

25 years of the IPCC

THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) was founded 25 years ago to provide authoritative assessments on the emerging problem of climate change. Since its first report in 1990, the IPCC has issued increasingly complex follow-ups about every six years. The climate models that feed into the assessments have grown bigger and better, but researchers have not succeeded in reducing some key uncertainties about climate change. Where the reports have grown most firm is in declaring that humans are causing the world to warm.

GETTING BIGGER
The IPCC's Working Group I report on the science of climate change has more than quadrupled in length. The newest, due later in September, drew 52,822 comments in response to its first and second drafts. Source: IPCC

INCREASING COMPLEXITY
The models for forecasting climate change have grown more detailed and now consider ocean biology, soil processes and atmospheric chemistry. Their resolution has improved and the number of models has increased.

UNEVEN PROGRESS
Researchers have made no gains in narrowing the estimate of 'climate sensitivity': how much the world is likely to warm if atmospheric CO₂ levels double from the preindustrial value of 270 parts per million (p.p.m.). But the models have become more accurate at simulating the current climate. Source: IPCC

GAINING CONFIDENCE
Successive IPCC reports have grown more definitive in identifying humans as the cause of much of the recent warming. Source: IPCC

Annual average CO₂ levels were about 350 p.p.m. in 1988. Source: NOAA

