

SIXTY-FIRST SESSION OF THE IPCC
Sofia, Bulgaria, 27 July – 2 August 2024

IPCC-LXI/Doc. 2, Rev. 1
(2.VIII.2024)
Agenda Item: 4.1
ENGLISH ONLY

SEVENTH ASSESSMENT REPORT (AR7) PRODUCTS

Outline of the Special Report on Climate Change and Cities

(Prepared by the Scientific Steering Committee for the Scoping of the Special Report)

(Submitted by the Secretary of the IPCC)

IPCC Secretariat

c/o WMO • 7bis, Avenue de la Paix • C.P. 2300 • 1211 Geneva 2 • Switzerland
telephone : +41 (0) 22 730 8208 / 54 / 84 • email : IPCC-Sec@wmo.int • www.ipcc.ch



SEVENTH ASSESSMENT REPORT (AR7) PRODUCTS

Outline of the Special Report on Climate Change and Cities

1. Introduction

The Panel at its Forty-third Session (Nairobi, Kenya, 11–13 April 2016) in its Decision IPCC/XLIII-6. Sixth Assessment Report (AR6) Products, Special Reports, paragraph 6, decided that the seventh assessment cycle would include a Special Report on Climate Change and Cities.

Thereafter, the Chair of the IPCC established a Scientific Steering Committee, Chaired by Ms Diana Ürge-Vorsatz, IPCC Vice Chair, to undertake the scoping of the Special Report under the joint scientific leadership of Working Groups I, II and III with support from the Working Group II Technical Support Unit.

2. Scoping Meeting

A Scoping Meeting for the IPCC Special Report on Climate Change and Cities was held in Riga, Latvia from 16 to 19 April 2024.

Participants were invited to discuss all aspects of the scope, outline, and contents of the report. The proposed outline for the Special Report was developed over the course of the scoping meeting. After intensive discussions within an iterative process between plenary sessions, breakout groups and stocktaking sessions, consensus was reached on the structure presented in Annex I.

3. Proposed Content and Structure of the Report

The proposed title and outline, with chapter headings and bullets of indicative content are presented in Annex I.

4. Time Schedule

A call for the nominations of experts to serve as Coordinating Lead Authors, Lead Authors and Review Editors will be issued in early August, immediately following the 61st Session of the IPCC. Approval and acceptance of the Special Report is planned for the 56th Session of the IPCC in early 2027. In order to achieve this, the timetable for the Special Report is as follows:

2024	
9 August – 20 September	Call for author nominations
23 September – 19 December	Selection of authors
2025	
10–15 March	First Lead Author Meeting
21–25 July	Second Lead Author Meeting
17 October – 12 December	Expert Review of First Order Draft
2026	
12–16 January	Third Lead Author Meeting
8 May – 3 July	Government and Expert Review of the Second Order Draft
3–7 August	Fourth Lead Author Meeting
11 December – 5 February	Final Government Distribution of the Final Draft & Government Review of the Summary for Policymakers

2027	
11 December – 5 February	Final Government Distribution of the Final Draft & Government Review of the Summary for Policymakers
15–19 March	Approval of the Summary for Policymakers and acceptance of the Special Report

5. Provisional Budget Estimate

The IPCC Secretariat has developed budget implications based on the proposed outline with five chapters, assuming chapter teams of about 15-20 authors with 50% from developing countries (DC) and countries with economies in transition (EIT).

Activity	DC/EIT Support	Additional Expenditure	Subtotal	Reference to Decision IPCC-LX-10
LAM1	200,000 50 journeys ¹	34,000	234,000	Annex 3
LAM2	200,000 50 journeys	34,000	234,000	Annex 3
LAM3	200,000 50 journeys	34,000	234,000	Annex 4
LAM4	200,000 50 journeys	34,000	234,000	Annex 4
IPCC-67 ²	40,000 10 journeys	6,800	46,800	n/a
Total				

Budget 2025: assuming 2 Lead Author Meetings with 50 journeys each for Coordinating Lead Authors, Lead Authors and Bureau Members from developing countries and countries with economies in transition at 4,000 CHF per journey, plus 68,000 CHF for other meeting costs. A subtotal of 468,000 CHF will be needed from the IPCC Trust Fund in 2025.

Budget 2026: assuming 2 Lead Author Meetings with 50 journeys each for Coordinating Lead Authors, Lead Authors, Review Editors and Bureau Members from developing countries and countries with economies in transition at 4,000 CHF per journey, plus 68,000 CHF for other meeting costs. A subtotal of 468,000 CHF will be needed from the IPCC Trust Fund in 2026.

Budget 2027: The overall budget for IPCC-67 would include funds for 10 Coordinating Lead Authors and Lead Authors from developing countries and countries with economies in transition to attend a preparatory meeting of SPM Drafting Authors and participate in the IPCC Joint WG Session to approve the Summary for Policymakers. This assumes 4,000 CHF per journey plus 17% for other meeting costs.

Costs for publication, translation and outreach of the Special Report will be included in the budget line items 'publications/translation' and 'outreach' for 2027.

¹ Including DC/EIT Bureau Members who will travel to LAM1-LAM4 in support of the Special Report.

² This will be part of the overall budget for IPCC-56 for DC/EIT SPM Drafting Authors who will travel to the Joint WG Session in support of the Special Report.

IPCC Special Report on Climate Change and Cities

Summary for Policymakers

Technical Summary

Chapter 1: Cities in the context of climate change: framing of the report

- Integrated storyline of the report, chapter narrative, sequence, and linkages to other relevant processes and assessments
- Framing and defining urban systems and settlements, and their regional and climatic characteristics (including complex, cascading, compounding, and repeating risks)
- Sustainable development and climate resilience, acknowledging the diversity of development status of cities and countries
- Cities as hotspots of effects of hazards and emissions, losses and damages, vulnerabilities, exposure, and impacts, while also being key climate actors
- Framing of multi-dimensional urban characteristics, including physical, socioeconomic and environmental features
- Treatment of urban vulnerabilities, marginalized areas and people, gender, equity, informality and justice
- Psychology, perception, behaviour and attitudes toward climate change and cities
- Interconnection between local context and global context (governance, science, and climate change), and between urban and rural systems
- Assessment methodologies, including following a regional approach, diverse knowledge systems (including Indigenous Knowledge), practitioner expertise, city networks, and considered time frames and spatial scales

Chapter 2: Cities in a changing climate: trends, challenges and opportunities

- Understanding and learning from the past (global climate, hazards, crises, socioeconomic developments); past, current and future global and city-specific climate (trends, means, extremes)
- Urbanization, urban service, common and different urban development trends (population, demographics, informality and inequity, development stage, land use, geography, minorities and intersectionality, urban extent, form, path dependencies, lock-in, retreat, reconstruction, growth and decline, resource and carbon footprint, health and wellbeing, waste management, ecosystems, economy, finance and insurance, work, artificial intelligence and digitalization)
- Urban emissions trends including consumption-based emissions; the role of cities in emissions and mitigation; future global and city-level scenarios, considering local options, equity, sustainable development, infrastructure, and informal settlements

- City-specific risks and their global and regional climatic impact-drivers (extremes and their attribution, slow-onset events, e.g., sea level rise); compounding and cascading risks; scenarios with and without risk reduction, adaptation, resilience building, changes in vulnerability and exposure across systems and sectors, including eco-systems and biodiversity, food, health and housing, innovative technologies/methods (measurements and models)
- Current mitigation and adaptation, planned and unplanned relocation, losses and damages experienced, and the socio-economic trends that shape them, including policy, governance, colonization
- Understanding the two-way interaction/feedback between cities, regions and countries, science behind the interactions (understanding the biophysical mechanisms); social interactions; climate and air quality, and other environmental changes, multi-hazard components (compounding and cascading hazards)
- Data, information, tools accessibility/availability/usability/transparency
- Uncertainties, implementation gaps, unprecedented situations
- Complexity and the need to contextualized climate change within broader societal trends (geopolitical, polarizing societal trends) and goals (Sustainable Development Goals), justice, cascading effects on critical infrastructure

Chapter 3: Actions and solutions to reduce urban risks and emissions

- Common and context specific urban mitigation options for spatial planning, energy (heating, cooling, electricity), existing and new buildings and infrastructure, mobility and transport, water, land, food, demand-side measures and behavioral change and cross-sectoral, integrated approaches in urban systems such as circularity
- Common and context specific urban adaptation and disaster risk reduction options for managing risks in natural, ecological and human systems (including but not limited to physical infrastructure, urban nature-based solutions and ecosystem-based adaptation, and planning and social policies such as relocation, health systems, early warning systems)
- Evaluation of city actions across mitigation and adaptation, and responding to losses and damages such as reconstruction and rehabilitation, including lessons-learned, effectiveness and feasibility, mitigation measures with baseline emissions inventories and targets adopted by cities
- Urban observation and modelling tools for monitoring and evaluation for sectors and unaccounted sources
- Local risk assessments using scientific information, Indigenous Knowledge, and local knowledge of impacts, types and scales of adaptation responses (including positive experiences and outcomes, and aspects of maladaptive practices) and adaptation cycles in various regions and contexts
- Integrating mitigation and adaptation into sustainable development and just transitions, planning approaches under and for uncertainty, synergies and trade-offs, nexus approaches, social innovation, climate resilient development, adaptation targets and the role of cities in net-zero targets
- Metrics for assessing mitigation and adaptation options in the context of sustainable development and the characteristics of and within cities, including service provisioning that delivers health and well-being for all

- Case studies/best practices/stories related to climate resilient development, adaptation, decarbonization and low-carbon development in a diverse range of cities

Chapter 4: How to facilitate and accelerate change

- New ways of planning under and for uncertainty; the likelihood of tipping points
- Providing climate and information services to enable action, including evaluation of mitigation, adaptation, responses to losses and damages, and the cost and benefits of action and inaction, and sustainable development
- Innovation in governance, urban planning policies, decision-making, technology, urban service provision, energy access and shelter, infrastructure, social systems, and finance, including adoption of innovation, facilitation of societal trends, acknowledging the diverse capacities
- Institutional capacities, competencies, inclusive multi-level governance
- Indigenous Knowledge, local knowledge, diverse knowledge systems and values
- Policies for behavioural and lifestyle changes including demand-side mitigation measures, education for empowerment, community engagement, social movements and communications
- Finance, financial instruments, legal frameworks, economic and policy instruments
- Holistic planning and systems thinking approach towards decarbonized and climate resilient cities
- Structural inequity, gender, colonialism, and justice
- Enabling conditions for poverty eradication, equity in just transitions
- Political will and leadership
- Conflicting goals and trade-offs

Chapter 5: Solutions by city types and regions

This chapter contains a synthesis of solution-relevant information and a collection of case studies by city types in the context of urban sustainable development, distinguished by multi-dimensional characteristics such as:

- Geographical location (regions)
- Development stage
- Informality
- City climate and projections
- Climatic impact-drivers
- Adaptation and mitigation options
- Sectoral contributions to the economy

- Migration, urbanization and demographic trends
- Fragility and conflict situations
- Losses and damages, vulnerability, impacts and risks
- Early warning systems
- Capacities
- Inclusiveness, equity and justice
- Governance
- Climate finance

Annex I: Glossary