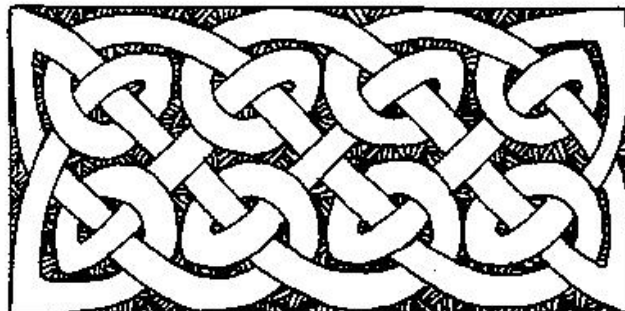
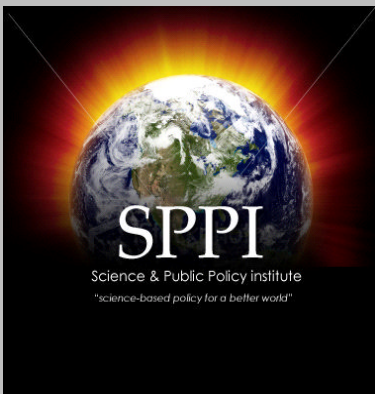


WHY THE IPCC SHOULD BE DISBANDED

by

John McLean

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So why is the IPCC so adamant that it will not revisit its conclusions?

It may be that they are so profoundly concerned about the perils of global warming that the darkest possible picture is painted in order to secure urgent action.

There may also be the inevitable institutional characteristic of making the problem more serious than it is in order to command greater attention. This too may be a consequence of the way research funding is administered - it is a cold, isolated world for the climate change contrarian in the modern scientific community.

Whichever reason - and I suspect it may be both - the IPCC's absolutist position is unhelpful. The world faces a number of other and arguably more imminent challenges and competing claims on resources: the threats from nuclear proliferation and international terrorism, and the need for humanitarian aid for the world's poorest, are obvious examples...

In conclusion, I believe that the IPCC process is so flawed, and the institution, it has to be said, so closed to reason, that it would be far better to thank it for the work it has done, close it down...

-- Lord Nigel Lawson from Britain's House of Lords

Why the IPCC should be disbanded

Introduction

The common perception of the Intergovernmental Panel on Climate Change (IPCC) is one of an impartial organisation that thoroughly reviews the state of climate science and produces reports which are clear, accurate, comprehensive, well substantiated and without bias.

One only needs examine some of its procedural documents, its reports and its dealings with reviewers of the report drafts to discover how wrong this impression is.

The IPCC is not and never has been an organisation that examines all aspects of climate change in a neutral and impartial manner. Its internal procedures reinforce that bias; it makes no attempts to clarify its misleading and ambiguous statements. It is very selective about the material included in its reports; its fundamental claims lack evidence. And most importantly, its actions have skewed the entire field of climate science.

Over the last 20 years and despite its dominance and manipulation of climate science, the IPCC has failed to provide concrete evidence of a significant human influence on climate.

It's time to call a halt to its activities and here are ten reasons for doing so.

1. The IPCC charter emphasises a human influence on climate, not climate in general

The role of the IPCC is defined in item 2 of its document "Principles Governing IPCC Work", (online at <http://www.ipcc.ch/about/princ.pdf>)

The role of the IPCC is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of **human-induced climate change**, its potential impacts and options for adaptation and mitigation. [*my emphasis added*]

This extract makes it clear that the name "Intergovernmental Panel on Climate Change" is something of a misnomer because the organisation is specifically directed to investigate any human influence on climate. In this context the term "climate change" is analogous to the definition used by the United Nations Framework Convention on Climate Change that is "climate change caused by human activity".

The various IPCC reports demonstrate this emphasis on a human influence by their chapter titles and sequence.

In the First Assessment Report (1990) the first seven chapters discussed greenhouse gases, aerosols, climate modelling and "greenhouse gas-induced climate change" before chapter 7 had anything to say about climate observations and chapter 8 looked for greenhouse effects in those observations.

The Second Assessment Report (1995) reorganised the chapters but opened with an overview that stressed the greenhouse effect followed by a chapter on radiative forcing, which is how the greenhouse effect operates, prior to a chapter dealing with observations.

In the Third Assessment Report (2001) the chapters were again reorganised with the observations moved to chapter 2, following the overview in chapter 1, and the radiative forcing to chapter 6. In what appears to be a momentary lapse, chapter 1 admitted that the changes in temperature did not necessarily mean that a human influence on climate had been identified and that the changes may be natural.

The acknowledgement of other possible factors did not last long because the Fourth Assessment Report (2007) reorganised its chapters so that chapter 1 contained an overview and chapter 2 discussed changes in atmospheric components and radiative forcing (i.e. greenhouse gas emissions) prior to three chapters dealing

with observations.

With each assessment report we've seen discussion of greenhouse effects preceding a discussion about observations. We've also seen each report increasing the probability of a human influence in climate but the quality of evidence to support this claim has scarcely improved so it looks like the IPCC is trying to justify its own existence.

It would be unfair to criticise the IPCC for following the terms of its charter but one can criticise it for failing to clearly enunciate that charter. This situation has encouraged the perception that the IPCC is independent and the ultimate authority on all climate science, but it is intent on selling the notion of a man-made influence on climate in order to justify its own existence. To put it simply, if it was shown that there is no significant human influence on climate there would be reason for having the IPCC.

2. Its participants are not impartial towards a possible human influence on climate

Items 8 and 9 of the above-mentioned document set out the procedures for participation in IPCC work.

8. Invitations to participate in the sessions of the Panel and its Working Groups, Task Forces and IPCC workshops shall be extended to Governments and other bodies by the Chairman of the IPCC.
9. Experts from WMO/UNEP Member countries or international, intergovernmental or nongovernmental organisations may be invited in their own right to contribute to the work of the IPCC Working Groups and Task Forces. Governments should be informed in advance of invitations extended to experts from their countries and they may nominate additional experts.

For this extract we can see that governments can appoint participants to the IPCC but also that those who already work with the IPCC can invite experts to join various working groups and task forces.

Consider this from the origins of the IPCC in 1998 and a troubling picture quickly emerges. At that time the various governments would have appointed to the new organisation scientists or researchers with a strong interest in the question of a human influence on climate. Once appointed to the IPCC such people would, in accordance with the defined procedures, have directly invited other like-minded individuals to also participate.

More than just being a wonderful way to create a lobby group, this procedure created a strongly self-selecting assembly of people with a vested interest. Doubtless it included those who had undertaken research into the area, published papers on the subject and in general developed a reputation around the hypothesis of human-induced climate change. The potential to enhance the general acceptance of that hypothesis and incidentally to develop one's reputation by being part of IPCC processes was obvious from the outset.

Although some individuals appointed to the IPCC were probably sceptical of the extent of any human influence on climate, the very nature of the organisation's charter and its procedures indicates that such minority viewpoints would be quickly marginalized by the dominance of participants aligned to a "human cause".

3. The IPCC promotes a self-sustaining hypothesis of man-made warming

Over time the IPCC reports have progressively expressed more certainty that humans have significantly influenced climate. A key plank for this increased certainty is the number of scientific papers that are claimed to support this contention. This is nothing more than a self-sustaining hypothesis promulgated by the IPCC.

Here's how it works. When an IPCC report expresses confidence in a human influence on climate governments direct research funding into projects that will investigate aspects of this claim. The research

produces scientific papers that support the argument. Like-minded experts, probably involved in similar research, review those papers on behalf of journals that subsequently publish the papers. The dominance of papers on those themes enables the IPCC to say that the number of papers supporting the particular line of argument is strong evidence for the claim.

With the dominance of the IPCC's opinions on the governments, which after all fund it and provide both scientists and policy architects, large amounts of public money are directed towards research projects that assume a human influence on climate and little or no funding flows to projects that take a more critical line.

Researchers are not foolish, and they have learned to word their research proposals in a manner that endorses or assumes a human impact on climate. And they have learned to make similar assertions in their scientific papers even if they have very little evidence for such claims. This artful wording of course helps the researcher obtain funding but it also works to the IPCC's advantage because the result will be an increase in the number of papers that endorse a certain viewpoint.

One reviewer's comments to the first order draft of the Working Group I report referred to this matter by suggesting that governments and other institutions be recognised for their support of climate research. This was rejected with the comment "The LAs [lead authors] have been sensitive to avoid the appearance of special pleading for research funding."

But indirectly this is exactly what the IPCC reports do - highlight a certain issue and, by virtue of the esteem of this biased organisation, complaisant governments are only too willing to fund research into that area. The IPCC then claims that the predominance of papers that discuss and support a certain view is evidence that the notions are correct.

It's a self-sustaining practice that also marginalizes investigations into natural drivers of climate by starving them of funds and exposure.

4. The IPCC's misuse of the concept of consensus

The IPCC misuses the concept of a consensus to provide misleading and false impressions.

The document defining the IPCC's principles also says:

10. In taking decisions, and approving, adopting and accepting reports, the Panel, its Working Groups and any Task Forces shall use all best endeavours to reach consensus.... Differing views on matters of a scientific, technical or socio-economic nature shall, as appropriate in the context, be represented in the scientific, technical or socio-economic document concerned....

In other words the IPCC's formal acceptance of a document or report will be determined by consensus among its members. This is entirely reasonable because a consensus is a decision-making tool for groups of people working in administrative or advisory roles (e.g. committees, juries in court cases, politicians, and assemblies in general).

It is a fundamental principle of science that support for a hypothesis means nothing because everything depends on whether the hypothesis can be proved wrong. Settling an unresolved scientific matter is normally done by trying to break various hypotheses and continuing until one is found that cannot be broken, at which point the hypothesis is provisionally accepted.

These matters are not settled by consensus but by dogged testing. Science and its near neighbour medicine are replete with examples of maverick individuals rejecting the consensus of the day and proposing new theories that subsequently proved to be correct. This is not to say that the mavericks are always right but it does illustrate that consensus does not confer "truth" on a scientific theory.

The IPCC's assessment reports are basically a literature survey of the current state of climate science. In the creation of these reports it is desirable that the length of the report be reasonable and therefore that a

consensus be reached about the material to be included but if no consensus is possible then the range of differing opinions should be presented.

But whose opinions are we talking about? Is it the authors and review editors who seek to establish a consensus among themselves or is it a wider consensus among climate scientists?

If it is the latter then the review editors of the IPCC WG I report are in contravention of the defined procedures when they reject a reviewer's comments with statements like "More papers reject your claim than support it". If it is the former then seems that the IPCC is interpreting a consensus about the text of a report as somehow determining the truth of a certain statement.

In a similar fashion the IPCC often defends the content of its reports by claiming that it is the consensus of expert reviewers or other scientists. Such a consensus is merely a collection of opinions, not a statement of a truth or unassailable scientific fact

The IPCC seems unable or unwilling to accept the limitations of the use of a consensus as a decision-making tool. It's either that or the IPCC is really geared towards consensus-based political decisions and the science is a minor issue.

5. Many IPCC report authors have vested interests

We are told that the authors of each chapter of the IPCC reports are experts in their fields and let's accept that for the sake of argument. With the skewed state of climate science many of these experts will have undertaken research and written peer-reviewed papers with funding which is biased towards to the claims of the IPCC.

This research is clearly biased and the findings are likely to reinforce the IPCC's claims of consensus, moreover this work has probably enhanced the experts' reputations and enhanced their credibility for future research projects. There is no way that these authors can be regarded as impartial when they have so much to gain from the IPCC's reports.

Self-promotion is a further advantage for these author-researchers. Their research papers are likely to be cited by the very chapters of which they are authors because this is the field of their expertise. Judging by the review comments by some authors it was not uncommon for an author of the IPCC reports to draw attention to his own published papers and recommend that they be cited by the report. Think all this could never happen? The very prominent and influential "hockey stick" temperature graph of the IPCC's 2001 report was the creation of a lead author of the chapter in which it featured.

It is not always the promotion of one's own work that is important because in some fields of climate science the number of scientists is not great and other experts may be colleagues or joint authors of published papers. The promotion of their work might be just as advantageous to authors as the promotion of their own.

Little has changed over time. In the early days the IPCC authors included some who were reliant on the proposition of man-made warming for their employment and their reputation, and with the field being small they probably cited their own research papers. This emphasis on man-made warming set the tone of subsequent IPCC reports and for the science in general so it should be no surprise that today's IPCC authors are product of that situation. In these circumstances it would be very surprising if the text of the reports was not biased towards the views of the expert authors.

6. The IPCC report authors are often also reviewers

The IPCC document "Second review by governments and experts" (available online at <http://www.ipcc.ch/about/faq/IPCC%20Procedures.pdf>) says:

The second order drafts and a first draft of the Summary for Policymakers are distributed through the government focal points to all governments, **all authors** and to the reviewers involved in the expert review. [*Emphasis added*]

Despite the potential conflict of interest, many authors of the 4AR took this as an invitation to also be reviewers.

An analysis of the review comments for the second order draft of the WG I report¹, released under the US Freedom of Information Act, shows that it was examined by 308 reviewers of which 95 (i.e. 31%) were authors of at least one chapter of the report. Of these 95, 34 reviewed only the chapters they authored, a further 31 reviewed their own chapters and as well as other chapters, and the remaining 30 reviewed other chapters but not their own.

One such author-reviewer made 282 comments about his only chapter and together 3 author-reviewers of chapter 11 made a total of 350 comments about that chapter.

Perhaps the involvement of authors in the review process is a sign of failure to include all authors' opinions even though this might be in contravention of the directive to include differing views. It might also be a means of increasing the number of reviewers in response to the experience in the Third Assessment Report (2001) for which only 25% of those who applied to be reviewers actually responded. If the IPCC's claims about expert authors are correct then we might wonder how many experts were not authors and were in a position to review the document.

Of course it might also be that each contributing author was involved with only a small part of each chapter and they are being asked to review the other parts of the text. This is feasible but it fails to explain why one lead author, who should be across most of the chapter, was also a reviewer of that chapter.

This situation is very disturbing because these author-reviewers have a clear vested interest. These expert authors would have much to gain from supporting their chapters and much to lose if they disagreed with them.

There may be quite legitimate reasons for authors to review their chapters but the failure to clearly describe the purpose and extent of their involvement has meant that false weight has been added to certain impressions of the review process and in particular to the support for certain opinions.

7. IPCC gives a misleading impression of the extent of review and support for its claims

Over the years the IPCC has shown a clear habit of making statements that are ambiguous or misleading and making no effort to clarify them.

The preface of the WG I report says:

"... Drafts prepared by the authors were subject to two rounds of review and revision during which over 30,000 written comments were submitted by over 650 individual experts as well as by governments and international organizations. ..."

An analysis of the review comments for the two drafts of the WG I report reveals that 548 reviewers commented on the first order draft and 308 reviewers on the second order. These figures include governments, of which 22 examined the second draft, and just 3 international organisations.

The IPCC's implication that 650 individuals plus others examined each draft is simply unsupported by the data.

We might also wonder about the changes in the number of reviewers between the first and second drafts.

¹ See: http://scienceandpublicpolicy.org/sppi_originals/peerreview.html

After 508 reviewers examined the first draft only 208 reviewers went on to examine the second draft and were joined by another 100 reviewers. It could be very interesting to learn the reasons for that disappearance of the 60% of those initial reviewers.

The IPCC's mention of an unspecified number of international organisations implies a substantial involvement when in fact it was negligible. Just 3 individuals were listed in the appendix to the WG I Report under the heading of "International Organizations" rather than under the name of their country. One made no comments on the second order draft, one made just 1 comment and the third made 163 comments.

The review of every chapter was not undertaken by the 650 reviewers as the IPCC would have us believe. The average number of reviewers for each chapter of the first order draft of the WG I report was 102 (range: 73 to 156) and for the second order draft, 67 (range: 34 to 100).

These numbers diminish even further when we exclude the reviewers who were not impartial.

Data for the pivotal chapter 9, in which recent warming was substantially attributed to human activity, illustrates the point.

This chapter was examined by 62 reviewers but 37 had a potential direct vested interest in the chapter. Some were contributing authors of the very same chapter, others of different chapters. Some were directly involved with the creation of the overall WG I report and some were authors of cited papers. And some reviewers fell into more than one of the above groups.

Remove all those reviewers and the number falls to 25 but even then many had vested interests. Eight are recorded as government reviewers and another was a government reviewer by his own admission but not recorded as such. Without exception, all of these governments have policies that seek to limit carbon dioxide emissions and therefore implicitly accept the IPCC's fundamental claim. Government appointed reviewers would have been carefully selected and would be unlikely to seriously contradict the basis for their government's policy.

Seven more individual reviewers were found to be currently or recently employed by government agencies whose research tends to be aligned towards a human influence on climate. Another appears to have a possible commercial vested interest in the claim of man-made warming and one more was an author of one or more chapters of earlier IPCC reports. There is of course the possibility that these reviewers may have been impartial but it would be foolish to assume this was the case in the absence of any evidence.

After excluding all the above reviewers we are left with just 7 who might have been truly independent and impartial, and of these just 2 made more than a single comment.

The IPCC's implication that its 650 reviewers endorsed the key finding of chapter 9 is likewise nonsense. Explicit statements of support came from just 5 reviewers but 4 of these had either direct or indirect vested interests.

The entire contribution to the review of the 11-chapter WG I report by that remaining fifth reviewer was this one supporting statement. Was the rest of the report so perfect in his eyes that he had no cause to make even a comment of praise or was the supporting evidence for the crucial claim that human activity has significantly influenced climate never examined in detail?

The IPCC implies that over 650 impartial reviewers diligently examined chapter 9 and a very substantial majority endorsed it. The reality is that only 7 reviewers appear to have been impartial and even fewer were diligent. Credible support among reviewers for the IPCC's claim of a significant human influence on climate was basically negligible. The IPCC is being grossly misleading, one might say deceitful, about the level of review and support for its claims.

8. IPCC advances a very weak argument for a significant human influence on climate

The IPCC bases its claim about the human impact on climate on an increase in temperature, a supposed correlation with increase in carbon dioxide concentration, the distribution of warming and on a claimed need

to include a "human" factor in climate models in order that the models produce output which closely matches reality.

Not one of these points stands up to close scrutiny.

The IPCC relies heavily on the surface temperature record as proof of widespread and significant warming but the agencies that produce that record refuse to permit independent auditing of the data and the methods. There are very good grounds for believing that observational temperature data is contaminated by local man-made changes to the thermal environment (buildings, roads, heat generation, land-use changes etc.). Without an independent audit there is no verification that proper adjustment has been made for these localised factors.

The remainder of the IPCC's arguments rests on the use of estimates, simulations and computer models. The IPCC admitted in its Third Assessment Report that many climate factors are poorly understood, and was very circumspect in detailing the state of knowledge in the Fourth Assessment Report.

When knowledge is lacking it is impossible to make credible estimates and climate models, yet the IPCC often says things like "We've investigated several possible reasons for the warming but we still don't know what might have caused it so therefore it must be human activity." This is unfounded when most climate factors are poorly understood and natural causes cannot be ruled out.

The IPCC claims that the pattern of warming fails to match computer predictions of the warming pattern that could be expected from natural events. Climate scientists can't agree on the existence of Ferrell Cell Circulation, which some scientists say is an air movement system that moves air from the mid latitudes towards the poles. That uncertainty is a major problem when creating a model of heat distribution but it's not an issue for the IPCC who showed blind faith in such models and decided that the pattern of heating was unnatural and that human activity should be blamed.

With the argument resting on factors that are far less than robust it is simply dishonest of the IPCC to claim a 90% to 95% probability that human activity is to blame.

9. Its primary conclusion was probably pre-determined

According to the IPCC's website work commenced on the WG I report in November 2003, with lead author meetings in Sep. 2004, May 2005, Dec. 2005 and Jun. 2006, and with the final draft submitted to governments in October 2006 prior to public release in April 2007.

In parallel with this, work commenced on the WG II report ("Climate Change 2007: Impacts, Adaption and Vulnerability") in September 2003, with lead author meetings in Sep. 2004, Mar. 2005, Jan. 2006 and Sep 2006, all prior to public release shortly after the WG I report.

The work schedule for the WG III report is unknown, but like the WG II report its content is based on the finding in the WG I report that humans are responsible for climate change. The Introduction to the WG II report makes this very clear:

After confirming in the first volume on "The Physical Science Basis" that climate change is occurring now, mostly as a result of human activities, this volume illustrates the impacts of global warming already under way and the potential for adaptation to reduce the vulnerability to, and risks of climate change.

All IPCC assessment reports go through a sequence of data gathering, formulating an initial or "zero" draft, a review of that draft, a second draft (the "first order draft"), a review, a third draft (the "second order draft"), another review and then the creation of the final draft. This activity takes time, almost 3 years according to the IPCC schedules.

Of course the WG II and WG III reports could have progressed in parallel with the WG I report upon which conclusions they rely, but to do so without a clear idea of the findings of the WG I would be to risk wasting time and effort.

The more likely situation is that the WG II and WG III were able to progress because the conclusions of the WG I report had been determined even in advance of the majority of the writing. This is supported by the above schedule that shows WG II report activities preceding or coinciding with WG I report activities from September 2003 through to the end of 2005.

Such pre-empting of the findings of WG I would be not only lacking in integrity but would nullify the ability of the reviewers of the WG I report to have any major influence on the content of that report. In other words the review exercise would be a sham, but then that's what it appears to have been given that the rather biased authors were also the gatekeepers of the text.

10 Ethics and professionalism

How an organisation deals with potential conflicts of interest, its respect for the abilities of its workers, its co-operation with those workers and with external complaints says a lot about the ethics and professionalism of the organisation.

The IPCC's track record in these matters falls well short of impressive as the following four examples indicate.

(a) Chairman Dr Rejandra Pachauri is a busy man. As well as chairing the IPCC he is also head of The Energy and Resources Institute, an Indian organisation, is the south-east Asian representative of The Renewable Efficient Energy Partnership (REEP), a non-governmental organisation based in Austria, and recently has been appointed to a committee to advise the Indian government.

Three questions are begging to be asked - (i) which of these organisations will gain from the IPCC's claims of man-made warming?; (ii) which will lose if the claim is proven to be false?; and (iii) when Dr Pachauri makes public comments after being introduced as the chairman of the IPCC which hat is he wearing at the time?

(b) In 2004 Dr Kevin Trenberth, lead author of chapter 3 of the IPCC's 4AR Working Group I report, declared that global warming would spur more outbreaks of intense hurricane activity. Not surprisingly this was widely reported by the media. Trenberth had usurped the authority of hurricane expert Dr Chris Landsea who had been asked to write the part of that chapter which discussed hurricane activity and whose research had shown no such thing. Landsea's complaint to the IPCC was dismissed with the claim that Trenberth was speaking as an individual despite being introduced as an IPCC lead author.

(c) Dr Paul Reiter worked on a particular chapter of the IPCC report for some time before becoming frustrated that his objections to the text were being ignored. He resigned and asked that his name be removed from the list of authors but the IPCC insisted that he had contributed and that his name should appear. It took the threat of legal action from Reiter before the IPCC would agree to remove his name.

(d) Ian Castles and David Henderson criticised the IPCC for using Market Exchange Rates for its predictions of the future wealth of countries in its Third Assessment Report rather than the often-used Purchasing Power Parity method. Over the ensuing months Castles and Henderson met IPCC representatives and presented their detailed arguments and the IPCC twice discussed which method should be used in 4AR.

More than 12 months after Castles and Henderson made their initial comments the IPCC released a media statement in which it referred to them as "so called 'two independent commentators' ", accused them of spreading "misinformation" and claimed that their criticism was "unfounded". The statement also claimed that recent tests, which were clearly made as a consequence of the complaint, revealed only very minor differences between the two methods, but would anyone have expected it to say otherwise?

None of these four instances show the IPCC in a particularly good light. We have conflicts of interest, the advice of experts pre-empted, a lack of co-operation and a delayed but hostile defensiveness when challenged.

SUMMARY

The IPCC is a political lobby group whose members undertake research funded by governments and produce peer-reviewed scientific papers. Then teams of authors, including some of the original researchers, write reports based on those peer-reviewed papers and declare those reports to be an accurate summary of the field.

In normal circumstances there would be howls of protest were authors permitted to review and promulgate their own work, and the summary documents would be automatically rejected on the grounds that the authors had vested interests.

But this is how the IPCC has operated since its inception, in fact since its charter directed it to concentrate on the risks posed by any human influence on climate.

Even worse, the IPCC has, via complaisant governments, skewed scientific research to concentrate on aspects of its own claims to the detriment of the wider science. Those claims have very little evidence to support them but such is the dominance of the IPCC that the targeted research has produced more experts in those fields and more scientific papers, potential authors and partisan reviewers through which the IPCC can sustain its claims.

To top it all off the IPCC makes statements that imply a far more intense review process and far greater support for its claims than the evidence really shows.

The bias and manipulation of climate science has gone on for long enough and the problems are too great to rectify from within. The only sensible course of action is to disband the IPCC. If we really must have a central body to co-ordinate the science then we need one that is independent and transparent, and encompasses all aspects of climate science rather than being fixated on an unproven human cause.

Statement of Lord Nigel Lawson

House of Lords, United Kingdom

Kyoto Protocol: Assessing the Status of Efforts to Reduce Greenhouse Gases

I am grateful for your invitation to testify before you today. I am aware that you have been provided with the Report of the House of Lords Select Committee on Economic Affairs on The Economics of Climate Change in advance of these proceedings, so I intend simply to summarise our key findings and to provide some commentary of my own.

By way of background, the Economic Affairs Committee is one of the four permanent investigative committees of the House of Lords, and fulfils one of the major roles of our second chamber as a forum of independent expertise and review of all UK government activity. It is composed of members of all three main political parties. Its climate change report, which was agreed unanimously, was published on 6 July 2005, just ahead of the G8 summit at Gleneagles in Scotland.

In summary, the Committee concluded that:

- The Government should give the UK Treasury a more extensive role, both in examining the costs and benefits of climate change policy and presenting them to the public, and also in the work of the Intergovernmental Panel on Climate Change (IPCC); There are concerns about the objectivity of the IPCC process, and the influence of political considerations in its findings;
- There are significant doubts about the IPCC's scenarios, in particular the high emissions scenarios, and the Government should press it to change its approach;
- Positive aspects of global warming have been played down in the IPCC reports: the IPCC needs to reflect in a more balanced way the costs and benefits of climate change;
- The Government should press the IPCC for better estimates of the monetary costs of global warming damage and for explicit monetary comparisons between the costs of measures to control warming and their benefits;
- A more balanced approach to the relative merits of adaptation and mitigation is needed, with far more attention paid to adaptation measures;
- UK energy and climate change policy appears to be based on dubious assumptions about the roles

of renewable energy and energy efficiency, and the costs to the UK of achieving its objectives have been poorly documented, and the Government, with much stronger Treasury involvement, should review and substantiate the cost estimates involved and convey them in transparent form to the public;

- Current UK nuclear power capacity should be retained;
- International negotiations on climate change reduction will prove ineffective because of the preoccupation with setting emissions targets. The Kyoto Protocol makes little difference to rates of warming, and has a naïve compliance mechanism which can only deter countries from signing up to subsequent tighter emissions targets. Any future Protocols might be more fruitfully based on agreements on technology and its diffusion.

I cannot of course speak for the Committee as a whole, but my own understanding of the issue is clear:

- The IPCC's consistent refusal to entertain any dissent, however well researched, which challenges its assumptions, is profoundly unscientific;
- Although its now famous "hockey stick" chart of temperatures over the last millennium, which inter alia featured prominently in the UK Government's 2003 Energy White Paper, is almost certainly a myth, the IPCC refuses to entertain any challenge to it;
- The IPCC's scenarios exercise, which incidentally incorporates a demonstrably fallacious method of inter-country economic comparisons, manifests a persistent upward bias in the likely amount of carbon dioxide emissions over the next hundred years. For example, a combination of steadily increasing energy efficiency and the growth of the less energy-intensive service economy has led to a steadily declining rate of growth of carbon dioxide emissions over the past 40 years: all the IPCC's scenarios unaccountably assume an abrupt reversal of this established trend.

So why is the IPCC so adamant that it will not revisit its conclusions?

It may be that they are so profoundly concerned about the perils of global warming that the darkest possible picture is painted in order to secure urgent action.

There may also be the inevitable institutional characteristic of making the problem more serious than it is in order to command greater attention. This too may be a consequence of the way research funding is administered – it is a cold, isolated world for the climate change contrarian in the modern scientific community.

Whichever reason – and I suspect it may be both – the IPCC's absolutist position is unhelpful. The world faces a number of other, and arguably more imminent, challenges and competing claims on resources: the threats from nuclear proliferation and international terrorism, and the need for humanitarian aid for the world's poorest, are obvious examples. Choices always have to be made, and they need to be based on rational assessment.

So far as climate change is concerned, I am not qualified to pronounce on the science. While it seems clear to me, as a layman, that – other things being equal – increasing carbon dioxide emissions will, in time, warm the planet, I note that the science of climate change is uncertain and that reputable scientists hold greatly differing views about the rate at which such warming is likely to occur – which in any case is not simply a matter of the science: it depends just as much on the likely rate of future economic growth and the pattern and nature of that growth.

The key question, which is not a matter for scientists at all, is what should be done about such global warming as may occur.

- There are two possible approaches, which are not of course mutually exclusive: mitigation, that is, seeking to stabilize and if possible reduce the amount of carbon dioxide in the atmosphere, and adaptation, that is to accept that the climate may well be warming, and to take action to counter any harmful consequences that may flow from this.

- The IPCC and its acolytes make only the most perfunctory acknowledgment of adaptation. Their estimates of the damage from global warming are based on the assumption that very little adaptation occurs, and focus almost exclusively on the need for mitigation. In my view, however, the most important conclusion of the House of Lords report is that adaptation needs to take centre stage. . . . Numerous studies have shown that adaptation is the more cost-effective option, which is hardly

surprising. Not only is that the way in which we normally come to terms with climatic vagaries, but there are benefits as well as costs from global warming. There are, of course, regional variations: in northern Europe, for example, including Britain, for the rest of this century the benefits are likely to exceed the costs, whereas for the tropics the reverse is the case. But adaptation, which implies pocketing the benefits while acting to diminish the costs, has obvious attractions.

- The four principal costs potentially involved in global warming are damage to agriculture and food production, water shortage, coastal flooding (as sea levels rise), and – allegedly – malaria:

- In the case of agriculture, adaptation, much of which will occur autonomously, that is, without the need for government action, would consist of cultivating areas which have hitherto been too cold to be economic and, in other cases, switching to crops better suited to warmer climates.

- In the case of water shortage, there is massive wastage of water at the present time, and ample scope for water conservation measures – which incidentally would also help on the farming front.

- The most serious likely cost is that caused by coastal flooding of low-lying areas, where government action is clearly required, in the form of the construction of effective sea defenses – as the Dutch, incidentally, put in place more than 500 years ago. With modern technology this becomes an admittedly expensive but nonetheless highly cost-effective option.

- Finally, as to malaria – which leading malaria experts, whom the IPCC was careful to

exclude from its deliberations, argue is in any event unrelated to temperature, noting that the disease was endemic in Europe until the 17th century – the means of combating if not eradicating this scourge are well established.

- By contrast, the Kyoto and emissions caps and targets approach seems a most unattractive option:

- Even if the existing Kyoto targets were attained they would make little if any difference to the predicted rate of global warming. Kyoto's importance is presented as a first step to other, stiffer future agreements. But this is pie in the sky.

- The developing countries, including major contributors to future carbon dioxide emissions such as China and India are – and are determined to remain – outside the process.

- Since the only sanction against non-compliance with Kyoto (which is likely to be

widespread) is even stricter targets in any successor agreement, the realism of this approach is even harder to detect.

- In addition, even if targets were achievable, the cost of reaching them would be horrendous. Essentially, it would work by raising the cost of carbon-based energy to the point where carbon-free energy sources, and other carbon saving measures, become economic. For Kyoto-style mitigation to be seriously effective, it would involve a substantially greater rise in energy prices than anything we have yet seen despite recent spikes.

- The real cost of this approach is not so much dearer energy as the reduced rate of world economic growth which this would imply. It is far from self evident, not least for the developing countries, that over the next hundred years a poorer but cooler world is to be preferred to a richer but warmer one. Nor should it be overlooked that the Kyoto strategy requires the present and next generation to sacrifice their living standards in order to benefit more distant generations who are projected in any event to be considerably better off.

- Mitigation can however, be a desirable complement to adaptation. Far better than the Kyoto approach is additional support for research into reduced carbon technologies of all kinds, thus bringing forward the time when at least some of

these technologies may become economic. A nation which performs relatively well in terms of cutting back emissions is bound to lose out competitively whereas a nation which achieves a technological breakthrough is likely to benefit competitively.

In conclusion, I believe that the IPCC process is so flawed, and the institution, it has to be said, so closed to reason, that it would be far better to thank it for the work it has done, close it down, and transfer all future international collaboration on the issue of climate change, where the economic dimension is clearly of the first importance, to the established Breton Woods institutions.

It is profoundly important that all governments, most importantly their Treasury departments, make their own independent and rigorous economic analysis of the issue. At the time the Lords committee was taking evidence this, for whatever reason, had not happened in the UK. I very much hope that, following our report, it will.

We appear to have entered a new age of unreason, which threatens to be as economically harmful as it is profoundly disquieting. It must not be allowed to prevail.

Robert Ferguson, President

bferguson@sppinstitute.org

5501 Merchants View Square

#209

Haymarket, VA 20169

www.scienceandpublicpolicy.org (202) 288-5699