new non-road spark ignition engines and equipment (for example garden equipment and outboard engines).
- Levels of airborne pollutants such as ground-level ozone and particulate matter still frequently exceed air quality standards.
- At a local level, emissions of sulfur dioxide, mercury, particulates and other airborne pollutants continue to cause environmental and health concerns to local communities.
- Further work will need to be undertaken to evaluate the impact on health and the environment from other sources of emissions (for example light vehicles, marine diesel and non-road diesel).

It is critical that governments and businesses take action to continue to improve our air quality to ensure our management of air quality continues to meet community expectations.

In April 2014 the Commonwealth Environment Minister Greg Hunt MP proposed that all Australian Environment Ministers work together to develop a National Clean Air Agreement to address the challenges regarding our air quality and to chart a course to cleaner air in the future. The Agreement will focus actions to reduce air pollution and improve air quality through cooperative action between industry and government at the national, state and local level. The Agreement is designed to incorporate a range of existing, new and complementary measures to improve Australia's air quality.

### Finalising existing work streams

Recent scientific evidence has shown that particulate matter (PM) - present in both outdoor air pollution and diesel exhaust, and emitted from a range of sources including equipment, vehicles, industrial facilities and heating sources, is harmful to human health. Under the Agreement, Governments will complete work by mid 2015 to develop emissions control measures for:

- wood heaters;
- non-road spark ignition engines and equipment; and

- strengthened reporting standards for particulate matter under the Ambient Air Quality National Environment Protection Measure (NEPM).

### Possible new emissions control measures

There are a range of outstanding and emerging issues which present environment and health challenges for the Australian community. Feedback is sought from the community on new measures to be considered under the Agreement including:

- strengthening the Ambient Air Quality NEPM standards for sulfur dioxide, nitrogen dioxide and ozone;
- measures to address mercury releases into the environment;
- jurisdictional initiatives to reduce localised non-road diesel engine emissions and shipping emissions; and
- a review of Australia's fuel quality standards legislation.

### Complementary measures

The Agreement will also incorporate complementary measures which help to improve Australia's air quality.

- The Commonwealth Government has established a National Environmental Science Programme which includes \$8.88 million in funding for a clean air and urban landscapes hub to support environmental quality in urban areas.
- The Commonwealth Government is providing \$2.55 billion under the Emissions Reduction Fund to meet Australia's greenhouse gas emissions reduction target. Actions to reduce carbon dioxide emissions will also help to reduce other airborne pollutants including sulfur dioxide, nitrogen dioxide, mercury and ozone.
- The Bureau of Meteorology is working towards developing a National Air Quality Data Service to improve access to information and reporting on air quality.

This discussion paper provides an overview of why we need a National Clean Air Agreement, and the basis on which it is proposed to be developed. It has been prepared by the Commonwealth Department of the Environment in cooperation with State and Territory environment agencies. It is intended to serve as a basis for engagement with the community and industry to help inform the development of the Agreement.

Australian Environment Ministers look forward to receiving feedback on air quality priorities, mechanisms for implementing new measures and continuing consultation with the community to improve our air quality.

### PURPOSE OF THIS DISCUSSION PAPER

This discussion paper provides an overview of why we need a National Clean Air Agreement, and the basis on which it is proposed to be developed. It has been prepared by the Commonwealth Department of the Environment in cooperation with State and Territory environment agencies.

This discussion paper is intended to serve as a basis for engagement with business, industry and community representatives to help inform the development of the Agreement.

A series of questions posed at the end of this paper are intended to prompt feedback on the proposals for the basis of the Agreement, including potential air quality priorities and opportunities to forge partnerships with non-government organisations. Further information on how to provide written feedback is provided at the end of this paper.

### **AIR QUALITY IN AUSTRALIA**

### Why is our air quality important?

Not only does the air we breathe impact our health and well being, good air quality is critical for supporting the amenity of the places we live in, our environment, and maintaining our way of life.

The World Health Organisation (WHO) considers clean air to be a basic requirement of human health and well being. It recognises outdoor (ambient) air pollution as a major environmental health problem affecting everyone in developed and developing countries alike. In 2012, 3.7 million deaths worldwide were attributable to ambient air pollution, with the greatest number occurring in the Western Pacific (1.67 million deaths) and South East Asian (936 000 deaths) regions<sup>1</sup>.

The respiratory and cardiovascular effects of air pollution have long been known and range from airway irritation to premature death. Sensitive individuals (children, the elderly and those with existing respiratory and/or cardiovascular disease) are particularly susceptible to the effects of air pollution. Both short-term and long-term exposure to air pollution can cause health problems<sup>2</sup>.

Recent scientific evidence has identified additional health effects of air pollution. In 2012, the International Agency for Research on Cancer reclassified diesel exhaust emissions as carcinogenic<sup>3</sup>. In 2013, it identified outdoor air pollution and particulate matter (PM) - present in both outdoor air pollution and diesel exhaust - as causes of lung cancer<sup>4</sup>.

\_

<sup>&</sup>lt;sup>1</sup> World Health Organization (2014) Burden of disease from ambient air pollution for 2012. Available at: http://www.who.int/phe/health\_topics/outdoorair/databases/AAP\_BoD\_results\_March2014.pdf

<sup>&</sup>lt;sup>2</sup> World Health Organization (2013) Review of evidence on health aspects of air pollution – REVIHAAP project. Technical Report. Available at:

http://www.euro.who.int/\_\_data/assets/pdf\_file/0004/193108/REVIHAAP-Final-technical-report-final-version.pdf

<sup>&</sup>lt;sup>3</sup> International Agency for Research on Cancer (2012) Diesel engine exhaust carcinogenic. Press Release No. 213, 12 June 2012. Available at: http://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213 E.pdf

<sup>&</sup>lt;sup>4</sup> International Agency for Research on Cancer (2013) Outdoor air pollution a leading environmental cause of cancer deaths. Press Release No. 221, 17 October 2013. Available at: http://www.iarc.fr/en/media-centre/pr/2013/pdfs/pr221\_E.pdf

Furthermore, for PM, there is no evidence of a threshold below which no adverse health effects occur<sup>5</sup>, meaning that the impacts from exposure may be seen even when current air quality standards are being met. While Australia's overall levels of PM are low compared with many countries in our region, PM pollution from vehicles, industrial facilities, and heating sources is of concern to some communities.

In addition to health impacts, air pollution may have significant impacts on the environment, either directly or indirectly. Impacts may include damage to crops and other vegetation through impaired growth (for example, through the direct deposition and accumulation of particles on leaf surfaces: reduced photosynthesis); acidification of soils and freshwater, which depletes essential nutrients that support flora and fauna; eutrophication which depletes oxygen levels and can lead to a change in species diversity; and chronic health problems in wildlife from heavy metals and organic pollutants<sup>6,7</sup>. Research has identified that secondary PM<sub>2,5</sub><sup>8</sup> makes an important contribution to sulfur and nitrogen deposition, leading to the acidification and eutrophication of natural ecosystems<sup>9</sup>.

Though seemingly subtle and isolated, such impacts on ecosystems may, in turn, have consequences for human health due to our reliance on their many services, including food.

### Air quality management

### In Australia

The sources of air pollution in Australia range from man-made (e.g. emissions from vehicles, industrial facilities, heating sources) to necessary land management practices (e.g. fire hazard reduction burns, agriculture) and natural sources (e.g. bushfires, dust storms). Air quality issues may be limited to a particular region or may be more widespread and experienced across one or more jurisdictions. This may be due to sharing common air pollutant sources (e.g. wood heater emissions during winter in some jurisdictions) or to the trans-boundary movement of air pollutants due to weather, geography and topography influences (e.g. movement of bushfire smoke).

Given the varied sources of air pollution and its movement, exposure to ambient air pollution is largely beyond the control of individuals. Air quality management in Australia has, to date, therefore largely required action by government. Variations in the nature of air quality issues faced across Australia will often lead to tailored responses from governments and across different sectors. This is consistent with the primary responsibility that State, Territory and local governments have regarding environmental management, including air pollution issues.

fine-particle-matter-20121220.pdf

<sup>&</sup>lt;sup>5</sup> World Health Organization (2013) Review of evidence on health aspects of air pollution – REVIHAAP project. Technical Report. Available at:

http://www.euro.who.int/\_\_data/assets/pdf\_file/0004/193108/REVIHAAP-Final-technical-report-final-

<sup>&</sup>lt;sup>6</sup> Lovett GM and Tear TH (2008) Threats from above: air pollution impacts on ecosystems and biological diversity in the eastern United States. The Nature Conservancy and the Cary Institute of Ecosystem Studies. Available at:

http://www.caryinstitute.org/sites/default/files/public/reprints/Threats\_From\_Above.pdf

Marion J. Martin, et al. (2000) Can the stomatal changes caused by acute ozone exposure be predicted by changes occurring in the mesophyll? A simplification for models of vegetation response to the global increase in tropospheric elevated ozone episodes. Functional Plant Biology 27 (3): 211-219. <sup>8</sup> PM<sub>2.5</sub> refers to particles with an aerodynamic diameter of 2.5 micrometres or less. Some particles are

emitted directly: others are formed in the atmosphere when other pollutants react (secondary PM<sub>2.5</sub>). Air Quality Expert Group (2012) Fine particulate matter (PM25) in the United Kingdom. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/69635/pb13837-ageg-

However, governments have also recognised that there are circumstances where collaboration across jurisdictions can lead to better outcomes. The Inter-Governmental Agreement on the Environment 1992<sup>10</sup> (IGAE) was made between the Commonwealth, State and Territory governments and representatives of Local Government in Australia, to provide a basis for cooperative approaches to the management of environmental issues, including air quality. Its intention was to deliver better environmental protection, greater certainty for government and business decision-making and ensure clarity of the roles of respective governments. An outcome of the IGAE was the establishment of the *National Environment Protection Council Act 1994* which allowed for the making of National Environment Protection Measures (NEPMs), as agreed to by the National Environment Protection Council (NEPC)<sup>11</sup>. NEPMs are a special set of national objectives designed to assist in protecting or managing particular aspects of the environment.

The key existing air quality management framework in Australia was established in 1998 under the National Environment Protection (Ambient Air Quality) Measure (Ambient Air Quality NEPM)<sup>12</sup>. The Ambient Air Quality NEPM established a common national goal to aim for to best protect human health and well being from the adverse impacts of air pollution.

It sets national ambient air quality standards for six common air pollutants (carbon monoxide, sulfur dioxide, nitrogen dioxide, photochemical oxidants (as ozone), particles (as  $PM_{10}^{13}$ ) and lead), as well as mandatory monitoring and reporting requirements against which Australia's ambient air quality can be assessed. Advisory reporting standards for  $PM_{2.5}$  are also currently listed in the Ambient Air Quality NEPM.

A process to strengthen the particle standards in the Ambient Air Quality NEPM and consider population exposure reduction to particles is currently underway<sup>14</sup>, in light of recent health evidence about the health impacts of particles. Work to consider strengthening the standards for other pollutants, including sulfur dioxide, nitrogen dioxide and ozone, has recently commenced.

State and Territory governments implement legislation, statutory instruments, policies and programmes in their own jurisdictions in order to meet the Ambient Air Quality NEPM standards.

The Commonwealth has also taken a lead role in specific areas to address air quality issues. For example, the Commonwealth contributes to air quality management through the *Fuel Quality Standards Act 2000* (sets fuel quality standards) and the *Motor Vehicle Standards Act 1989* (sets road vehicle emission standards for new vehicles) and through the implementation of measures to meet Australia's obligations under international conventions (for example, shipping and aviation). However, national approaches to managing air quality may not necessarily require the Commonwealth as lead.

http://www.environment.gov.au/about-us/esd/publications/intergovernmental-agreement

6

<sup>&</sup>lt;sup>10</sup> Intergovernmental Agreement on the Environment (1992) Available at:

<sup>&</sup>lt;sup>11</sup> The National Environment Protection Council comprises ministers from the Commonwealth and States and Territory governments. A NEPM cannot be made, varied or revoked unilaterally.

<sup>&</sup>lt;sup>12</sup> National Environment Protection (Ambient Air Quality) Measure. Available at: http://www.comlaw.gov.au/Details/C2004H03935

<sup>&</sup>lt;sup>13</sup> PM<sub>10</sub> refers to particles with an aerodynamic diameter of 10 micrometres or less.

<sup>&</sup>lt;sup>14</sup> Proposed variation to the National Environment Protection (Ambient Air Quality) Measure in relation to the standards for particles. National Environment Protection Council. http://www.environment.gov.au/protection/nepc/nepms/ambient-air-quality/variation-2014

### How is Australia tracking?

Strategies to manage air pollution in Australia to date have contributed to the overall success in reducing the levels of carbon monoxide, nitrogen dioxide, sulfur dioxide and lead in our air. However, levels of other pollutants (ground-level ozone and PM) still frequently exceed current air quality standards and continue to cause health concerns in some regional and urban areas <sup>15</sup>.

Concerns about our future air quality are also increasing, with many recent publications highlighting the impacts of air pollution in Australia. Some examples of these follow.

- The health costs of air pollution in Australia have been estimated to be in the order of \$11.1 billion to \$24.3 billion annually, solely as a result of mortality<sup>16,17</sup>.
- A study on the health impacts resulting from air pollution in Sydney, Melbourne, Brisbane and Perth estimated that short-term and long-term exposure to above-background levels of air pollutants for the 2006 to 2010 period was linked to a variety of health impacts including hospital emergency department attendances for childhood asthma, respiratory and cardiovascular hospital admissions including pneumonia and acute bronchitis, and mortality<sup>18,19</sup>.

### For example:

- Approximately 1130 (2.2 per cent) of respiratory hospital admissions in 0 to 14 year olds were attributable to short-term PM<sub>10</sub> exposures. Annual mortality attributable to long-term PM<sub>2.5</sub> exposures was equivalent to approximately 1590 (2.2 per cent) deaths at typical ages.
- Short-term exposures to ozone and nitrogen dioxide were estimated to be attributable to approximately 3.4 per cent and 2.8 per cent, respectively, of annual mortality across the four cities.
- Averaged over the four cities, an estimated 2.3 per cent of respiratory hospital admissions (65+ year age group) were attributable to short-term daily one-hour exposures to sulfur dioxide.

<sup>16</sup> Begg S, Vos T, Barker B, Stevenson C, Stanley L and Lopez A (2007) The burden of disease and injury in Australia 2003. Cat. no. PHE 82. Australian Institute of Health and Welfare, Canberra. Available at: http://www.aihw.gov.au/publication-detail/?id=6442467990.

http://www.safeworkaustralia.gov.au/sites/swa/about/publications/Documents/330/TheHealthOfNations\_Value StatisticalLife 2008 PDF.pdf

<sup>&</sup>lt;sup>15</sup> Department of Sustainability, Environment, Water, Population and Communities (2010) State of the Air in Australia: 1999-2008. Australian Government, Canberra. Available at: http://www.environment.gov.au/resource/state-air-australia

<sup>&</sup>lt;sup>17</sup> Access Economics (2008) The Health of Nations: The Value of a Statistical Life. Report for the Office of the Australian Safety and Compensation Council. Available at:

<sup>&</sup>lt;sup>18</sup> Summary for policy makers of the Health Risk Assessment on air pollution in Australia (2013). National Environment Protection Council. Available at:

http://www.environment.gov.au/system/files/pages/dfe7ed5d-1eaf-4ff2-bfe7-

dbb7ebaf21a9/files/summary-policy-makers-hra-air-pollution-australia.pdf

<sup>&</sup>lt;sup>19</sup> Note: due to a degree of overlapping health effects between pollutants, cases attributable to different pollutants cannot simply be added together to capture the total health burden. Reference 18 refers.

 Road transport is an important source of PM: the health costs of PM<sub>10</sub> emissions from road transport in Australia have been estimated to be \$2.7 billion per year<sup>20</sup>.

Recent events, such as the Hazelwood coal mine fire near Morwell in Victoria's Latrobe Valley, have further highlighted the impact and extent of community concern relating to air pollution. Furthermore there are specific areas of concern to local communities including sulfur dioxide emissions from the Anglesea power station in Victoria and emissions of PM and other pollutants in the Hunter Valley in New South Wales.

There are multiple drivers that run the risk of accelerating air pollution in Australia, including population growth, urbanisation and increasing demands for transportation and energy consumption. For example:

- Australia's estimated resident population is projected to grow from 22.7 million people (as at 30 June 2012) to between 36.8 and 48.3 million people by 2061, and to between 42.4 and 70.1 million people by 2101<sup>21</sup>.
- All capital cities except Darwin are projected to experience higher percentage growth than their respective state or territory balances, resulting in a further concentration of Australia's population within the capital cities<sup>21</sup>, areas where people are more likely to be exposed to air pollution. In 2012, 66 per cent of Australians lived in a capital city. By 2061, this proportion is projected to increase to 74 per cent<sup>21</sup>. By 2030, the over 65s population is expected to have grown by three times faster than any other age group<sup>21,22</sup>.
- Over 70 per cent of all domestic travel occurs via roads. By 2030, road and rail freight are
  expected to grow by 80 and 90 per cent, respectively. National public transport is projected
  to grow by 30 per cent to 2030. The Australian transport sector is expected to rely heavily
  on oil over the next 20 years<sup>23</sup>.

Such challenges could erode the air quality improvements achieved to date through existing air quality management strategies, and present further challenges to our health and well being and that of future generations.

### **Overseas**

Compared to many other countries, Australia's current air quality is very good. However, given the evidence at hand and the challenges impacting our air quality, it is prudent to act now or risk falling behind our international peers.

<sup>&</sup>lt;sup>20</sup> Bureau of Transport and Regional Economics (2005) Health Impacts of Transport Emissions in Australia: Economic Costs. BTRE Working Paper 63, Bureau of Transport and Regional Economics, Canberra. Available at: http://www.bitre.gov.au/publications/2005/files/wp\_063.pdf

<sup>&</sup>lt;sup>21</sup> Australian Bureau of Statistics 3222.0 - Population Projections, Australia, 2012 (base) to 2101. Available at:

http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features32012%20(base)%20to%20210

<sup>1 22</sup> Bureau of Infrastructure, Transport and Regional Economics (BITRE) (2014) Trends: Infrastructure and Transport to 2030. BITRE, Australian Government, Canberra. Available at: http://www.infrastructure.gov.au/infrastructure/publications/files/Trends\_Infrastructure\_and\_Transport\_to 2030.pdf

<sup>&</sup>lt;sup>23</sup> Department of Infrastructure and Regional Development (2014) Transport Security Outlook to 2025. Australian Government, Canberra. Available at:

http://www.infrastructure.gov.au/transport/security/pdf/Transport\_Security\_Outlook\_to\_2025.pdf

Countries around the world are actively taking steps to address the increasing concerns of air pollution. Strategies include tightening emission standards for key air pollutants, including through fuel quality and vehicle emission standards, setting emission reduction targets to be attained in specific regions, establishing frameworks to reduce exposure to air pollution across a population, research and development (e.g. monitoring data), and working with sectors to reduce emissions. Examples of initiatives overseas are provided in Figure 1.

Figure 1: Overseas Air Quality Management Initiatives

### Canada

Canada-wide Standards for PM and Ozone

Air Quality Management System

- Ambient air quality standards
- Base-level industrial emission requirements
- Air quality management via local air zones and regional airsheds

### **European Union (EU)**

Legislation establishing health-based standard and objectives for air pollutants

- 2008 ambient air quality directive
- Air Quality Framework Directive

A new Clean Air Programme for Europe

- Ensuring existing targets are met and new air quality objectives leading up to 2030
- National Emission Ceilings Directive with stricter national emission ceilings
- A new Directive to reduce pollution from medium-sized combustion installations

### China

12th Five-Year Plan on Air Pollution Prevention Control in Key Regions

- Ambient concentration targets
- Emission reduction targets in key regions compared to national targets
- City air quality attainment plan requirements
- Comprehensive measures to tackle air pollution

# **United States of**

- Protecting public health and
- Regulating emissions of hazardous air pollutants

Air, Climate and Energy Research Program to identify and management of air quality

**Hong Kong** 

13<sup>th</sup> Five-Year Clean Air Plan

- Tighter air quality objectives (standards)
- Population exposure management
- Measures targeting emission sources; vehicles, shipping, power plants, non-road mobile machinery
- Community and regional collaboration

## America (USA)

National Ambient Air Quality Standards under the Clean Air Act 1977

welfare

emerging trends in air pollution

### **United Kingdom (UK)**

National Air Quality Strategy

- Standards, objectives and measures for improving ambient air quality
- Framework for fine particle exposure reduction to improve public health
- Objectives for ecosystem sustainability

### **Singapore**

- National ambient air quality targets to be achieved by 2020 and into the future
- Abatement measures targetting fuel quality, vehicle emissions and transboundary movement of haze

### **New Zealand**

National Environmental Standards for Air Quality

- Ambient air quality standards
- Standards for banning activities that discharge significant quantities of air toxics
- Design standard for wood burners in urban areas

National Air Quality Compliance Strategy to meet PM<sub>10</sub>

### WHY A NATIONAL CLEAN AIR AGREEMENT?

In recognising the challenges to Australia's air quality, Environment Ministers from the Commonwealth and all State and Territory governments announced on 29 April 2014 that they would work towards the development of a National Clean Air Agreement to chart a course to cleaner air in the coming years<sup>24</sup>.

The development of a National Clean Air Agreement is a timely opportunity to recognise and build on existing successes in air quality management to date<sup>25</sup> and to ensure a continued and strengthened cooperative approach to air quality management across levels of government.

This could be achieved by developing a basis on which to set priorities for action now and in the future, as required. An agreement also has the potential to bring existing work streams together and deliver deeper collaborative action across governments, and assist the development of practical, effective and efficient policy settings to ensure Australia is well positioned to respond to emerging air quality issues.

It is recognised that governments, business and the community will need to be active. Government strategies to manage air quality could be complemented by exploring opportunities for partnerships with industry and non-government organisations in working towards a common goal under the Agreement. Opportunities for ensuring up-to-date, accessible and reliable air quality information to inform responses and to strengthen knowledge, education and awareness could also be sought.

As the first stage in developing an agreement, the Commonwealth and State and Territory governments have worked together to formulate the following basis on which it is proposed to develop the Agreement.

It is proposed that the Agreement be comprised of two key components (Figure 2):

- an overarching facilitating framework to support the identification of priorities for action
- an agreed work plan, for periodic review, that details specific practical actions and identifies roles and responsibilities for implementing those actions in order to address agreed priorities.

\_

<sup>&</sup>lt;sup>24</sup> Agreed Statement – Environment Ministers meeting, 29 April 2014. Available at: http://www.environment.gov.au/minister/hunt/2014/mr20140429.html

The development of the National Clean Air Agreement will build on previous initiatives overseen by the Council of Australian Governments' former Standing Council on the Environment and Water to tackle air pollution in Australia.

**National Clean Air Agreement Facilitating Framework** Enabling governments to work together to identify priorities and areas for action now and into the future Purpose and Scope **Principles** Goal Work Plan Identifying actions governments have committed to pursue in order to address priority issues Practical Clear roles and Areas for further Periodic measures assessment responsibilities Review

Figure 2: Facilitating Framework and Work Plan under the Agreement

### **FACILITATING FRAMEWORK**

An overarching framework would facilitate the identification of priority issues for action, and guide development of efficient and effective responses to these priorities, having regard to the overarching goal, purpose, scope and principles underpinning the Agreement. The proposed elements of this framework are discussed below.

### Goal

The proposed goal of the National Clean Air Agreement is:

The sustained reduction in air pollution and exposure for all Australians, with associated health, environmental and economic benefits.

This is intended to reflect a desire, on behalf of all Australians and future generations, to enjoy the benefits of clean air, attained through a continued management of, and reduction in, air pollution and exposure while facing challenges to our air quality. In addition to health benefits, it is expected that a continued improvement in air quality may offer environmental and economic benefits (e.g. health cost savings).

### **Purpose**

The National Clean Air Agreement could achieve its proposed goal and lay the groundwork for sustained air quality improvements for Australia in two ways.

1. Providing a facilitating framework to identify specific air quality issues where concentrated effort is needed and will afford health, environmental and economic benefits.

Maintaining good air quality into the future will require a dynamic and flexible approach, given the multiple challenges and range of air quality issues experienced, and likely to be experienced, in Australia.

The Agreement would enable the Commonwealth and State and Territory Governments to maintain responsiveness to Australia's air quality challenges over time by serving as a framework for identifying the most important issues and developing practical, cost-effective and outcome-focussed solutions to these priorities.

2. Formalising cooperative management of air quality at the national, state and local levels to help develop effective and efficient policy settings to ensure Australia can respond to current and emerging air quality priorities.

As indicated previously, some regions in Australia are faced with unique challenges to air quality, requiring locally-tailored responses, while other actions to tackle air pollution may be best coordinated on a larger scale, whether at a State or Territory level, or nationally.

The Agreement would provide the flexibility to facilitate targeted cooperation between jurisdictions where it is needed to provide an effective and efficient policy response (whether a nation-wide focus or limited to a few jurisdictions), but otherwise enable State, Territory and local governments to act independently in accordance with local needs and priorities.

Consistent with the guiding principles outlined below, actions pursued under the Agreement would identify the most appropriate level of government to take the lead, with appropriate burden-sharing for the development and implementation of those actions. Roles and responsibilities will also be informed by the outcomes of the White Paper on the Reform of the Federation, which is due to be publicly released in 2016<sup>26</sup>. The Agreement could also enable identification of air quality issues that would be more appropriately managed by organisations other than government (e.g. non-government organisations, industry), or with whom partnerships could be formed to tackle air pollution more effectively.

### **Principles**

A set of proposed principles have been developed to support prioritisation and decision-making under the Agreement. These principles have been developed in consideration of the Agreement's overarching goal and purpose and best practice regulation and governance.

<sup>&</sup>lt;sup>26</sup> White Paper on Reform of the Federation (2014) Available at: https://www.pm.gov.au/media/2014-06-28/white-paper-reform-federation.

The proposed principles are:

- 1. The Agreement facilitates action to address current and emerging air quality issues.
- Responses to air quality issues under the Agreement maintain best practice approaches, consider the latest evidence available and identify the most appropriate level of government to take the lead.
- 3. Policy decisions under the Agreement are relevant, timely, consider available resources, allow for effective consultation and adequate lead-in times, and minimise disruptions that may result from policy changes.
- 4. Air quality management measures delivered are efficient and effective, and avoid creating cumulative or overlapping regulatory burdens.
- 5. Overall community benefits, taking account of social, environmental and economic outcomes for measures, whether regulatory or non-regulatory, are considered.
- 6. Activities under the Agreement are consistent with Australia's international obligations.
- 7. The Agreement and endorsed work programme is periodically reviewed to maintain a focus on achievement of desired outcomes and to ensure its continuing relevance.

### Reducing regulatory burden

In the context of identifying priorities for future action, it is important that existing measures remain applicable. It is therefore proposed that review opportunities will be built into the Agreement. For example, the NEPC's response to the third review of the NEPC Act noted that consideration will be given to determining if the Air Toxics and Diesel Vehicles NEPMs are still required to meet future needs or if revocation should be considered<sup>27</sup>. In developing the Agreement, consideration will be given to these two NEPMs.

In designing future measures to manage air quality under the Agreement, a balance between the obligation to protect the community or public interest while not imposing unnecessary costs will need to be maintained. The Australian Government has made a commitment to regulatory reform with the aims of reducing the burden of regulation, boosting productivity, increasing competitiveness, reducing unnecessary regulation and lifting regulatory performance<sup>28</sup>.

In developing the Agreement, it is intended that opportunities at all levels of government will be sought to identify efficient and effective methods to implement actions. Regulation is a last resort, to be considered only where genuinely required. Opportunities may also include streamlining, revising, revoking or reviewing existing air quality management strategies.

### Scope

\_

Environment Ministers consider that governments, business and the community will need to be active to ensure a clean air future. The proposed scope of the Agreement is therefore encompassing of a wide range of measures to strengthen management of air quality.

<sup>&</sup>lt;sup>27</sup> Report of the review of the National Environment Protection Council Acts (Commonwealth, State and Territory) (2013). National Environment Protection Council. Available at: http://www.scew.gov.au/system/files/resources/8e833bc5-1429-5734-d96f-8ace733469d6/files/nepc-act-nepc-act-review-200208 0.pdf

The Australian Government Guide to Regulation (2014) Available at: http://www.cuttingredtape.gov.au/handbook/australian-government-guide-regulation

The scope of the Agreement can be divided into four key streams or themes for activity, outlined in Figure 3.

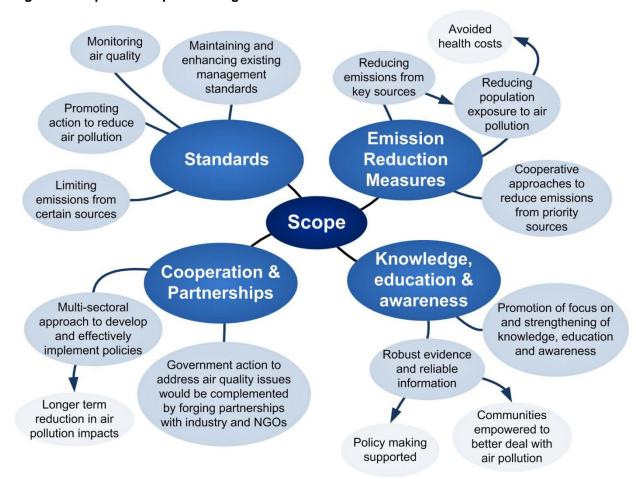


Figure 3: Proposed Scope of the Agreement

### PUTTING THE FRAMEWORK INTO PRACTICE

The above elements of the Agreement provide the framework through which air quality issues can be evaluated as part of a rigorous evidence-based process and, if appropriate, prioritised for action under the Agreement. In this way, as new and emerging air quality issues are raised with governments, the framework elements of the Agreement will guide their consideration for inclusion in the work plan under the Agreement (discussed further below) and identify the most appropriate level of government to lead the response.

In practice, governments would achieve this by drawing on information and evidence such as inventory and modelling data, and other research and studies to better understand the nature, scale, and impact of the problem; identifying the extent to which measures are already in place to manage the issue raised and; where necessary, examine the efficiency and efficacy of potential new measures, having regard to relative priorities, available resources and roles and responsibilities, in line with the principles underpinning the Agreement (Figure 4).

Appropriate coordination and governance arrangements are being established to support the finalisation of the Agreement and to facilitate proposed prioritisation and policy development mechanisms which are integral to the effectiveness of the Agreement over the longer-term.

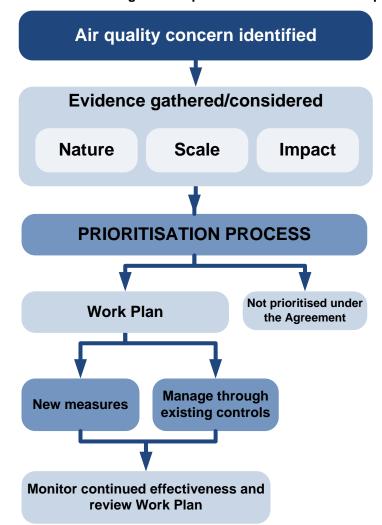


Figure 4: Flowchart of the Agreement prioritisation and Work Plan processes

### **WORK PLAN**

It is intended that the framework would be used now and into the future to develop an ongoing rolling programme of work to respond to air quality priorities.

It is proposed that at the outset, the Agreement would include an initial set of specified priorities set against a two year work plan for delivery. Such a timeframe would allow for necessary processes, including consultation and regulatory impact analysis, to be appropriately conducted. The work plan would be reviewed periodically to maintain accountability and continued relevance.

In building on existing activities and considering the proposed scope of the Agreement, governments will need to seek feedback from the community on the development of measures to address priority issues, for example as part of reviewing the ambient air quality NEPM towards strengthening standards for emissions of sulfur dioxide and other pollutants.

An initial work plan could include the activities outlined in Table 1.

Table 1: Activities which may form part of the initial work plan under the Agreement

Current	Activity	Under Development	Potential new activities
	Streams	Decisions expected 2015–2016	
Key national standards:  National Environment Protection Measures  Fuel quality standards  Vehicle emission standards	National standards	Ambient Air Quality NEPM variation – strengthen particle reporting standards.  Ambient Air Quality NEPM - review other pollutant standards (sulfur dioxide, nitrogen dioxide, ozone) with a view towards strengthening the standards.	Review of fuel quality standards legislation. Review need for Air Toxics and Diesel Vehicles NEPMs.
	Emission reduction measures	Finalise decision regulation impact statements (DRIS) examining options to reduce emissions from:  • non-road spark ignition engines and equipment (NRSIEE)  • wood heaters	Implement outcomes of wood heaters and NRSIEE DRIS processes.  Scope opportunities to better integrate air quality considerations in new infrastructure developments and upgrades e.g. shipping and ports.
		Jurisdictional initiatives, e.g. action on non-road diesel engines and shipping emissions (NSW).	Other potential emission reduction measures identified as a priority to reduce population exposure.
	Cooperation and partnership opportunities		Scope opportunities for business/community partnerships e.g. Clean Air Champions.  Exchanging information/experiences in implementing air quality management/monitoring tools across jurisdictions.
	Knowledge, education and awareness	State and Territory initiatives.  Support research to identify and address air quality data gaps, trends, management options:  Commonwealth has committed \$8.88 million over six years for the establishment of a Clean Air and Urban Landscapes Hub under the National Environmental Science Programme (NESP).	Improve access to reliable air quality information for researchers, policy makers and the community:  • the Bureau of Meteorology is working towards developing a National Air Quality Data Service.  Periodic state of the air reporting.
	Reducing the regulatory burden	Review/identify deregulatory benefits and approaches – streamline, revise, revoke or review.  Identify efficient and effective methods to implement actions where regulation is genuinely required (not the default option).	
	Periodic review	Agreement and endorsed work programme is periodically reviewed to maintain a focus on achievement of desired outcomes and to ensure its continuing relevance.	

### **NEXT STEPS**

Your feedback is now being sought to help inform the development of the Agreement. Details on how to provide a submission are available at:

www.environment.gov.au/national-clean-air-agreement

Please note that submissions close on 17 April 2015.

### **QUESTIONS**

The following questions have been developed for consideration in preparing your response. Please feel welcome to provide additional feedback relevant to assisting in the development of the National Clean Air Agreement.

- Do you agree with the proposed goal, purpose, principles and scope as a basis for the National Clean Air Agreement? If not, please explain and provide alternatives if appropriate.
- 2. What, in your view, do you consider as a high priority air quality issue(s) that could be considered under the National Clean Air Agreement? Please provide evidence.
- 3. Can you provide any suggestions for cooperation/partnerships and/or knowledge, education and awareness for the purpose of assisting governments to manage air quality?