

Submission to House Standing Committee on the Environment and Energy Inquiry into the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020

Contact:

CAHA Executive Director Fiona Armstrong fiona.armstrong@caha.org.au 0438900005 www.caha.org.au

About the Climate and Health Alliance

The Climate and Health Alliance (CAHA) is a national charity and the peak body on climate change and health in Australia. CAHA's mission is the build a powerful health sector movement for climate action and sustainable healthcare.

The membership of CAHA includes a broad cross-section of health sector stakeholders with 48 member organisations, representing healthcare professionals from a range of disciplines, as well as healthcare service providers, institutions, academics, researchers, and consumers. Information about CAHA's membership and governance can be found at www.caha.org.au.

The Climate and Health Alliance has produced a significant number of reports and publications to assist policymakers and inform health stakeholders and the wider community understand the links between climate change and health, and to guide decisions regarding policy and solutions.

These include the Healthy, Regenerative and Just post COVID policy agenda; Human Health and Wellbeing Adaptation Plan for Queensland; Framework for a National Strategy on Climate, Health and Well-being for Australia and the preceding Discussion Paper; a Review of Health and Climate Change Literature for the City of Melbourne; a joint report on divestment Healthy Investments (with Doctors for the Environment); the seminal report Coal and Health in the Hunter: Lessons from One Valley for the World; a multi-stakeholder Joint Position Statement and Background Paper on Health and Energy Choices; a joint report 'Our Uncashed Dividend' (with The Climate Institute) on the health benefits of reducing greenhouse gas emissions; Discussion Paper for the Roundtable on the Health Implications of Energy Policy and a subsequent Briefing Paper on the same topic.

CAHA has produced a film on the risks to health and climate from coal and gas, <u>The Human Cost of Power</u>; and has conducted many innovative and groundbreaking public events, including a series of Greening the Healthcare Sector Forums, including several <u>Healthcare Environmental Sustainability Forums</u> with Western Health and Institute for Hospital Engineers Australia; the <u>Our Climate Our Health Seminar</u>, featuring an innovative thought experiment: <u>Imagining 2030 as a healthy low carbon world</u>; a <u>Public Seminar on Protecting Health from Climate Change</u> (with University of NSW); and a national <u>Forum on Climate and Health: Research, Policy and Advocacy</u>. CAHA also contributes to many conferences, community dialogues, and forums, both nationally and internationally on these issues.

For more information about the membership and governance of the Climate and Health Alliance, please see Appendix A. For further information see www.caha.org.au

Introduction

The Climate and Health Alliance supports this Bill.

The Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 (The Climate Act) will enable Australia to make an immediate, positive and nationally coordinated response to the risks, challenges and opportunities of climate change. Given that climate change poses a significant and increasing risk to the health of Australians, the Climate Act is essential to safeguarding human health.

Climate change poses significant immediate, medium-term and long-term risks to the health of Australians and communities around the world. 1,2,3,4

Despite the substantial body of scientific evidence highlighting these risks, and growing evidence that climate change represents a 'health emergency',⁵ human health has not yet been afforded sufficient priority in Australia's national mitigation and adaptation policy and strategy actions.

The Climate Act provides a vehicle for Australia to reposition itself in the global context as a climate leader, and make a positive contribution to securing our future health, security and prosperity.

Part 1

The Bill's Objectives

The Bill's objectives are supported, although we recommend Objective 1. (a). also include reference to health, for the reasons explained below.

¹ Australian Academy of Science, 2015, Climate change challenges to health: Risks and opportunities. Recommendations from the 2014 Theo Murphy High Flyers Think Tank. Canberra: Australian Academy of Science.

² Bambrick, H, Dear, K, Woodruff, R, Hanigan, I & McMichael, A 2008, *The impacts of climate change on three health outcomes: temperature related mortality and hospitalisations, salmonellosis and other bacterial gastroenteritis, and population at risk from dengue*. Garnaut Climate Change Review. Canberra: Commonwealth of Australia.

³ Smith, KR, Woodward, A, Campbell-Lendrum, D, Chadee, DD, Honda, Y, Liu, Q., Olwoch, J.M., Revich, B, Sauerborn, R. 2014: *Human health: impacts, adaptation, and co- bene ts.* In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., Barros V.R., Dokken, D.J., Mach K.J., Mastrandrea, M.D., Bilir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., White, L.L. (eds.)]. Cambridge, United Kingdom and New York, USAz; Cambridge University Press, pp. 709-754.

⁴ Hughes, L, & McMichael, A 2011, *The Critical Decade: Climate change and health.* Canberra: Department of Climate Change and Energy Efficiency, Commonwealth of Australia.

⁵ Watts, N, et al., 2015, *'Health and climate change: policy responses to protect public health,'* Lancet (London, England), 386, 10006, pp. 1861–1914.

We propose the following:

This Act recognises:

1.

(a) climate change is a serious challenge to Australia's prosperity and security and this requires a planned transition towards a net zero emissions economy and the implementation of adaptation measures to protect **health**, livelihoods, business and the environment.

Risks to health from climate change

The profound risks to people's health from climate change, both in Australia and around the world, is one of the most compelling drivers for emissions reductions. At the current level of 1.1°C of average global heating, significant health effects are already being experienced.⁶ During 2019-2020 Australia experienced unprecedented bushfires and associated air pollution.^{7,8,9} It has been estimated that the air pollution from the fires were associated with 429 premature deaths, 3,230 hospital admissions and AU\$1.95 billion in additional health costs.¹⁰ During the 2009 January–February heatwave that preceded the Black Saturday Bushfires a 62% increase in all-cause mortality was recorded in Victoria.¹¹ Alarmingly, these extreme conditions are now becoming the norm.

There is now widespread concern about the impacts of climate change in the Australian community, ¹² and the adverse health impacts of climate change are already being felt.

These risks to health associated with climate change include: impacts on food production, leading to under-nutrition and impaired child development; water insecurity; injuries, hospitalisations and deaths due to extreme weather events such as heatwaves, fires, droughts, floods and storms; mental illness and stress; and

⁶ World Meteorological Organisation. WMO Provisional Statement on the State of the Global Climate in 2019 [Internet]. Geneva; 2019. Available from: https://library.wmo.int/doc_num.php?explnum_id=10108

⁷ Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Boykoff M, et al. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. Lancet. 2019;394(10211):1836–78.

⁸ Beggs PJ, Zhang Y, Bambrick H, Berry HL, Linnenluecke MK, Trueck S, et al. The 2019 report of the MJA–Lancet Countdown on health and climate change: a turbulent year with mixed progress. Med J Aust. 2019; pp. 491.e2-491.e21.

⁹ Hughes L, McMichael T. The Critical Decade: Climate Change and Health [Internet]. Canberra; 2011. Available from: https://www.climatecouncil.org.au/resources/commission-climate-change-and-health/

¹⁰ Johnston FH, Borchers Arriagada N, Morgan GG, Jalaludin BB, Palmer AJ, Grant J. Williamson, et al. Unprecedented smoke-related health burden associated with the 2019–20 bushfires in eastern Australia. Med J Aust. 2020;2019–20

¹¹ Department of Human Services. January 2009 Heatwave in Victoria: an Assessment of Health Impacts [Internet]. Melbourne; 2009. Available from: https://www2.health.vic.gov.au/getfile//?sc_itemid=%7B78C32CE8-A619-47A6-8ED1-1C1D34566326%7D

¹² Merzian R, Quicke A, Bennett E, Campbell R, Swann T. Climate of the Nation 2019 [Internet]. Canberra; 2019. Available from: https://www.tai.org.au/content/climate-nation-2019

increases in the spread and incidence of infectious diseases.^{13,14} Illnesses, diseases and deaths from climate change also occur from the exacerbation of pre-existing health problems. **Those who are most at risk are also those who are the least able to adapt, including those experiencing poverty, homelessness, mental illness and pre-existing chronic disease.** ^{15,16,17,18,19} Globally, low income countries are being and will be disproportionately affected.

Fossil fuels that drive climate change produce air pollution that has independent and detrimental effects on health. Air pollution from fossil fuels contributes to increased burden of disease from ischaemic heart disease, stroke deaths, chronic obstructive pulmonary disease, lung cancer, and lower respiratory tract infections.²⁰

Outdoor air pollution is estimated to cause 4.2 million deaths globally²¹ and 2,566 deaths in Australia each year.²² **Air pollution related mortality costs the Australian public an estimated \$16 billion per year.**²³

Benefits to health from reducing emissions

Many of the actions that mitigate climate change also produce independent health co-benefits and significant associated economic savings. Addressing climate change, can therefore be viewed as an opportunity to create a healthier,

¹³ Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Boykoff M, et al. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. Lancet. 2019;394(10211):1836–78.

¹⁴ Thompson R, Hornigold R, Page L, Waite T. Associations between high ambient temperatures and heat waves with mental health outcomes: A systematic review. Public Health 2018;161:171–91. doi: 10.1016/j.puhe.2018.06.008. Search PubMed

¹⁵ Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Boykoff M, et al. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. Lancet. 2019;394(10211):1836–78.

¹⁶ Beggs PJ, Zhang Y, Bambrick H, Berry HL, Linnenluecke MK, Trueck S, et al. The 2019 report of the MJA–Lancet Countdown on health and climate change: a turbulent year with mixed progress. Med J Aust. 2019; 491.e2-491.e21.

¹⁷ Hughes L, McMichael T. The Critical Decade: Climate Change and Health [Internet]. Canberra; 2011. Available from: https://www.climatecouncil.org.au/resources/commission-climate-change-and-health/

¹⁸ Core Writing Team, Pachauri RK, Meyer L. Climate Change 2014: Synthesis Report [Internet]. Geneva; 2014. Available from: https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf

¹⁹ Thompson R, Hornigold R, Page L, Waite T. Associations between high ambient temperatures and heat waves with mental health outcomes: A systematic review. Public Health 2018;161:171–91. doi: 10.1016/j.puhe.2018.06.008. Search PubMed

²⁰ Forouzanfar MH, Afshin A, Alexander LT, Biryukov S, Brauer M, Cercy K, et al. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016;388(10053):1659–724.

Forouzanfar MH, Afshin A, Alexander LT, Biryukov S, Brauer M, Cercy K, et al. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. Lancet. 2016;388(10053):1659–

Australian Institute of Health and Welfare. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2015. Australian Burden of Disease series no. 19. Cat. no. BOD 22. Canberra, ACT: AIHW, 2019. Health Effects Institute (2017), 'State of Global Air 2017' (online database), www.stateofglobalair.org. (Accessed 07/05/2018) Ambient PM + Ozone mortality: Australia – 3099 deaths (2015 global burden of disease x \$A5.2M the 2010 value of statistical life).

more sustainable and more prosperous society.²⁴ Indeed, commentary in *The Lancet* has highlighted that while global climate change is the "biggest global health threat of the 21st century,"²⁵ addressing climate change could be "the greatest global health opportunity of the 21st century."²⁶

Calculating health co-benefits in economic modelling can help reveal the strong economic case for reducing emissions and shows cutting emissions is not only affordable, but can deliver budgetary savings, compared to business as usual.

The 2015 New Climate Economy report estimates reducing emissions from coal sources would deliver health benefits worth US\$100 for every tonne of CO2 abated in developed countries.²⁷ The health co-benefits associated with emissions reduction strategies offer extraordinary value in terms of the benefit-cost ratio, with some emissions reduction strategies returning \$10 in health benefits for every dollar invested.²⁸ (https://globalchange.mit.edu/publication/15583). Reducing emissions from fossil fuelled power generation and transport offers huge health benefits for local populations and significant savings for national budgets.^{29,30}

A framework to address the challenge of climate change

Setting long term emissions reduction targets

The objects of the Act to establish a framework to address the challenge of climate change, including the establishment of a target for achieving net zero emissions by the year 2050, and providing a system of emissions budgeting with five yearly reports, is supported.

However the net zero emissions target should come earlier than 2050, and the Bill should include establishment of emissions reduction targets for each decade, beginning with 2030, as per the recommendations of the *Intergovernmental Panel on Climate Change*.³¹

²⁴ Watts N, Amann M, Ayeb-Karlsson S, Belesova K, Bouley T, Boykoff M, et al. The Lancet Countdown on health and climate change: from 25 years of inaction to a global transformation for public health. Lancet. 2018;391(10120):581–630.

²⁵ Costello A, Abbas M, Allen A, Ball S, Bellamy R, Friel S, et al. Managing the health effects of climate change. Lancet. 2009:373

²⁶ Watts N, Amann M, Ayeb-Karlsson S, Belesova K, Bouley T, Boykoff M, et al. The Lancet Countdown on health and climate change: from 25 years of inaction to a global transformation for public health. Lancet. 2018;391(10120):581–630.

²⁷ Global Commission on the Economy and Climate. New Climate Economy technical note: Quantifying the multiple benefits from low-carbon actions in a greenhouse gas abatement cost curve framework. January 2015. Available from:

https://newclimateeconomy.report/workingpapers/wp-content/uploads/sites/5/2016/04/NCE-technical-note-quantifying-benefits-abatement-cost.pdf

²⁸ https://globalchange.mit.edu/publication/15583

²⁹ ibid

³⁰ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5963114/

³¹ Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments, 2018, Available at: https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/

All states and Territories in Australia have now adopted emission reduction targets of net zero by 2050. However, at the federal level Australia is lagging behind the international community in its declared emission reduction commitments.

Accordingly, the Climate and Health Alliance asserts that an approach of reducing emissions as quickly as possible is an appropriate goal for Australia. In line with advice from the Climate Change Authority, we recommend Australia's emissions reduction targets should, at a minimum, be a 40-60% reduction in greenhouse gas emissions by 2030, and net zero emissions by 2050 32 to protect health, prevent serious social and economic disruption, and to limit higher future costs of mitigation.

Limiting global heating to 1.5°C is critical to avoid even more widespread and pronounced health effects of climate change, and is consistent with the internationally agreed goal adopted in the Paris Agreement. Limiting average global warming to 1.5°C, compared with 2°C, could reduce the number of people both exposed to climate-related risks by several hundred million by 2050.³³ Australia has been demonstrated to be highly vulnerable to the effects of global climate change.³⁴

"Limiting global warming to 1.5°C compared with 2°C would reduce challenging impacts on ecosystems, human health and well-being, making it easier to achieve the United Nations Sustainable Development Goals."

Priyardarshi Shukla, Co-Chair of IPCC Working Group III.

Restricting global heating to 1.5°C, with limited risk of overshooting this threshold, requires a reduction of global greenhouse gas emissions of approximately 45% from 2010 levels by 2030 and for net zero emissions to be reached by 2050 globally (IPCC 2018).³⁵

While this has been proposed as a global target, it is insufficient for Australia. This is because:

 These targets may be insufficient to limit warming to 1.5°C due to uncertainty in the size of the remaining carbon budget

³² Climate Change Authority, p.119 https://www.climatechangeauthority.gov.au/sites/default/files/2020-06/Target-Progress-Review/Targets%20and%20Progress%20Review%20Final%20Report.pdf

³³ Masson-Delmotte, V. P, Zhai H-O, Pörtner D, Roberts J, Skea PR, A. S, et al. Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global

greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. 2018.

³⁴ Australian National University 2009, 'Implications of climate change for Australia's World Heritage properties: A preliminary assessment' A report to the Department of Climate Change and the Department of the Environment, Water, Heritage and the Arts by the Fenner School of Environment and Society, the Australian National University.

³⁵ Masson-Delmotte, V. P, Zhai H-O, Pörtner D, Roberts J, Skea PR, A. S, et al. Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. 2018.

- These targets rely on an assumption that it will be possible to transition to net negative global emissions through large scale removal of carbon dioxide from the atmosphere, although it is uncertain if this will be feasible.
- Principles of global equity require that more prosperous countries, such as Australia, that have greater means and a greater historical contribution to climate change, realise substantive emissions reductions well in advance of 2050 in order for the global target of limiting warming to 1.5°C to be achieved.
- It would be unfair for Australia to rely on low and middle income countries to make an equal contribution, where these countries have less capacity, are more vulnerable to the effects of climate change, and have historically contributed less to its occurrence. 36,37,38

It is therefore necessary for Australia to adopt emission reduction targets that exceed the projected global average. The imminent health risks posed by climate change and new evidence that global heating is now progressing more rapidly, has led the World Medical Association and British Medical Association to advocate for the adoption of a target of net zero emissions by 2030.^{39,40}

The Climate Act provides a mechanism for Australia to respond to the challenges and opportunities of climate change, including the risks to human health by providing a framework for both mitigation and adaptation.

Emissions reductions targets must be driven by evidence of risks to human health, social cohesion, food and water security, national security, environmental values including biodiversity, infrastructure and settlements, and the economy, both in Australia and globally, as well as recognition of the benefits to all of the above from emissions reductions.

A system of five yearly emissions budgets

The Climate Act provisions for five yearly emissions budgets (as in the UK Climate Change Act) is supported.

Setting five year carbon budgets will ensure steady progress towards the 2050 goal.

³⁶ ibid

³⁷ Jackson E. Beyond the limits Australia in a 1.5-2°C world [Internet]. 2016. Available from: http://www.climateinstitute.org.au/verve/ resources/TCl Beyond the Limits FINAL23082016.pdf

³⁸ Butler C, Denis-Ryan A, Kelly R, Stewart I, Yankos T. ClimateWorks Australia, 2020, Decarbonisation Futures: Solutions, actions and benchmarks for a net zero emissions Australia [Internet]. 2020. Available from: https://www.climateworksaustralia.org/resource/decarbonisation-futures-solutions-actions-and-benchmarks-for-a-netzero-emissions-australia/

³⁹ World Meteorological Association. WMA Resolution on the Climate Emergency. In: 70th WMA General Assembly, Tbilisi, Georgia [Internet]. Tbilisi, Georgia; 2019. p. 1. Available from: https://www.wma.net/policies-post/wmaresolution-on-climate-emergency/

 $^{^{}m 40}$ British Medical Association. Climate change is already affecting our health says BMA on global day of action [Internet]. 2019 [cited 2020 Apr 15]. Available from: https://archive.bma.org.uk/news/media-centre/pressreleases/2019/september/bma-says-climate-change-is-already-affecting-our-health-on-global-day-of-action

In the UK this mechanism has proved a success, providing clarity in regards to medium-term emission reduction outcomes, while still preserving flexibility in regards to how these targets are achieved.⁴¹

Guiding principles to be applied

The Climate Act outlines the following principles to guide its implementation:

- Effective, efficient and equitable action
- Informed decision making
- Risk-based, integrated decision making
- Fiscal responsibility
- Fair employment transition
- Community engagement and self-determination
- National and international cooperation

We support these principles, but CAHA proposes that the principles be broadened to encompass principles⁴² outlined below, in order to strengthen the focus on health, equity and justice.

These principles are consistent with the framework of The Climate Act, and a transition to a decarbonised economy that preserves community health, wellbeing and prosperity, including appropriate support for individuals and communities vulnerable to the effects of climate change and economically dependent on fossil fuels.

- 1. The right to health to fulfil individuals' and communities' right to health, action must be taken to protect the environment and achieve sustainable development that meets the needs of present and future generations. With Australia's signing of the Paris Agreement and the associated obligation to consider citizens' 'right to health' in the national climate change response, there is both an imperative and opportunity to ensure the Australian community and the health sector are better prepared to protect Australians from the immediate and long-term health risks posed by climate change.⁴³
- 2. **Community safety and resilience** the safety and protection of the community must be paramount in policy development, along with the goal of creating the conditions to ensure communities are prepared for and able to respond to the impacts of climate change.
- 3. Environmental protection as a foundation for health and well-being the dependence of human population health on a healthy functioning natural environment is recognised in many international treaties and must be core to policy development on climate change and health.

⁴¹ Grantham Institute 2018 https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/03/10-Years-of-the-UK-Climate-Change-Act Fankhauser-et-al.pdf

⁴² Framework for a National Strategy on Climate, Health and Wellbeing, Climate and Health Alliance, 2017. Available at:

https://d3n8a8pro7vhmx.cloudfront.net/caha/pages/40/attachments/original/1498008324/CAHA_Framework_for_a_N ational Strategy on Climate Health and Well-being v05 SCREEN %28Full Report%29.pdf?1498008324

⁴³ https://www.who.int/mediacentre/commentaries/climate-change-agreement/en/

- 4. Health in All Policies all dimensions of climate change are intrinsically linked, and action to reduce the health risks from climate change requires working across all policy areas and sectors to consider the health impact of their policies and practices. This is best captured through a Health in All Policies approach.
- 5. Intragenerational and intergenerational equity this refers to the obligation to ensure those most vulnerable to the impacts of climate change are protected, as well as to ensure the rights of all people and communities to access societal and environmental conditions for optimum health and wellbeing, now and for future generations. Australia also has a responsibility to its neighbours in the region who are disproportionately impacted by climate change and have limited capacity to both mitigate and adapt.
- 6. **Minimising and managing risk** reducing and managing current risks and anticipating and preparing for future risks to health from climate change must be a key element of policy development, and should be incorporated into risk management strategies for all public and private institutions.
- 7. **Indigenous rights, recognition and reconciliation** the rights and wisdom and unique cultures of Australia's Indigenous people must be central to policy development on climate mitigation and adaptation policies.
- 8. **Citizen engagement** all policy development must occur in consultation with, and account for, the stated needs and priorities of affected communities and stakeholders.

Part 2, 3, & 4 Mitigation and adaptation plans are needed for all sectors

We support the proposal for a national climate change risk assessment but CAHA would like to emphasise the importance of mitigation and adaptation across all sectors, including in the health sector, as well as sectoral budgets, to guide policy planning and implementation.

As outlined earlier in this submission, we are already experiencing the health impacts of climate change in Australia, and Australia is highly vulnerable to the effects of climate change.

The COVID-19 pandemic has demonstrated the interconnectedness between threats to health and broader societal impacts, as well as the benefits of a comprehensive and evidenced-based public health response.

Without robust adaptation and mitigation, climate change has the potential to cause catastrophic health and societal impacts.

Comprehensive sectoral mitigation plans should also be accompanied by climate risk assessments and adaptation planning to reduce the impacts of climate change that can no longer be avoided.

We support the Climate Act mechanisms to facilitate and enable adaptation within Australia are supported, including the requirements to:

- Require an annual National Climate Change Risk Assessment from the Independent Assessment Commission, reviewing risks to Australia's economy, society and environment; and
- Require five-year plans to adapt to those risks, both nationally and for regional and economic sectors, including agriculture, biodiversity, national parks, marine parks, health, energy, transport, services, education, planning, construction, infrastructure.

The Climate Act includes a specific requirement that there be consideration of the economic, social, health, water and food security, environmental, ecological, and cultural impacts of climate change - this should be applied to *all* policy decisions.

The Climate Act should also provide for a mechanism to ensure collaboration between multiple portfolio areas including health, energy, environment, transport, planning and infrastructure to ensure the development of integrated policies and avoid unintended consequences.

We recommend the inclusion of the Areas of Policy Action outlined in Figure 1 to guide mitigation and adaptation plans:



Figure 1: Key Areas of Policy Action, from Climate and Health Alliance's 'Healthy, Regenerative and Just' policy agenda (2020), building on Seven Areas of Policy Action in the 'Framework for a National Strategy on Climate, Health and Wellbeing for Australia' (2017)

Health sector mitigation

Emissions from the health sector in Australia are estimated to be 7% of total national emissions. 44 Globally, healthcare's climate footprint is 4.4% of the global total; meaning if it were a country, it would be the fifth largest emitter on the planet.⁴⁵ With a footprint of this size, it becomes clear that healthcare can play a vital role in mitigating our climate impact. Health care contributes to greenhouse gas emissions through energy consumption, transport, and product manufacture, use, and disposal.

Global analysis reveals:46

- Emissions emanating directly from health care facilities and health care owned vehicles (Scope 1) make up 17% of the sector's worldwide footprint. Indirect emissions from purchased energy sources such as electricity, steam, cooling, and heating (Scope 2) comprise another 12%.
- The lion's share of healthcare emissions 71% are primarily derived from the health care supply chain (Scope 3) through the production, transport, and disposal of goods and services, such as pharmaceuticals and other chemicals, food and agricultural products, medical devices, hospital equipment, and instruments.
- Three-quarters of all health care emissions, including from its supply chain, are generated domestically. This means roughly one-quarter of all health care emissions are generated outside of the country where the health care product is ultimately consumed.
- Fossil fuel consumption is at the heart of health care's emissions. Energy primarily the combustion of fossil fuels — makes up well over half of health care's climate footprint when measured across all three scopes.

There is significant scope and opportunity for reducing both greenhouse gas emissions and the environmental footprint of the health sector. The evidence demonstrates that a low carbon and environmentally sustainable health sector would deliver demonstrable economic, social and environmental benefits for Australia.

If combined with initiatives to improve the sector's climate resilience, Australia's health sector will be able to continue to deliver high-quality care while reducing exposure to climate risks. Without effective mitigation, and accelerating climate change, the quality and safety of healthcare in Australia is at risk.

It is vital that the Climate Change Act directly references, and supports, emissions reductions in healthcare, in order to drive emissions reductions from this complex, and emissions intensive sector, while helping to secure the safety and quality of care through climate resilience measures.

⁴⁴ https://www.thelancet.com/journals/lanplh/article/PIIS2542-51961730180-8/fulltext

⁴⁵ https://noharm-uscanada.org/ClimateFootprintReport

 $^{^{46}\} https://noharm-global.org/sites/default/files/documents-files/5961/HealthCaresClimateFootprint_092319.pdf$

Health sector adaptation

The effects of climate change are already being felt, but the health sector is not sufficiently and consistently prepared to respond. It is essential that health adaptation planning facilitated by the Act will adequately respond to the health risks and challenges posed by climate change. Therefore, CAHA recommends the following priorities highlighted in the Queensland *Human Health and Wellbeing Climate*Adaptation Plan (2018)⁴⁷ and building on the *Framework for a National Strategy*on Climate, Health and Well-being (2017), to guide health sector adaptation:

- Leadership and governance empowering leadership at all levels to plan and implement responsible, evidence-based, locally relevant climate change adaptation.
- 2. Building the preparedness and ability of the health and wellbeing services sector and the community to respond to climate threats to health.
- Specific public health measures evaluating specific vulnerabilities in the population and implementing appropriate measures to reduce avoidable morbidity and mortality.
- 4. Risk management and legal liability ensuring the operational and strategic plans of all facilities and services acknowledge and reflect the short-, medium- and long-term risks of climate change to health and wellbeing services.
- 5. Research, data and evaluation guiding policy and decision-making through well-planned research and climate-health risk surveillance to build greater understanding of risks, vulnerabilities and effective strategies.
- Economics and financing ensuring that financing decisions to support climate change related programs and initiatives include assessment of all the relevant health costs and benefits associated with climate change and adaptation.
- 7. Collaboration across agencies, sectors and stakeholder groups ensuring that government agencies, peak bodies, and industry and professional associations and service providers work together to achieve climate change adaptation and sustainability goals
- 8. Education and communication developing communication, education and training initiatives that inform and build capacity across the health and wellbeing workforce, policymakers and the wider community to respond to the health impacts of climate change.
- 9. Policy, regulation and legislation providing policy certainty for services, sectors and industries to guide decisions and investment for effective climate change adaptation.
- 10. Infrastructure, technology and service delivery investing in climate-resilient infrastructure, technology and service design to avoid delayed costs and ensure service integrity.

⁴⁷https://d3n8a8pro7vhmx.cloudfront.net/caha/pages/1573/attachments/original/1536565751/H-CAP Final Exec Summ and PAMs.pdf?1536565751

Part 5

Setting emissions reduction targets

We support the establishment of a Climate Change Commission, and the five-yearly emissions budget process, including the requirement for the Minister to set an emissions budget for each emissions budget period and the development of emissions reduction plans, in line with the advice of the Commission.

In order to achieve a net-zero outcome, we must chart a path. We cannot leave it for future generations and administrations to bear an unreasonable load of the task to secure a safe and habitable climate.

Part 6

A Climate Change Commission

We support the provision in the Climate Act to establish the Climate Change Commission as an independent body to advise on emissions reduction budgets, the preparation of emissions reduction plans, provide advice and climate change risk assessments and low emissions technologies, monitor and report on climate change actions and the implementation of plans.

The Commission has a crucial role in developing recommendations relating to adaptation plans and emission budgets and will provide annual reports on progress towards Australia's emissions targets, technology goals and adaptation and emissions reduction plans. The Commission will help to support enduring consensus across the political spectrum.

The establishment of a Climate Change Commission is an important mechanism to ensure that Australia's climate change adaptation and mitigation policy is developed based on robust evidence and climate science.

Division 2—Membership of the Commission

It is important that the Climate Change Commission includes a wide range of skills in its membership.

Given the profound interaction between climate change and community health impacts, it should be a requirement that the Commission membership includes experience or knowledge of public health policy and the impacts of climate change on health, in addition to the other requirements outlined in The Climate Act.

Conclusion

The Climate Act provides a much needed framework to legislate climate action for Australia. Without such legislation, Australia is unprepared and unable to effectively respond to impacts of climate change, which have the potential to severely disrupt our economy, society and health in the near, medium and longer future.

We concur with the Bill's Explanatory Memorandum, that if passed, this Bill will enable Australia to make an immediate, positive and nationally supported response to the risks, challenges and opportunities of climate change.

We urge consideration however, of the inclusion of recommendations in regard to health to strengthen the objectives and effectiveness of the Act.

This will help ensure governments not only develop policy to tackle the drivers of climate change, but support the health sector and the health professions to build resilience to respond to this serious and increasing threat, and ensure the community is well informed and capable of taking health protective actions.

APPENDIX A

Climate and Health Alliance Board

Dr Rebecca Patrick President

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Mr Michael Wheelahan, Deputy Treasurer, Governance and Finance Committee

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Dr Ingrid Johnston, Research and Policy Committee

Mr David Zerman, Independent Director

Ms Fiona Armstrong, Executive Director

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CAHA Member Organisations

Abilita

Australian Association of Social Workers (AASW)

Australian Association of Gerontology (AAG)

Australian College of Nursing (ACN)

Australian Council of Social Service (ACOSS)

Australasian Epidemiological Association (AEA)

Australian Healthcare and Hospitals Association (AHHA)

Australian Health Promotion Association (AHPA)

Australian Institute of Health Innovation (AIHI)

Australian Women's Health Network (AWHN)

Australian Medical Students' Association (AMSA)

Australian Nursing and Midwifery Federation (ANMF)

Australian, New Zealand and Asian Creative Arts Therapies Association (ANZACATA)

Australian Primary Health Care Nurses Association (APNA)

Australian Psychological Society (APS)

Australian Society of Lifestyle Medicine

Central Australia Rural Practitioners Association (CARPA)

Children's Healthcare Australasia

Codesain

CoHealth

ConNetica Consulting

Consumers Health Forum of Australia (CHF)

CRANAplus

Doctors for Nutrition

Doctors Reform Society (DRS)

Friends of CAHA

Health Consumers NSW

Healthy Futures

Health Issues Centre (HIC)

Health Nature Sustainability Research Group (HNSRG)

Health Services Union (HSU)

Kooweerup Regional Health Service (KRHS)

Medical Association for Prevention of War (MAWP) Australia

Medical Scientists Association of Victoria (MSAV)

Motion Energy Group

Naturopaths and Herbalists Association of Australia (NHAA)

NSW Nurses and Midwives' Association (NSWNMA)

Pharmacists for the Environment Australia (PEA)

Public Health Association of Australia (PHAA)

Psychology for a Safe Climate (PSC)

Royal Australasian College of Physicians

Queensland Nurses and Midwives Union (QNMU)

School of Public Health, University of Sydney

School of Public Health & Social Work, Queensland University of Technology

Services for Australian Rural and Remote Allied Health (SARRAH) Veterinarians for Climate Action (VFCA) Victorian Allied Health Professionals Association (VAHPA) Women's Health East (WHE) Women's Health in the North (WHIN) Women's Healthcare Australasia

Expert Advisory Committee

Assoc Professor Grant Blashki, Nossal Institute for Global Health

Assoc Professor Kathryn Bowen, Fenner School of Environment & Society, Australian National University

Professor Colin Butler, Visiting Fellow, Australian National University

Professor Tony Capon, Professor of Planetary Health, University of Sydney

Dr Susie Burke, Senior Psychologist, Australian Psychological Society

Professor Garry Egger, School of Health & Human Sciences, Southern Cross University

Professor Sharon Friel, Menzies Centre for Health Governance, Australian National University.

Dr Liz Hanna, Honorary Senior Fellow, Climate Change Institute, Australian National University

Professor David Karoly, Leader, Earth Systems and Climate Change Hub

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Professor Stephan Lewandowsky, School of Psychology, University of Western Australia

Dr Peter Tait, Convenor, Ecology and Environment Special Interest Group, Public Health Association

Professor John Wiseman, Melbourne Sustainable Societies Institute