

Tiempo Climate Cyberlibrary

A Roadmap for Implementing Adaptation Policy



Gary Yohe discusses the conclusions on climate impacts, adaptation and vulnerability reached during the Fourth Assessment of the Intergovernmental Panel on Climate Change.

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The report of Working Group II (WGII) to the Fourth Assessment (AR4) of the Intergovernmental Panel on Climate Change (IPCC) on Impacts, Adaptation and Vulnerability was approved in Brussels on April 5th 2007. To understand what that means, it is important to understand how IPCC reports are created.

Work on this latest report began more than three years ago when nations that have signed the United Nations Framework Convention on Climate Change nominated scientists to serve as authors for each of the 20 chapters of the prescribed outline. These authors, more than 200 in number from all six continents, then took up the task of assessing the recent scientific literature on the impacts of climate change in their specific regions or sectors. They argued among themselves as they scoured their shelves and experience for sources of new knowledge. They hammered out language with which they could all agree.

Their work appeared in four separate drafts, and each subsequent version was subjected to expert and government review from hundreds of other scientists and interested parties (including climate sceptics). In every round, they responded to thousands of comments. Review editors for each chapter made certain that each and every comment was adequately considered and a record of each and every response to each and every review comment is on file at the IPCC Secretariat.

At the same time, the convening lead authors of the 20 chapters were writing the Technical Summary of the major results from the evolving chapters as well as a draft version for what is termed the Summary for Policymakers. Both of these documents went through the same multiple draft and review process and the final version was ultimately submitted to the IPCC plenary in Brussels.

Because countries, and not the scientists, are ultimately responsible for the Summary for Policymakers, the final draft provided by the original authors was reworked in Brussels sentence by sentence, and sometimes word by word. And because the plenary is a consensus body, each word had to achieve unanimous approval. The point of this sometime incredibly tedious process is not to change the science to fit political agendas. It is, instead, to make certain that the message conveyed to policymakers accurately communicates the appropriate level of confidence from the science community and that the supporting material from the scientific literature was accurately located in the underlying chapters and Technical Summary. Finally, once the Summary for Policymakers has been approved, the Technical Summary and underlying chapters follow in quick order.

What major messages from the science author team survived this intense scrutiny?

The new assessment confirms a conclusion of the Third Assessment Report that developing nations will be most vulnerable to climate change because of high exposure to potential impacts and low capacity to adapt. After noting that climate has been changing faster than previously anticipated, the new assessment also makes the case that the risks associated with crossing thresholds of "dangerous anthropogenic interference" with the climate system (however they are defined in the political sphere) are larger and closer than forecast only five years ago.

The details behind this conclusion can be found most easily in the Technical Summary. For example, numbers that were removed from the sectoral table when it was approved in the Summary for Policymakers record that:

- an additional one degree Celsius of warming is now projected to increase the number of people facing water scarcity by 0.4 to 1.2 billion people worldwide and put as many as 30 million additional people at risk of hunger;
- for another degree of warming, it is now projected that one to two billion people would face water scarcity, but the number at risk of hunger could actually fall; and,
- for even more warming, identified risks would accumulate at an accelerated rate while potential benefits would disappear.

The Summary for Policymakers synthesizes these and a wide assortment of other results in a series of fundamental conclusions:

- vulnerability to climate risk will be amplified in areas that already confront multiple stresses (for example, from land degradation, globalization and exposure to disease);
- adaptation is unavoidable because the planet would be committed to more warming even if emissions of greenhouse gases were halted today;

- a portfolio of adaptation and emissions controls will be required if the world's people are to cope with climate risk because, of course, emissions will not end tomorrow; and,
- even these combined actions may be overwhelmed by the turn of the century.

Everyone has his or her own view of what is most important among these far-reaching conclusions. For me, the fundamental bottom line that delegates decided to take home to their governments is that climate change will impede progress toward meeting Millennium Development Goals (MDGs) across the world.

This stark and succinct assessment of the future, along with the recognition that adaptation and mitigation will be necessary, is certainly troubling, but the silver lining behind the growing storm cloud is an enormous opportunity. The WGII Report emphasizes that strengthening many of the factors that support the capacities of communities to adapt to climate risk is entirely consistent with making progress toward achieving the MDGs over the next half century. To be more specific, investments already planned or anticipated to help eradicate extreme poverty and hunger, provide primary education, promote equity, combat HIV/AIDS and other diseases and ensure environmental sustainability can be essential components of an effective climate policy.

To my eyes, therefore, the new WGII Report thereby offers a roadmap by which climate change can find its way onto the planning and implementation agendas of finance ministers all around the world. Instead of being yet another problem that complicates their lives, the coincidence of goals noted by the WGII Report shows why coping with climate risk can be yet another good reason for them to what they have been trying to do all along - to promote sustainable development.

The route to the highest levels of government is illuminated, for any country that wants to pick up the idea, when the WGII Report calls for the adoption of a risk management perspective in assessing impacts, adaptation and sustainable development. The language of risk management is a language with which finance ministers are quite familiar. The IPCC now sees that risk-based portraits of impacts, net of the effects of alternative adaptations, can, when inserted into alternative development pathways at specific locations, offer decision-makers simultaneous insight into a multiplicity of climate risks. A policy portfolio designed to reduce climate risk should take advantage of two different policy tools: reducing exposure through mitigation and reducing sensitivity through adaptation.

The ramifications of concluding that adaptation alone will not be able to accommodate unabated climate change should also be understood, even though IPCC reports cannot be policy prescriptive. For some developing countries, and particularly for the least developed countries whose emissions are small, the need for mitigation may not be a serious issue over the near term. The story is, however, different for other countries, like China, India and Brazil, where substantial industrial development has already taken place. Current and anticipated near-term emissions of greenhouse gas emissions are more significant for these countries, and they need to take notice of a change in the 'policy climate' that should emerge as the import of the Fourth Assessment Report is recognized around the world. More vigorous mitigation is on the way.

Countries such as China, India and Brazil have historically been reluctant to commit to emissions standards, of course, and that was an understandable position in a world where the largest contributors to atmospheric contributions, like the United States and Australia, pursued only voluntary programmes at the federal level. In a future where significant mitigation policies will likely be in place more ubiquitously, though, neglecting vigorous greenhouse gas mitigation policy will lead to development plans that are unsustainable - indeed, as unsustainable as development plans designed without taking climate risks into account.

Further information

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On the Web

The IPCC Summary for Policymakers can be downloaded (0.5Mb file).

