

IPCC AR6 Cycle: Products, Activities and Timeline

An Update

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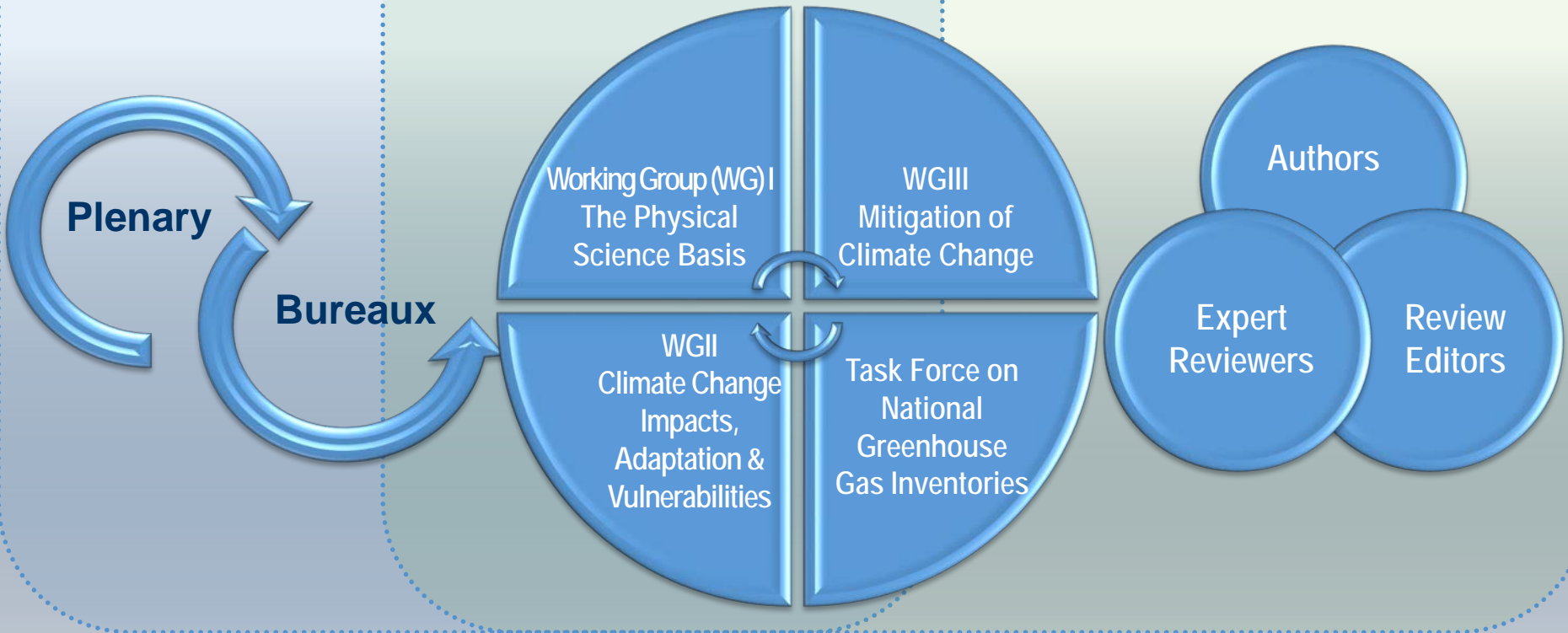
23rd AIM International Workshop
NIES, Tsukuba, Japan
November 27, 2017

Science/Policy Interface

IPCC – jointly established by **WMO** and **UNEP**, action endorsed by the **UN General Assembly**

Intergovernmental Panel: 195 member States appointing National Focal Points

Hundreds of scientists and experts from around the world are involved in the preparation of IPCC reports

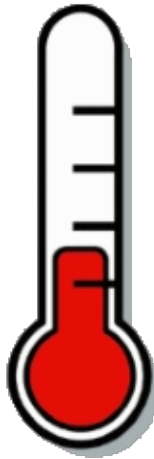


The three new IPCC products relevant to WG III

- Special report on “global warming of 1.5 C” invited by UNFCCC (September 2018)

“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”
- Special report on climate change, desertification, land degradation, sustainable land management, food security and greenhouse gas fluxes in terrestrial ecosystems (September 2019)
- Sixth Assessment report (July 2021)

Approved Outline of the Special Report on Global Warming of 1.5°C



Chapter 1: Framing and Context

Chapter 2: Mitigation pathways compatible with 1.5°C in the context of sustainable development

Chapter 3: Impacts of 1.5°C global warming on natural and human systems

Chapter 4: Strengthening and implementing the global response to the threat of climate change

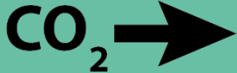






Chapter 5: Sustainable development, poverty eradication, and reducing inequalities

Mitigation Risks of 1.5 °C versus 2 °C?

- **How much higher are mitigation costs?**
- **Impacts on sustainable development including poverty eradication**
- **Technology needs (e.g. negative emissions & risks not to meet them)**
- **Impacts on food security and biodiversity, e.g. by BECCS**
- **Impacts on carbon cycle by more ambitious mitigation (e.g. forests)**
- **Overshoot risks (temperature, atmos. GHG conc.), irreversibility**

Review of 1.5°C pathways

Key differences with 2°C scenarios

	additional GHG reductions, mainly from CO2
	CO2 reductions beyond net zero
	rapid near-term decarbonisation of energy supply
	greater demand side mitigation efforts
	energy efficiency improvements are crucial
	higher mitigation costs
	comprehensive reductions in the coming decade

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



Chapter 1: Framing and Context

Chapter 2: Land-Climate Interactions

Chapter 3: Desertification

Chapter 4: Land Degradation

Chapter 5: Food Security

Chapter 6: Interlinkages between desertification, land degradation, food security and GHG fluxes: Synergies, trade-offs and Integrated Response Options

Chapter 7: Risk management and decision making in relation to sustainable development

Scoping of IPCC AR6

Overall recommendations from the Expert Meeting

Be bold about cross-cutting topics and possible chapter structures. Don't feel bound by AR5.

- Infrastructure? Cities? Consumption and behaviour? Innovation?

Separate forward-looking chapters on the **medium-term** (up to 2030-2040?) and the **long-term** (2100)

- Medium-term issues: SDGs, NDCs and global peaking of emissions
- Long-term issues: balancing sinks and sources; temperature goals

Connect mitigation responses across **different scales**

- Regional, international, national, cities

Transparency of scenarios and models

A **cross Working Group team** on scenarios for AR6

Proposed outline of WG III AR6

Framing (1 chapter)

1. Introduction and framing

High-level assessment of emission trends, drivers and pathways (3 chapters)

2. Past emissions trends and drivers

3. Long-term mitigation goals and pathways

4. Mitigation and development pathways in the near- to mid-term

Sectoral chapters (8 chapters)

5: Demand, services and social aspects of transformation

6: Energy systems

7. AFOLU

8. Urban systems and other settlements

12. Responses across and beyond sectors

9. Buildings

10. Transport

11. Industry

Institutional drivers (2 chapters)

13. National and sub-national policies and institutions

14. International cooperation

Financial and technological drivers (2 chapters)

15. Mobilising finance

16. Innovation, technology development and technology

Synthesis (1 chapter)

17. Accelerating the transition in the context of sustainable development

Set up sustainable development as key framing concept

Balancing sources and sinks/warming levels

NDCs, emissions peaking, mid-century long-term low greenhouse gas emission development strategies

Orients sectors to human needs

The sectoral core: maps on to inventories

Responses not captured by sectoral framing

Institutions, policies & cooperation

Financial flows + technological innovation

Synthesis sustainable development in different geographical scales

ipcc

INTERGOVERNMENTAL PANEL ON climate change



Timeline for WGIII contribution to AR6

26-28 April 2017	Expert Meeting on Mitigation, Sustainability and Climate Stabilization Scenarios
1-5 May 2017	AR6 Scoping Meeting
6-10 Sept	Panel consideration of outline for AR6
11 Sept – 22 Oct 2017	Call for CLA/LA/RE Nominations
29 Jan – 4 Feb 2018	Decision on selection of CLA/LA/RE
1-5 Apr 2019	1st Lead Author Meeting (LAM1)
30 Sep – 4 Oct 2019	2nd Lead Author Meeting (LAM2)
9 Dec 19 – 31 Jan 20	1st Order Draft (FOD) Expert Review
30 Mar – 3 Apr 3 2020	3rd Lead Author Meeting (LAM3)
1 Jun – 24 Jul 2020	2nd Order Draft (SOD) Expert Review
19-23 Oct 2020	4th Lead Author Meeting (LAM4)
1 Feb – 26 Mar 2021	FGD Government Review of SPM
12-14 Jul 2021	IPCC acceptance/adoption/approval

Scoping
Review

Author
Selection

Drafting and

AR6 Approval

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IPCC WGIII: www.mitigation2014.org

WG III links

www.ipcc.ch

www.ipcc-wg3.ac.uk



Thank you