Pre-Budget Submission

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Introduction

Doctors for the Environment Australia (DEA) is an independent, non-government organization of medical doctors and students in all Australian states and territories. Our members work across all specialties in community, hospital, and private practices. We work to prevent and address the health risks - local, national, and global - caused by climate change and damage to our natural environment. We are a public health voice in the sphere of environmental health with a primary focus on the health harms from pollution, environmental degradation, and climate change.

DEA welcomes the opportunity to provide a Pre-Budget 2021 Submission to the Australian government at a time when human health and the environment are facing massive challenges which were unforeseen several decades ago.

The current system of economic production is generating physical changes in the climate that negatively affect our health and our environment, putting at risk economic growth and our quality of life. Greenhouse gas emissions contributing to climate change, biodiversity loss and pollution threaten to undermine the last 50 years of improvements in health and living standards. These, together with progressive population expansion and increasing resource consumption, are placing the very future of healthy, vibrant, productive communities at risk.

The costs of inaction on climate change outweigh mitigation costs.

Policy choices that fail to reduce climate change impacts or inadequately address mitigation measures are far from costless to our economy. Inaction on climate change does not result in uninterrupted economic growth, but instead results in significant economic losses. Not only is it increasingly clear that the costs of climate change and environmental damage are rising each year, but the costs associated with reducing the risks are also rising with each year of delayed or inadequate policy action.¹

The World Health Organisation has described climate change as the defining issue for public health in the 21st Century and warns that "the severity of impacts of climate change on health are increasingly clear". Urgent action is needed to reduce emissions to keep global warming at less than 2°C. If we fail to do this, tipping points are likely to be reached, after which further limits on global warming and climate change will be exceedingly difficult to manage, water and food security will be at risk and some areas of Australia will likely be uninhabitable.

Last year numerous major medical organisations in Australia, and many others around the world declared a *Climate Health Emergency* and called on governments for strong and effective action to reduce emissions and for recognition, preparation and management of the critical public health challenges ahead.

Measures to protect future health must be considered alongside the ongoing acceptance of medical and scientific expertise which leads the response to the COVID19 pandemic. The level of scientific expertise in the environmental fields of climate change, biodiversity loss and pollution are no less accurate, investigated, or scrutinised, and is therefore no less worthy of direction by experts. DEA urges the government to adhere to the scientific and

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¹ https://www2.deloitte.com/au/en/pages/economics/articles/new-choice-climate-growth.html

medical knowledge of environmental experts in its adoption of measures in the forthcoming 2021 Budget.

Overriding recommendations

The Australian government provides funding for:

- 1. recognition of the impending health crisis imposed by climate change and the declaration of a Climate Health Emergency
- 2. development of a *national Climate Change and Health strategy* that would enhance the delivery of information on health impacts to the general public
- 3. preservation of biodiversity and its elevation to a key role in maintaining biological and human health by upgrading the Environmental Protection Act
- 4. instigation of active measures to reduce air pollution, particularly from the combustion of fossil fuels including diesel
- 5. transition of the healthcare sector to environmentally sustainable practices throughout with a net zero emissions target by 2040 for the sector, and the establishment of a National Sustainable Healthcare Unit.

Economic advantages of measures to protect health.

DEA and other Australian health organisations have long advocated for a health framework in planning, adaptation and mitigation of climate change risks on human health. Already we have experienced a huge toll on physical and mental health through extreme climate-induced events in Australia. The cost of intangible losses from the Black Saturday bushfires, which includes impacts on health is estimated to be over \$3.9 billion, with a further \$4.4 billion in insured losses which include the tragic loss of lives. Health costs alone from the 2019-20 summer bushfires were \$2 billion and other costs are yet to be determined but are likely to exceed those of Black Saturday. The lifetime cost of mental health issues resulting from the 2010-11 Brisbane floods is estimated at around \$5.9 billion.² These health and economic tolls are a national issue for which there needs to be national acknowledgement of the threats and a clear and ambitious plan for their minimisation.

Neither costs incurred in climate mitigation nor costs resulting from climate change can be assessed accurately, and analyses of the costs of climate-sensitive health outcomes are urgently needed to inform public policy. In one 2016 estimate, Australia's Productivity Commission found that between 2009–10 and 2012–13, \$11.0 billion was spent on disaster recovery, while only \$225 million was spent on climate mitigation.³ Many economic institutions have assessed that climate impact costs will be far greater than those of mitigation, and no credible assessment has yet concluded otherwise.

DEA recommends the following components of environmental care be strengthened.

² Deloitte Economics. The Economic cost of the social impact of natural disasters. Australian Business Roundtable March 2016 http://australianbusinessroundtable.com.au/our-research

³ Productivity Commission (2015), Natural Disaster Funding, Australian federal government Public Inquiry

1. Emissions reduction and renewable energy

Recommendations:

- 6. The Australian Government, through legislation, support the policies of all Australian states, most of its major cities and dozens of its local councils in committing to net-zero greenhouse gas emissions by 2050.
- 7. Renewable energy uptake programs be strengthened nationally and coordinated through AEMO, AEMC and the ESB with aggressive measures to improve the NEM network.
- 8. Investment in the electricity grid with appropriate transmission upgrades, batteries and other technologies to enable 100% renewable electricity and decarbonisation of the economy.
- 9. Promotion and incentives for electric vehicles.

It is incumbent on the Australian government to fully honour its commitment to the Paris Agreement, which was not only a commitment to its original (and contested) National Determined Contribution, but was a pledge to adopt increasingly ambitious targets with time in an effort to keep global mean temperature rise to 2°C. Although many reports, scientists and policymakers continue to discuss rises of 2°C, the Intergovernmental Panel on Climate Change (IPCC) reported in 2018 that even warming of more than 1.5°C would be disastrous, and to remain under this lower limit required deep emissions cuts leading to net-zero emissions by 2050.

Multiple sectors contribute to greenhouse gas (GHG) emissions. While energy production contributes the most, other sectors such as transport (land, air and maritime), industry, agriculture and forestry, and energy efficiency in the built environment all contribute significantly. The health sector alone contributes 7% of Australia's emissions. For all these sectors to reduce emissions adequately, clear guidance and development of policies and incentives from federal government are necessary. The need for action is too vital to be left in the hands of the market which tends to be reactive rather than proactive.

Targets are now accepted internationally as a catalyst to achieving emissions reductions. A national emissions reduction target (ERT) or national coordinating effort is necessary to bring together government, business, trade unions, civil society, and communities to transform employment and provide certainty for investment. Planning also has the potential to deliver more equitable and prosperous growth.

Legislation for a national target of net-zero emissions by 2050 is clearly required because Australia has failed to reduce emissions adequately since pledges to the IPCC were first accepted in 1997.

Australia's emissions reduction objective must include all GHGs. As well as carbon dioxide (CO₂), GHGs include methane, nitrous oxide (N₂O), certain refrigerants and sulphur hexafluoride. The strength of methane (natural gas) as a GHG is not generally appreciated. Methane now contributes nearly 20% of GHG activity and its influence is increasing. Although its atmospheric life of about 20 years is relatively short compared with CO_{2} , it is longer than the current critical timeline for emissions reduction. Nitrous oxide, a powerful

long-lived greenhouse gas mainly from nitrogenous fertilizers, is also exerting an increasing greenhouse effect.

The cost of renewable energy from solar and wind together with battery storage is now cheaper than new coal- and gas-fired power so there is no economic advantage in contemplating the extension of fossil-fuel powered electricity generation. However, more urgency needs to be directed to improving grid access and distribution.

2. National Climate and Health Strategy

Recommendations:

- 10. Develop a National Climate and Health strategy.
- 11. To guarantee specific climate action targets and health solutions through federal legislation.
- 12. To support and co-ordinate the ambitious climate mitigation aims of Australia's states and territories.
- 13. To increase Australia's foreign aid especially to our Pacific and South-east Asian neighbours.

Meaningful action on climate change and health requires sophisticated planning by all sectors of society and co-ordination at multiple levels.

Any discussion on health and natural disasters must acknowledge that climate change is an underlying driver of extreme weather and is a national economic, health and security threat which merits statutory action. Observations, reconstructions and climate modelling paint a consistent picture of ongoing, long-term climate change interacting with underlying natural variability. Associated changes in weather and climate extremes—such as extreme heat, heavy rainfall and coastal inundation, fire weather and drought—have a large impact on the health and wellbeing of our communities and ecosystem.⁴ Australia needs a comprehensive national assessment of risks to human health from climate change, such as those of the United Kingdom and the United States, and national spending on climate change health research, which has so far been miniscule. An evidence base is essential to drive a national Climate Change and Health strategy to protect the health of Australians. Unless action is taken and results achieved in this next decade, the next generation may well be faced with almost insurmountable difficulties.

Progression of global surface and ocean warming, increasing ocean acidity, sea-level rise, weather extremes, biodiversity loss and increasing extinctions mandate immediate action. The current federal government's aim of reaching net zero sometime in the second half of this century does not recognize the degree of urgency required. This is a failure to acknowledge the scientific advice given by experts. Every year that climate action is delayed increases the cost of effective solutions. Had serious climate action begun in 2010, the cuts required to meet the emissions levels for 2°C mean temperature increase would have been around 2% per year on average, up to 2030. Instead, emissions increased and the required cuts from 2020 are close to 3% for a 2°C increase, and more than 7% per year on average

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⁴ http://www.bom.gov.au/state-of-the-climate/

for a 1.5°C increase. In 2010, the world thought it had 30 years to halve global emissions of greenhouse gases. In 2020, we know that this must happen in ten years.

States and territories have developed ambitious climate mitigation aims over the last 5 years, with several embedding these aims in legislation. States have proceeded despite expressed opposition by the federal government. With states assuming responsibility for climate action regardless of political orientation, how much easier it is for the federal government to weave these actions into a coherent whole for the benefit of all. Federal legislation to commit to net-zero emissions by 2050 would affirm responsibility for Australia's future.

To assist our Pacific neighbours in combatting effects of climate change, Australia's overseas development assistance should be restored to 0.5% of our Gross National Income. It is currently \$4 billion, or only 0.21% of our gross national income (GNI). Of the \$4.2 billion aid allocated by Australia in 2018-19, \$1.4 billion was for the Pacific and a further \$1 billion for South-east and East Asia. In 2019 the Joint Standing Committee on Foreign Affairs, Defence and Trade also recommended that the Government commit to increasing the aid budget to at least 0.5% of GNI within 5 years.

3. Sustainable Healthcare Unit

Recommendations:

- 14. Establish a national Sustainable Healthcare Unit (SHU) to oversee reduction in healthcare's carbon footprint, advance sustainable models of care and collaborate with state-based SHUs.
- 15. Provide infrastructure to enable the healthcare sector to achieve net-zero emissions by 2040.
- 16. Coordinate with state governments for the adoption of renewable energy and storage for the whole healthcare sector.

The Australian healthcare sector is one of the largest of our economy, with expenditure approaching 10% of GDP. The carbon emissions of the sector are also significant, estimated at over 7% of Australia's total greenhouse gas emissions. There are significant environmental, as well as financial benefits in healthcare playing a role in leading emissions reduction.

Doctors for the Environment has proposed a national Sustainable Healthcare Unit (SHU) which would assist the Australian healthcare sector (primary, secondary and tertiary) to deliver quality health care in environmentally and financially sustainable ways. An SHU could lead research, policy development, system changes and education of staff, fulfilling a central national coordinating role for maximum effectiveness and successful implementation of initiatives at state, regional, health network, hospital and practice levels.

Actions and policy by the National Health Service (NHS) in the UK can be used as a working example of reducing emissions, with its commitment to reach net-zero emissions for its carbon footprint by 2040, and an ambition for an interim 80% reduction by 2028-2032.

England's NHS Sustainable Development Unit (with less than 10 staff) achieved an 11% reduction in GHG emissions between 2007 and 2015 while the level of health care activity rose by 18%. By 2017, the associated financial savings associated with environmental sustainability (mainly energy, waste, and water) rose to £90 million annually. In the US, one study showed that hospital programs to reduce energy use and waste and improve efficiencies could save over US\$5.4b over five years and US\$15b over ten years.

4. Air quality

The Australian Government should address the current standards of concentrations of air pollutants which are injurious to health.

Recommendations:

- 17. Complete the review of Australia's air quality standards for SO2, NO2 and ozone recognising recent science showing health effects at levels below the current standards.
- 18. Fund \$9 million over 4 years for a public education campaign to increase community awareness of air pollution risks during pollution emergencies and make available protective behaviours for vulnerable people.
- 19. Promote the use of zero pollution vehicles and increase fuel excise by approx. 20c/litre on diesel to reflect the excess toxicity of diesel exhaust.
- 20. Introduce exhaust standards for off road diesel equipment including locomotives, with a 5 year catch up period to reach equivalent US standards.

Ambient air pollution contributes to over 3000 premature deaths each year in Australia. Air pollution "hot-spots" exist in both cities and regional areas close to busy roads and intersections, freight routes, certain industries, mining activities and coal-fired power stations. Adverse health effects include those to the respiratory system of asthma and reduced lung function, to the unborn foetus, and to brain function, particularly in the elderly. Currently, because of the sparsity of monitoring, and therefore a lack of adequate reporting, the public is generally unaware of the potential hazards and so cannot make decisions in the interests of their health.

While Australia has strict standards for particle pollution, standards for gaseous pollutants are currently set well above international best practice levels and have not been revised since 1998.

During the Black Summer fires there were an estimated 417 deaths due to excess particle pollution. The community is generally unaware of protective measures that vulnerable people can take: to stay indoors, wear the appropriate mask, and avoid exercising at times of high pollution. The most vulnerable can also benefit from indoor air purifiers supported by technical advice. Public health announcements during a bushfire crisis should be preceded by a community education campaign in the lead up to each fire season. DEA supports funding of the Air Smart education proposal originated by Asthma Australia.

Although there have been several federal Inquiries in the last 5 years with the intention of improving vehicular engine efficiency and levels of exhaust pollutants, there has been no meaningful outcome. Australia now holds the lowest rank out of the 35 OECD countries for fuel quality. While diesel vehicles are being phased out in many OECD countries due to the

health impacts from diesel emissions, in Australia the proportion of diesel vehicles on the roads is increasing. Electric vehicles will reduce vehicular pollution enormously.

None of Australia's coal-fired power stations have been fitted with flue-gas "scrubbers" which remove 99% of sulfur dioxide emissions, nor have they installed selective catalytic reduction to reduce nitrogen dioxide emissions. Yet internationally, many similar power stations have been successfully retrofitted with such pollution-reduction technology.

5. Biodiversity

The Australian Government should strengthen environmental controls without which we will continue to force species to extinction and create ecological mayhem from which it may be impossible to recover.

Recommendations:

- 21. The Federal Government recognises that biodiversity loss and ecosystem decline are key threats to human health and wellbeing.
- 22. The Federal Government accepts the key recommendations from the Samuel Review of the Environmental Protection and Biodiversity Conservation Act, which include developing national environmental standards, creating an independent federal regulator and improving transparency, data and information mechanisms.
- 23. The Federal Government allocates adequate funding to enable the implementation of these legislative reform measures.
- 24. The Federal Government increases funding to support threatened species conservation and recovery actions.
- 25. In considering allocating funds to legislative reform and threatened species management, the Federal Government recognises that protecting biodiversity represents a least-cost way of ensuring that we can continue to experience nature's benefits into the future.

Human health is indivisible from healthy, biodiverse ecosystems as these provide and sustain the very fundamentals of good health - clean air, a secure water supply, reliable production of healthy and nutritious food, and a stable climate. As biodiversity and ecosystems decline or are lost, we are not only undermining these fundamentals of health, but also the contribution our natural environment makes to our physical and mental well-being. The value of "ecosystem services" - the benefits the natural ecosystems provide to people - is immeasurable, while replacing them would be extremely costly, if not impossible.

Australia has an appalling record of species extinction and has undergone the largest decline in biodiversity of any continent since colonisation. Currently Australia has the second highest rate of biodiversity loss in the world.⁵

⁵ Waldron, A., et al. Reductions in global biodiversity loss predicted from conservation spending. Nature551,364–367 (2017). https://doi.org/10.1038/nature24295

Australia's environmental management systems are clearly failing and far from sufficiently robust to meet today's complex and extensive environmental needs. Particularly concerning is the longstanding and ongoing failure of Australia's key piece of environmental legislation, the Environmental Protection and Biodiversity Conservation (EPBC) Act. This Act underwent a statutory 10-year review last year, and from this review, an interim report (the Samuel Report) recognised the serious environmental crisis we are facing and the ongoing deterioration of our natural capital.⁶

Specifically, it noted: "Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The current environmental trajectory is unsustainable." It also highlighted the gross inadequacy of the EPBC Act to fulfill its statutory objectives of conserving Australian biodiversity, and promoting ecologically sustainable development, and the urgent need for major reform.

The Samuel Report made several key recommendations which included the development of national environmental standards, the creation of an independent federal regulator for monitoring and to ensure compliance, better access to transparency and justice and improved data and information mechanisms. It is DEA's view that together these recommendations represent essential safeguards and systemic reforms, and we thereby call on the Federal Government to adequately resource their implementation.

DEA also calls for the allocation of specific funding to support threatened species conservation and recovery actions. There is empirical evidence that the more a country spends on conservation, the fewer species it loses. Biodiversity expenditure in Australia has remained between AUD \$400 million and \$500 million per year (less than 0.05% of GDP) since 2010, equating to less than five cents for every \$100 of Australian Commonwealth spending.

This is clearly an inadequate level of funding to address Australia's extinction crisis given ongoing species loss, the ongoing decline of most listed species, and the increasing number of species being identified as threatened every year. Australia remains one of only four developed countries in the top 40 underfunded countries in terms of conservation expenditure.^{7,9}

In considering the allocation of funding to implement legislative reform and to improve biodiversity conservation, DEA strongly advises that the costs are not subject to short term expediencies. Species and ecological decline, through their detrimental effects on human health, productivity, and sustainability, will have far greater long-term impacts on the national economy.

As an example of the fiscal gains that can flow from environmental protection, the Victorian Government's Biodiversity Strategy to 2037 notes that the benefits that Victoria's national parks and conservation reserves provide to Victorians are valued at well more than one billion dollars every year. ¹⁰ From a health perspective, visits to parks are estimated to save

⁶ https://epbcactreview.environment.gov.au/resources/interim-report

⁷ Waldron (2017) op cit

⁸ Australian Conservation Foundation (2018). Environment spending in Australia. https://d3n8a8pro7vhAmx.cloudfront.net/auscon/pages/5288/attachments/original/1517524145/Govenrment Environment Spending in Australia.pdf?1517524145

⁹ Waldron A, Mooers AO, Miller DC, et al (2013). Targeting global conservation funding to limit immediate biodiversity declines. Proc Natl Acad Sci USA. 110; 12144-12148.

Victorian Government. Protecting Victoria's Environment - Biodiversity 2037.
https://www.environment.vic.gov.au/ data/assets/pdf file/0022/51259/Protecting-Victorias-Environment-Biodiversity-2037.pdf

Victoria somewhere between \$80 million and \$200 million from avoidance of disease, mortality and lost productivity annually. Victoria's Biodiversity Strategy to 2037 also quotes a Future Economy Group report which has estimated that by 2028, healthier natural capital could provide between \$15 and \$36 billion in economic benefits for Victoria on the one hand, while on the other, continuing decline of natural capital could result in an economic loss of between \$16 and \$78 billion.

It is vitally important that the Federal Government recognises that investment in protecting biodiversity and addressing threats is money well spent.

6. Preventive Health expenditure

Recommendations:

- 26. A national Centre for Disease Control (CDC) to better monitor, identify and manage emerging threats from communicable diseases.
- 27. Recognition that preventive health care is the cornerstone of a robust, effective and efficient health care system and needs increased expenditure to at least 5% of the health budget.
- 28. Public health education and nutritional guidelines promoting a predominantly plant based diet with reduced meat intake and provision of clear information about healthy and sustainable food choices.
- 29. Improved agricultural practices.
- 30. Infrastructural developments and improvements should be informed by public health expertise to avoid or minimise adverse health impacts.
- 31. The health benefits of green and active transport infrastructure with the consequent health savings be considered in the planning and policies of cities and communities.

The current COVID-19 pandemic highlights the need for a national body – a national Centre for Disease Control (CDC) - to coordinate responses to diseases which threaten all Australians. The centre should be adequately funded to sustain research, develop expertise and provide experience in managing communicable diseases. Experience would not be limited to local diseases but would encompass knowledge and understanding of global disease behaviour in preparation for spread to Australia. Recent experience with COVID-19 has borne out the need for a rapid and meticulous response guided by scientific and medical expertise. Australia is the only country in the OECD which does not have an established national authority delivering scientific research and leadership in communicable disease control. The Australian Medical Association has been calling for a national CDC since 2017, the adoption of which would likely have saved Australia millions of dollars in the current pandemic by activating a more effective and rapid response.

National action on climate would also benefit from a national CDC because of the anticipated change in disease patterns with increasing severity of climate change.

While Australian health care is primarily responsible for the treatment and management of illness, current Australian health services direct only 1.4% of the health budget towards prevention. Most of this is spent on dedicated programs such as reducing smoking and alcohol and providing immunisations. By purely focusing on established diseases, we miss the opportunity for primary prevention to modify the "causes of the causes" of ill health in our society. World's best practice suggests that preventive health expenditure should be around 5-6% of total health system expenditure, as is available in New Zealand, Canada and the UK.¹¹

Preventive health is the cornerstone of a robust, effective and efficient health care system. Preventive health care is the means of saving future costs generated by chronic diseases such as diabetes, hypertension, obesity and mental disease. Costs encompass the increased medical and hospital attendances, pharmaceutical requirements and many other medical, surgical and support services created by complications of these disorders. Preventive medicine produces better health outcomes at costs far lower than those incurred in the management of established chronic disease.

Action on climate change has many preventive health co-benefits that improve health and well-being. For example: moving from a fossil fuel-based energy system to renewables will reduce emissions, improve air quality and have better health outcomes; investment in active transport infrastructure will reduce vehicular emissions and encourage exercise; adoption of plant-based diets and reduced consumption of red meat will both reduce emissions and improve health.

7. Disaster and emergency preparedness

Recommendations:

- 32. Strengthen the public health sector to respond to extreme weather and climate emergencies.
- 33. Support vulnerable members of society, particularly Aborigines and Torres Strait Islanders in coping with effects of climate change.
- 34. Continue public education of risks of extreme weather events such as extreme heat, storms, and floods.
- 35. Ensure recommendations of the National Natural Disaster Arrangements (NNDA) 2020 royal commission are enacted.

Current national health coordination arrangements for disaster planning are fragmented, with a lack of coordination between states, and metropolitan and regional divides - with a significant omission being dissemination and receipt of information to front-line health care workers. In most jurisdictions, emergency service responses and government department disaster planning occur in silos separate from hospital and primary care disaster planning

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¹¹ https://www.oecd-ilibrary.org/docserver/f19e803c-en.pdf?expires=1611465710&id=id&accname=quest&checksum=C6EC341268D92DA0DFED16A3BD0B9C5F

and separate from GPs and health clinics. There is a need for federal integration of health care responses through a national body tasked with decision making in health emergencies.

In other countries, the US Centre for Disease Control and the UK's Public Health England exist as national health protection agencies involved in disaster response. In Australia, responsibility lies with the states and territories, with knowledge and expertise fragmented between eight separate jurisdictions. It is obvious that natural disasters do not respect state boundaries.

As during the COVID19 pandemic, the public health sector is the cornerstone of healthcare in environmental emergencies, aided by community health services such as primary care providers, allied health professionals, general practitioners, and pharmacists. Clearly, all these services need to be fully informed and funded for emergency work. For example, Primary Health Networks (PHNs) which had taken on coordination of primary healthcare providers in emergencies were recognized by the royal commission into NNDA 2020 as being inadequately funded and poorly informed of disaster management systems. Clearly deficiencies such as these need to be addressed.

Currently, the Minister for Health and the Department of Health have little input or authority to address the risks and management of current and future health impacts arising from climate change. Mitigation of climate change is currently accepted at the federal level as the responsibility of the Department of the Environment and Energy. This is indicative of the government's lack of recognition of the vital links between the environment and human health, and the disconnect between environmental policies that negatively impact the health of Australians. DEA calls on government to accept responsibility for ensuring coordination and consistency of adaptation measures which impact health across the nation, with appropriate standards, research, and funding to ensure compliance by state and territory authorities. These measures must be accompanied by efforts to develop and deliver robust climate change mitigation policies.

Climate change does not affect sectors of the community equally. Australia's indigenous community is especially vulnerable, both physically and mentally, as their spiritual connection with country is being severed by harsher climatic conditions. The Australian government needs to take more visible measures to assist Indigenous communities in dealing with climate challenges.

Adapting to natural disasters will become more complex and undoubtedly more expensive unless climate change is mitigated by reducing GHGs. Australia needs a comprehensive national assessment of risks to human health from climate change, such as those of the United Kingdom and the United States, and national spending on climate change health research, which has so far been miniscule. An evidence base is essential to drive a national climate change and health strategy to protect the health of Australians. DEA urges the federal government to adopt a National Climate and Health strategy as developed by CAHA, AMA, and RACGP and our own organization.