



CLIMATE^{AND}
HEALTH
ALLIANCE

**Submission to Climate Change Authority in
response to Second Draft Report from
Review of Australia's climate policy
options**

February 2016

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About the Climate and Health Alliance

The Climate and Health Alliance (CAHA) is a not-for-profit organisation that is a national alliance of organisations and people in the health sector working together to raise awareness about the health risks of climate change and the health benefits of emissions reductions.

CAHA's members recognise that health care stakeholders have a particular responsibility to the community in advocating for public policy that will promote and protect human health.

Membership of the Climate and Health Alliance includes a broad cross section of the health sector with 30 organisational members, representing hundreds of thousands of health care professionals from a range of disciplines, health care service providers, institutions, academics, researchers, and health consumers.

The Climate and Health Alliance, as its name suggests, is concerned with the health threats from climate change, and the organisation works to raise awareness of those risks and advocate for effective societal responses, including public policies, to reduce risks to health.

The Climate and Health Alliance has produced a number of reports and publications. It produced the [Coal and Health in the Hunter: Lessons from One Valley for the World](#) report in 2015; led the development of the multi-stakeholder [Joint Position Statement and Background Paper on Health and Energy Choices](#) in 2014; produced the joint report '[Our Uncashed Dividend](#)' with The Climate Institute in 2012 on the health benefits of reducing greenhouse gas emissions; conducted a national [Roundtable on the Health Implications of Energy Policy](#); prepared a [Briefing Paper](#) on the same topic; produced a film on the risks to health and climate from coal and gas, [The Human Cost of Power](#); conducted a national [Forum on Climate and Health: Research, Policy and Advocacy in 2013](#); jointly hosted a [Public Seminar on Protecting Health from Climate Change](#) in 2014; organised the [2015 Our Climate Our Health Seminar](#), featuring an innovative thought experiment: [Imagining 2030 as a healthy low carbon world](#); and contributes to 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

Overview

The Climate and Health Alliance (CAHA) welcomes the opportunity provided by this Special Review by the Climate Change Authority to help identify effective policies and measures that Australia can use to reduce its emissions and support an effective global response.

CAHA seeks to highlight in this submission the concerns of the health sector with respect to climate change and proposes recommendations for climate policy to limit greenhouse gas emissions (and thus reduce the adverse impacts on human health from further global warming and subsequent climate change), as well as deliver co-benefits in the form of health improvements associated with the implementation of certain climate policies.

CAHA also wishes to highlight the new obligation for all nations expressed in the 2015 Paris Agreement to “pursue efforts to limit the temperature increase to 1.5 °C above pre- industrial levels”,¹ and urges the Federal Government and the Climate Change Authority to reconsider and re-evaluate its recommendations for emissions reductions, in light of this commitment.

This goal highlights the importance of investing in climate change projections and on this issue, CAHA wishes to raise the risks to climate science projection capacity with proposed cuts to jobs in CSIRO Oceans and Atmosphere, Land and Water departments.

With respect to emissions trading (on which views are specifically sought in the Review), CAHA reiterates its preference for a price on carbon, but not necessarily an emissions trading scheme, and agrees with the Climate Change Authority that a mechanism that puts a price on greenhouse gas emissions should be considered for implementation ***along with a range of other policy tools***.

CAHA recommends that these policy tools include a staged and planned phase out of fossil fuels, coupled with investments in renewable energy, including a strengthened Renewable Energy Target and equitable feed in tariffs; energy efficiency regulations, standards, and labelling; stronger emissions regulations for fossil fuel power generation (coal and gas) and transport (diesel, petrol and LPG); energy efficiency measures; and support for a sustainable and resilient health sector – see Policy Options below for more detail.

The health sector and climate policy

The health sector recognises the significant negative impacts of climate change upon health. Ensuring the health and wellbeing of the population and preventing avoidable hospital admissions is a key focus of the health and community sector. Disease and illness associated with climate change, including through its effects on the social determinants of health, are very much preventable. Much more should therefore be done to avoid creating man-made health problems. . These problems include exacerbating the impacts of chronic disease, extreme heat and heat-related illness, and increasing the incidence and spread of infectious and vector borne diseases.

The hospital and health sector, as a large industry in the Australian context, has significant potential to influence carbon emissions and therefore climate change. However, it is vital that public and not-for-profit health and community services are supported to undertake action against carbon change through funding for such purposes.

More incentives could be provided to the health and community industry, as consumers of resources and products, to ensure environmental policies and procedures of suppliers are designed around reducing carbon emissions and addressing climate change. Procurement of medical equipment, construction and development of capital, transport facilities, and building design, all have the potential to have an impact on carbon emissions and climate change. For example, more should be done in this area to encourage reduction in waste, and utilization of clean, safe, renewable energy resources.

Pricing carbon is an effective method of reducing emissions and addressing climate change. However, there is a need to ensure that short, medium and long-term goals are considered, and that no unintended consequences occur. One effective example exists in British Columbia, Canada. The carbon price was partnered with concurrent reductions in personal income tax and corporate tax, on a “revenue neutral” basis, thus ensuring the introduced carbon tax was offset by equivalent cuts to other taxes. Similar arrangements have accompanied the introduction of a carbon price in other jurisdictions to provide compensation and avoid a disproportionate impact on low income and vulnerable households.

Principles for assessing policies

The Climate and Health Alliance considers the proposed framework for evaluation criteria of climate policy to be deficient. The principles proposed – and associated definitions – fall short of outlining a set of criteria that when applied to climate policies would deliver outcomes that would avert catastrophic global warming.

Firstly, it is insufficient and irresponsible, given the profound consequences of unmitigated climate change for humans and other species, to assert that policies be considered to have achieved “environmental effectiveness” if they contribute to some or any emissions reductions. Rather, a policy should only have achieved environmental effectiveness if it has contributed to the more important goal of limiting global warming to a level that will avert these consequences.

The Intergovernmental Panel on Climate Change has indicated Australia is among those countries that will need to reduce its emissions by 80-95% by 2050. Environmental effectiveness in the context of Australian climate policy evaluation, therefore, should reflect its quantifiable progress towards this goal.¹ Effectiveness should be evaluated to reflect consistent and planned progress towards a net zero emissions goal.

The Climate and Health Alliance argues that equity must be a central component of all climate change policies. We support the principle of equity as articulated by the Australian Climate Roundtable (and by CAHA member, the Australian Council of Social Services), as follows:

The costs of climate policy should be spread fairly within the Australian community and policy should:

- *protect the most vulnerable individuals;*
- *avoid disproportionate impacts on vulnerable people, low income households and the organisations that support them; and*
- *assist the successful transition of communities that are especially vulnerable to economic shocks or physical risks as a result of climate change or climate policy.*

Equity should be explicitly addressed in the policy design process, including immediate impacts and those on future generations of Australians.

¹ <http://www.climateinstitute.org.au/articles/media-briefs/the-ipcc-and-australias-emissions-targets.html>

All policies need to be considered from a cross-sectoral perspective if they are to be effective and to avoid unintended adverse outcomes. Ensuring the health and wellbeing of people should be a primary consideration in the evaluation of policies.

The following additional principles for evaluation of climate policy options are proposed:

People Principle: People must have prime consideration in climate change policy.

It is not enough to just focus on the economic risks and benefits of climate policies, although these must be considered. Rather, evaluation of policy must also consider health and social impacts and benefits, such as community sustainability, resilience, health and wellbeing – that is, the needs of people, families, and communities. The evaluation of climate policy options must not only evaluate impacts on industry in terms of cost effectiveness, but also evaluate health and social impacts as well.

Health Co-Benefits Principle: Strategies to reduce emissions can also deliver health improvements, the value of which (in avoided ill-health and productivity gains) can offset the costs of implementing the climate policy.

An important consideration in designing strategies to reduce emissions is the consideration of co-benefits that can arise in addition to the climate benefits/risk reduction. The evidence regarding health co-benefits in economic modelling reveals a 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 health co-benefits associated with emissions reduction strategies offer extraordinary value in terms of the benefit: cost ratio. The financial savings associated with avoided ill-health and productivity gains can outstrip the costs of implementation – if strategies are carefully designed.

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.²

A 2014 study from Lawrence Berkeley National Laboratory (Berkeley Lab), the National Institute of Environmental Health Sciences (NIEHS), RAND Corp., and the University of Washington, calculated that the economic benefit of reduced health impacts from GHG reduction strategies in the U.S. range

between \$6 and \$14 billion annually in 2020, depending on how the reductions are accomplished. This equates to a health benefit of between \$40 and \$93 per metric ton of carbon dioxide reduction.³

A study by the Massachusetts Institute of Technology (MIT) published in *Nature Climate Change* in 2014 found reducing emissions from fossil fuelled power generation and transport offers huge health benefits for local populations and significant savings for national budgets.⁴

The MIT study found that the savings from avoided ill health arising from the implementation of a national cap and trade program could return up to 10.5 times the cost of implementing the scheme.⁵

Emissions reductions measures that deliver substantive health benefits include substituting coal power with solar and wind power, improving energy efficiency in buildings, shifting modes of transport from private vehicles to public transport and from fossil fuel powered cars to renewable powered electric vehicles, and reducing consumption of animal products.⁶

Not all emission reductions require costly or technological solutions. A recent South Australian study, for example, showed how substituting private car trips with alternative transport modes, such as public or more active forms of transport like walking and cycling, can reduce emissions as well as deliver environmental and health benefits.⁷

The evaluation of climate policy options for Australia must consider the economic value of health co-benefits associated with emissions reduction strategies, as any estimate of costs or benefits will overstate the costs and vastly underestimate the benefits if the accompanying health benefits are not included in the economic modelling of mitigation and adaptation strategies.

Transparency and Community Engagement Principle: Climate policy planning and development (and implementation) must be done in consultation with the community.

Climate policy and plans must be developed in conjunction with the community and accessible by the community. Climate policies must include plans that centre on the impacts of climate change on people and their health, and the opportunities for strengthening community resilience and wellbeing, and reflecting community values and priorities.

Resilience and Preparedness Principle: Climate policies must address community vulnerabilities and support preparedness within the community to respond to climate change and develop resilience to

assist communities and sectors (especially the health sector) to deal with existing and future health effects of climate change.

Climate policy should ensure Australia's workforce and community are prepared for and able to respond to climate change impacts. Policies should help develop climate resilience, including within the health and aged care sector, which is already affected by health impacts resulting from climate change.

Policy options

The Climate and Health Alliance asserts that Australia's climate policies should support a rapid transition to a clean renewable energy-powered economy and society.

A suite of policies must be implemented to deliver deep and rapid emissions reductions across all sectors, particularly the energy and transport sectors, as well as agriculture, shipping, aviation, manufacturing, tourism, healthcare, and education.

Policies should be selected that will reduce emissions in the short, medium and longer term, and each should include a process for implementation, evaluation and review.

Further, a whole of government approach is required to ensure climate change policies are integrated across all areas: from employment, housing and transport, energy and agriculture, to health and social services. Integrated policies and programs will help build stronger communities, ensure a strong and resilient economy, deliver environmental benefits, address the drivers of vulnerability and disadvantage and tackle the impacts of climate change.

This requires:

- The development of a whole-of-government Climate Change and Health Plan, which must include strategies for both mitigation and adaptation.
- Dramatically reducing the use of fossil fuels in Australia's energy mix, through investing in renewable energy, the staged and planned phasing out of coal fired power, and no further development of coal or gas resources.
- Genuine consultation with affected workers, communities, and families, to ensure a just transition for communities and regions with coal mining and coal fired power stations. These plans should new identify new opportunities for local economies that will encourage the development of new industries able to deliver long-term environmental, economic, and social benefits and sustainability for the community. Health status and economic viability are key factors. The development of just transition plans should include investments in reskilling and retraining of affected workers, as well as the identification and seeding of new

economic opportunities to limit economic and social disruption and provide tangible and viable new futures for affected communities.

- A price on carbon, but not necessarily an emissions trading scheme, with appropriate compensation to protect low income or disadvantaged households.⁸
- Support for renewable energy through expansion of the Renewable Energy Target (RET). The RET is an important national policy to assist Australia to boost Australia's electricity supply from clean, renewable energy sources as a necessary transition away from fossil fuels in order to meet its greenhouse gas emission reduction obligations. Renewable energy from sources such as wind and solar is Australia and the world's energy source of choice in this century and beyond. Renewable energy helps deliver lower emissions energy options, produces less pollution, poses fewer risks to health and wellbeing, and poses less occupational health and safety risks than existing energy supply systems. The Australian RET has delivered increased capacity in renewable energy and is an important contributor to reduced energy prices. In the medium to longer term, it will be a key factor in minimising energy price rises. Complementary measures to encourage both small and large-scale renewable energy are also required, such as loan guarantees (where there is market failure), feed in tariffs (to provide investment certainty), and investment in research and development to quickly scale up emerging technologies. The expansion of renewable energy resources to expedite the transition away from fossil fuels is vital. Wind and solar farms are a legitimate and valuable part of the energy mix in Australia and should be supported and subject to appropriate regulation consistent with other forms of infrastructure.
- Removal of fossil fuel subsidies and redirection of funds towards renewables. All subsidies to fossil fuels should cease and the funds applied to boost the availability and affordability of clean, renewable resources for energy and transport.
- A moratorium on unconventional gas. Unconventional gas poses potentially serious risks to health, and is extremely greenhouse gas emissions intensive due to both the nature of the gas (methane, which has a high global warming potential), and the volume of fugitive gas that is released to the atmosphere during exploration and extraction.⁹

- Stronger emissions regulations for fossil fuel power generation (coal and gas) and transport (diesel, petrol and LPG).
- Adoption of stronger air quality standards. This would deliver greenhouse gas emissions reductions as well as improve air quality, improve public health, and potentially save billions of dollars in avoided ill health and productivity gains – a win-win-win, situation.¹⁰
- The development of sector-specific incentives to encourage emissions reductions in all sectors, including energy efficiency and improved environmental standards for buildings, including healthcare sector infrastructure and housing. Measures should include comprehensive household energy efficiency programs, with special consideration of the needs of low-income and disadvantaged households. Energy efficiency offers some of the cheapest emissions abatement opportunities, and reductions can be achieved quickly using existing technologies. Improving the energy efficiency of houses and buildings, together with improvements in indoor air quality, can offer important health gains as well as financial savings in addition to emissions reductions.¹¹
- Investing in water efficiency measures (as both a mitigation and adaptation response).
- Investment in low carbon transport options, especially public transport, and improving urban planning to encourage healthier and more forms of transport, which also build community resilience, such as walking and cycling.
- Reducing emissions in food and agriculture sectors. Shifting the average (meat-based) diet in Australia to one that has a higher plant content offers important pathways for the reduction of greenhouse gas emissions and improvements in public health. A rapid worldwide growth in meat consumption is driving emissions growth and contributing to diseases such as ischaemic heart disease, obesity, and colorectal cancers.¹² Reductions in red meat consumption in Australia from the (current) average of 100g to 50g per person per day could potentially reduce annual emissions from livestock by 13.3 MtCO₂-e (about 22 per cent) as well as cutting the incidence of colorectal cancer by 11 per cent.¹³
- Funding of community services that help people better prepare for and respond to the risks associated with climate change is an important

element of the public policy response to climate change. Particular attention should be paid to the needs of disadvantaged communities.

- Strategies to reduce existing health inequalities, since this amplifies the risks to people's health associated with climate change.

Supporting climate mitigation and adaption in the health sector

In terms of assisting the health sector to respond to climate change, there is a need to create a supportive environment through policy to encourage and obligate the health sector to mitigate. There are significant opportunities for the health sector to cut carbon – if sector specific policy incentives are available. Specific programs to support the implementation of environmental sustainability and low carbon initiatives in healthcare services are needed to improve sector resilience, reduce emissions, and prevent public health risks associated with climate change.

Measures for investing in sustainable healthcare and preparing the health sector to deal with existing and future health effects of climate change include:

- Encouraging (and obliging, through regulation) health services to use renewable energy and reduce carbon emissions in the healthcare procurement supply chain, addressing emissions in manufacturing of healthcare equipment, reducing emissions through use of building space, heating and cooling could deliver substantial emissions reductions.
- The development of a climate resilience national health performance standard.
- Mandating the inclusion of climate change science in all health professional curricula.
- Investing in continuing professional education programs for health professionals to ensure there is an adequately staffed and skilled workforce cognisant of climate risks and able to respond to the increased burden on the population and health services from climate change.
- Ensuring disaster management plans are developed in consultation with communities, using the expertise of first responders and health

professionals, and reflecting specific localised risks of natural disasters and epidemics.

Community engagement and education and community resilience

To assist people to respond and adapt to a changing climate, climate policy must:

- Provide relevant information about the effects of climate change and the action that people can take, including education about how communities can reduce emissions as well as deal with extremes in temperature, air pollution, infectious diseases, and vector borne disease.
- Develop communities' capacity to assist people and support one another in times of adversity caused by climate change.
- Engage communities in the development of strategies to respond, as well as contribute to public education programs.
- Fund community sector organisations to help support and protect vulnerable people and communities.

APPENDIX A

Climate and Health Alliance Committee of Management

Dr Liz Hanna, President
Dr Peter Sainsbury, Vice President and Treasurer
Ms Fiona Armstrong, Secretary and Executive Director
Dr Elizabeth Haworth
Dr Brad Farrant
Terrona Ramsay
Mr Peter Malouf
Ms Clare de Kok
Ms Kim Daire
Dr Robyn Clay Williams
Dr Harry Jennens

CAHA Organisational Members

Alliance for Future Health
Australian Association of Social Workers (AASW)
Australian College of Nursing (ACN)
Australian Council of Social Service (ACOSS)
Australian Hospitals and Healthcare Association (AHHA)
Australian Health Promotion Association (AHPA)
Australian Medical Students Association of Australia (AMSA)
Australian Institute of Health Innovation (AIHI)
Australian Women's Health Network (AWHN)
Australian Nursing and Midwifery Federation (ANMF)
Australian Psychological Society (APS)
Australian Research Council for Children and Youth (ARACY)
Australian Rural Health Education Network (ARHEN)
CRANAplus
Doctors Reform Society (DRS)
Friends of CAHA
Health Consumers' Network (Qld)
Health Issues Centre (HIC)
Health Services Union (HSU)
Kooverup Regional Health Service (KRHS)
Psychology for a Safe Climate (PSC)
Public Health Association of Australia (PHAA)
Co-health (formerly North Yarra Community Health)
School of Public Health and Community Medicine, UNSW
Services for Australian Rural and Remote Allied Health (SARRAH)
Victorian Allied Health Professionals Association (VAHPA)
Women's Health East (WHE)
Women's Health in the North (WHIN)
World Vision Australia (WVA)

Expert Advisory Committee

Associate Professor Grant Blashki, Nossal Institute for Global Health
Associate Professor Colin Butler, College of Medicine, Biology and Environment, Australian National University
Professor Garry Egger, School of Health & Human Sciences, Southern Cross University
Professor David Karoly, Federation Fellow in the School of Earth Sciences, University of Melbourne
Professor Stephan Lewandowsky, School of Psychology, University of Western Australia
Dr Peter Tait, Convenor, Ecology and Environment Special Interest Group, Public Health Association
Professor Simon Chapman, Professor of Public Health, University of Sydney
Dr Susie Burke, Senior Psychologist, Public Interest, Environment & Disaster Response, Australian Psychological Society

¹ Paris Agreement

² 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.

³ Chen, A. New Research Quantifies Health Benefits of Reducing Greenhouse Gas Emissions, Berkely Lab News, 18 November 2014. Available at: <http://newscenter.lbl.gov/2014/11/18/new-research-quantifies-health-benefits-of-reducing-greenhouse-gas-emissions/>

⁴ Resuttek, A. "Cutting Emissions Pays for Itself", News Release, MIT Joint Program on the Science and Policy of Global Change, 25 August 2014. Available at: http://globalchange.mit.edu/news-events/news/news_id/402#.VQJL0SkRFUQ

⁵ *ibid*

⁶ Armstrong, F. Our Uncashed Dividend: The Health Benefits of Climate Action, Climate and Health Alliance and The Climate Institute, 2012. Available at: http://caha.org.au/wp-content/uploads/2010/11/OurUncashedDividend_CAHAandTCI_August20121.pdf

⁷ Xia, T. Traffic-related air pollution and health co-benefits of alternative transport in Adelaide, South Australia, [Environment International](#), [Volume 74](#), January 2015, Pages 281-290. Available at:

<http://www.sciencedirect.com/science/article/pii/S0160412014002980>

⁸ 2014 ECONOMISTS' OPEN LETTER SUPPORTING A PRICE AND LIMIT ON CARBON POLLUTION Available at: <http://blogs.usyd.edu.au/envi-economics/2014/20ECONOMISTS%20OPEN%20LETTER%20%20SUPPORTING%20A%20PRICE%20AND%20LIMIT%20ON%20CARBON%20POLLUTION.pdf>

⁹ Armstrong, F., and Tait, P. Health and Energy Choices, Background Briefing Paper, November 2014. Available at: <http://caha.org.au/wp-content/uploads/2014/11/Health-Energy-Choices-Bkgd-Briefing-Paper-201411081.pdf>

¹⁰ Australian Government Department of Environment, Working towards a National Clean Air Agreement, Discussion paper, March 2015. Available at:

<http://www.environment.gov.au/system/files/pages/e60c698a-ea71-4f3f-8c01-30213f1512e1/files/ncaa-discussion-paper.pdf>

¹¹ Our Uncashed Dividend, *ibid*.

¹² McMichael, A. J. et al. Food, livestock production, energy, climate change, and health, Energy and Health Series 5, *The Lancet*, Vol 370 October 6, 2007.

¹³ Friel, S. Climate change, food insecurity and chronic diseases: sustainable and healthy policy opportunities for Australia, Vol. 21(5-6) 2010 NSW Public Health Bulletin, p 132.