

Open letter to the Prime Minister of Australia

The Hon Kevin Rudd, MP
Prime Minister of Australia
Australian Parliament
Canberra, Australian Capital Territory, 2600

Dear Prime Minister,

September 26, 2008

The 2007 IPCC report, compiled by hundreds of climate scientists and representing a consensus view of the best available peer-reviewed science, has unequivocally concluded that our climate is warming rapidly, and that we are now at least 90% certain that this is primarily due to human activities.

The concentration of carbon dioxide in our atmosphere now far exceeds the natural range of the past 650,000 years, and it is rising at an alarming rate due to human activity – currently by over 2 parts per million per year. The concentration of several other important greenhouse gases is also increasing rapidly.

If this trend is not halted soon, many millions of people from around the world will be at risk from extreme events such as heat waves, drought, fire, floods and storms, our coasts and cities will be threatened by rising sea levels, vector-borne, water- and food-borne diseases will spread rapidly, food yields and water supplies will be impaired in many regions, and many ecosystems, plant and animal species will be in serious danger of extinction. Some of Australia's natural assets such as the Great Barrier Reef, Kakadu and the Daintree World Heritage areas, which bring great wealth and recognition to our nation, could be damaged for all time.

Australia is especially vulnerable as pointed out by Professor Garnaut in February when he says we *"would be a big loser--possibly the biggest loser amongst developed countries--from unmitigated climate change. The pace of global emissions growth under "business as usual" is pushing the world rapidly towards critical points, which would impose large costs on Australia directly and also indirectly through the effects on other countries of importance to Australia."* (Garnaut, February 20, 2008, Interim Report).

The critical next round of focused negotiations for a new global climate treaty is now underway. The prime goal of this new regime must be to limit global warming to no more than 2°C above the pre-industrial temperature, a limit that has already been formally adopted by the European Union, South Africa and a number of other nations.

Based on current scientific understanding, this requires that global greenhouse gas emissions be reduced by at least 50% below their 1990 levels by the year 2050. In the long run, greenhouse gas concentrations need to be stabilised at a level **well below 450 ppm** (parts per million; in CO₂-equivalent concentration). In order to stay below 2°C, global emissions must peak and decline before 2015, so there is no time to lose.

As highlighted by the Garnaut Review: *"... analysis suggests that a global objective of 450 ppm, with discussion of transition to 400 ppm once the 450 ppm goal is being approached with confidence, would better suit Australian interests."* This statement, taken from the "Targets and Trajectories Report", is consistent with the climate science cited above. Indeed, there is broad agreement in the reputable science community regarding these targets.

The Garnaut Review concluded that an emission reduction target for Australia of 25% below 1990 levels by 2020 would be an equitable contribution to the international effort required to achieving this outcome. As a group of Australia's leading climate change scientists, we urge you to adopt this target as the minimum requirement for Australia's contribution to an effective global climate agreement.

Failure of the world to act now will leave Australians with a legacy of economic, environmental, social and health costs that will dwarf the scale of national investment required to address this fundamental problem. Other nations have taken action and have committed to further action. We urge you to act decisively to maintain global momentum and to protect Australia's future.

Sincerely yours,

Professor Nathan Bindoff, University of Tasmania

Dr. John Church, Immediate past Chair of the Joint Scientific Committee of the World Climate Research Programme

Professor Matthew England, ARC Federation Fellow and joint Director, Climate Change Research Centre, University of New South Wales

Professor Dave Griggs, Director, Monash Sustainability Institute, Monash University

Professor Ann Henderson-Sellers, Immediate Past Executive Director, World Climate Research Programme, Macquarie University

Professor Ove Hoegh-Guldberg, Director, Centre for Marine Studies, University of Qld

Professor Lesley Hughes, Director, Climate Risk Concentration in Research Excellence, Macquarie University

Dr Roger Jones, Co-ordinating Lead Author, IPCC Fourth Assessment Report

Professor David Karoly, ARC Federation Fellow, University of Melbourne

Professor Amanda Lynch, ARC Federation Fellow, Monash University

Professor Tony McMichael, NHMRC Australia Fellow, Australian National University

Professor Neville Nicholls, ARC Professorial Fellow, Monash University

Professor Graeme Pearman, Monash University

Professor Andy Pitman, Convenor, ARC Research Network and joint Director, Climate Change Research Centre, University of New South Wales

Dr. Barrie Pittock, Lead Author, IPCC Fourth Assessment Report

Dr. Michael Raupach, Co-Chair, Global Carbon Project

Cc: Senator the Hon Penny Wong, Minister for Climate Change and Water
The Hon Peter Garrett MP, Minister for the Environment, Heritage and the Arts