

## **Decision IPCC/XLIV-4. Sixth Assessment Report (AR6) Products, Outline of the Special Report on 1.5°C**

*The Intergovernmental Panel on Climate Change decides,*

1. To agree to the outline of 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 as contained in Annex 1 to this document;
2. That this report responds to the invitation of the UNFCCC to the IPCC as contained in paragraph 21 of its Decision 1/CP.21, the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), and should also be seen in the context of paragraph 17 of the same decision;
3. That this report assesses literature relevant to 1.5°C, especially since the Fifth Assessment Report (AR5), consistent with the IPCC guidance on the use of literature;
4. That the bulleted text in Annex 1 to this Decision, that resulted from the scoping process and refined through comments by the Plenary, be considered by authors as indicative, taking into account the scope of the literature assessment referred to in bullet 3 and scientific gaps that will be explicitly identified;
5. That the time schedule for the production of the Special Report is as follows:
  - A call for nominations of Coordinating Lead Authors (CLAs), Lead Authors (LAs) and Review Editors (REs) will be issued after the 44th Session of the IPCC in October 2016.
  - Approval and acceptance of the Special Report is planned for the 48th Session of the IPCC in September 2018.
  - In order to achieve this, the timetable for the Special Report is as follows:

31 October - 11 December 2016	Call for author nominations
29 January 2017	Selection of authors
6-12 March 2017	1st Lead Author Meeting
5-11 June 2017	2nd Lead Author Meeting
31 July - 24 September 2017	First Order Draft Expert Review
23-29 October 2017	3rd Lead Author Meeting
1 January - 25 February 2018	Second Order Draft Expert and Government Review
9-15 April 2018	4th Lead Author Meeting
4 June - 29 July 2018	Final Government Review of Summary for Policymakers (SPM)
24-30 September 2018	IPCC acceptance/adoption/approval
6. That the budget for the production of the Special Report is as contained in Decision (IPCC/XLIV-1) on the IPCC Trust Fund Programme and Budget.

**Proposed outline of the special report in 2018 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**

Title:

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

List of Contents

- Front Matter (2 pages)
- Summary for Policy Makers (up to 10 pages, incl. headline statements, tables, figures)
- Chapter 1: Framing and context (15 pages)
- Chapter 2: Mitigation pathways compatible with 1.5°C in the context of sustainable development (40 pages)
- Chapter 3: Impacts of 1.5°C global warming on natural and human systems (60 pages)
- Chapter 4: Strengthening and implementing the global response to the threat of climate change (50 pages)
- Chapter 5: Sustainable development, poverty eradication and reducing inequalities (20 pages)
- Boxes - integrated case studies/regional and cross-cutting themes (up to 20 pages)
- FAQs (10 pages)
- Total: up to 225

Front matter

- IPCC context
  - Building on AR5
  - Assessing literature since AR5
  - Reports to come in this cycle
- Context of UNFCCC invitation
- Specificity of this report within the cycle (integration, systems- and solutions-based approach, near-term)
- Laying the foundations for the Special Report in the context of strengthening the global response to climate change, sustainable development and poverty eradication

Chapter 1:

Framing and Context

- Understanding 1.5°C; reference levels, probability, transience, overshoot, stabilization
- 1.5°C in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, with consideration for ethics and equity
- Key concepts central to understanding the report
- Building on AR5: new information, integrative approaches, response options
- Assessment and methodologies across spatial and time scales
- Treatment of uncertainty
- Storyline of the report

## Chapter 2:

### Mitigation pathways compatible with 1.5°C in the context of sustainable development

- Methods of assessment and assumptions in the literature
- Constraints on, and uncertainties in, global greenhouse gas emissions consistent with warming of 1.5°C compared to 2°C, considering short lived and other climate drivers and taking into account uncertainty in climate sensitivity
- Characteristics of mitigation and development pathways compatible with 1.5°C compared with 2°C and, where warranted by the literature, comparison with higher levels of warming. This may include short and long term timeframes, sectorial, regional, demand/supply-side, technological and socio-economic implications
- Technological, environmental, institutional and socio-economic opportunities and challenges related to 1.5°C pathways

## Chapter 3:

### Impacts of 1.5°C global warming on natural and human systems

- Methods of assessment
- Observed and attributable global and regional climate changes and impacts and the adaptation experience
- Key global and regional climate changes, vulnerabilities, impacts, and risks at 1.5°C, taking into account adaptation potential and limits to adaptive capacity
- Key sectoral vulnerabilities, impacts, and risks at 1.5°C, taking into account adaptation potential, limits to adaptive capacity and socio-economic aspects
- Avoided impacts and reduced risks at 1.5°C compared with 2°C and, where warranted by the literature, comparison with higher levels of warming
- Timeframe, slow vs. fast onset, irreversibility and tipping points
- Implications for impacts, adaptation and vulnerability of different mitigation pathways reaching 1.5°C, including potential overshoot

## Chapter 4:

### Strengthening and implementing the global response to the threat of climate change

- Assessing current and emerging adaptation and mitigation options, including negative emission methodologies, and associated opportunities and challenges
- Synergies, trade-offs and integration of adaptation and mitigation options
- The pace of the development and deployment of adaptation and mitigation options compared to pathways consistent with sustainable development and 1.5°C
- The potential and capacity limitations for development and deployment of adaptation and mitigation responses to accelerate transitions within and across scales and systems (e.g. food production, cities)
- Options for implementing far-reaching and rapid change; implications, challenges (e.g. lock in, spillover effects), enabling environments and across scales
- Case studies for implementation of adaptation and mitigation options at different scales and circumstances, and lessons learned

## Chapter 5:

### Sustainable development, poverty eradication, and reducing inequalities

- Linkages between achieving SDGs and 1.5°C
- Distributional impacts arising from response options
- Opportunities, challenges, risks, and trade-offs
- Positive and negative impacts of adaptation and mitigation measures including response measures and strategies, economic diversification, livelihoods, food security, cities, ecosystems, technologies
- Knowledge and experience from local to global, including case studies and integrated planning as relevant to aforementioned bullets
- Climate-resilient development pathways