

**Statement of Renate Christ, Secretary of the IPCC at the opening of SBSTA-40
Bonn, 4 June 2014,**

Thank you Mr. Chairman for giving me the opportunity to update delegates on the work of the IPCC.

I am very pleased to inform you that in March and April this year the contributions to the IPCC 5th Assessment Report (AR5) of Working Group II “Impacts, Adaptation and Vulnerability”, and Working Group III “Mitigation of Climate Change” have been approved and accepted by the Panel. Allow me to highlight a few key findings from the reports:

WG II concluded:

- In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans. Observed impacts are widespread and consequential
Example: Many terrestrial, freshwater, and marine species have shifted their geographic ranges, seasonal activities, migration patterns, abundances, and species interactions in response to ongoing climate change.
- Increasing magnitudes of warming increase the likelihood of severe, pervasive, and irreversible impacts.
Example: Freshwater-related risks of climate change increase significantly with increasing greenhouse gas concentrations, increasing the fraction of people affected by water scarcity and river floods. All aspects of food security are potentially affected by climate change, including food access, utilization, and price stability
- Adaptation and mitigation choices in the near-term will affect the risks of climate change throughout the 21st century.

This leads me to highlights of the WG III Report:

- Total anthropogenic GHG emissions have continued to increase over 1970 to 2010 with larger absolute decadal increases toward the end of this period. About half of cumulative anthropogenic CO₂ emissions between 1750 and 2010 have occurred in the last 40 years.
- Without additional efforts to reduce GHG emissions beyond those in place today, emissions growth is expected to persist driven by growth in global population and economic activities. Baseline scenarios, those without additional mitigation, result in global mean surface temperature increases in 2100 from 3.7 °C to 4.8 °C compared to pre-industrial levels.
- Scenarios reaching atmospheric concentration levels of about 450 ppm CO₂eq by 2100, which are consistent with a likely chance to keep temperature change below 2 °C relative to pre-industrial levels, include substantial cuts in anthropogenic GHG emissions by mid-century through large-scale changes in energy systems and potentially land use.

- Mitigation requires major technological and institutional changes including the upscaling of low- and zero carbon energy throughout the economy. Efforts in one sector determine mitigation efforts in others.
- Estimated global GHG emissions based on the Cancun Pledges are not consistent with cost-effective long term mitigation trajectories that are at least as likely as not to limit temperature change to 2 °C relative to pre-industrial levels, but they do not preclude the option to meet that goal.
- Delaying mitigation efforts beyond those in place today through 2030 is estimated to substantially increase the difficulty of the transition to low long-term emissions level and narrow the range of options consistent a 2 °C goal.

As you can see, these two reports contain a richness of knowledge which can inform the activities of all Subsidiary Bodies and various workstreams under the Convention including the Structured Expert Dialogue on the 2013-2015 Review, ADP (Ad hoc Durban Platform for Enhanced Action), the work on economy wide emissions target, the Adaptation Committee and the mechanism for loss and damage, to just mention a few.

We have therefore arranged a number of events and presentations to provide you with detailed information about the two reports and allow inter actions with authors.

- Today a lunchtime we will start with a SBSTA-IPCC special event about the Working Group 2 report and on Friday lunchtime we will present an overview of the WG 3 report.
- IPCC experts will inform all meetings of the SED, with focus on impacts, adaptation and vulnerability on Friday and Saturday and focus on mitigation on Sunday.
- As requested by SBSTA-36 new information about common metrics will be presented at a special event on Saturday.
- In a side event tomorrow the TFI talk about the evolution of IPCC Inventory Guidelines and their potential contribution to future climate action.
- IPCC experts will participate in the SBSTA research dialogues and speak about polar oceans, ocean acidification and knowledge gaps identified in the AR5.
- Other experts will meet with the Adaptation Committee on Sunday to discuss up to date information about adaptation, including limits to adaptation.
- IPCC experts will also participate in the TEM on land use and urban environments.
- Finally, the IPCC Chair and Co-chairs will brief Ministers about key AR5 findings tomorrow at the ministerial lunch.

You can find the comprehensive programme on a dedicated page on the IPCC website and I hope you will be able to participate in many events.

Thank you Mr. Chairman

