

OUTLOOK FOR EARTH

AS THE IPCC FINALIZES ITS NEXT BIG CLIMATE-SCIENCE ASSESSMENT, *NATURE* LOOKS AT THE PAST AND FUTURE OF THE PLANET'S WATCHDOG.

In December 1988, the United Nations General Assembly endorsed a call to create a panel to assess “the magnitude, timing and potential environmental and socio-economic impact of climate change and realistic response strategies”. Now in its 25th year, the resulting Intergovernmental Panel on Climate Change (IPCC) has grown substantially from its early days, when just a few dozen experts convened to write its first scientific assessment report.

Next week, the group will publish its fifth such report, which has been crafted by more than 250 lead authors and editors — as well as hundreds more contributors and reviewers — who spent five years on the project and had to deal with a flood of some 52,000 comments submitted in response to early drafts (see page 298).

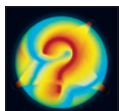
As the IPCC has matured, it has become firmer in its message that humanity is warming the globe to a degree that will threaten much of the world's population over the next century. The panel's warning has grown more confident and specific with time, as have its assessments of strategies to mitigate future problems.

In a special issue this week, *Nature* examines how the IPCC and climate science have evolved over the past quarter-century, and how scientific assessments can intersect with policy decisions. One News

Feature on page 300 investigates how much progress the panel has made on the topic of rising sea levels — one of the most controversial aspects of its previous big report, published in 2007. Another News Feature (see page 303) profiles economist Ottmar Edenhofer, who is leading the IPCC working group that will next April issue a second report, on ways to mitigate climate change and its impacts. A third IPCC report, on the impacts of climate change, will come out next March.

Even as the research on global warming has progressed steadily, nations have failed to forestall the problem. In a Comment on page 307, climate-policy analyst Elliot Diringer argues that individual actions by countries may be the best way forward. And on page 310, energy analyst K. John Holmes offers a look at how large-scale environmental assessments informed policy debates in the nineteenth century.

The IPCC has won praise for its work, including a Nobel Peace Prize in 2007, yet many researchers question whether it should continue to produce giant, infrequent reports. Past assessments have already described the basic science on climate change, which is now broadly accepted by governments. The IPCC can still play an essential part in climate mitigation, but it is time to re-evaluate how it offers advice to nations. ■ [SEE EDITORIAL P.281](#)



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