

Come together

Three IPCC special reports are scheduled, which will require the Working Groups to harmonize approaches and potentially influence the formulation of the sixth Assessment Report (AR6).

The IPCC is working to a busy schedule these days. With AR5 finalized in 2014, it's straight into the next cycle, with scoping and planning meetings underway for AR6. In addition to producing the next Assessment Report, there is a Methodology Report (updating the 2006 guidelines on national greenhouse gas inventories) and three upcoming special reports — the impacts of 1.5 °C global warming, oceans and cryosphere, land use change and desertification — which will bring together the different groups. In late August, a workshop entitled 'Integrated research on climate risk and sustainable solutions across IPCC Working Groups: Lessons learnt from AR5 to support AR6' was held in Stockholm. The meeting reflected on AR5 —

identifying gaps and challenges — in order to implement changes moving forward to the next set of reports, with the aims of greater integration across disciplines and more unified approaches.

These upcoming special reports are driving a shift in thinking away from the autonomous workings of each Working Group. Historically each Working Group produced a report independently for the Assessment Report and they only came together after these were finalized to generate the Synthesis Report. This is not the first time there has been an integrated approach with the Special Report on Extreme Events (<https://www.ipcc.ch/report/srex>) uniting the Working Groups. Each of the upcoming Special Reports will,

from the beginning, have scoping meetings bringing together participants from the different disciplines and Working Groups.

The 1.5 °C report scoping meeting has already been held and for the first time there was equal representation from the developing world. It is important to gain global representation at the planning stages of the assessment and Special Reports, to ensure the end product is comprehensive and inclusive.

As Hoesung Lee, the IPCC chair, noted in his opening address in Stockholm, barriers to zero emissions don't come from science: they are economic, social and political. The new IPCC focus will be to help to overcome these barriers through scientific analysis. □

Meeting global conservation challenges

Hot on the heels of last year's Sustainable Development Goals and the Paris Agreement, representatives from the global conservation community met to set the conservation agenda that will help to implement these targets.

As society has developed and grown, pressure on the natural life support systems on which we all depend has become ever greater. This trajectory is powerfully demonstrated by the 'planetary dashboard' (Steffen, W. *et al.* *Anthropocene Rev.* 2, 81–98; 2015) and the International Union for Conservation of Nature (IUCN) red list (<http://www.iucnredlist.org/>). At the same time, societal awareness of these challenges and efforts to address them have grown enormously. The 'planet at the crossroads' theme of the IUCN World Conservation Congress, held in Hawaii this September, reflects both the growing scale of our environmental challenges and the growing opportunities to address them. In his opening speech, Xinsheng Zhang, president of the IUCN, emphasized the potential for attendees "to make a transformative difference ... to move the planet from tipping point, to turning point".

The IUCN holds a World Conservation Congress every four years. Fittingly, the meetings follow the same schedule as the Olympics. Like the Olympics, if participants are to achieve their goals they need to

perform at their best and do so pretty quickly. This year there were more reasons to believe they might reach some sort of planetary podium than in previous years. In the lead up to the congress, Barack Obama announced the expansion of the Papahānaumokuākea Marine National Monument, quadrupling the size of the existing protected area to make it the largest in the world today. Just a few days later, China and the US both ratified the Paris Agreement, significantly increasing the chances that it will come into force ahead of schedule. These events, in the context of last year's intergovernmental progress on sustainable development and climate change, gave the gathering — taking place over 10 days and involving more than 9,000 participants — an optimistic mood.

Speaking at the meeting, Patricia Espinosa (executive secretary, United Nations Framework Convention on Climate Change) emphasized the need for action on the ground to implement Paris Agreement commitments. She pointed particularly to the value of nature-based solutions, which can be relatively easy to implement and have multiple benefits to nature and society.

Many initiatives were announced at the congress to aid in the implementation of nature-based solutions, for example the Key Biodiversity Areas partnership (<http://birdlaa2.memset.net/kba/home>). A collaboration between eleven leading conservation organizations, the partnership provides end users with the most unified, comprehensive and transparent information currently possible on the areas we need to be safeguarding to protect biodiversity. A second example saw financial industry, conservation, and academic partners form a coalition for private investment in conservation. The group was formed with the aim of starting to meet the estimated US\$200–300 million annual deficit in conservation funding by creating investment models for return-driven private investment to deliver conservation outcomes.

The congress was an important platform for government representatives, scientists, NGOs, indigenous peoples and businesses to share knowledge and set priorities for managing the natural environment, in a way that allows development while maintaining ecological resilience and tackling the causes of climate change. □