

Proposal to form a Green Health Alliance

May 2010

“Climate change is the biggest global health threat of the 21st century.”

The Lancet, May 2009. ¹



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“There is a great need to add the health lobby to the mitigation debate. [Climate change] is the great issue of our age. We have to take more action; we need to be saying: “this is a very serious threat”. This will help focus minds on the importance of getting greenhouse gas emissions down and doing more about biosequestration. We have to add our voice to that debate.”

Professor Anthony Costello, Professor of International Child Health and Director of UCL Institute for Global Health and lead author of the report: ‘*Managing the Health Effects of Climate Change*’ published by the Lancet in May 2009. ²

Background

Climate change poses serious immediate and long term threats to the health and wellbeing of the Australian and global population. Climate change is occurring extremely rapidly with the Earth’s climate now changing faster than in any time in the last 10,000 years - during which human civilisation has flourished.³ Projections regarding its effects are now well beyond the predictions of the 2007 Intergovernmental Panel on Climate Change (IPCC)* report and its worst case scenarios.^{4,5,6}

Increasing emissions from the use of coal, oil and gas and burning of wood and charcoal has led to an accumulation of greenhouse gases being trapped in the Earth’s atmosphere. Global atmospheric concentrations of CO₂, methane, and nitrous oxide are now higher than at any time in last 800,000 years.^{7,8}

Ice core data spanning many thousands of years shows atmospheric CO₂ now far exceeds pre-industrial times, when it was around 280 parts per million (ppm).⁹ Since the industrial revolution atmospheric CO₂ has risen rapidly to its current level of 387ppm; beyond the level considered safe by climate scientists (between 300-350 ppm).¹⁰ The current rate of increase (about 2ppm each year)^{11,12} is much faster than at any time over the last million years, during which an increase of 30ppm has always taken more than 1000 years to occur.¹³

Global warming directly correlates to the increasing concentration of greenhouse gases in the atmosphere, and average global temperature has increased almost 1°C over the last century.^{14,15} Irreversible climate change has already occurred with the current global average level (0.8°C) of warming.¹⁶

An important and previously underestimated contributor to global warming is the positive feedback loop associated with melting of the ice on the Earth’s surface.¹⁷ Reduced ice cover is leading to a loss of ‘albedo’ – the reflective capacity of ice that reflects solar radiation back into space.^{18,19,20}

This leads to an increase in warming, and risk leakage from the massive stores of carbon and methane (a much more powerful greenhouse gas than carbon dioxide) in permafrost beneath melting sea ice. The volume of gases in the permafrost exceeds many times those already in the atmosphere.²¹ Release of carbon from under the Arctic sea ice and the loss of

the Greenland ice sheet are considered the most significant tipping points for a sudden transition from the Earth's previously stable climate to one in which catastrophic and irreversible change occurs.^{22,23,24, 25} Current temperatures and atmospheric CO₂ levels are now too high to maintain the climate to which humans are currently adapted, and unless prompt action is taken, are expected to lead to such dramatic alterations in the earth's climate that human intervention will be futile.²⁶

Leading international climate scientists such as Professor James Hansen from the NASA Goddard Institute for Space Studies says to avoid catastrophic irreversible climate change, temperature increases must peak as far below 2°C as possible.²⁷ Two degrees is considered to be the global warming "guardrail" beyond which warming must not occur to 'avoid dangerous anthropogenic interference with the climate system'.²⁸ However even a warming of 2°C Celsius poses "unacceptable risks to key natural and human systems, including significant loss of species, major reductions in food-production capacity in developing countries, severe water stress for hundreds of millions of people, and significant sea-level rise and coastal flooding".²⁹

Australia is considered particularly vulnerable to climate change, and a failure to mitigate further increases in temperature is expected to lead to a severe decline in food production, increased water insecurity, and an unprecedented wave of extinctions.³⁰ The recent Garnaut report warns unmitigated climate change could lead to a fall in agricultural production in Australia by over 90% by 2100.^{31,32} The distribution of negative impacts where the majority of people and species are adversely affected by climate change becomes a severe risk beyond 2°C warming.^{33,34} A high risk of "large scale discontinuities" accompanies a scenario of more than 3°C warming.³⁵

The interdependence of all the different parts of the Earth's climate system means these changes are non-linear. Once a particular threshold is reached, it could lead to a cascading of abrupt and irreversible change to the Earth's climate.³⁶ Of the nine identified planetary boundaries identified by Earth System scientists as the limits beyond which humanity cannot safely exist, three have already been transgressed.³⁷ These are: climate change (the boundary for which is described as atmospheric CO₂ above 350ppm); biodiversity loss; and changes to the global nitrogen cycle.

The risks of crossing any of these interdependent boundaries are profound, the authors say:

*"Transgressing one or more planetary boundaries may be deleterious or even catastrophic due to the risk of crossing thresholds that will trigger non-linear, abrupt environmental change within continental- to planetary-scale systems."*³⁸

Given the pace of global warming, the targets for industrialised countries outlined in the IPCC report to reduce greenhouse gas emissions by 25-40% by 2020 (80% by 2050) to avert dangerous/catastrophic climate change are no longer considered adequate. Strong emissions cuts must commence immediately, with emissions peaking before 2020 before they begin to decline to carbon negative levels by 2050 is now considered necessary to avoid abrupt or irreversible climate change.³⁹

To have even a 50:50 chance of constraining temperatures rises to 2.4°C, global emissions should be reduced by 60-80% immediately.⁴⁰ Current proposals to reduce emissions however fall way short of what is required.⁴¹ Modelling suggests that current proposals will lead to a 4°C increase in global temperature and atmospheric CO₂ levels of 730ppm by 2100.⁴² If emissions continue at a “business-as-usual” level, it is predicted atmospheric CO₂ will reach 1000ppm by the end of the century.⁴³

There is no time to waste. It is now two years since James Hansen’s seminal paper *Target Atmospheric CO₂: Where should humanity aim?* was published, in which he and his colleagues warned that:

*“Continued growth of greenhouse gas emissions, for just another decade, practically eliminates the possibility of near-term return of atmospheric composition beneath the tipping level for catastrophic effects.”*⁴⁴



Proposal

The proposal to establish a Green Health Alliance acknowledges that climate change poses a serious and increasing threat to human health and that health care stakeholders have an important contribution to make in advocating for policy action on climate change and environmental issues.

It is envisaged that the membership of the Alliance would be a broad cross section of the sector as possible, and include health care professionals, health care service providers, institutions, academics, researchers, and health care consumers. The Alliance would be composed of and represent stakeholders in the health care sector who wish to see the issue of the environmental impact of the health care sector and the health implications of climate change addressed through prompt policy action. This would be based around a collective understanding that there are significant environmental consequences associated with the delivery of health care and profound human health and ecological impacts associated with unmitigated climate change.

Figure 1. Process for developing a Green Health Alliance



Purpose

The purpose of such an alliance would be to raise awareness of the health implications of climate change and the associated challenges of peak oil, increasing population and food and water insecurity. The establishment of the Alliance would demonstrate the public interest concern of health care sector and its members' commitment to contribute to the development of sound evidence based public policy that protects the community from the adverse consequences of environmental damage and climate change.

Possible objectives (for consideration)

The alliance may (for example) advocate for strong emissions reductions to reduce the current and future health impacts and risk associated with increasing global temperature, sea level rise, and food and water insecurity. It may also (for example) accept that the health sector itself should be making an effort to reduce its effect on the environment and therefore advocate for a commitment from the sector to reduce environmental harm through, for example, advocating for the inclusion of mandatory criteria in the accreditation of healthcare facilities for the use of energy and water; production of waste; standards for energy efficiency; and establishment of environment committees in all health care institutions. It may also (for example) advocate for policy development in the areas of drawdown of excess CO₂, healthy power generation, healthy transport and urban planning, sustainable healthy agricultural systems, improvements to land use, and protecting and conserving water supply.

Expected outcomes

The anticipated outcomes from the establishment of the Green Health Alliance would be:

- improved climate literacy within the health care sector;
- increased awareness of, and engagement with, the importance of climate change mitigation within the health sector; and
- increased understanding in the community of the health risks associated with failing to prevent further climate change
- the development and implementation of policy initiatives to significantly reduce greenhouse gas emissions in Australia;
- the development and implementation of policy initiatives to reduce atmospheric CO₂ through drawdown of carbon dioxide,⁴⁵ and
- the establishment of national initiatives to improve the environmental performance (and reduce the environmental impact) of health care institutions.

Process to establish the Alliance

As this is a federal election year, it would be appropriate and timely to arrange the formation of the Alliance prior to the federal election. This could be achieved through the immediate establishment of a core group of interested persons/organisations, and for this group to approach other partners in the sector with the intention of organising a workshop/roundtable meeting in July of health care stakeholder interested in forming a Green Health Alliance.

This would be a national alliance, so it might be appropriate for the meeting to be held in Canberra. This would assist in terms of engaging with federal politicians, and it may be appropriate, (and assist the political impact) to hold the meeting in a committee room of Parliament House, and Ministers Roxon and Wong invited to attend.

This meeting/workshop should be supported by the development of a background discussion paper circulated to stakeholders prior to the event to assist in moving to some core areas of agreement.

The membership, objectives, priorities and governance, as well as discussion regarding the consensus core areas of agreement for the alliance would be best discussed at the face to face meeting.

Governance

The structure of the alliance could take a similar approach to that of the Australian Health Care Reform Alliance with an elected executive committee established from the membership, and its advocacy to centre on the core areas of consensus that are able to be articulated within the alliance. For example, the membership may choose to elect a ten person executive committee to carry out the functions of the Alliance. This committee may then appoint a Chair and or Spokesperson to represent the Alliance.

Next steps

The proposed next steps are that a Working Group be formed among interested persons/organisations. Members of this group should then approach potential Alliance partners outlining the proposal. A date should then be set for the roundtable meeting/workshop to discuss the establishment of the Alliance.

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- ² [Listen to Richard Horton and Anthony Costello](#) explaining the background to the first *Lancet*/UCL Commission.
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- ⁷ Intergovernmental Panel on Climate Change (IPCC), Climate Change 2007: Synthesis Report, Summary for Policymakers, November 2007, p.5.
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