Overview of the IPCC, its role, mandate, history and the production of the Sixth Assessment Cycle

**Ko Barrett** Vice-Chair of the IPCC 6 October 2017, Lautoka, Fiji





## The role of the IPCC is ...

"... to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation."

"IPCC reports should be neutral with respect to policy, although they may need to deal objectively with scientific, technical and socio-economic factors relevant to the application of particular policies."

Principles Governing IPCC Work, paragraph 2 Source: http://www.ipcc.ch/pdf/ipcc-principles/ipcc-principles.pdf



## **Science/Policy Interface**

**IPCC** – jointly established by **WMO and UNEP**, action endorsed by the **UN General Assembly** Intergovernmental Panel: 195 member States Hundreds of scientists and experts from around the world are involved in the preparation of IPCC reports appointing National Focal Points Authors Working Group (WG) I WGIII Plenary **The Physical Mitigation of Climate Change Science Basis Bureaux Expert Review** WGII **Reviewers Editors Task Force on Climate Change National** Impacts, Greenhouse Adaptation & **Gas Inventories Vulnerabilities** 



## **IPCC Reports**

DEC

**CLIMATE CHANGE 2014** 

TE CHANGE 2014

CLIMATE CHANGE MITIGAT

AAMAGING THE RISKS OF EXTREMI

Five assessment reports (1990, 1995, 2001, 2007, 2013-14)

**1992 supplementary report and 1994 special report** 

Nine special reports (1997, 1999, 2000, 2005, 2011, 2012)

Guidelines for national GHG inventories, good practice guidance (1995, 1996, 2000, 2003, 2006, 2013)

Six technical papers (1996-2008)



## **Achievements: 2007 Nobel Peace Prize**



Den Norske Nobelkomite har overensstemmende med reglene i det av ALFRED NOBEL den 27. november 1895 opprettede testamente tildelt Intergovernmental (Panel on Climate Change Nobels (Fredspris for 2007 Oslo to desember 2007 Oslo to desember 2007 Oslo to desember 2007



The Intergovernmental Panel on Climate Change and Albert Arnold (Al) Gore Jr. were awarded the Nobel Peace Prize "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change".





## **Other Activities and Achievements**

National Greenhouse Gas Inventories (Publication of IPCC Methodology Reports)



Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA): facilitates distribution and application of climate change related data and scenarios)

Organizing expert meetings and workshops to facilitate discussion on topics relevant to the Assessment process





## What are IPCC reports used for?









## **Achievements: The Assessment Reports**



## Achievements: 2013/2014 Fifth Assessment Report



Key messages

Human influence on the climate system is clear

The more we disrupt our climate, the more we risk severe, pervasive and irreversible impacts

We have the means to limit climate change and build a more prosperous, sustainable future



## Sixth assessment cycle

| Special Reports |   |
|-----------------|---|
|                 | Global Warming of 1.5 °C, an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty <b>October 2018</b> |
| UNFCCC Cop 23   | Facilitative dialogue   |
| -               | Special Report on the Ocean and Cryosphere in a Changing Climate September 2019   |
|                 | Special Report on Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems <b>September 2019</b>   |



## Sixth assessment cycle (cont)

#### Methodology Report update

|                | 2019 Refinement to the 2006 IPCC Guidelines for National Greenhous<br>Gas Inventories<br>May 2019   |
|----------------|---|
| AR6 Main Repor | rt  |
| ar6            | Working Group I, II, and III contribution to the Sixth Assessment Report<br>in <b>2021</b><br>Synthesis Report to the Sixth Assessment Report <b>April 2022</b> |
| UNFCCC global  | stocktake 2023  |
| Cities         |   |
|                | Attention on <b>cities</b> in AR6 including a conference and special report on cities in AR7  |



## How the IPCC produces its reports?

|  |   | bd   |
|--|---|--|
| Scoping  | Approval of Outline   | Nomination of authors  |
| The outline is drafted and developed<br>y experts nominated by governments<br>and observer organizations | The Panel then<br>approves the outline  | Governments and observer<br>organizations nominate<br>experts as authors |
| Government and Expert<br>Review - 2nd Order Draft  | DOC<br>Expert Review -<br>1st Order Draft   | Selection of authors   |
| The 2nd draft of the report and 1st draft<br>of the Summary for Policymakers (SPM)                       | Authors prepare a   | Bureaux select authors   |
| PDF<br>Final draft report<br>and SPM   | Government review<br>of final draft SPM   | Approval & acceptance  |
| Authors prepare final drafts<br>of the report and SPM which<br>are sent to governments                   | Governments review the<br>final draft SPM in preparation<br>for its approval  | Working Group/Panel<br>approves SPMs and<br>accepts reports              |
| D mage was perchiliping  | Peer reviewed and internationally<br>available scientific technical and<br>socio-economic literature, manuscripts<br>made available for IPCC review and<br>selected non-peer reviewed literature<br>produced by other relevant institutions<br>including industry | Publication<br>of report   |



**IDCC** 

### AR6 WGI Outline

- Chapter 1: Framing, context, methods
- Chapter 2: Changing state of the climate system
- Chapter 3: Human influence on the climate system
- Chapter 4: Future global climate: scenario-based projections and near-term information
- Chapter 5: Global carbon and other biogeochemical cycles and feedbacks
- Chapter 6: Short-lived climate forcers
- Chapter 7: The Earth's energy budget, climate feedbacks, and climate sensitivity
- Chapter 8: Water cycle changes
- Chapter 9: Ocean, cryosphere, and sea level change
- Chapter 10: Linking global to regional climate change
- Chapter 11: Weather and climate extreme events in a changing climate
- Chapter 12: Climate change information for regional impact and for risk assessment



### AR6 WGII Outline

• Chapter 1: Point of departure and key concepts

SECTION 1: Risks, adaptation and sustainability for systems impacted by climate change

- Chapter 2: Terrestrial and freshwater ecosystems and their services
- Chapter 3: Ocean and coastal ecosystems and their services
- Chapter 4: Water
- Chapter 5: Food, fibre, and other ecosystem products Chapter 6: Cities, settlements and key infrastructure
- Chapter 7: Health, wellbeing and the changing structure of communities
- Chapter 8: Poverty, livelihoods and sustainable development

#### **SECTION 2: Regions**

Common elements across all regional chapters (guidance points not an outline)

- Chapter 9: Africa
- Chapter 10: Asia
- Chapter 11: Australasia
- Chapter 12: Central and South America
- Chapter 13: Europe
- Chapter 14: North America
- Chapter 15: Small Islands

SECTION 3: Sustainable development pathways: integrating adaptation and mitigation

- Chapter 16: Key risks across sectors and regions
- Chapter 17: Decision-making options for managing risk
- Chapter 18: Climate resilient development pathways



### AR6 WGIII Outline

- Chapter 1 Introduction and Framing
- Chapter 2: Emissions trends and drivers
- Chapter 3: Mitigation pathways compatible with long-term goals
- Chapter 4: Mitigation and development pathways in the near- to mid-term
- Chapter 5: Demand, services and social aspects of mitigation

Common elements across sectoral chapters 6-11

- Chapter 6: Energy systems
- Chapter 7: Agriculture, Forestry, and Other Land Uses (AFOLU)
- Chapter 8: Urban systems and other settlements
- Chapter 9: Buildings
- Chapter 10: Transport
- Chapter 11: Industry
- Chapter 12: Cross sectoral perspectives
- Chapter 13: National and sub-national policies and institutions
- Chapter 14: International cooperation
- Chapter 15: Investment and finance
- Chapter 16: Innovation, technology development and transfer
- Chapter 17: Accelerating the transition in the context of sustainable development



# CALL FOR AUTHORS for the Sixth Assessment Report

Governments, Observer Organizations and IPCC Bureau Members have been requested to submit nominations of Coordinating Lead Authors, Lead Authors and Review Editors **by Friday 27 October 2017 (midnight GMT +1)**. The Bureaus of the three IPCC Working Groups will then select the author teams from the lists of nominations.



## **Getting involved**



#### Contribute to existing literature

IPCC assessments are as good as the literature available. Look out for the various cut off dates for literature for the different reports.

#### As Authors or Review Editors

2

Bureaux selects Authors and Review Editors from lists of nominations provided by governments and observer organizations. Look out for the calls for nomination of authors and contact your IPCC Focal Point if you are interested in being nominated.





#### As Expert Reviewers

To be involved at the the two review stages; Expert Review of the First Order Draft and Government and Expert Review of the Second Order Draft.

3



# Available roles (1) Author teams – CLAs, LAs, REs

Coordinating Lead Authors (CLAs)

Lead Authors (LAs)

**Review Editors (REs)** 

Contributing Authors (CA)

Chapter Scientists (CS)

Usually more experienced scientists and practitioners

- CLAs and LAs develop the chapter content
- REs ensure comments from the review process are taken into consideration by the team

Selected following a call for nominations

- Proposed by IPCC focal Points from governments and observer organisations, and the IPCC Bureau
- Selected by the Bureau of the relevant IPCC Working Group or Task Force

Call for nominations are published on the IPCC website: <u>http://ipcc.ch/</u>



# Available roles (2) Author teams – CAs

Coordinating Lead Authors (CLAs)

Lead Authors (LAs)

Review Editors (REs)

Contributing Authors (CA)

Chapter Scientists (CS)

Prepare technical information in the form of text, graphs or data

Contributions

- Solicited by LAs
- Unsolicited contributions also encouraged





# Available roles Author teams – CS

Coordinating Lead Authors (CLAs)

Lead Authors (LAs)

Review Editors (REs)

Contributing Authors (CA)

Chapter Scientists (CS)

Scientific assistants who provide support to the author teams

- Technical aspects including crosschecking between findings in different parts of the report
- Additional fact-checking
- Reference management

#### Recruited

- Directly by CLAs
  - Through a call issued by the TSUs
    <u>http://wg1.ipcc.ch/</u>
    <u>http://www.ipcc-wg2.awi.de/</u>
    <u>http://www.ipcc-wg3.ac.uk/</u>
    <u>http://www.ipcc-nggip.iges.or.jp/</u>



# How could the IPCC work better for you?

#### Work with IPCC Focal Points from your country



Each IPCC Member country has a National Focal Point (NFP) which has been identified by the relevant authorities in the country. You can find their details on the IPCC website: <u>www.ipcc.ch</u>

#### Become an Observer Organization to the IPCC



Any non-profit body or agency, whether national or international, governmental or intergovernmental may be admitted as an observer organization (subject to acceptance by the Panel). See the "IPCC Policy and Process for Admitting Observer Organizations": <u>www.ipcc.ch</u>

#### **Participate in IPCC Sessions**



Participation of Government representatives in IPCC sessions ensures that your country's voice is heard (nomination is by NFP). Representatives of observer organizations may also attend. Contact: <a href="mailto:ipcc-sec@wmo.int">ipcc-sec@wmo.int</a>

#### **Organize and Participate in Outreach Events**



Outreach events create awareness about the work of the IPCC and its findings and are carefully tailored to the specific regional, national and stakeholders' needs. Contact: <u>ipcc-media@wmo.int</u>



# **THANK YOU FOR YOUR ATTENTION!**

## For more information:

Website: <u>http://ipcc.ch/</u> IPCC Secretariat: <u>ipcc-sec@wmo.int</u> IPCC Press Office: <u>ipcc-media@wmo.int</u>

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