Tiempo Climate Cyberlibrary

A Reason for Optimism

Gary Yohe discusses a significant change in attitude towards climate risk on the part of the international community.

The author is Woodhouse/Sysco Professor of Economics at Wesleyan University, Middletown, Connecticut, in the United States. He was a convening lead author with Working Group II to the Fourth Assessment of the Intergovernmental Panel on Climate Change (IPCC) and a member of the Core Writing Team for the IPCC Fourth Assessment Synthesis Report.

The Intergovernmental Panel on Climate Change completed the work of the Fourth Assessment of climate science, impacts and policies at its 27th meeting in Valencia, Spain, on November 18th 2007 with what could be an historical change in direction.

Much attention has been focused since then on the economic costs of mitigation, species extinctions, extreme weather events and other impacts highlighted in the Fourth Assessment Synthesis Report. Soon, however, it should become clear that the real news from the 27th meeting of the IPCC resonates from a different source: a few paragraphs that appear toward the end of the Summary for Policymakers, where governments accepted climate *risks* as the unifying theme of this and future assessments.

Because they unanimously approved the Summary for Policymakers of the Synthesis Report word by word, governments agreed that risks (and not just impacts or vulnerabilities) matter most to them. After intense scrutiny and debate that began on day one in Valencia, they embraced the fundamental insight of the Fourth Assessment that "responding to climate change involves a series of risk management decisions about adaptation and mitigation that account for climate damages, ancillary benefits and costs, sustainability, and equity."

There have been many reports in the media based on the Synthesis Report's listing of key vulnerabilities that "may be associated with many climate sensitive systems including food supply, infrastructure, health, water resources, coastal systems, ecosystems, global biogeochemical cycles, ice sheets, and modes of oceanic and atmospheric circulation." These are the critical connections between the science, the social science, and what might be deemed "dangerous anthropogenic interference with the climate system" - a fundamental concept from Article 2 of the United Nations Framework Convention on Climate Change (UNFCCC). These are, therefore, important results for the world to see and to understand, but the Fourth Assessment did more than make a list.

The Fourth Assessment went on to provide detailed coverage of *risks* to threatened systems, *risks* from extreme weather events, and *risks* from singularities (nonlinear, complex and discontinuous responses, such as major ice-sheet collapse), in addition to aggregate and distributional issues wherein metrics of economic risk are paramount. Indeed, the Summary for Policymakers highlights five aggregate "reasons for concern", only two of which are calibrated (and only then in part) in terms of the economic metrics that governments have, until now, tended to favour.

Careful, deliberate and extensive negotiations in Valencia made it clear that governments are beginning to understand that the risk associated with any possible event depends both on its likelihood and its potential consequences. This is the definition of risk that their finance ministers have been using for decades, so it was no surprise that many governments understood the concept well. The only surprise is, perhaps, that governments now recognized that they should view climate change through the very same lens.

In any case, governments have, in this simple but profound change in attitude, finally asked the authors of IPCC assessments to provide information about "climate risks". These are the governments that have signed on to the climate treaty, the UNFCCC. These are the governments that negotiate global climate policy. These are the governments who hold the future of the planet in their hands. These are the governments that now understand that they have, heretofore, been asking the wrong questions.

To an optimist, the real news from Valencia is, therefore, that governments want the IPCC authors to inform their negotiations about risks that are "high", about vulnerabilities that are "key" and about "reasons for concern" that are serious based on assessments of risk. IPCC authors are required, therefore, to convey information about impacts whose consequences are potentially large, even if scientific confidence in their occurrence is medium or even low.

Unanimous government approval in the IPCC process had previously allowed only high confidence conclusions to find their way into the policymaker summaries. Only high confidence conclusions, therefore, made their way onto the table of international policymakers. The simple act of asking authors to report on "key vulnerabilities" based on high likelihood and/or high consequence has changed all that. It is, from the author's perspective, groundbreaking.

It seems that the governments that have signed onto the climate treaty process have made an historic change in the rules. They have, perhaps, given the planet a chance to save itself.

Further information

Gary Yohe, Wesleyan University, 238 Church Street, Middletown, Connecticut 06459, USA. Fax: +1-860-6852781. Email: gyohe@wesleyan.edu.

On the Web

The Summary for Policymakers (SPM) and the full text of the Synthesis Report are available on the IPCC website. The three working group reports from the Fourth Assessment can also be found there.