

**Cardell, Susan (REPS)**

**From:** director.rses@anu.edu.au  
**Sent:** Monday, 21 May 2001 3:04 PM  
**To:** susan.redman@aph.gov.au  
**Subject:** Submission of joint statement by national academies of sciences  
Secretary  
Joint Standing Committee on Treaties  
Inquiry into the Kyoto Protocol  
Parliament House

Below, for the Committee's consideration, is a statement on the Science of Climate Change from sixteen national academies of science published in "Science" on 18 May 2001.

The statement is a response by these learned academies to the citing of "incomplete" scientific knowledge as one of the reasons for the USA withdrawal from the Kyoto Protocol process. The discussion paper (No. 38) issued by the Committee also notes the criticisms of the IPCC methods and conclusions by individuals and organisations concerned at possible Government actions contemplated in response to the conclusions of the IPCC consultations and consensus. The joint academies statement is a counter to such criticisms.

Yours sincerely  
David H. Green  
Chairman  
Greenhouse Science Advisory Committee

Dear Fellow

You will no doubt be aware of President Bush's recent decision to withdraw from the Kyoto Protocol, citing "incomplete" scientific knowledge as one of the reasons for this action. Several Fellows have contacted us recently to ask how the Royal Society would respond to this. The purpose of this e-mail is to inform you that, at the initiative of the Royal Society, a group of sixteen national academies of science from all parts of the world has agreed the following statement about the science of climate change. The statement endorses the Intergovernmental Panel on Climate Change as the most reliable source of information on climate change and its causes. It calls for prompt action to be taken to reduce emissions of greenhouse gases and recognises the ratification of the Kyoto Protocol as a small but essential first step towards stabilising atmospheric concentrations of greenhouse gases.

The statement is published in Science today and has already received considerable media coverage. Hard copies are available from the Royal Society and the statement can also be found on our website at <http://www.royalsoc.ac.uk/policy/>.

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THE SCIENCE OF CLIMATE CHANGE

A joint statement issued by the Australian Academy of Sciences, Royal Flemish Academy of Belgium for Sciences and the Arts, Brazilian Academy of Sciences, Royal Society of Canada, Caribbean Academy of Sciences, Chinese Academy of Sciences, French Academy of Sciences, German Academy of Natural Scientists Leopoldina, Indian National Science Academy, Indonesian Academy of Sciences, Royal Irish Academy, Accademia Nazionale dei Lincei (Italy), Academy of Sciences Malaysia, Academy Council of the Royal Society of New Zealand, Royal Swedish Academy of Sciences, and Royal Society (UK).

The work of the Intergovernmental Panel on Climate Change (IPCC) represents the consensus of the international scientific community on climate change science. We recognise IPCC as the world's most reliable source of information on climate change and its causes, and we endorse its method of achieving this consensus. Despite increasing consensus on the science underpinning predictions of global climate change, doubts have been expressed recently about the need to mitigate the risks posed by global climate change. We do not consider such doubts justified.

There will always be some uncertainty surrounding the prediction of changes in such a complex system as the world's climate. Nevertheless, we support the IPCC's conclusion that it is at least 90% certain that temperatures will continue to rise, with average global surface temperature projected to increase by between 1.4 and 5.8°C above 1990 levels by 2100 [1]. This increase will be accompanied by rising sea levels, more intense precipitation events in some countries, increased risk of drought in others, and adverse effects on agriculture, health and water resources.

In May 2000, at the InterAcademy Panel (IAP) meeting in Tokyo, 63 academies of science from all parts of the world issued a statement on sustainability in which they noted that "global trends in climate change ... are growing concerns" and pledged themselves to work for sustainability - meeting current human needs while preserving the environment and natural resources needed by future generations [2]. It is now evident that human activities are already contributing adversely to global climate change. Business as usual is no longer a viable option.

We urge everyone - individuals, businesses and governments - to take prompt action to reduce emissions of greenhouse gases. One hundred and eighty-one governments are Parties to the 1992 UN Framework Convention on Climate Change, demonstrating a global commitment to 'stabilising atmospheric concentrations of greenhouse gases at safe levels'. Eighty-four countries have signed the subsequent 1997 Kyoto Protocol, committing developed countries to reducing their annual aggregate emissions by 5.2% from 1990 levels by 2008-2012.

The ratification of this Protocol represents a small but essential first step towards stabilising atmospheric concentrations of greenhouse gases. It will help create a base on which to build an equitable agreement between all countries in the developed and developing worlds for the more substantial reductions that will be necessary by the middle of the century.

There is much that can be done now to reduce the emissions of greenhouse gases without excessive cost. We believe that there is also a need for a major co-ordinated research effort focusing on the science and technology that underpin mitigation and adaptation strategies related to climate

change. This effort should be funded principally by the developed countries and should involve scientists from throughout the world.

The balance of the scientific evidence demands effective steps now to avert damaging changes to the earth's climate.

Notes:

[1] Climate Change 2001: The Scientific Basis Contribution of WG1 to the IPCC Third Assessment Report <http://www.ipcc.ch>. The average global surface temperature is predicted to increase by between 1.4oC and 3oC above 1990 levels by 2100 for low emission scenarios, and between 2.5oC and 5.8oC for higher emission scenarios.

[2] Transition to Sustainability in the 21st Century: The Contribution of Science and Technology. A Statement of the World's Scientific Academies (May 2000). <http://interacademies.net/intracad/tokyo2000.nsf>