

What's in an assessment?

How the IPCC process contributes to climate science policy

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ipcc
INTERGOVERNMENTAL PANEL ON climate change



Overview

History and structure of the IPCC

How the reports are created

How is the literature assessed?

What are the different author roles?

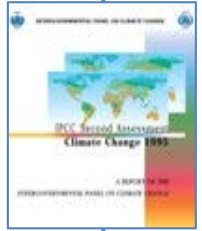
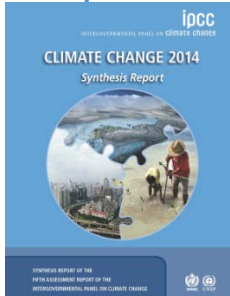
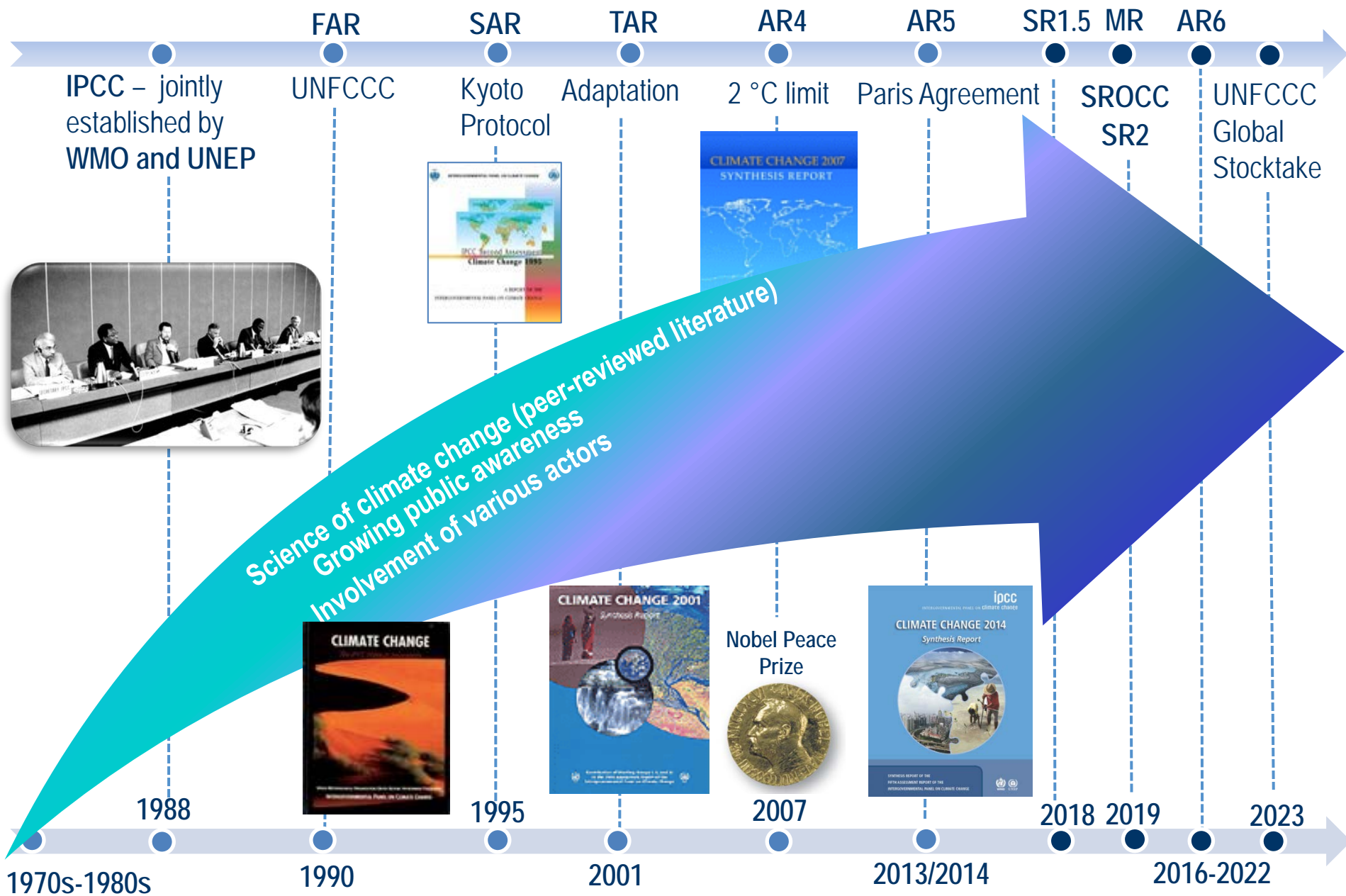
Major research topics covered in AR6

How to get involved

Role of the IPCC

“... 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.”

*Policy relevant
but not policy prescriptive*



Key SPM Messages

19 Headlines

on less than 2 Pages

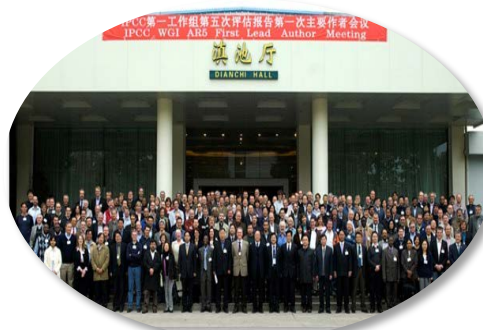
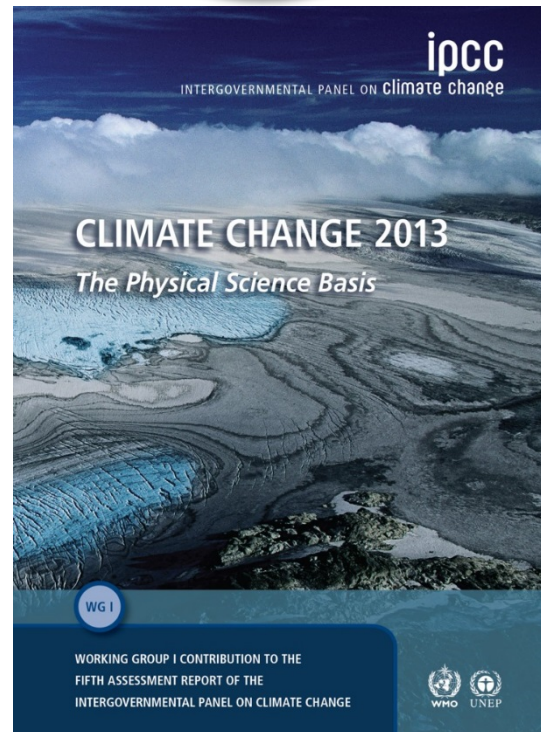
Summary for Policymakers
ca. 14,000 Words

14 Chapters
Atlas of Regional Projections

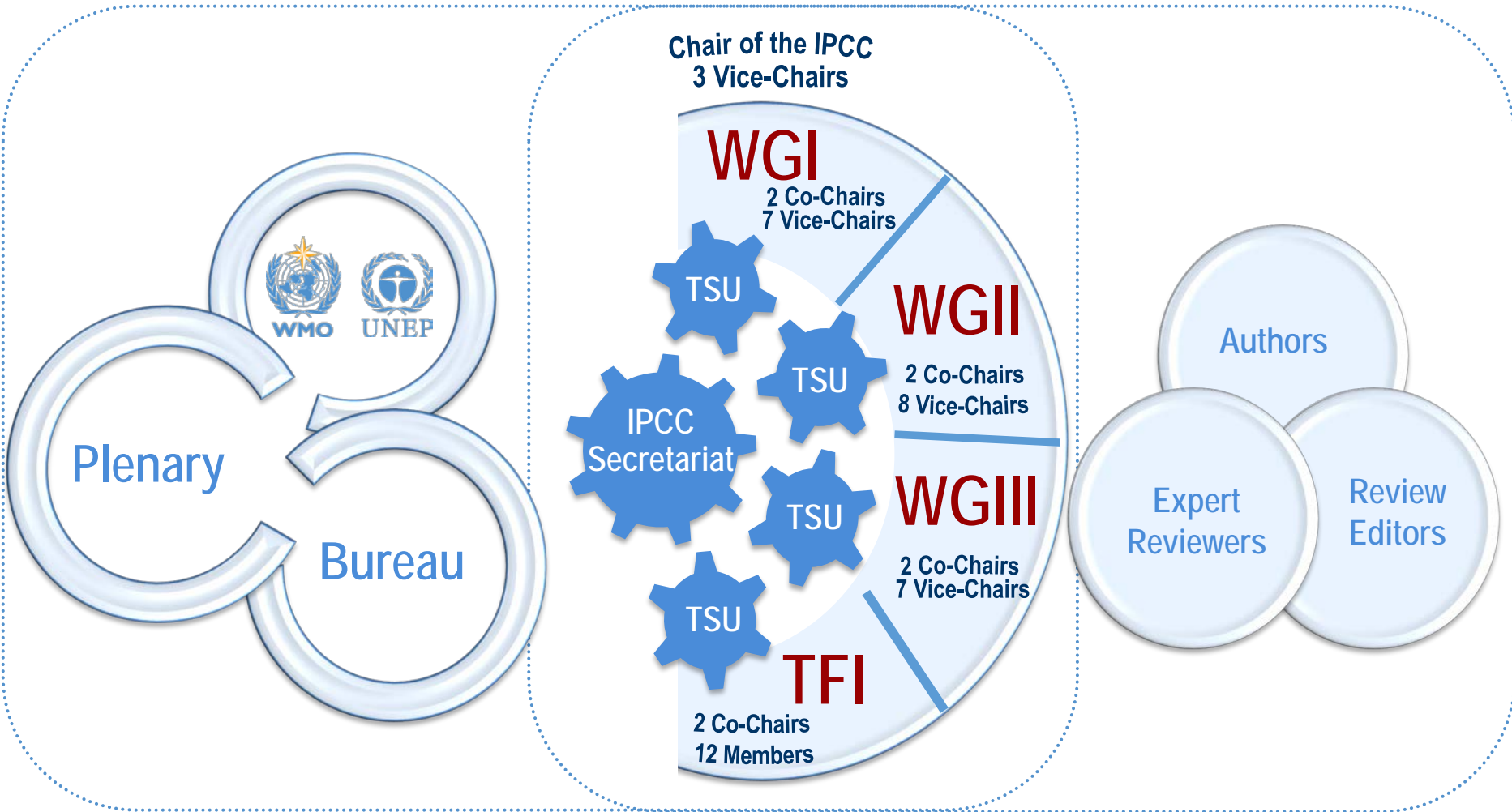
54,677 Review Comments
by 1089 Experts

2010: 259 Authors Selected
from 39 Countries

2009: WGI Outline Approved



IPCC Structure



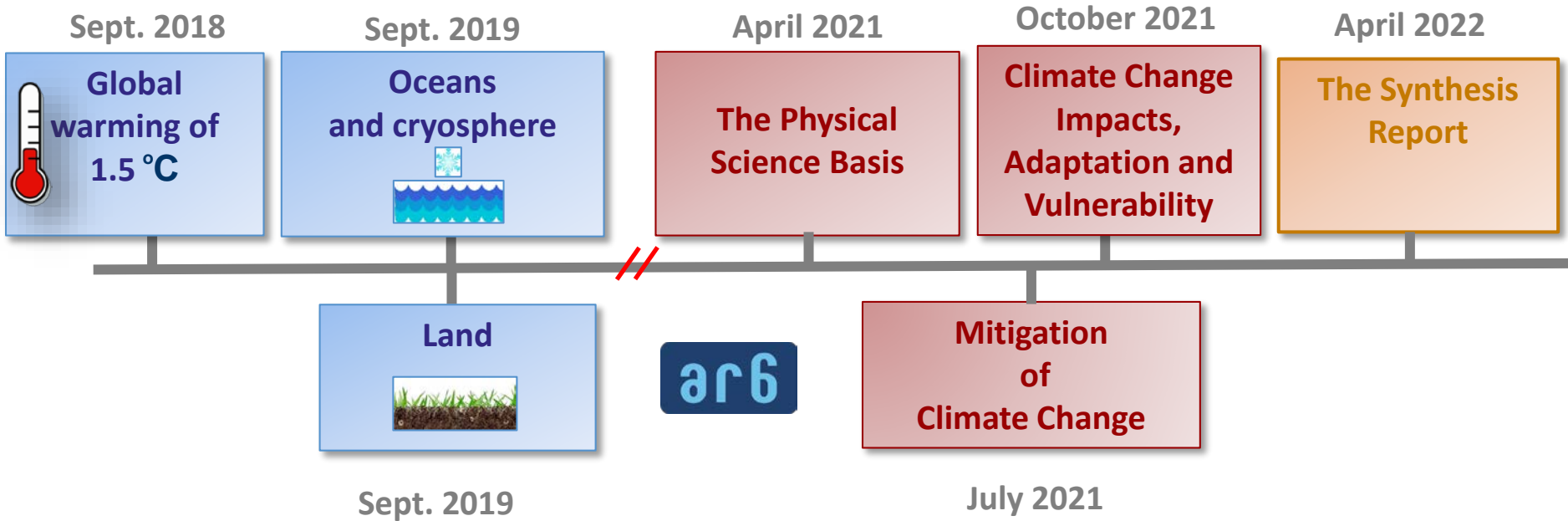
Policy

Science

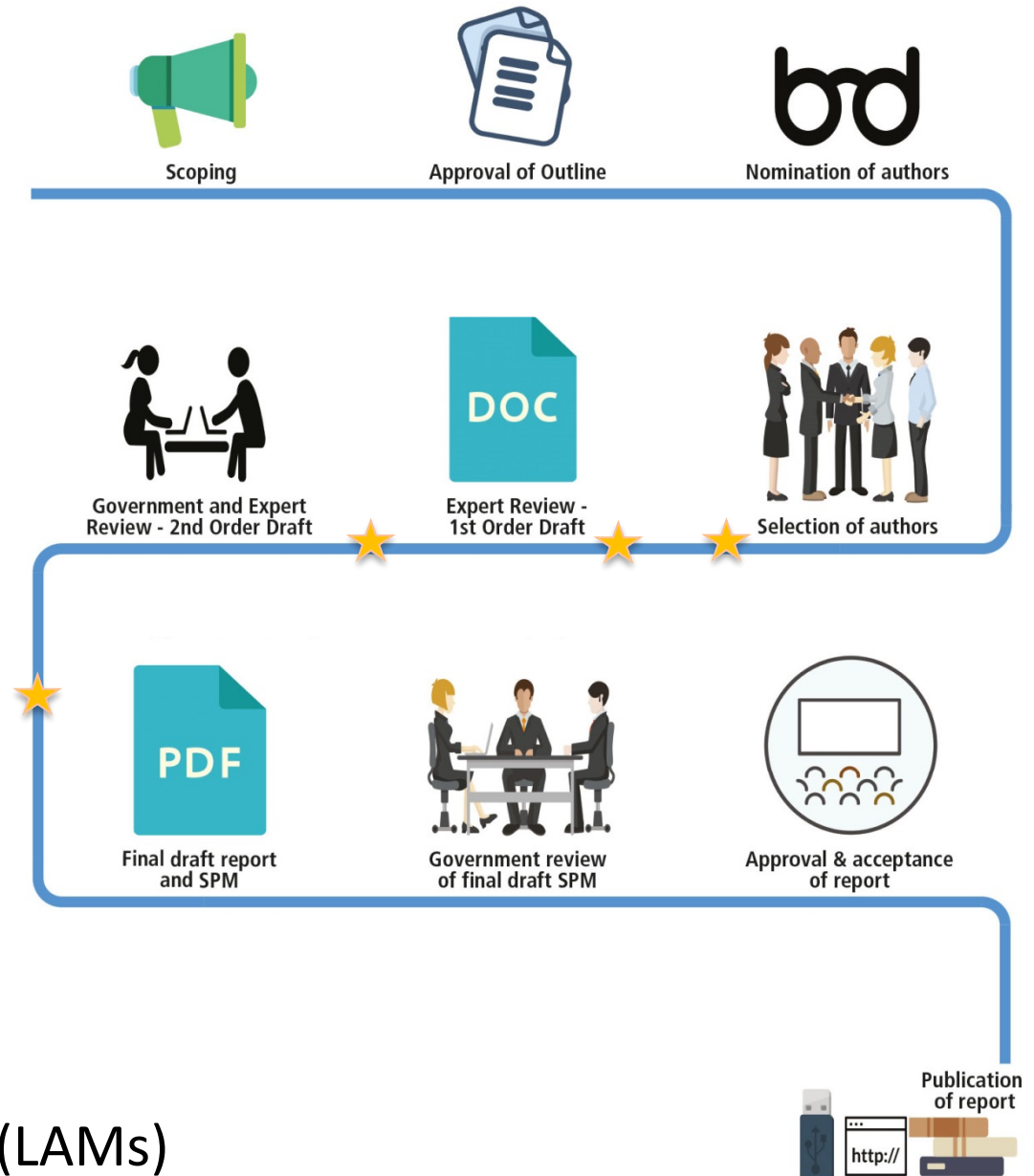
INTERGOVERNMENTAL PANEL ON climate change



The IPCC AR6 timeline



How are reports prepared?



★ = lead author meetings (LAMs)

SR1.5 - Scoping Process

Plenary Sessions



Break Out Groups

Selected experts scope each IPCC report outline comprising chapter titles and indicative bullets

This outline is then approved by the IPCC Plenary (delegates from 195 countries).



Accepting a report outline: An IPCC Plenary



Guadalajara, Mexico, March 28 - 31st 2017

Terminology



More photos: <http://enb.iisd.org/climate/ipcc45/>

How are Authors selected?

Call for nominations sent to IPCC national focal points and observing organisations

<http://ipcc.ch/apps/contact/interface/focalpoints.php>

Selection in several rounds by relevant WG bureau members

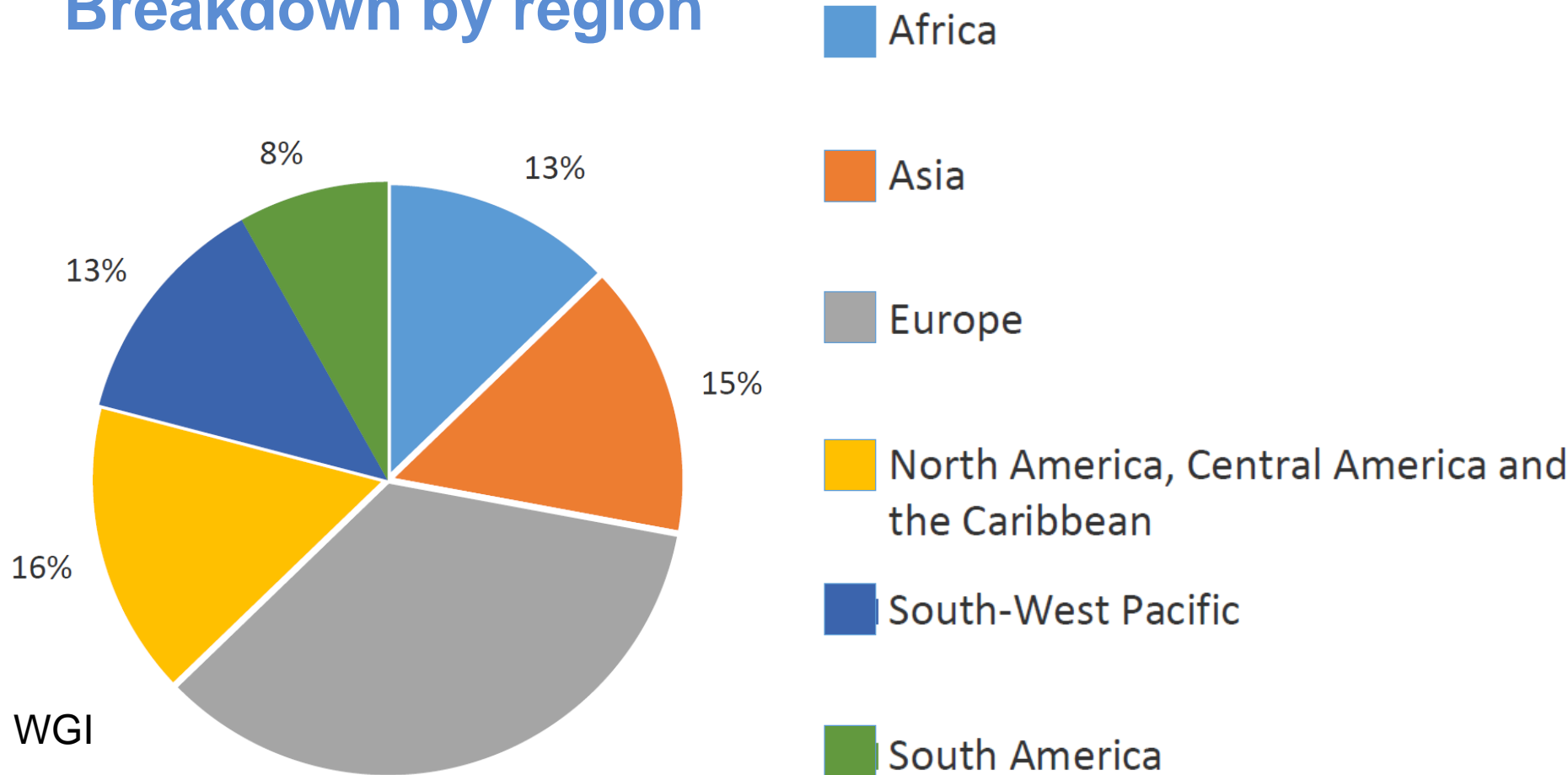
- expertise
- for Coordinating Lead Authors, coordination skills
- diversity of regions, gender, previous IPCC experience

High selection pressure

1 in 7 are selected (Europe is 1 in 15)

SR1.5°C Authors

Breakdown by region



*statistics based on experts' citizenship

SR1.5 – Lead Author Meeting

The IPCC Co-Chairs



86 experts from 39 countries
51% from developing countries
38% women
26% new to IPCC process

Author Team at Work



SR1.5 Authors



What are the author roles?

Chapter teams – CLAs, LAs, REs

Coordinating Lead Authors (CLAs)

Lead Authors (LAs)

Review Editors (REs)

Contributing Authors (CA)

Chapter Scientists (CS)

CLAs

- usually more experienced scientists and practitioners with previous IPCC experience
- responsible for major sections of the report

LAs

- Usually a mix of IPCC-experienced and authors new to the IPCC
- LAs are collectively responsible for content of a chapter

REs

- ensure comments from the review process are taken into consideration by the team
- Attend LAM3-4

Chapter teams – CAs

Coordinating Lead Authors (CLAs)

Lead Authors (LAs)

Review Editors (REs)

Contributing Authors (CA)

Chapter Scientists (CS)

Contributions

- Solicited by LAs to fill specific gaps in expertise and ensure a range of views are represented
- Work on sections of chapters

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

What's in an assessment?

How do Lead Authors find literature?

- Searches and lots of reading!
- Conferences and meetings
- Networks
- CAs and Expert Reviewers
- Submitted (to relevant TSU)

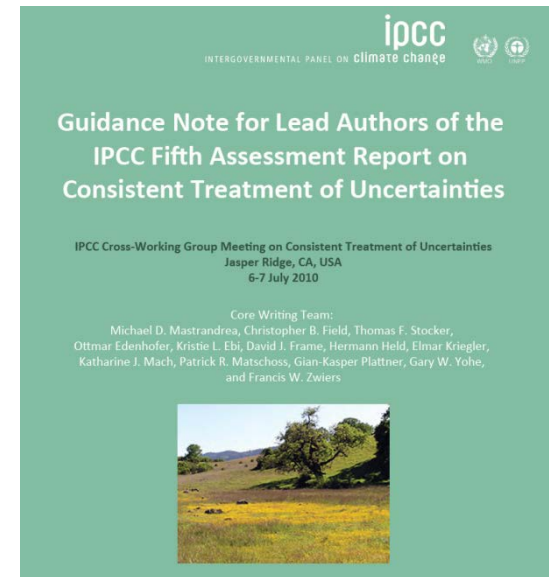
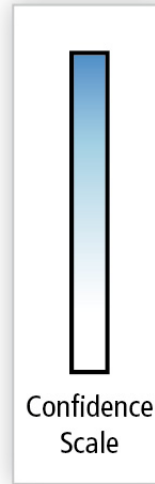


Use of uncertainty language

e.g.,

Global warming will result in more frequent extreme events and greater associated risk to ocean ecosystems (high confidence)

Agreement ↑	<i>High agreement Limited evidence</i>	<i>High agreement Medium evidence</i>	<i>High agreement Robust evidence</i>
	<i>Medium agreement Limited evidence</i>	<i>Medium agreement Medium evidence</i>	<i>Medium agreement Robust evidence</i>
	<i>Low agreement Limited evidence</i>	<i>Low agreement Medium evidence</i>	<i>Low agreement Robust evidence</i>
	Evidence (type, amount, quality, consistency) →		



- Qualitative metric determined by evaluation of evidence and agreement
- Author team and expert reviewer judgements

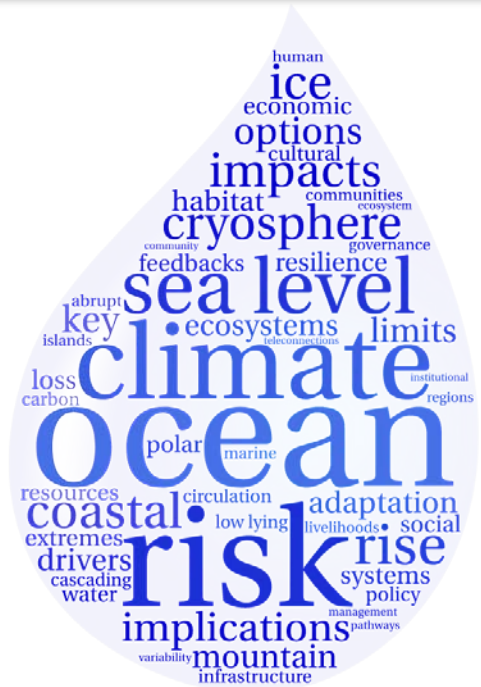
How do author teams work....

- Lead Author Meetings (LAMs)
- Informal get togethers
- Regular webex and skype (time zone!)
- Collaboration tools (file sharing etc.)



Chapter Lead Author Meeting

AR6: What topics will the Reports cover?



SROCC : SRCCL



1. Framing & Context
2. High Mountain Areas
3. Polar Regions
4. Sea Level Rise and Implications for Coasts and Communities
5. Changing Ocean, Marine Ecosystems, and Dependent Communities
6. Extremes, Abrupt Changes and Managing Risks

1. Framing & Context
2. Land Climate interactions
3. Desertification
4. Land Degradation
5. Food Security
6. Interlinkages between desertification, land degradation, food security and GHG fluxes: synergies, trade-offs and integrated response options
7. Risk management and decision making in relation to sustainable development

How can Early Career Scientists get involved?

How can you get involved?

SR1.5, SRCCL & SROCC:

- Contribute to the Literature
- Review relevant sections of the First/Second Order Drafts (F/SOD)

WGI:

- Contribute to the Literature
- Review relevant sections of the First/Second Order Draft (F/SOD)
- Selected as an Coordinating / Lead Author or Review Editor

General:

- Attend IPCC meetings: <http://ipcc.ch/>
- Communicate the report findings

Thank you for your attention!

Contact Details

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Working Groups Technical Support Units

WGI: tsu@ipcc-wg1.universite-paris-saclay.fr (SR1.5)

WGII: tsu@ipcc-wg2.awi.de (SROCC)

WGIII: tsu@ipcc-wg3.ac.uk (SRCCL)

IPCC Main webpage - www.ipcc.ch

Find us on:



@IPCCNews



@IPCC_CH



IPCC_Climate_Change



<https://www.linkedin.com/company/ipcc>



<http://www.slideshare.net/ipcc-media/presentations>



<https://www.flickr.com/photos/ipccphoto/sets/>



<https://www.youtube.com/c/ipccgeneva>



<https://vimeo.com/ipcc>

WGI Timeline

2017
SEP 11 Sep-22 October
Call for Author nominations

2018
FEB 4 February
Decision on selection of Authors

JUNE 25 June-1 September
First Lead Author Meeting

JAN 7-13 January
Second Lead Author Meeting

2019
MAY 29 May-23 June
First Order Draft Expert Review

AUG 26 August-1 September
Third Lead Author Meeting

MAR 2 March-26 April
Second Order Draft Government and Expert review

2020
JUNE 1-7 June
Fourth Lead Author Meeting

DEC 7 December-31 January
Final Draft-Government review of
Summary for Policymakers

2021
APR 12-18 April
IPCC Acceptance/Adoption/Approval

To be a CLA/LA/RE:

Get nominated through your country's
Focal Point

<http://ipcc.ch/apps/contact/interface/focalpoints.php>



Working Group I Themes

****Pending acceptance by IPCC Plenary in Montreal September 2018****

Changing state of the climate system

Human influence on the climate system

Future global climate: scenario-based projections

Carbon budgets, biogeochemical cycles & feedbacks

Short-Lived Climate Forcers & Air Quality

Earth's Energy Budget, Climate Feedbacks, & Climate Sensitivity

Water Cycle, Ocean, Cryosphere, & Sea Level Change

Global to Regional Climate Change

Weather & Climate Extremes

Authors

Coordinating Lead Authors (CLAs) = 13

Lead Authors (LAs) = 60

Review Editors (REs) = 13

	CLA	LA	RE
Chapter 1	3	10	3
Chapter 2	3	10	2
Chapter 3	3	14	3
Chapter 4	2	14	2
Chapter 5	2	12	3

Example Review Comments

- “ “Very likely” seems to contradict the use of “may” in the next line. Suggest reconsidering which uncertainty modifier to use.

Text has been modified to remove the ambiguity.

- “ “What does “spatial variation in SST” mean and why is it related to ENSO Modoki? Unclear.

We have reworked sentence to make this clearer and also referred the reader to WG1 Chp 14 for further information

- “ “The impact of ocean acidification on Caribbean corals is not mentioned, yet there is quite a lot of research in this area.

We have added “Coral ecosystems in the Caribbean Sea are at risk from ocean acidification (Albright et al 2010, Albright and Langdon 2011), although impacts are yet to be observed”

First Order Draft Review for SR1.5

How to register:

IPCC Main webpage - www.ipcc.ch

Required information:

Chapters you are interested in reviewing

Personal details

Publications (max 5)

All experts who submitted comments on the FOD will be invited to review the SOD and to submit further comments.

Registration closes 17 September 2017.

Reviews must be submitted by 24 September 2017.