

This web page was annotated and summarised by: AccessIPCC as Version 1.01 2011 April 18 where there is associated material, introductions, summaries, tables, AR4, IAC Report etc. Integration of the NIPCC report is coming soon. All text in this background colour has originated by AccessIPCC.

## Inferences concerning the quality of AR4 drawn from the IAC Report.

The InterGovernmental Panel on Climate Change (IPCC) commissioned the InterAcademy Council (IAC) to review the IPCC's processes and procedures, presumably to ensure that the upcoming Fifth Assessment Report (AR5) would be perceived as a credible unbiased scientific assessment. The IAC is the world peak academic body to which the various national academies of science belong. The governments of the world use the IPCC's Fourth Assessment Report (AR4) as the justification for their actions on climate change.

[All inferences, listed below, have links back to the appropriate area of the IAC Report at <http://accessipcc.com/IAC-Report-Overview-Long.html>]

### Political interference: The IPCC process is rife with political interference.

- ⤴ **"Assessments" were provided where no reliable information existed.**  
*IAC statement: "Scientists should not feel obligated to provide an assessment where no reliable information exists."*
- ⤴ **Deliberate political interference in the SPM caused it to differ in content from the underlying report.**  
*IAC statement: "difference in content between the Summary for Policymakers and the underlying report"*
- ⤴ **Government representatives negotiated the SPM line by line, making AR4 a wholly political document.**  
*IAC statement: "Government representatives then negotiate and agree to the final wording line by line."*
- ⤴ **There was political interference with the scientific results.**  
*IAC statement: "Scientists and government representatives who responded to the Committee's questionnaire suggested changes to reduce opportunities for political interference with the scientific results and to improve the efficiency of the approval process."*
- ⤴ **AR4 prescribed policy and did not present the range of thoughtful scientific viewpoints.**  
*IAC statement: "Although policy-makers are the primary target audience, the reports are intended to be policy relevant, not policy prescriptive, and to present the range of thoughtful scientific viewpoints."*
- ⤴ **The majority of nations represented expect to receive vast sums of money as a major outcome of the IPCC process.**  
*IAC statement: "194 representatives of Member nations of WMO and/or UNEP)-Determines the IPCC structure, principles, procedures, work program, and budget; nominates and elects the IPCC Chair and Bureau members; agrees on the scope, outline, and work plan for an assessment report; nominates authors and reviewers; approves the Summaries for Policymakers; and accepts the reports"*
- ⤴ **The production of AR4 was controlled from start to finish by government policy makers.**  
*IAC statement: "Representatives of 194 participating governments agree on the scope of the assessment, elect the scientific leaders of the assessment, nominate authors, review the results, and approve the summaries written for policymakers."*

### Bias: The precautions necessary to produce a credible unbiased scientific assessment (or systematic review) are well known to scientists but were ignored by the IPCC.

- ⤴ **The scoping of AR4 was not done by people selected by a transparent process and criteria.**  
*IAC recommendation: "The IPCC should make the process and criteria for selecting participants for scoping meetings more transparent. "*
- ⤴ **The writing of AR4 was not controlled by people selected by a formal process and criteria.**

IAC recommendation: "The IPCC should establish a formal set of criteria and processes for selecting Coordinating Lead Authors and Lead Authors. "

⚠ **Properly documented alternative views were not given due consideration.**

IAC recommendation: "Lead Authors should explicitly document that a range of scientific viewpoints has been considered, and Coordinating Lead Authors and Review Editors should satisfy themselves that due consideration was given to properly documented alternative views. "

⚠ **Genuine controversies were not adequately reflected.**

IAC recommendation: "The IPCC should encourage Review Editors to fully exercise their authority to ensure that reviewers' comments are adequately considered by the authors and that genuine controversies are adequately reflected in the report. "

⚠ **Authors did not respond effectively to significant review issues in many cases.**

IAC recommendation: "The IPCC should adopt a more targeted and effective process for responding to reviewer comments. In such a process, Review Editors would prepare a written summary of the most significant issues raised by reviewers shortly after review comments have been received. Authors would be required to provide detailed written responses to the most significant review issues identified by the Review Editors, abbreviated responses to all noneditorial comments, and no written responses to editorial comments. "

⚠ **AR4 is not a proper "assessment" as the authors were not independent and did not consider the full range of available knowledge."**

IAC statement: "An assessment is a process by which independent experts review and synthesize available scientific and technical knowledge relevant to climate change that is needed by policymakers to help make decisions"

⚠ **Selection bias was rampant - both in terms of personnel and the publications included for assessment.**

IAC statement: "Most important are the absence of criteria for selecting key participants in the assessment process and the lack of documentation for selecting what scientific and technical information is assessed."

⚠ **AR4 did not even get to the first step in considering the range of thoughtful views.**

IAC statement: "Having author teams with diverse viewpoints is the first step toward ensuring that a full range of thoughtful views are considered"

⚠ **Controversial issues did not receive appropriate consideration as even the weak existing procedures were not followed.**

IAC statement: "The Committee found that some existing IPCC review procedures are not always followed and that others are weak. In particular, Review Editors do not fully use their authority to ensure that review comments receive appropriate consideration by Lead Authors and that controversial issues are reflected adequately in the report"

⚠ **There is no evidence that all thoughtful views were considered.**

IAC statement: "The Committee also recommends that Lead Authors document that they have considered the full range of thoughtful views, even if these views do not appear in the assessment report."

⚠ **The IPCC indulged in advocacy.**

IAC statement: "Straying into advocacy can only hurt IPCC's credibility."

⚠ **Authors placed too much weight on their own views relative to other views.**

IAC statement: "Equally important is combating confirmation bias-the tendency of authors to place too much weight on their own views relative to other views (Jonas et al., 2001). As pointed out to the Committee by a presenter [[FOOTNOTE: 10]] and some questionnaire respondents, alternative views are not always cited in a chapter if the Lead Authors do not agree with them."

⚠ **WG2 SPM amplified the negative impacts of climate change contained in the underlying report.**

IAC statement: "A recent review by the Netherlands Environmental Assessment Agency, for example, observed that the Working Group II Summary for Policymakers in the fourth assessment is more focused on the negative impacts of climate change than the underlying report"

⚠ **Lead Authors were at liberty to reject critical review comments without justification.**

IAC statement: "Lead Authors have the final say on the content of their chapter"

**Uncertainty:** Many conclusions of AR4 were based upon little or no evidence, and were not traceable to the underlying science if it existed.

⚠ **Unpublished and non-peer-reviewed literature was used in violation of even the weak**

**procedure then existent and was almost never appropriately flagged.**

IAC recommendation: "The IPCC should strengthen and enforce its procedure for the use of unpublished and non-peer-reviewed literature, including providing more specific guidance on how to evaluate such information, adding guidelines on what types of literature are unacceptable, and ensuring that unpublished and non-peer-reviewed literature is appropriately flagged in the report."

- ⚠ **There was no traceability in the assignment of ratings for level of scientific understanding and likelihood.**

IAC recommendation: "Chapter Lead Authors should provide a traceable account of how they arrived at their ratings for level of scientific understanding and likelihood that an outcome will occur."

- ⚠ **Quantitative probabilities (as in the likelihood scale) were used to describe the probability of well-defined outcomes when there was insufficient evidence i.e exaggeration**

IAC recommendation: "Quantitative probabilities (as in the likelihood scale) should be used to describe the probability of well-defined outcomes only when there is sufficient evidence. Authors should indicate the basis for assigning a probability to an outcome or event (e.g., based on measurement, expert judgment, and/or model runs)."

- ⚠ **The confidence scale was used to assign subjective probabilities to ill-defined outcomes.**

IAC recommendation: "The confidence scale should not be used to assign subjective probabilities to ill-defined outcomes."

- ⚠ **Formal expert elicitation procedures were not used to obtain subjective probabilities for key results.**

IAC recommendation: "Where practical, formal expert elicitation procedures should be used to obtain subjective probabilities for key results."

- ⚠ **Inappropriate use of unpublished and non-peer reviewed material which has not been critically evaluated compounds the uncertainty of any conclusions.**

IAC statement: "An analysis of the 14,000 references cited in the Third Assessment Report found that peer-reviewed journal articles comprised 84 percent of references in Working Group I, but comprised only 59 percent of references in Working Group II and 36 percent of references in Working Group III (Bjurstrom and Polk, 2010)."

- ⚠ **High confidence was attributed on little evidence and to vague statements.**

IAC statement: "However, authors reported high confidence in some statements for which there is little evidence. Furthermore, by making vague statements that were difficult to refute, authors were able to attach 'high confidence' to the statements. The Working Group II Summary for Policymakers contains many such statements that are not supported sufficiently in the literature, not put into perspective, or not expressed clearly."

- ⚠ **Many statements have weak evidentiary basis.**

IAC statement: "The use of the level-of-understanding scale (Table 3.1), rather than the confidence scale (Table 3.2), would have made clear the weak evidentiary basis for these statements."

- ⚠ **Conclusions were stated so vaguely as to make them impossible to refute.**

IAC statement: "In the Committee's view, assigning probabilities to imprecise statements is not an appropriate way to characterize uncertainty. If the confidence scale is used in this way, conclusions will likely be stated so vaguely as to make them impossible to refute, and therefore statements of 'very high confidence' will have little substantive value."

- ⚠ **Authors reported high confidence in statements for which there is little evidence.**

IAC statement: "However, the guidance was not consistently followed in the fourth assessment, leading to unnecessary errors. For example, authors reported high confidence in statements for which there is little evidence, such as the widely quoted statement that agricultural yields in Africa might decline by up to 50 percent by 2020. Moreover, the guidance was often applied to statements that are so vague they cannot be disputed. In these cases the impression was often left, incorrectly, that a substantive finding was being presented."

- ⚠ **Anonymous unsubstantiated ratings are worthless.**

IAC statement: "However, it is unclear whose judgments are reflected in the ratings that appear in the Fourth Assessment Report or how the judgments were determined."

- ⚠ **WG2 SPM assigned high confidence on little evidence.**

IAC statement: "However, such guidance was not always followed, as exemplified by the many statements in the Working Group II Summary for Policymakers that are assigned high confidence but are based on little evidence. Moreover, the apparent need to include statements of 'high

confidence' (i.e., an 8 out of 10 chance of being correct) in the Summary for Policymakers led authors to make many vaguely defined statements that are difficult to refute, therefore making them of 'high confidence.' Such statements have little value."

**Conflict of interest:** The IPCC never considered conflict of interest to apply to it.

- ⚠ **There was no evidence of any procedure to exclude conflicts of interest in the preparation of reports.**

IAC recommendation: "The IPCC should develop and adopt a rigorous conflict-of-interest policy that applies to all individuals directly involved in the preparation of IPCC reports, including senior IPCC leadership (IPCC Chair and Vice Chairs), authors with responsibilities for report content (i.e., Working Group Co-chairs, Coordinating Lead Authors, and Lead Authors), Review Editors, and technical staff directly involved in report preparation (e.g., staff of Technical Support Units and the IPCC Secretariat)."

- ⚠ **Conflict-of-interest within the senior leadership was not even considered.**

IAC statement: "The IPCC does not have a conflict-of-interest or disclosure policy for its senior leadership (i.e., IPCC Chair and Vice Chairs), Working Group Co-chairs and authors, or the staff of the Technical Support Units."

- ⚠ **The presence at important meetings of government representatives, who control funding, probably strains the objectivity of scientist who receive the funding.**

IAC statement: "A complication could arise when Lead Authors are sitting side by side with their government representative, which might put the Lead Authors in the difficult position of either supporting a government position at odds with the Working Group report or opposing their government's position. This may be most awkward when authors are also government employees."

**Management:** The IPCC management had no idea how to conduct an unbiased scientific assessment as indicated by the significant shortcomings uncovered by the IAC.

- ⚠ **Dr R Pachauri should not have been IPCC chair.**

IAC recommendation: "The term of the IPCC Chair should be limited to the time frame of one assessment."

- ⚠ **Working group Co-chairs should not have had a second term.**

IAC recommendation: "The terms of the Working Group Co-chairs should be limited to the time frame of one assessment."

- ⚠ **The Bureau members, including the IPCC chair, did not necessarily have the highest scholarly qualifications or leadership skills and acted without proper definition of roles and responsibilities.**

IAC recommendation: "The IPCC should develop and adopt formal qualifications and formally articulate the roles and responsibilities for all Bureau members, including the IPCC Chair, to ensure that they have both the highest scholarly qualifications and proven leadership skills."

- ⚠ **IPCC faces acute issues of accountability and transparency.**

IAC statement: "Although the IPCC is a different kind of organization, it faces acute issues of accountability and transparency, given the broad public policy interests associated with climate change. However, these new expectations are not yet reflected in the current governance and management structure of the IPCC."

- ⚠ **AR4 was produced with a total lack of transparency.**

IAC statement: "Interviews and responses to the Committee's questionnaire revealed a lack of transparency in several stages of the IPCC assessment process, including scoping and the selection of authors and reviewers, as well as in the selection of scientific and technical information considered in the chapters."

- ⚠ **The scientific method has been compromised by unwillingness to share data.**

IAC statement: "Issues for future consideration also merits attention to its detail including: 'access to data' under the heading 'Access to Information' mention is made of "unwillingness to share data with critics and enquirers"" "Poor access to data inhibits users' ability to check the quality of the data used and to verify the conclusions drawn."

- ⚠ **The Review Editors were clearly not independent.**

IAC statement: "To be independent, the selection of Review Editors would have to be made by an individual or group not engaged in writing the report, and Review Editors would report directly to that individual or group"