

## Summary of the 62nd Session of the Intergovernmental Panel on Climate Change: 24 February – 1 March 2025

Yet another heavy agenda awaited delegates to the 62nd session of the Intergovernmental Panel on Climate Change (IPCC) in Hangzhou, China, and predictions that this would be a very challenging meeting—even by IPCC standards—were borne out. After contentious talks about issues large and small, the session finally drew to a close late on Saturday, 1 March, more than 30 hours after the scheduled conclusion of the meeting.

Key items on the agenda included consideration of the outlines of the reports that will be produced by each of the three IPCC Working Groups for the Seventh Assessment Cycle (AR7), and the timeline for their delivery. Despite extensive discussions, delegates were unable to reach an agreement on the timeline, continuing a debate that has remained unresolved since IPCC-60 in January 2024. While some countries emphasized the importance of a timely completion of the reports to maintain policy relevance by informing the Global Stocktake under the United Nations Framework Convention on Climate Change (UNFCCC), others raised concerns that a compressed timeline could affect participation, particularly from developing countries. Nevertheless, the meeting delivered an important outcome: delegates reached consensus on the outlines of the three Working Group reports and agreed on a decision that enables the author nomination process to begin, allowing work on AR7 to move forward—laying the foundation for what is likely to be an intense assessment cycle.

The timeline will be taken up once again at IPCC-63, which is expected to convene in late 2025, with hope that the Panel can finally break its deadlock.

Discussions were also difficult on the Carbon Dioxide Removal (CDR) Technologies, Carbon Capture, Utilization and Storage for National Greenhouse Gas Inventories Methodology Report, particularly regarding the inclusion of CO<sub>2</sub> removal from waterbodies. While the broader methodological framework was approved, further deliberations on volume 7—focused on marine CDR—were postponed to IPCC-63.

In addition to these core agenda items, delegates considered proposals for expert meetings and workshops, approving two workshops on new and extended methods of assessment: one on the role of emerging technologies such as artificial intelligence, and another one on engaging diverse knowledge systems such as Indigenous Knowledge. The Panel also approved an expert meeting

on methodologies, metrics and indicators for assessing climate change impacts and adaptation.

The session also included debates on observer organization status, budgetary matters, and participation, with discussions on inclusivity and representation continuing to be a focus. This was particularly relevant as the extended meeting hours resulted in the absence of many of the smallest delegations, mostly from small island developing states and least developed countries. As a result, the final decisions were made without their participation. The session marked the first absence of the United States in IPCC history, raising questions about the US's future participation in IPCC meetings, including IPCC-63 and beyond.

IPCC-62 convened from 24 February – 1 March 2025 in Hangzhou, China, with 449 participants from governments, international organizations, and civil society, including 300 delegates from 124 Member Countries and 48 observer organizations.

## A Brief History of the IPCC

The IPCC was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) to assess, in a comprehensive, objective,

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open, and transparent manner, the scientific, technical, and socio-economic information relevant to understanding human-induced climate change, its potential impacts, and adaptation and mitigation options. The IPCC is an intergovernmental and scientific body with 195 Member Countries. It does not undertake new research or monitor climate-related data; rather, hundreds of scientists from around the world volunteer their time to conduct assessments of the state of climate change knowledge based on peer reviewed and internationally available scientific and technical literature. IPCC reports are intended to be policy relevant but not policy prescriptive. The reports provide key input into international climate change negotiations and are intended to support governments at all levels.

The IPCC has three Working Groups (WGs):

- WGI addresses the physical science basis of climate change;
- WGII addresses climate change impacts, adaptation, and vulnerability; and
- WGIII addresses options for reducing greenhouse gas (GHG) emissions and mitigating climate change.

Each WG has two Co-Chairs and seven Vice-Chairs, with the exception of WGII, which has eight Vice-Chairs.

The Co-Chairs guide the WGs in fulfilling their mandates with the assistance of Technical Support Units (TSUs). In addition, the IPCC has a Task Force on National Greenhouse Gas Inventories (TFI), supported by a TSU, to oversee the IPCC National GHG Inventories Programme. The Programme aims to develop and refine an internationally agreed methodology and software for calculating and reporting national GHG emissions and removals and encourage its use by parties to the UNFCCC.

The IPCC elects its Bureau for the duration of a full assessment cycle, which includes preparation of an assessment report and any special and methodological reports and technical papers published during that period. The Bureau is composed of climate change experts representing all regions and includes the IPCC Chair and Vice-Chairs, WG Co-Chairs and Vice-Chairs, and TFI Co-Chairs. The IPCC has a permanent Secretariat based in Geneva, Switzerland, hosted by the WMO.

In 2007, the Nobel Peace Prize was jointly awarded to the IPCC and former US Vice-President Al Gore for their work and efforts “to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations needed to counteract such change.”

### ***IPCC Products***

Since its inception, the Panel has prepared a series of comprehensive assessment reports and special reports that provide scientific information on climate change to the international community.

The IPCC has produced six assessment reports, which were completed in 1990, 1995, 2001, 2007, 2014, and 2023. The assessment reports are structured in four parts, three matching the purviews of the WGs and a fourth synthesizing their key findings. Each WG’s contribution comprises a comprehensive assessment report (the “underlying report”), a Technical Summary (TS), and a Summary for Policymakers (SPM). The report undergoes an exhaustive, three-stage review process by experts and governments consisting of a first review by experts, a second review by experts and governments, and a third review by governments. The SPM is then approved line-by-line in plenary by the respective WG and adopted by the Panel.

After the three WG reports are accepted and their SPMs approved, a Synthesis Report is produced to integrate the key findings from the three WG reports and any other reports from that assessment cycle, with the Panel then undertaking a line-by-line approval of the SPM of the Synthesis Report.

The IPCC has also produced a range of special reports on climate change-related issues. The sixth assessment report (AR6) cycle included three special reports:

- Global Warming of 1.5°C (SR1.5), which was approved by IPCC-48 in October 2018;
- Climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (SRCCL), which was approved by IPCC-50 in August 2019; and
- Ocean and Cryosphere in a Changing Climate (SROCC), which was approved by IPCC-51 in September 2019.

In addition, the IPCC produces methodology reports, which provide guidelines to help countries report on GHG emissions. Good Practice Guidance reports were approved in 2000 and 2003, while the IPCC Guidelines on National GHG Inventories were approved in 2006. A Refinement to the 2006 Guidelines on National GHG Inventories (2019 Refinement) was adopted at IPCC-49 in May 2019.

### ***Sixth Assessment Cycle***

The sixth assessment cycle began with the election of the Bureau members in 2015 at IPCC-42. In 2016, IPCC-43 agreed to undertake during the AR6 cycle three special reports (SRCCL, SROCC, and in response to an invitation from the 21st session of the Conference of the Parties to the UNFCCC, SR1.5) and the 2019 Refinement. The Panel also agreed that a Special Report on Climate Change and Cities would be prepared as part of the seventh assessment report (AR7) cycle.

Between IPCC-44 and 47 (2016-2018), the Panel adopted outlines for the three Special Reports and the 2019 Refinement, as well as the chapter outlines for the three WG contributions to AR6. During this period, the Panel also discussed a proposal to consider short-lived climate forcers (SLCFs). The Panel agreed to establish a Task Group on Gender and draft terms of reference for a task group on the organization of future work of the IPCC in light of the Global Stocktake under the Paris Agreement.

In October 2018, IPCC-48 accepted the SR1.5 and its TS and approved its SPM, which concluded that limiting global average temperature rise to 1.5°C was still possible but would require “unprecedented” transitions in all aspects of society.

In 2019, the Panel adopted the Overview Chapter of the 2019 Refinement and accepted the underlying report at IPCC-49, accepted the SRCCL and its TS and approved its SPM at IPCC-50, and accepted the SROCC and its TS and approved its SPM at IPCC-51. The Panel also adopted decisions on the terms of reference for the Task Group on Gender and on a methodological report on SLCFs to be completed during the AR7 cycle.

In February 2020, just prior to the COVID-19 pandemic shutdown, IPCC-52 adopted the outline for the AR6 synthesis report, containing an introduction and three sections: current status and trends; long-term climate and development futures; and near-term responses in a changing climate. The Panel also adopted the IPCC Gender Policy and Implementation Plan, which, among other things, established a Gender Action Team.

At IPCC-54, which took place virtually in August 2021 due to the COVID-19 pandemic, the Panel accepted the WGI contribution to AR6, entitled “Climate Change 2021: The Physical Science Basis,” and approved its SPM. At IPCC-55, which took place virtually in February 2022, the Panel accepted the WGII contribution to AR6, entitled “Climate Change 2022: Impacts, Adaptation and Vulnerability” and approved its SPM. At IPCC-56, which took place virtually in March-April 2022, the Panel accepted the WGIII contribution to AR6, entitled “Climate Change 2022: Mitigation of Climate Change,” and approved its SPM. Following a significant delay in the production of the Synthesis Report of the Sixth Assessment Report, its adoption was deferred to IPCC-58. IPCC-57 instead dealt with matters including the size, structure, and composition of the IPCC Bureau, as well as actions to strengthen gender equality and equity in internal operations.

In March 2023, IPCC-58 adopted the Synthesis Report of the Sixth Assessment Report and approved its SPM. This meeting concluded the IPCC’s sixth assessment cycle.

### **Seventh Assessment Cycle**

In July 2023, IPCC-59 elected a new slate of leaders, including Jim Skea (UK) as Chair, to guide the Panel’s work during the seventh assessment cycle.

In January 2024, IPCC-60 took crucial decisions on its workplan for the coming years, including on the products and timelines for some of its outputs. However, the Panel was not able to reach consensus on key elements of the timeline for the cycle and agreed to continue deliberations on its strategic planning schedule during its next meeting.

During IPCC-61 in July 2024, the Panel agreed on the outlines for the Special Report on Cities and Climate Change, and a methodological report on short-lived climate forcers. The Panel was again unable to reach agreement on the strategic planning schedule.

### **IPCC-62 Report**

On Monday, 24 February 2025, IPCC Chair Jim Skea and IPCC Secretary Abdallah Mokssit welcomed delegates to the 62nd session of the IPCC.

In opening remarks, Li Yanyi, Vice Governor of Zhejiang, underscored the province’s commitment to climate action. He highlighted Zhejiang’s ongoing energy transition, with renewable energies surpassing coal power for the first time, and emphasized the increased resilience of its rural and urban infrastructure. Calling for strong partnerships, he noted that “if you want to go fast, go alone, but if you want to go far, go together.”

Liu Zhenmin, China’s Special Envoy for Climate Change, highlighted the IPCC’s relevance for strengthening climate governance, pointing to the incorporation of recent IPCC findings in the first Global Stocktake (GST). Emphasizing that progress towards implementing the Paris Agreement depends on voluntary commitment and implementation at the national level, he highlighted China’s achievements in moving towards a green and low-carbon society and urged other countries to honor their commitments. He hoped delegates would “adhere to the spirit of science” and said the IPCC should: propose solutions in accordance with fairness and justice; continue to support the principle of common but differentiated responsibilities (CBDR); and focus on the state of global financing during the AR7 cycle, noting that current financial flows “are far from sufficient.”

Chair Skea cited the Panel’s “important and steady progress” since the start of AR7, highlighted the importance of IPCC work for the UNFCCC process, and outlined the “rich and demanding” agenda for the week ahead. He said Bureau members and scientists had done “their utmost” to bring scientifically strong outlines to the session.

In a video message, Inger Andersen, Executive Director, UNEP, underscored the WMO’s warning that 2024 was the warmest year on record, at about 1.55°C above pre-industrial levels. Emphasizing that “every degree, every day, every week counts,” she urged delegates to finalize “timelines, outlines and budgets.”

Simon Stiel, UNFCCC Executive Secretary, also speaking via a video message, cited progress made in the 10 years since the adoption of the Paris Agreement, highlighting that, in 2024, global investment in the energy transition exceeded USD 2 trillion. However, he warned that the window to limit warming to 1.5°C is closing and called for delegates to “accelerate action,” particularly on adaptation.

Ko Barrett, Deputy Secretary-General, WMO, called for the Panel to take “decisive action,” noting the importance of AR7 reports for the second GST and underscoring that the cost of inaction far exceeds the cost of action.

Chen Zhenlin, Administrator, China Meteorological Administration, stressed China’s long commitment to the IPCC, noting over 100 Chinese authors have contributed to reports thus far. He underscored China’s adherence to the UN’s Early Warnings for All initiative and its willingness to “join hands” with other countries to build global early warning networks.

Chair Skea then formally opened IPCC-62. He underscored the need to prioritize substantive issues and ensure inclusivity, including by avoiding an overrun of the meeting time, given the disproportionate impact on least developed countries (LDCs) that may be unable to extend their participation.

Saying it has been three years since the Russian Federation invaded her country, UKRAINE emphasized the impact of war on climate change and the exhaustion of the carbon budget from military emissions. The Panel then adopted the agenda as presented ([IPCC-LXII/Doc.1, Rev. 1](#)).

### **Approval of the Draft Report of the 61st Session**

On Monday, Chair Skea introduced the draft report of the 61st session of the IPCC ([IPCC-LXII/Doc.1, Rev. 1](#)) for the Panel’s approval.

Expressing concern about qualifying terms such as “many” or “some,” SAUDI ARABIA called for amendments to text on collaboration between the IPCC and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), specifically proposing to change “general support” for strengthening collaboration to “support was expressed.” With VENEZUELA, he also proposed to delete references to potential cooperation on “efforts to remove environmentally harmful fossil fuel and energy subsidies, in contrast with biodiversity subsidies,” saying this was not discussed much and gives the wrong impression of the session.

FRANCE, GERMANY, CHILE, the UK, SWITZERLAND, BELGIUM, and SWEDEN expressed concern about removing qualifiers from the report, stressing the need for clarity and transparency. Given IPCC-62’s heavy agenda, they expressed flexibility to postpone discussion of this issue until the end of the meeting or the beginning of IPCC-63.



The Panel briefly resumed discussion of this agenda item on Friday and agreed to defer further consideration of the draft report to the next meeting.

**Final Decision:** In its decision (IPCC-LXII- 2), the Panel defers the approval of the draft report of IPCC-61 to IPCC-63.

### **IPCC Trust Fund Programme and Budget**

**Budget for the years 2024, 2025, 2026 and 2027:** On Monday, the Secretariat introduced the revised budget ([IPCC-LXII/Doc.2, Rev.1](#)). INDIA and SOUTH AFRICA noted that Panel decisions, including on expert meetings, should precede adoption of the budget. Chair Skea clarified the Financial Task Team (FiTT) would take Panel decisions into account when preparing the revised budget for approval later in the week. He invited the FiTT to focus on the priority needs of the Panel when considering financial and budgetary implications of draft decisions discussed by Panel. The UK announced its voluntary contribution of GBP 115,000 to the IPCC Trust Fund in addition to its in-kind support.

The Secretariat presented a draft decision to the plenary on Saturday night.

INDIA and SAUDI ARABIA had questions on the nature of the decision and forecast expenditures and indicative budgets for 2026 and 2027, with INDIA expressing concern with giving the impression that the timeline for delivery of the AR7 was approved.

The Panel approved the revised 2024 and proposed 2025 budgets and took note of the budgets for 2026 and 2027.

**Final Decision:** In its decision (IPCC-LXII-7), the Panel, *inter alia*:

- approves the revised budget for 2024, as contained in Annex 1 of the decision;
- approves the proposed budget for 2025, as contained in Annex 2;
- notes the forecast budget for 2026, as contained in Annex 3, noting that disbursement of funds for the Data Distribution Centre (DDC) will be subject to Panel approval of the Group on Data Support for Climate Change Assessments (TG-Data) AR7 work programme;
- notes the indicative budget for 2027, as contained in Annex 4, noting that disbursement of funds for DDC will be subject to Panel approval of the TG-Data AR7 work programme;
- decides to continue preparing the budget of the IPCC Trust Fund using standard costs;
- requests the Secretariat to present the statement of financial position and financial performance on a modified cash basis, which categorizes expenditure per activity as well as by natural account;
- requests the Secretariat to provide the Panel with interim statements of expenditure covering the first six months of a given year, as well as the projection of expenditure for the rest of the given year;
- requests the Secretariat to provide information on major activities and related costs covered by the Communications budget; and
- requests the FiTT to meet virtually intersessionally to conduct informal discussions regarding relevant FiTT decisions and matters.

**Audit of 2023 financial statements:** The Secretariat introduced the audited 2023 IPCC Financial Statements ([IPCC-LXII/INF. 1](#)), noting the external auditor's favorable review. The Panel took note of the document.

### **Task Group on Data Support for Climate Change**

**Assessments:** In a video message, TG-Data Co-Chair David Huard presented relevant information on TG-Data's work, including on its workplan for 2025 ([IPCC-LXII/Doc. 5](#)). The Panel approved the AR7 TG-Data work plan for 2025, contingent upon the approval of the budget for the DDC's activities for the year.

**Final Decision:** In its decision (IPCC-LXII-3), the IPCC:

- approves the AR7 TG-Data work plan for 2025 and requests the FiTT to consider the budget for DDC activities for 2025;
- takes note of the recommendations and lessons learned from the AR6; and
- invites the Secretariat to continue resource mobilization for the sustainability of DDC activities in AR7.

### **Admission of Observer Organizations**

On Saturday morning, Jennifer Lew Schneider, Legal Officer, IPCC Secretariat, reported on the admission of observer organizations ([IPCC-LXII/Doc.3, Rev. 3](#)). She said there are currently 226 observer organizations admitted to the IPCC, and 17 new applications have been filed for consideration by the Panel.

The UK objected to admission of the Gas Exporting Countries Forum (GECF) as an observer. SAUDI ARABIA objected to admitting the other 16 should this organization be "singled out." SWITZERLAND called for the IPCC to develop guidelines on conflict of interest.

After conferring with Bureau members, the UK agreed to accept the GECF as an observer organization, but supported SWITZERLAND's call for conflict of interest guidelines to be taken up at IPCC-63. SAUDI ARABIA opposed this proposal.

**Final Decision:** In its decision (IPCC-LXII- 6) the Panel decides, *inter alia*, to grant 17 organizations IPCC observer status, in accordance with the IPCC Policy and Process for Admitting Observer Organizations.

### **Scoping of the IPCC Seventh Assessment Report (AR7)**

On Monday, Chair Skea provided an overview of the scoping process for the three Working Group (WG) reports, focusing on cross-cutting issues and the AR7 Synthesis Report ([IPCC-LXII/INF. 7](#)), and outlined progress toward and steps planned to improve inclusivity ([IPCC-LXII/INF. 5](#)).

INDIA, SAUDI ARABIA, EGYPT, and the RUSSIAN FEDERATION expressed concern about lack of inclusivity in the scoping activities for the Synthesis Report (SYR) and cautioned against setting a narrative for the SYR before the WGs have started working on their reports. They requested removing consideration of the SYR from the meeting's agenda.

NORWAY and LUXEMBOURG expressed surprise, noting the agenda, which included consideration of the SYR, had been approved earlier in the meeting. They also called for increased visibility of cross-cutting themes in the outlines of the WG reports.

Chair Skea noted that, based on precedents from previous cycles, the SYR for AR7 had been addressed during the scoping meeting for the WG reports. He clarified that the subsequent guidance for the SYR is "detailed on process but broad on content," and the content will be specified during a dedicated scoping meeting for the SYR that will take place later in the cycle.

**WGI AR7 Report Outline:** On Monday, WGI Co-Chair Xiaoye Zhang introduced the outline for the WGI report and described the work that took place prior to the WGI Scoping Meeting, which was held in Kuala Lumpur, Malaysia, in December 2024. He

stressed the importance of a strong narrative structure and a sound introductory chapter that will frame the report and introduce the methodology used throughout. He said Chapters 2-4 would address new observations and recent developments, Chapters 5-8 would be rather future-oriented, and Chapters 9-10 would focus on climate information.

WGI Co-Chair Robert Vautard outlined opportunities across chapters to highlight advances in climate science, including improved understanding of recent anomalies such as regional or global temperature extremes, and the fast-growing literature on potential abrupt changes.

CHINA, SAINT KITTS AND NEVIS, ITALY, and others welcomed the outline and congratulated the authors.

IRELAND expressed support for including “plain language” chapter summaries, noting the information must be clear and accessible throughout for the audience. The RUSSIAN FEDERATION asked for clarification on the intended audience for these summaries. INDIA and SAUDI ARABIA opposed the proposal, noting these summaries overlap with the Summary for Policymakers (SPM).

INDIA called for, *inter alia*, the inclusion of a chapter on monsoons and deletion of a chapter on climate information and services.

SWITZERLAND called for addressing the unique challenges faced by high altitude and latitude environments.

BELGIUM expressed concern about the treatment of solar radiation modification (SRM) in the report, calling for it to include both its limits and risks.

SAUDI ARABIA said the outline includes issues that are outside of the WGI mandate and opposed concepts that he said “remain uncertain,” such as tipping points.

This issue was further discussed from Tuesday through Friday, during the fifteenth session of WGI.

**WGII AR7 Report Outline:** On Monday, WGII Co-Chair Winston Chow outlined the scoping of the WGII report, emphasizing steps taken to ensure inclusivity in the process of author selection and engagement.

WGII Co-Chair Bart van den Hurk introduced the draft outline, noting it includes: global chapters on topics such as risks and drivers, options for action and responses, and climate finance; multilevel perspectives with more regional and sectoral elements, including an atlas as an extension of the WGI atlas; regional chapters; and thematic chapters. He also elaborated on the update to the 1994 Technical Guidelines for assessing climate change impacts and adaptation.

The RUSSIAN FEDERATION queried the attribution methodology for impacts and risk and for assessing uncertainties, reiterating their call for guidance notes on this matter.

INDIA welcomed the centrality of adaptation and the chapter on finance but expressed concerns about the theoretical framing. He cautioned against mitigation-centric references to climate-resilient development and maladaptation. With SAUDI ARABIA, he said the proposed implementation timeline should be reconsidered, saying three years are insufficient.

SAUDI ARABIA underscored the need for an inclusive and comprehensive approach to adaptation, including that all adaptation strategies be based on context and necessity. She opposed the inclusion of legal and policy aspects, references to trade and conflict, and criteria such as maladaptation.

SWITZERLAND welcomed the focus on solutions and trade-offs with mitigation and questioned the lack of references to limits to adaptation and maladaptation.

KENYA called for reflecting language agreed at IPCC-60 on adaptation indicators, methods and methodologies, and called for a broad take on losses and damages, including quantification. Saying the AR6 definition of maladaptation is limiting, she called for the term to be redefined should it be included in this report.

SENEGAL underscored the need for a focus on losses and damages and expressed hope this would help showcase those in greatest need.

ANTIGUA AND BARBUDA welcomed the focus on adaptation and new chapters on finance and losses and damages, and said AR7 should build on advancements in AR6 toward assessments of adaptation under specific levels of warming.

BRAZIL, with SWITZERLAND, called for WGII to assess the risks of SRM, given its cross-cutting nature and potential impacts on sectors such as agriculture.

This issue was further discussed from Tuesday to Saturday, in the thirteenth session of WGII.

**WGIII AR7 Report Outline:** On Monday, WGIII Vice-Chair Jan Fuglestad presented an overview of the scoping process. WGIII Co-Chair Joy Jacqueline Pereira introduced the proposed outline structure. She noted the 15 proposed chapters comprise introduction and framing (Chapter 1), past and current trends and futures (Chapters 2-3), sustainable development as a framing concept (Chapter 4), factors that enable or constrain mitigation (Chapters 5-7), sectors, systems and their integration (Chapter 8-14), and potentials, limits, and risks of carbon dioxide removal (Chapter 15).

The RUSSIAN FEDERATION requested qualifying past and current emissions as “anthropogenic” and cautioned against discussing national policies, as suggested in Chapters 3 and 6, noting this is beyond the WG’s mandate. NORTH MACEDONIA underscored that sectoral integration is key to deep decarbonization, welcoming the inclusion of Chapter 14 on integration and interactions across sectors and systems.

INDIA, supported by EGYPT and SAUDI ARABIA, welcomed the focus on sustainable development, equity, and justice throughout the report outline, cautioned against a disproportionate focus on policies, including ex-post assessments, and said the proposed implementation plan does not provide sufficient time to deliver the report.

NEPAL, BELGIUM, GERMANY, and FRANCE supported the proposed implementation plan, stressing WGIII’s contribution to AR7 should be available for the second GST.

NEPAL suggested including a chapter on mountains and welcomed regional chapters across all WG reports. BELGIUM suggested including “societal tipping points.”

GERMANY and FRANCE called for treating cross-cutting issues, including finance, consistently across the WG reports. BELIZE, supported by FRANCE, called for reflecting on the risks of SRM and taking a cautious approach.

SAUDI ARABIA expressed concern about a “shift in language,” noting relevant stakeholders are in the position to evaluate outcomes of climate policies while the IPCC should not be the “judge.” She noted IPCC reports should be neutral with respect to policy and called for a full assessment of the potential of carbon dioxide removal (CDR) technologies.

This issue was further discussed from Tuesday to Saturday in the fifteenth session of WGIII.

**WG I-III Implementation Plans:** This issue was taken up by IPCC plenary on Saturday afternoon, as the WGs had decided this should be considered jointly by the Panel. Chair Skea underscored the enormous effort and time taken by this matter since IPCC-60, including during the scoping meeting in Kuala Lumpur, and stressed the integrated approach to the planning jointly taken by the three WGs.

Melinda Tignor, WGII TSU, introduced the proposed timeline for the WG reports, highlighting full consideration of all mile-markers as well as other meetings and holidays. WGI Co-Chair Vautard stressed that “this is not a rushed timeline,” noting it was similar to the schedule for the Special Report on Cities, which had not been questioned.

Underscoring the importance of a timely, policy-relevant AR7, AUSTRALIA, AUSTRIA, BELGIUM, CANADA, CHAD, CHILE, DENMARK, the EU, FRANCE, GERMANY, HUNGARY, JAPAN, LUXEMBOURG, MALAWI, NEPAL, the NETHERLANDS, NORWAY, SWEDEN, SWITZERLAND, TÜRKIYE, the UK, and JAMAICA, speaking also on behalf of other SIDS who were unable to stay past the plenary’s scheduled end, urged adoption of the schedule as prepared by the Bureaus and avoiding failure to deliver at this meeting.

INDIA, SAUDI ARABIA, ALGERIA, and SOUTH AFRICA called for revising the schedule, citing time compression in the timeline and challenges for scientists from developing countries to produce literature, and for governments to review draft WG reports. KENYA expressed concern about inclusivity and called for more flexibility on timing.

LUXEMBOURG recalled that AR6 was produced under global pandemic conditions and was therefore delayed, so the proper comparison of the timeline would be to AR5, relative to which the proposed timetable was not rushed.

Many countries expressed concern about the number of countries who had had to leave due to the continuation of the meeting beyond its scheduled closure, with AUSTRALIA noting that many of them are precisely those who lack capacity and depend on IPCC’s assessments.

CHINA raised the question how the IPCC will align with future GSTs, given their five-year cycles.

FRIENDS WORLD COMMITTEE FOR CONSULTATION (FWCC) noted existing and ongoing research and stressed the urgency to act.

Chair Skea reminded delegates of the need for agreement on a timeline at this meeting, in order to advance WG work on author selection. FRANCE announced its readiness to host the first Lead Author Meeting (LAM) in 2025.

Discussion continued in a huddle facilitated by IPCC Vice-Chair Ladislaus Chang’a. The huddle continued throughout Saturday afternoon and into the evening.

Late on Saturday evening, Vice-Chair Chang’a and facilitator Fredrick Ouma (Kenya) reported back from the huddle citing the development of an additional option to stretch the timeline that would allow more “wiggle room.” ITALY and IRELAND, supported by SWITZERLAND, DENMARK, LUXEMBOURG, DENMARK, AUSTRIA, CHAD, the UK, and SWEDEN, explained that this option would, by moving the WGIII approval session

one month later, allow for an additional month at the time when governments needed it most and possibly another additional month if the first LAM could start a month earlier.

INDIA, supported by SAUDI ARABIA and SOUTH AFRICA, recalled their proposal for completion of: WGI by July 2028; WGII in December 2028; WGIII in April 2029; and SYR in the second half of 2029. WGI Co-Chair van den Hurk said INDIA’s proposal would require a feasibility check by the TSU. JAPAN asked for clarification concerning the feasibility of the proposal put forward by ITALY and others.

AUSTRALIA emphasized that they were the only country left from Region V (the South-West Pacific) and, voicing requests by VANUATU and PALAU for support in delivering the AR7 in time for the GST, called for the extended option as a compromise.

INDIA and SOUTH AFRICA said the addition of one or two months did not make it a viable counter-suggestion. SOUTH AFRICA highlighted that dense timelines create challenges for government review.

Chair Skea reminded delegates of the default option to fail to reach agreement and forego the two options of timelines currently available. He further questioned whether a middle ground between the two proposals could be found, noting each proposal sets different priorities, one on effective participation, the other one on aligning with the GST.

As a way forward, Chair Skea proposed a draft decision on AR7 scoping and outlines for adoption, comprising agreement on the respective WG outlines, an invitation to the WGs to start their work by initiating the call for nominations, and deferral of discussions on the implementation plans to the next session. He noted, while this procedure does not reflect practice from previous cycles, “it enables us to move forward.”

IPCC Deputy Secretary Ermira Fida then presented draft decision IPCC-LXII-X, Scoping and Outlines of the IPCC Seventh Assessment Report (AR7), which invites the WGs to start their work by initiating the call for author nominations.

SAUDI ARABIA, with LUXEMBOURG, requested adding “as indicated in the 2025 budget.”

ITALY, LUXEMBOURG, and DENMARK stressed the need to signal that IPCC-63 and the first LAM should happen as soon as possible.

On a reference to “implementation plans,” INDIA requested these be described as “proposed.” SAUDI ARABIA suggested instead referring to “schedules and workplans.”

GERMANY, opposed by INDIA, requested “defer the consideration” of the plans to IPCC-63 be changed to “continue,” to better reflect the work done at IPCC-62. The Secretariat prepared a revised decision text.

On the revised version of the draft decision, DENMARK, JAPAN, ITALY, GERMANY, and CANADA urged for a signal that WGs initiate work for AR7, calling for convening the first LAM jointly as early as possible in 2025.

INDIA, supported by SAUDI ARABIA, opposed, noting this brings in elements of the deferred discussions on the implementation plans and saying the proposal touches their main concern about expediting AR7. Following discussions, the Panel agreed to delete reference to “as soon as possible” and “joint.”

**Final Decision:** In its decision (IPCC-LXII-8), the Panel decides:



- to agree on the outlines of the contributions to the Working Groups to AR7 as contained in Annexes 1, 2 and 3 of the decision;
- to invite the Working Groups to start their work, as indicated by the 2025 budget as contained in Decision IPCC-LXII-7, by initiating the call for nominations for authors, and convene the first Lead Author meetings in 2025; and
- to defer further consideration of the workplan, including the proposed Implementation Plan as contained in IPCC-LXII/Doc. 14, 15 and 16 for the preparation of Working Group contributions to AR7 to the 63rd session.

### **Scoping of the Methodology Report**

On Monday, Takeshi Enoki, TFI Co-Chair, introduced the CDR methodology report. He highlighted an Expert Meeting on CDR held in July 2024 in Vienna, Austria, and outlined the process and criteria by which the methods included in the report were selected. Co-Chair Enoki added the methodology report would stand both as a supplement to and a refinement of the 2006 Guidelines for National Greenhouse Gas Inventories. He also explained the report would be divided into seven thematic volumes.

INDIA, SAUDI ARABIA, SOUTH AFRICA, and ALGERIA objected to the description of the report as a “supplement” to the 2006 Guidelines, noting it must be a standalone output. NORWAY, the NETHERLANDS, UK, SWEDEN, DENMARK, and others instead supported describing the report as an update to existing guidelines, emphasizing the need for consistency. Various countries also underscored the importance of a science-led approach and avoidance of double-counting.

SWITZERLAND, SWEDEN, ITALY, GERMANY, and others called for distinguishing between temporary and permanent storage and called for focusing on long-term storage and use. ITALY and CHILE pointed to the lack of metrics regarding permanence of carbon storage, while VANUATU stressed the need to consider non-permanence and called for caution regarding speculative methodologies. The NETHERLANDS stressed the importance of completeness, clear methodologies, and distinguishing the source of CO<sub>2</sub> in carbon utilization.

NORWAY emphasized the need for coordination and knowledge exchange with WGIII and supported the new volume on carbon dioxide capture, transport, utilization, and storage.

CHINA suggested clarifying the scope and definitions of technologies in Volume 1.

INDIA, FRANCE, BELGIUM, SWITZERLAND, SWEDEN, NORWAY, GERMANY, CHILE, and TÜRKIYE objected to a separate Volume 7 on direct CO<sub>2</sub> removal from waterbodies, given immature technologies and insufficient understanding of their impacts, with some proposing that the matter should be addressed in WGIII and possibly WGI before methodology is developed.

SAUDI ARABIA called for retaining a separate Volume 7. He highlighted the importance of deploying CDR technologies to counterbalance hard-to-abate sectors, urged including all technologies, and warned that additional complexity for accounting emissions could hinder implementation rather than support it.

ECUADOR stressed the plains of the Amazon must be included as a CDR method in the report. TOGO drew attention to different uses of “carbonization” in French and called for attention to definitions.

REPUBLIC OF KOREA highlighted work on coastal areas and human impact and the possibility of introducing the managed land proxy. JAPAN welcomed methodological work on soil carbon sequestration and biochar.

CHILE suggested including additional ecosystems to those identified in the wetlands supplement. NIGERIA supported technologies that promote sustainable development and said they should be made economically accessible to all.

The HEINRICH BÖLL FOUNDATION, FWCC, ENVIRONMENTAL DEFENSE FUND (EDF), and CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW (CIEL) cautioned against losing sight of the risks associated with CDR technologies. They highlighted potential impacts on ecosystems and biodiversity, especially occurring from novel marine CDR techniques, and called for reflection of the wider risks in the report.

In response to interventions, Co-Chair Enoki said the authors did find direct CO<sub>2</sub> removal from waterbodies to fit the six criteria used to select CDR methods.

CONGO called for the GHG inventory methodologies to include peatland zone protections, as they function as carbon sinks.

BELGIUM and SWITZERLAND, opposed by SAUDI ARABIA and ALGERIA, said it was essential to specify whether emissions come from fossil fuels or are biobased.

AZERBAIJAN asked about scientific research on other factors that make CDR methods efficient, such as the quality of water used.

On Volume 7, EDF pointed out that scoping meeting experts had considered that measurable, reportable, and verifiable methods for open water systems are not possible, and therefore the TFI’s requirement to develop robust approaches to reporting would not be met.

Discussions continued in a contact group, co-facilitated by Xueting Peng (China) and María José Sanz (Spain), with further input submitted by Panel members via email.

On Thursday morning, the contact group co-facilitators reported on progress in the discussions, including on the title and possible ways forward on Volume 7.

Highlighting the speculative nature of CDR in open water systems and risks to biodiversity, food security and human health, FRANCE, BELGIUM, the NETHERLANDS, GERMANY, AZERBAIJAN, CANADA, and AUSTRALIA objected to inclusion of open bodies of water, calling for an “objective” study to be included before producing methodologies for national inventories.

SAUDI ARABIA said that neither feasibility nor environmental aspects should be considerations for the methodological report, and, with SINGAPORE, supported addressing both closed and open water systems in Volume 7.

CHILE drew attention to coastal wetland ecosystems that were not covered in the wetlands supplement such as kelp forests and microalgae. Noting they had been the first country to include these ecosystems in their inventory, JAPAN offered its support in advancing the methodologies. FUTURE EARTH supported including microalgae in the supplement.

ECUADOR, COLOMBIA, and PERU highlighted consideration of the páramo or Andean moorlands in the methodology, given their carbon capture potential, and underscored the need to improve estimates for inventories in the region. CONGO emphasized the need for updates on wetlands given the vulnerability and impact of peatlands on climate change.

On the title of the report, the Panel agreed to “2027 IPCC Methodology Report on Carbon Dioxide Removal Technologies, Carbon Capture, Utilization and Storage for National Greenhouse Gas Inventories (Additional Guidance)” and to an explanatory text referencing the existing methodological reports for National Greenhouse Gas Inventories.

Co-Chair Enoki said discussions on Volume 7 would continue in the contact group.

On Friday afternoon, contact group co-facilitators Sanz and Peng reported on general agreement to the draft methodology report with the exception of Volumes 6 and 7. They explained that advances had been made on two options for addressing concerns with Volume 7. Option One would move direct removal of CO<sub>2</sub> from waterbodies in closed systems from Volume 7 to Volume 6, with a footnote on impacts and risk, and leave out the rest. Option Two would retain Volume 7 as “Direct Removal of CO<sub>2</sub> from waterbodies, Alkalinity Enhancement of Waterbodies,” but would also add a footnote noting that the guidance “does not prejudice the potential impacts associated with carbon dioxide removal from water bodies or alkalinity enhancement on the marine ecosystem and the vulnerability of the waterbodies.”

Saying they were demonstrating “extreme flexibility,” BELGIUM, with FRANCE and GERMANY, supported Option One with further work on the footnote, stressing this was “already an enormous stretch.” SAUDI ARABIA, supported by ALGERIA, called for Option Two without conditionalities, and keeping strictly to the technical mandate of the TFI.

Work continued in a huddle, facilitated by Sanz.

On Saturday morning, Co-Chair Enoki reported that the huddle had not made progress. IPCC Chair Skea invited comments on the way forward. CHINA lauded Panel members’ hard work and said she had hoped to achieve a result during the meeting.

The NETHERLANDS emphasized that the main disagreement during the huddle related to Volume 7 and the potential inclusion of CO<sub>2</sub> removal through waterbodies. He outlined his proposal that the issue be tabled for decision after the WG reports have gone through their first government review, which would enable concerned countries to review substantial information on environmental impacts and effectiveness that the TFI, as per its mandate, could not deliver.

GERMANY supported the proposal, emphasized that Volume 7 is not ready for a methodology report, and cited findings from AR6 on environmental impacts and effectiveness of CO<sub>2</sub> removal through waterbodies that support his concerns.

SAUDI ARABIA rejected the proposal, opining that restricting work on methodologies in this manner is a “worrying precedent,” highlighting the independence of IPCC Working Groups, and saying this would be a “bad sign” for emerging technologies.

Chair Skea invited the TFI to continue efforts to arrive at a “clear and unambiguous proposal” that could be adopted at this meeting.

On Saturday afternoon, huddle facilitator Sanz presented a compromise solution for views by the Panel. This included agreeing on the latest iteration of Volumes 1-6 and making Chapter 3 of Volume 7 on the alkalinity enhancement of waterbodies an appendix.

FRANCE, AUSTRIA, and GERMANY objected to the proposal. The NETHERLANDS said he could have agreed to it, should there have been consensus.

SAUDI ARABIA expressed disappointment over the lack of progress on this item.

Facilitator Sanz then proposed, and the Panel agreed, to work further on Volume 7.

### ***Proposals for Expert Meetings and Workshops for the Seventh Assessment Cycle***

Chair Skea opened this agenda item for discussion on Monday, noting proposals for a workshop on new and extended methods of assessment in AR7 ([IPCC-LXII/Doc. 7](#)), an expert meeting on high-impact events and Earth system tipping points ([IPCC-LXII/Doc. 8](#)), and an expert meeting on methodologies, metrics, and indicators for assessing climate change impacts and adaptation ([IPCC-LXII/Doc. 9](#)). This agenda item was discussed on Monday, Thursday, and Friday.

ITALY, AUSTRALIA, the UK, CHILE, DENMARK, TÜRKIYE, the PHILIPPINES, and others voiced support for all proposed expert meetings and workshops. NEPAL called for these to be inclusive, particularly of LDCs.

On Thursday, following lengthy discussions outlined below, SAINT KITTS AND NEVIS and NORWAY, echoed by Chair Skea, expressed concerns about the general process of decision-making in the meeting, noting some delegations’ entrenched positions were complicating efforts to find consensus.

#### **Workshop on New and Extended Methods of Assessment:**

Chair Skea explained that the proposed workshop is intended to address the exponential increase of literature to be assessed, to extend the knowledge base to include Indigenous and local knowledge, and to consider the means of assessing literature, for example through the use of artificial intelligence (AI). He highlighted the potential for a single workshop to pull the discussion together as well as the importance of giving due consideration to these issues in a balanced manner and adhering to IPCC principles and procedures.

BRAZIL emphasized the value of the proposed workshop and underscored the importance of incorporating Indigenous Knowledge into IPCC outputs.

Saying AI is “extremely fraught as a tool for assessment,” INDIA emphasized the importance of appropriate safeguards and proper discussion with wider government participation.

KENYA cautioned against overemphasizing new assessment methods, such as AI, at the expense of focusing on Indigenous and local knowledge systems and underscored the importance of incorporating these knowledge systems in AR7.

GERMANY supported the workshop and extending the basis of knowledge, and stressed the need to bring any ideas on AI back to the Panel.

On Thursday, when the Panel resumed consideration of this item, AUSTRALIA, BELGIUM, CANADA, ECUADOR, FINLAND, SWEDEN, CHILE, and the INUIT CIRCUMPOLAR COUNCIL (ICC) emphasized the importance of ensuring that Indigenous Peoples are adequately represented and stressed the workshop should be designed to give due space to Indigenous Peoples’ knowledge.

BELGIUM, with SWITZERLAND, proposed learning from IPBES’ expertise on Indigenous and local knowledge integration. NEW ZEALAND called for including Indigenous Peoples in the steering committee for the workshop and producing separate outcomes for AI and Indigenous and local knowledge.

INDIA, with SAUDI ARABIA, proposed holding separate workshops on AI and on Indigenous Knowledge, saying they require



different areas of expertise. SAUDI ARABIA, with ALGERIA and EGYPT, called for local knowledge to be addressed alongside Indigenous Knowledge. KENYA proposed having one workshop with two different streams and outputs.

On Friday, Chair Skea introduced a proposal to hold two workshops on the topic, one on engaging diverse knowledge systems and a second on methods of assessment, including AI and large language models. He said the workshops would be held in the same location to allow interaction and noted a modest increase in the budget.

INDIA called for the workshops to produce separate outcomes and suggested alignment with ongoing work on AI in the UN system. SAUDI ARABIA opposed inclusion of ex-post policy evaluations evidence. Welcoming the proposed workshop as a “good step forward,” ICC underscored the need for a new relationship with Indigenous Knowledge and emphasized recognition of Indigenous Peoples’ rights as a prerequisite.

Following Chair Skea’s proposal to convey delegates’ comments to the steering committee of the proposed workshops, the Panel agreed to the two workshops.

**High-Impact Events and Earth System Tipping Points:** On Monday, WGI Co-Chair Vautard opened discussion of the proposed expert meeting on this topic, highlighting the usefulness of agreeing on definitions, identifying dedicated contributors to enhance regional representation, and facilitating coherent communication across WGs ahead of the LAMs. He noted the proposal had been revised to focus exclusively on high impact and Earth system tipping points, given concerns expressed at IPCC-61 that the scope was too broad.

UKRAINE and FRANCE emphasized the value of an expert meeting on this topic. SAUDI ARABIA questioned the value of an expert meeting on tipping points at this time, emphasizing that the Panel should focus on what is needed in this cycle.

On Thursday, when the Panel resumed discussion of this item, VANUATU, PANAMA, FRANCE, and GERMANY expressed support for the proposed meeting. ITALY highlighted the importance of a coherent understanding of tipping points across WGs and the need for enhanced communication to the public.

BELGIUM proposed considering societal tipping points. DENMARK highlighted his region’s particular interest in ice sheet collapse and the Atlantic Meridional Overturning Circulation.

INDIA preferred to convene a workshop instead of an expert meeting and, noting a risk of imbalanced treatment of the concept of tipping points, called for including critical perspectives. SAUDI ARABIA opposed an expert meeting, saying it risks overstating confidence in tipping points. PANAMA and WGI Co-Chair Vautard said this was precisely the reason to hold an expert meeting, as experts are meant to shed light on issues where there is no consensus.

GERMANY proposed that, if the term “tipping points” cannot be agreed upon, the title could be changed to “abrupt changes, high impact events, and irreversibility.” Co-Chair Vautard clarified that, at IPCC-61, the scope of the meeting had been narrowed to Earth system tipping points.

On Friday, WGI Co-Chair Vautard introduced a proposal to change the format from an expert meeting to a workshop.

INDIA cautioned against an unbalanced view on tipping points and suggested social science input be included, noting that tipping points require understandings of risk and possible futures beyond the expertise of physical scientists. MONGOLIA cautioned against

sensationalizing the topic. DENMARK preferred an expert meeting but indicated flexibility.

Chair Skea proposed, and the Panel agreed, to defer discussions on an expert meeting or workshop on High-Impact Events and Earth System Tipping Points to a future meeting of the Panel.

**Methodologies, Metrics and Indicators for Assessing Climate Change Impacts and Adaptation:** On Monday, WGII Co-Chair van den Hurk drew attention to, *inter alia*: gaps in research on adaptation actions and their effectiveness; methodologies, approaches, metrics and indicators to assess impacts and track progress on adaptation; and support for the revision and update of the IPCC Technical Guidelines.

NORWAY emphasized the need to focus on WG cross-cutting issues at this stage of the cycle, given that such work takes time. He proposed going forward with the workshop on New and Extended Methods of Assessment, since it would help all WGs, and suggested some of the issues could be worked on as part of the LAMs. JAPAN asked about the relationship of this meeting to the development of the IPCC Technical Guidelines on Adaptation.

On Thursday, INDIA called for participation of development economists from the Global South.

SAUDI ARABIA proposed considering an earlier timeline to better connect with the update of the 1994 IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations.

PANAMA offered to host the meeting.

On Friday, the Panel agreed to the proposed expert meeting.

**Final Decision:** In its decision (IPCC-LXII-4), the Panel approves proposals for:

- two co-located workshops as outlined in IPCC-LXII/Doc. 7 Rev. 1 and its respective budget (as agreed at the FiTT): the Workshop on Engaging Diverse Knowledge Systems, and the Workshop on Methods of Assessment;
- an expert meeting on the Methodologies, Metrics and Indicators for Assessing Climate Change Impacts and Adaptation as outlined in IPCC-LXII/Doc. 9 and its respective budget (as agreed at the FiTT).

The Panel further decides:

- to convey views expressed during the discussion of the agenda item on the Workshop on Engaging Diverse Knowledge Systems and Workshop on Methods of Assessment to the Scientific Steering Committee and respective invited experts; and
- to defer discussion on the proposal for an Expert Meeting on High-Impact Events and Earth System Tipping Points as outlined in IPCC-LXII/Doc. 8 to a future session.

### IPCC Scholarship Programme

On Saturday morning, Mxolisi Shongwe, IPCC Secretariat, introduced the report on the IPCC Scholarship Programme ([IPCC-LXII/Doc. 4](#)). Shongwe thanked Germany and Norway for their recent contributions of, respectively, EUR 30,000 and NOK 1,090,000.

Shongwe invited the Panel to amend the Trust Deed as to the election of the Chair of the Board of Trustees, and to elect Edgardo Alvarez-Chávez (Peru) as a member of the Board of Trustees.

Both were approved by the Panel.

**Final Decision:** In its decision (IPCC-LXII-5), the Panel, *inter alia*:

- approves the amendment of the IPCC Scholarship Trust Deed (set out in paragraph 11 of Annex I to the decision);

- appoints Edgardo Alvarez-Chávez (Peru) as a member of the Board of Trustees;
- thanks the governments of Germany and Norway for their financial contributions in 2024; and
- thanks the Prince Albert II of Monaco Foundation and the Cuomo Foundation for their continued support.

### **Report of the IPCC Conflict of Interest Committee**

On Saturday, IPCC Vice-Chair Chang'a reported no conflicts of interest had been identified by the IPCC Conflict of Interest Committee in its review of the annual reports of the three WGs and the TFI. He thanked the WG Co-Chairs for transparency and submitting complete information.

The Panel took note of this oral report.

### **Progress Reports**

This agenda item was considered on Saturday.

**IPCC Chair and Vice Chairs:** IPCC Chair Skea introduced the document with relevant information ([IPCC-LXII/INF. 3, Corr. 1](#)).

BELGIUM requested publishing IPCC Bureau meeting reports, noting this practice had been discontinued.

SAUDI ARABIA voiced concern over briefings by some IPCC Bureau members and the IPCC Chair to judges of the International Court of Justice (ICJ) in the context of its advisory opinion on the obligations of states in respect of climate change, noting a lack of transparency and inclusivity in the way IPCC representatives had been selected, and requested their intervention be recorded in the meeting's report.

IPCC Chair Skea outlined the process taken in response to the invitation by the ICJ, highlighting consultations with the IPCC Legal Advisor and underlining that the briefing was confined to "purely scientific" information relating to the physical science basis of climate change.

The Panel took note of the report.

**Secretariat:** IPCC Chair Skea introduced the document containing relevant information ([IPCC-LXII/INF. 10](#)). The Panel took note of the report.

**WGI:** IPCC Chair Skea introduced the document containing relevant information ([IPCC-LXII/INF. 6](#)). FRANCE said they are pleased to host the WGI TSU. The Panel took note of the report.

**WGII:** IPCC Chair Skea introduced the document containing relevant information ([IPCC-LXII/INF. 8](#)). JAPAN thanked the WGII Co-Chairs and Vice-Chairs for their work and highlighted the first LAM for the Special Report on Cities will be held in Japan from 10-14 March 2025. The Panel took note of the report.

**WGIII:** IPCC Chair Skea introduced the document containing relevant information ([IPCC-LXII/INF. 9](#)). The Panel took note of the report.

**TFI:** IPCC Chair Skea introduced the document containing relevant information ([IPCC-LXII/INF. 4](#)). The Panel took note of the report.

**Gender Action Team:** IPCC-Vice Chair Diana Ürge-Vorsatz introduced the document containing relevant information ([IPCC-LXII/INF. 11](#)) and reported on: the process on dealing with complaints; the Expert Meeting on diversity, equity, inclusion, and gender-related issues; training; and gender statistics.

FRANCE, HUNGARY, and SAUDI ARABIA congratulated the Gender Action Team on the outlined activities.

The Panel took note of the report.

**Communication and Outreach Activities:** Andrej Mahecic, Head of Communications and Media Relations, IPCC Secretariat, introduced the document containing relevant information ([IPCC-LXII/INF. 2](#)) and provided details on media coverage, outreach, and the AR7 Communications and Outreach Action Team.

INDIA reiterated concerns over outreach activities raised at IPCC-60, in which he had lamented that IPCC communication materials did not adequately reflect the findings of AR6, requesting information on how these concerns had been addressed.

Noting the discussions on plain language overviews during the week, SWITZERLAND requested a process be set up to follow up on how IPCC findings are better communicated in the future.

The Panel took note of the report.

### **Matters Related to UNFCCC and Other International Bodies**

This agenda item ([IPCC-LXII/INF. 12](#)) was taken up late Saturday morning, with Chair Skea noting that the UNFCCC Secretariat had left and therefore could not present the report.

The panel took note of the UNFCCC report.

Chair Skea said that the IPBES Secretariat was also absent.

FRANCE, TÜRKIYE, CHILE, ITALY, JAPAN, NORWAY, NETHERLANDS, CHAD, SWITZERLAND, and BELGIUM called for stronger collaboration with IPBES. AUSTRALIA emphasized there is much to learn from IPBES on Indigenous Knowledge. BELGIUM, GERMANY, and others called for setting aside time at IPCC-63 to address IPBES collaboration and respond to the invitation from IPBES-11. BELGIUM called for a document to be prepared for IPCC-63 on how engagement with IPBES could be facilitated.

INDIA, supported by SAUDI ARABIA, expressed concern about significant differences in the way that IPBES products and reviews are approved, and said collaboration merits careful consideration as IPBES processes are not aligned with those of the IPCC.

The panel took note of the IPBES report.

### **Place and Date for the 63rd Plenary Session of the IPCC**

On Friday, PERU announced its offer to host IPCC-63 and said the meeting is expected to be held in the last quarter of 2025.

### **Closing of the Session**

On Saturday night, after Chair Skea thanked host country China and delegates gave them a standing ovation, BELGIUM expressed satisfaction with the approval of the outlines but voiced disappointment over the lack of agreement on timelines, emphasizing the uncertainty it creates, and raised concerns about limited participation from developing countries due to the extended plenary.

Chair Skea gave IPCC-62 a close on Saturday, 1 March, at 10:35 pm.

### **Working Group I – Fifteenth Session Report**

On Tuesday, WGI Co-Chair Zhang opened the session, and the Group adopted the agenda ([WG-I: 15th / Doc. 1, Add. 1](#)).

### **Chapter Outlines of the Working Group Contribution to AR7**

WGI convened on Tuesday, Wednesday, Thursday, and Friday to review and agree on the report outline for its contribution to AR7. The Group's discussions progressed along three main revised

versions of the outline, which were successively published as Conference Room Papers (CRPs).

On Tuesday, WGI Co-Chair Vautard introduced the WGI report outline ([WG-I: 15th / Doc. 2](#)). He noted a suggestion from the scoping meeting to have plain language summaries, explaining that local authorities, companies, and the general public do not necessarily know the WGI “jargon;” thus, authors suggested including language in the form of frequently asked questions (FAQs) for clarity. He said this would serve to remind authors to have a reader-oriented mindset.

Stressing the importance of accessibility, AUSTRALIA, CANADA, IRELAND, SWEDEN, FRANCE, and VANUATU supported including plain language summaries, with many also calling for shorter reports focused on new science.

These proposals were opposed by the RUSSIAN FEDERATION, INDIA, and SAUDI ARABIA. The RUSSIAN FEDERATION argued that the report is intended for an expert audience. INDIA said these are high-level messages and would compete with the SPM and IPCC outreach mechanisms, and any plain language summaries would have to be subject to line-by-line approval.

IRELAND, supported by ITALY, said that while he felt “agnostic” about their inclusion, it is essential that the report uses accessible language throughout.

The group then addressed the outline in four blocks of chapters.

In **general comments on Chapters 1-4**, ITALY and FRANCE stressed the importance of multiple lines of evidence and strengthened integration of the three WG reports.

DENMARK and JAPAN proposed including sea level rise. INDONESIA emphasized the ocean’s critical role in the climate cycle. BHUTAN, SWITZERLAND, NEPAL, SWEDEN, NORWAY, and TANZANIA called for consideration of high-altitude and latitude areas and their relation to the climate system. BRAZIL, INDIA, and CHINA called for a dedicated chapter on monsoons.

AUSTRIA proposed a new chapter on models. AUSTRALIA, INDONESIA, and KENYA welcomed the inclusion of Indigenous Knowledge in the report.

On **Framing, methods and knowledge sources (Chapter 1)**, AUSTRIA, supported by DENMARK and SAUDI ARABIA, suggested an extra bullet point on “Limits of assessment and knowledge,” with SAUDI ARABIA proposing it also reference knowledge from developing countries. ITALY called for a cross-chapter narrative, including assessment of changes in the climate system. INDIA proposed a dedicated chapter on the development of models.

On **Large-scale changes in the climate system and their causes (Chapter 2)**, SAUDI ARABIA called for removing “and their causes” from the title. SWEDEN objected to this proposal. IRELAND cautioned that terms such as “radiative forcing” could be too opaque for many readers.

On **Changes in the regional climate and extremes and their causes (Chapter 3)**, ITALY called for further clarity on a bullet point referring to “disparities in regional information availability, accessibility and gaps, and integration of multiple information sources, including Indigenous Peoples’ knowledge and local knowledge, and paleo archives.” INDIA suggested that “multiple information sources” is sufficient as an umbrella term and there is no need to specify other sources of information.

KENYA called for greater regional-level characterization of extremes, noting that what qualifies as a heat wave differs across regions. JAPAN welcomed an updated section on advances in assessment of regional climate change and extremes and, supported by AUSTRALIA, the MALDIVES, INDONESIA, and the PHILIPPINES, called for a focus on tropical cyclones.

SAUDI ARABIA proposed removing “and their causes” from the title of the chapter.

On **Advances in process understanding of Earth system changes (Chapter 4)**, INDIA called for adding “and carbon budget across scales” in a section dealing with scenarios and non-CO2 forcers and, with SAUDI ARABIA, objected to referencing air quality alongside SLCFs and interactions. IRELAND and the MALDIVES opposed this proposal, with the latter stressing the need to address transboundary pollution. NORWAY said that, due to the breadth of issues covered, a greater number of authors could be assigned to this chapter. CHILE and NORWAY said references to the cryosphere and the ocean should be addressed in separate bullet points.

In **general comments on Chapters 5-8**, WGI Co-Chair Zhang emphasized that several chapters in this block consider different time scales, comprising short, medium, and long-term scales, and highlighted a significant increase of literature on tipping points in recent years.

The BAHAMAS, supported by the UK and GERMANY, called for further detailing projected changes with different levels of warming, such as 1.5°C. The UK suggested a stronger focus on thresholds to enhance the understanding of risk and policy-relevant thresholds such as sea level rise.

On **Scenarios and future global temperatures (Chapter 5)**, INDIA called for transparency on socioeconomic assumptions underlying scenarios on land use change.

SAUDI ARABIA suggested amending the title to “projected scenarios and future global temperatures” and proposed adding historical emissions in relation to the carbon budget. The RUSSIAN FEDERATION called for adding probability statements to the scenarios. SOUTH AFRICA proposed referencing historical carbon budgets and stressed the need for transparency on scenarios and the criteria for their selection, including uncertainties.

On **Global projections of Earth system responses across timescales (Chapter 6)**, BELIZE and VANUATU, supported by SWITZERLAND, called for reflecting on global impacts of sea level rise more explicitly. SAUDI ARABIA proposed assessing the “capacity” of carbon sinks instead of their “vulnerability” in the context of projected changes in biogeochemical cycles. SOUTH AFRICA suggested addressing limits to carbon sinks, including related to nature-based solutions (NbS), and emphasized the need for clarity on selection of models and their practicality.

On **Projections of regional climate and extremes (Chapter 7)**, SINGAPORE supported including projections of regional climates, calling for a strong regional focus, especially for the Southeast Asian region. TANZANIA called for considering seasonal extremes. SAUDI ARABIA suggested better reflection of the disproportionate effects on developing countries.

On **Abrupt changes, tipping points and high impact events in the Earth system (Chapter 8)**, SINGAPORE, VANUATU, BRAZIL, ITALY and others expressed support for including tipping points, noting they are typically overlooked, and highlighted the importance of increased understanding of how and when they are



triggered. INDIA, supported by SAUDI ARABIA, questioned whether tipping points should be singled out, and suggested deleting the reference to tipping points in the chapter's title. The RUSSIAN FEDERATION expressed doubt about the spatial scale of tipping points and suggested amending the title to "system-specific critical thresholds."

The PHILIPPINES supported taking into account Indigenous Peoples' knowledge. CHINA highlighted difficulties with including Indigenous Peoples' knowledge, citing its qualitative character and associated challenges with consistency.

**On Earth system responses under pathways towards temperature stabilization, including overshoot pathways (Chapter 9)**, Co-Chair Vautard explained this was identified as a cross-WG chapter that would be strongly linked to WGII and WGIII.

INDIA, supported by MALDIVES, questioned the focus on a temperature stabilization goal, with MALDIVES calling for inclusion of immediate and urgent implications alongside short- and long-term implications.

VANUATU, JAMAICA, BRAZIL, KENYA, GERMANY, SWEDEN, and SWITZERLAND cautioned against inclusion of SRM, particularly in a section on stabilization pathways, stressing the need to ensure that potential unintended consequences and the hypothetical nature of the technology is clear. CHILE, supported by KENYA, noted SRM has socioeconomic and policy implications and is thus relevant to the other WGs, and asked what the modalities of establishing SRM as a cross-WG topic could look like. NORWAY said the concept and terminology of "overshooting" should be clarified, as some readers may assume it refers to a permanent, rather than temporary, situation.

**On Climate information and services (Chapter 10)**, Co-Chair Vautard said the chapter collects information that was already present in AR6's Chapter 12 on climate impact and risk assessment, and the authors felt it was useful to include the use of climate information and methodologies, disparities, and sources of knowledge. Co-Chair Zhang emphasized the importance of the chapter as a follow-up to AR6 and for its cross-cutting nature.

INDIA agreed on the need for this chapter but called for it to be aligned with the AR6 chapter, opposing sections such as "responses of regional climate and extremes to adaptation and mitigation strategies, including ecosystem-based approaches." Saying that "subjective" storylines had been "an unmitigated problem" in the AR6 WGIII report, he urged steering clear of the concept.

ITALY, supported by NORWAY, welcomed inclusion of this chapter but suggested changing the title to refer to climate change information "in the context of sustainable development." TANZANIA noted the chapter's relevance to the deployment of early warning systems.

Co-Chair Vautard said the outline would be revised according to comments.

On Wednesday, WGI Co-Chairs Vautard and Zhang presented the **revised report outline**, highlighting changes that had been made to accommodate views expressed during the WG meeting on Tuesday and submitted by email. They noted that "plain language summaries" had been changed to "plain language overviews," in which authors provide a chapter overview, including through graphics, in a similar manner to the FAQs sections. They also

noted that uncertainties were systematically addressed in IPCC assessments and, in some cases, additions had been made to accommodate specific concerns.

Co-Chairs Zhang and Vautard noted changes to the outline, including: references to monsoons in the context of large-scale changes in the climate system; the addition of requested typological regions comprising "mountains, small islands, and polar, monsoon, desert and semi-arid regions" in the context of changes in regional climate and extremes; a wider scope on the carbon budget that includes its historical dimension; emphasis on "long-term changes in cryosphere and sea level rise;" and specification that thresholds for abrupt changes, tipping points, and high impact events in the Earth system are "system-specific."

WGI Co-Chairs Vautard and Zhang explained why other suggestions had not been reflected in the amended outline, noting references to hurricanes and cyclones would create an imbalance with other severe weather events. They also preferred to retain "tipping points" in the chapter title, saying many selected experts had highlighted the importance of the topic and its increased coverage in the literature.

**In general comments**, SAUDI ARABIA, INDIA, ALGERIA, and the RUSSIAN FEDERATION opposed the inclusion of plain language overviews. KENYA queried whether these would be written by the authors. GERMANY, with ITALY, SAINT KITTS AND NEVIS, IRELAND, AUSTRIA, LIBYA, SWITZERLAND, TÜRKIYE, the UK, LUXEMBOURG, DENMARK, CHINA, CHILE, BELGIUM, NEPAL, VANUATU, UKRAINE, SWEDEN, TIMOR-LESTE, and CANADA supported the changes introduced by the Co-Chairs and warned against "micromanaging" the authors. BELGIUM added that the inclusion of plain language "has become standard practice in scientific magazines and the IPCC needs to evolve with its time."

WGI Co-Chair Vautard invited delegates to convene in a huddle, co-facilitated by IPCC Vice-Chair Chang'a and WGI Vice-Chair Sherilee Harper, with a mandate to agree whether and with which wording plain language overviews should be included in the chapters.

IPCC Vice-Chair Chang'a subsequently reported the huddle had agreed to delete the reference to the plain language overviews and encourage authors to ensure the Executive Summary is clear.

**On a revised Chapter 1**, NIGERIA requested the addition of a sentence on the integration of knowledge from different fields.

SAUDI ARABIA, INDIA, and ALGERIA opposed the addition of a bullet point on "Key concepts and dimensions of integration across Working Groups." The Co-Chairs proposed softening the language to "introduce" the concepts, a proposition that was rejected by INDIA and SAUDI ARABIA.

ITALY proposed deleting this bullet and making a first bullet on "framing, narrative, and context of the AR7" common to all WG outlines. The Panel accepted this proposal.

**On a revised Chapter 2**, INDIA reiterated his call for comprehensive treatment of hydrological cycles, preferring not to have monsoons singled out, and his request to have a specific chapter on models. WGI Co-Chair Vautard explained that model evaluation would be presented in Chapter 1 and further evaluated in Chapter 5. MONGOLIA suggested noting changes in westerlies—prevailing winds that blow west to east in the Earth's middle latitudes—given their important role in climate dynamics.

Another revised version was presented on Thursday evening and was broadly welcomed. A suggestion by SAUDI ARABIA to add “limitations and uncertainties” in relation to attribution of large-scale changes was not accepted. A reference to monsoons in relation to changes in modes of climate variability was also dropped due to lack of support for the reference in this context, including from INDIA, who preferred separate treatment of monsoons. A reference to Earth energy imbalance was retained.

On a **revised Chapter 3**, PANAMA, supported by KENYA, INDONESIA, and CUBA, called for including tropical regions. JAPAN, supported by INDONESIA, BAHAMAS, CUBA, MADAGASCAR, BANGLADESH, the MALDIVES, and TIMOR-LESTE, called for including tropical cyclones and compound events as part of extreme events.

JAPAN also suggested a bullet point that explicitly bridges regional and large scales, as in AR6. MALDIVES, supported by INDONESIA, suggested adding slow-onset events.

Presenting another revised version on Thursday evening, Co-Chair Vautard noted that the list of regions and typological areas will never be perfect but, based on input from Panel members, they had added several examples, including mountains, low-lying coastal areas, and polar, tropical, desert and semi-arid regions.

Co-Chair Vautard further noted the addition of tropical cyclones in a bullet point on attribution of extreme events and compound events, and a reference to slow-onset events including regional sea level rise and desertification. The chapter was agreed as presented.

On a **revised Chapter 4**, INDIA and SAUDI ARABIA opposed the inclusion of air quality. IRELAND and CHILE supported retaining it and, with MALDIVES, proposed including transboundary air pollution.

CHILE highlighted the relevance of additional elements, such as glaciers, in the context of cryosphere and ocean processes. SAUDI ARABIA requested the addition of droughts and desertification to respective bullet points on water cycle and land surface processes.

On ocean processes, BANGLADESH proposed the addition of ocean acidification.

Presenting delegates with another revised version of the text on Thursday night, Co-Chair Vautard explained air pollution was now preceded by “in connection to,” which represented a compromise with those who wanted this reference removed.

INDIA requested deletion of “long-range transport” in the context of air pollution. The MALDIVES and TIMOR-LESTE requested adding “ocean acidification” to the list of ocean processes. After both requests were accepted, the chapter was approved.

On a **revised Chapter 5**, INDIA requested adding carbon budget considerations to the assessment of effects of non-CO<sub>2</sub> forcings on temperature across time scales. Stressing the need to be as actionable and policy relevant as possible by linking issues, NORWAY, supported by UKRAINE, proposed adding the demasking effect of aerosols.

In the title, SAUDI ARABIA called for adding “projected” to the term future. Co-Chair Zhang explained that as a scientific expression, “future” always implies “projected.” To accommodate SAUDI ARABIA, the Group agreed to “Scenarios and future projected global temperatures.”

On a **revised Chapter 6**, wording on a bullet point on “projected changes in biogeochemical cycles, including vulnerability, efficacy and limits, of carbon sinks and pools,” was discussed extensively. SAUDI ARABIA, opposed by SOUTH AFRICA, BRAZIL, the

UK, CHILE, KENYA and others, called for replacing “limits,” as proposed originally by SOUTH AFRICA, with “resilience.” After protracted discussion, the Group agreed on a compromise proposal from ITALY to refer simply to “projected changes in biogeochemical cycles including carbon sinks and pools.”

On a **revised Chapter 7**, INDIA suggested adding cyclones, droughts, and extreme rainfalls as extreme phenomena. JAPAN supported inclusion of tropical cyclones.

On Thursday evening, delegates engaged in a lengthy discussion on a list of regional and local extremes and compound events, with many delegates proposing inclusion of phenomena relevant to their regional contexts. The Group agreed to refer to “compound events on land and oceans, including but not limited to tropical cyclones, oceanic events, extreme sea levels, heat waves, sand and dust storms.”

On a **revised Chapter 8**, SAUDI ARABIA and INDIA objected to singling out tipping points as a phenomenon. SAUDI ARABIA reiterated that tipping points should be subject to further research before they are assessed by the IPCC. INDIA proposed replacing tipping points in the chapter title with “low probability, high impact events.” Highlighting its relevance for policy and science, SWITZERLAND, supported by SENEGAL, FRANCE, DENMARK, and NORWAY, called for maintaining the focus on tipping points. NORWAY further suggested coupling them with increasing warming levels.

INDIA voiced concern over stating “critical thresholds” in relation to global warming levels, saying this association is “deficient.” WGI Co-Chair Zhang highlighted the policy-relevance of indicating critical thresholds for global warming levels.

In response to a proposal by MONGOLIA to look at socioeconomic aspects of tipping points, WGI Co-Chair Zhang said this falls outside the scope of WGI.

On Thursday evening, SAUDI ARABIA and INDIA continued to object to inclusion of “tipping points,” and questioned the role of case studies and storylines. While they both called for removing “tipping points” from the title, preferring “critical thresholds,” INDIA later compromised by suggesting a footnote to clarify reservations.

The addition of “physical climate” storylines on revised text was also contentious, with INDIA and SAUDI ARABIA questioning their necessity and boundaries, while others, including INDONESIA and the Co-Chairs, sought to clarify their placement within the report. A huddle on both matters was planned for the following morning.

On Friday, after the huddle, the Group agreed to change the title to: “Abrupt changes, low-likelihood high-impact events and critical thresholds, including tipping points, in the Earth system” and to add a footnote with a definition of tipping points. The Group also agreed to delete the last bullet point on case studies and storylines.

On a **revised Chapter 9**, BRAZIL, supported by NORWAY and LUXEMBOURG, expressed concern about addressing SRM in the same chapter as CDR, with NORWAY calling for ways to decouple them. NORWAY also called for explicit mention of pathways.

SAUDI ARABIA suggested replacing “limits” of CDR with “capacity,” saying this includes both limits and possibilities.

KENYA and UGANDA welcomed the placement of the reference to SRM, saying it allows for an assessment of advances in the science. KENYA warned against language biased in favor of the technology.

INDIA objected to what he perceived as an overemphasis on overshoot and opposed a reference to net-negative emissions.

UKRAINE suggested shortening the title to reduce complexity.

On Friday, SAUDI ARABIA requested deletion of a reference to global net-zero and net-negative emissions, which was opposed by LUXEMBOURG, the UK, NORWAY, SWEDEN, and UKRAINE. INDIA proposed adding a reference to “negative emissions.”

Views diverged over assessing global and regional Earth system responses to CDR methods. SAUDI ARABIA, supported by ALGERIA, objected to “singling out” CDR and proposed “net-negative methods” as alternative wording. NORWAY, the UK, CHILE, GERMANY, and others called for retaining the intended purpose of the bullet point and opposed the proposal. In a huddle co-chaired by WGI Vice-Chairs Sonia Seneviratne and Nana Ama Browne Klutse, delegates agreed to replace CDR with “removals of carbon-dioxide, methane or nitrous oxide.”

Lengthy discussions ensued over global and regional Earth system responses to different global and regional SRM methods. BRAZIL, PANAMA, JAMAICA, VANUATU, BAHAMAS, and NEPAL expressed concern about SRM and requested its deletion. Some countries proposed language strengthening the focus on the biogeochemical risks of SRM, with TIMOR-LESTE highlighting the value of increased awareness of the consequences of SRM, including for livelihoods and agriculture.

Following Co-Chair Vautard’s reassurance that WGI will coordinate with the other WGs on SRM, including during the first joint LAM, the Group agreed to the bullet point on SRM.

On a **revised Chapter 10**, ITALY proposed changing the title to “climate information and responses across regions and sectors” to better reflect the content of the chapter. INDIA opposed the reference to responses.

On Friday evening, the Group agreed to a proposal by CHILE to add monitoring infrastructure in a bullet point on gaps and disparities, and to other smaller revisions to the text, including reference to multi-hazard warning systems, as suggested by JAPAN and supported by UKRAINE.

**Outcome:** On Saturday, WGI agreed to the revised chapter outlines for its contribution to AR7, as set out in IPCC-LXII/Doc. 11. The report will include the following chapters:

- Chapter 1: Framing, methods and knowledge sources;
- Chapter 2: Large-scale changes in the climate system and their causes;
- Chapter 3: Changes in regional climate and extremes, and their causes;
- Chapter 4: Advances in process understanding of Earth system changes;
- Chapter 5: Scenarios and projected future global temperatures;
- Chapter 6: Global projections of Earth system responses across time scales;
- Chapter 7: Projections of regional climate and extremes;
- Chapter 8: Abrupt changes, low-likelihood high impact events and critical thresholds, including tipping points, in the Earth system;
- Chapter 9: Earth system responses under pathways towards temperature stabilization, including overshoot pathways; and
- Chapter 10: Climate information and services.

## **Management of the Working Group Contribution to AR7**

**Work Programme and Schedule:** On Saturday morning, SAUDI ARABIA, INDIA, and SOUTH AFRICA, opposed by IRELAND, NEPAL, and GERMANY, objected to the adoption of the work programme as presented, expressing concern with what they considered a compressed AR7 timeline. They called for considering the schedule together with that of WGII and WGIII.

GERMANY highlighted the importance of sending a clear signal on the value and effectiveness of multilateralism.

IPCC Chair Skea noted that timelines are elaborated upon in Table 10 of IPCC-61 Doc.10.

SAUDI ARABIA called for noting their objection to the document.

The Group decided to defer consideration to IPCC-62.

## **Other Matters**

On Saturday late morning, WGI Co-Chair Vautard noted that a WGI progress report had been provided as part of the IPCC-62. He said the time and place of the next WGI session were yet to be decided, and noted the session would likely deal with approval of the WGI report.

At 11:55 am, WGI Co-Chair Vautard gavelled the fifteenth session of WGI to a close.

## **Working Group II – Thirteenth Session Report**

On Tuesday, WGII Co-Chair Winston Chow opened the session and the Group adopted the agenda ([WG-II: 13th / Doc. 1, Add. 1](#)).

## **Chapter Outlines of the Working Group Contribution to AR7**

WGII convened on Tuesday, Wednesday, Thursday, Friday, and Saturday to review and agree on the chapter outline for its contribution to AR7. The Group considered three rounds of revisions to the outlines. On Tuesday, WGII Co-Chair Chow introduced the draft WGII report outline and the draft outline of the Update to the 1994 IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations ([WG-I: 15th / Doc. 2](#)). WGII Co-Chair Bart van den Hurk responded to comments collected from interventions during Monday’s Plenary session, noting that relevant information is contained in the background document ([WG-II: 13th / INF. 1](#)), assuring participants that the WGII assessment will be evidence-based, and suggesting that a proposed update of IPCC guidance notes would be better addressed in a cross-WG manner.

WGII Co-Chair van den Hurk invited delegates to comment on all major blocks of the draft outline, comprising the point of departure and global chapters, regional chapters, thematic chapters, and Technical Guidelines.

SWEDEN, LUXEMBOURG, and UKRAINE stressed the need to avoid a line-by-line textual negotiation. NORWAY recalled language from the IPCC Principles and Procedures on “agreement” of the WG outlines as opposed to “approval.”

In **general remarks**, the RUSSIAN FEDERATION called for a clear methodology on attribution and uncertainty assessments, noting there is a lack of approved IPCC guidance on these matters, and suggested WGII should initiate work on this cross-cutting issue.

TUNISIA, supported by SAUDI ARABIA, AUSTRIA, and others, welcomed inclusion of cost-benefit analyses of adaptation measures, work on indicators and metrics, cross-sectoral strategies, and a regionalized focus.



SUDAN emphasized the need to consider lessons learned from AR6 and asked for indicators to assess both progress and deficit of action and support for adaptation.

BURUNDI stressed the importance of avoiding maladaptation to reduce risks and a focus on women and children and people with disabilities.

AUSTRIA called for a dedicated chapter on mountains.

AUSTRALIA and CANADA welcomed the recognition of Indigenous Knowledge in various sections of the outline. ANTIGUA AND BARBUDA, supported by the UK, suggested considering different levels of global warming, including in all regional assessment chapters. The UK and SWITZERLAND proposed including a risk-oriented assessment of SRM.

LUXEMBOURG, with SWITZERLAND and ITALY but opposed by SAUDI ARABIA, underscored the priority of cross-WG integration, noting that several concepts, such as overshoot, CDR, and finance, should be dealt with consistently across the WGs. LUXEMBOURG, SWEDEN, and AUSTRALIA called for greater visibility of the nexus concept, which emphasizes interlinkages between several systems or sectors, as recently assessed by IPBES.

Noting the increased length and complexity of the WGII report outline, CHINA suggested integrating redundant chapters into other parts of the AR7 report.

SWEDEN, with SWITZERLAND, the NETHERLANDS, PANAMA, and others, called for a focus on solution-oriented language, feasibility, cost-benefit analysis, and costs of inaction. SWEDEN also called for more coverage of biodiversity, reallocation of capital, and invasive species.

CHINA, UKRAINE, and BURUNDI supported inclusion of early warning systems. REPUBLIC OF KOREA supported inclusion of adaptation policy, a risk framework, and monitoring.

**On Point of departure, framing and key concepts (Chapter 1),** INDIA called for flexibility with the listed key concepts, noting they should be open for modification. He proposed stronger emphasis on the linkages between development and adaptation, and, with SAUDI ARABIA, suggested focusing on positive messages, especially in the context of adaptation.

SWITZERLAND suggested providing key “definitions” instead of “concepts.”

SOUTH AFRICA highlighted the importance of equity in scenarios and modeling frameworks and cautioned against adding new concepts, such as NbS, that are not scientific or universally agreed. He also stressed the importance of greater focus on responses in relation to poverty and agriculture and the incorporation of Indigenous Knowledge.

DENMARK, AUSTRALIA, MALAWI, VANUATU, SWEDEN, and TÜRKIYE emphasized the importance of addressing maladaptation. DENMARK and SWEDEN also stressed the importance of including transformational adaptation, biodiversity, NbS, and synergies.

BELGIUM, with CANADA and opposed by SAUDI ARABIA, supported further inclusion of biodiversity. BELGIUM also called for references to women’s empowerment.

ITALY called for further integration of social sciences and humanities perspectives to better understand how communities perceive and are impacted by climate change.

VANUATU welcomed the reference to the polycrisis, and Indigenous Knowledge.

MALAWI highlighted the critical importance for LDCs of chapters on losses and damages and finance, and a focus on climate change as a driver of poverty and erosion of livelihoods. She called for inclusion of explicit references to global warming levels throughout the report, including warming of 1.5°C.

**On Vulnerabilities, impacts and risks (Chapter 2),** KENYA suggested taking a broad approach to reasons for concern.

**On Current adaptation progress, effectiveness and adequacy (Chapter 3),** the UK suggested adding synergies with mitigation and sustainable development. The MALDIVES urged inclusion of grey literature on adaptation costs.

**On Adaptation options and conditions for accelerating action (Chapter 4),** INDIA called for a stronger emphasis on adaptation as a continuous learning process.

**On Losses and damages (Chapter 5),** FRANCE, with DENMARK, preferred a more comprehensive approach establishing linkages with transformational adaptation as a continuum of activities.

GERMANY requested the removal of normative language such as “equitable,” and deletion of points relating to losses and damages in other chapters.

CHINA questioned the necessity of a standalone chapter on losses and damages and suggested integrating its contents in other chapters. VANUATU stressed the importance of keeping references to legal responses, as in previous reports.

KENYA supported inclusion of non-economic losses and damages, and adding quantification in the title.

**On Finance (Chapter 6),** SWITZERLAND, supported by FRANCE, called for including financial flows from all sources.

DENMARK, supported by SWEDEN, suggested adding “and investments” after “finance.” GERMANY suggested amending the title to “Finance and Investment for Climate-Resilient Development,” and deleting points relating to finance in other chapters.

Noting how the private sector can contribute to adaptation action, JAPAN, supported by FRANCE, proposed including references to “beneficial opportunities” and co-benefits.

SAUDI ARABIA called for the deletion of references to “geopolitics,” as well as “schemes” if the latter are not clearly specified as “national.” He also suggested mentioning the challenge of attracting private investment in adaptation projects, as such investments usually focus on mitigation.

Noting a strong focus on the quantity of finance, the UK called for an increased focus on its quality, and, supported by LUXEMBOURG and SWEDEN, including information on the costs of action, delayed action, and inaction.

KENYA stressed the role of public finance.

**On the Regional chapters (Chapters 7-13),** SUDAN called for references to the special circumstances of LDCs, particularly regarding adaptation.

SOUTH AFRICA called for greater focus on drought, dust storms, and drylands. DENMARK, supported by CANADA and SWEDEN, proposed more focus on polar regions, as in the AR5 report. MALAWI called for a dedicated chapter on LDCs, like the one for SIDS, given their unique vulnerabilities and resilience strategies.

**On the Thematic Assessment chapters (Chapters 14-20),** TÜRKIYE said that a chapter on cross-cutting adaptation should be added.

On **Terrestrial, freshwater, and cryospheric biodiversity, ecosystems and their services (Chapter 14)**, SWITZERLAND suggested considering high altitudes and mountains and adding references to feedback loops between climate change and biodiversity. The UK proposed references to biodiversity and human-nature interactions.

On **Agriculture, food, fibre and fisheries (Chapter 17)**, SWITZERLAND said synergies and tradeoffs between mitigation and adaptation should be assessed. JAPAN noted the particular vulnerability of the food and agriculture sector and, with SWITZERLAND, proposed focusing on food security.

Regarding competition for land and ocean use, JAPAN, supported by DENMARK, suggested adding references to synergies and trade-offs. KENYA called for referencing inland water bodies, as well as inter- and intra-regional trade.

On **Energy, industry, infrastructure and human settlements (Chapter 18)**, the UK suggested including not only business risks but also opportunities.

On **Health and well-being (Chapter 19)**, REPUBLIC OF KOREA and SWITZERLAND proposed also including mental health.

On **Poverty, livelihoods, mobility and fragility (Chapter 20)**, UKRAINE called for adding armed conflict. REPUBLIC OF KOREA suggested integrating concrete examples, such as adaptation facilities, and including policy cases.

On the **Technical Guidelines**, ITALY and the UK requested clarification on the intended audience, noting the 1994 document was aimed at the scientific community.

In answer to a question by SAUDI ARABIA on how the outline would be used by authors, WGII Co-Chair Chow stressed it is meant to guide them but not influence findings. CHINA called for including adaptation techniques, such as early warning systems.

On Wednesday afternoon, the Co-Chairs presented a **revised report outline**. Co-Chair Chow highlighted the incorporation of suggestions for which there was broad consensus. These included bringing forward positive aspects of adaptation and references to:

- overcoming barriers;
- pathways across levels of warming and system thresholds;
- enabling and constraining conditions of adaptation decision-making and planning;
- economic and non-economic aspects of losses and damages;
- costs of inaction;
- high-altitude mountain regions and arid regions;
- slow onset events;
- forestry and livestock;
- synergies and trade-offs related to adaptation and mitigation;
- inter- and intra-regional trade and trade as an essential element of food security;
- mental health; and
- infectious diseases.

On the Technical Guidelines, Co-Chair van den Hurk explained the title had been modified to better reflect decision text, and that it now also included specific reference to scientifically-assessed legal and policy frameworks.

Making a point of order, INDIA and SAUDI ARABIA said there was insufficient clarity on the process by which these revisions had been made and objected to the text. After consulting with the WGII Bureau, Co-Chair Chow assured the Group of the Co-Chairs' commitment to inclusivity and to moving forward. PALAU

commended the Co-Chairs' approach and noted an imbalance in all WG discussions where "more powerful developing countries" take up undue share of the discussion space. NEW ZEALAND suggested the introduction of a timer to limit interventions.

In **general comments**, PALAU, supported by ANTIGUA AND BARBUDA, VANUATU, MALDIVES, GRENADA, ZIMBABWE, and SAINT KITTS AND NEVIS, emphasized that responses to losses and damages differ from adaptation responses and therefore need a dedicated chapter. He highlighted hard and soft limits to adaptation, which he said neither early warning systems nor insurance policies can fully address, and called for consistency with WGIII in the finance chapter.

SAUDI ARABIA opposed alignment of WGII and WGIII reports on finance, suggesting both WGs should maintain autonomy in dealing with this topic.

SOUTH AFRICA, with ANGOLA, LIBYA, and ALGERIA, recalled suggestions to provide more comprehensive coverage of droughts, desertification, and dust storms. SOUTH AFRICA highlighted the need to include not just transformational but also incremental adaptation and to address the informal economy and urban-rural linkages.

FINLAND, with CHILE, SWEDEN, CANADA, NEPAL, and AUSTRALIA, said the current structure may not adequately address the specific needs of polar regions and called for a dedicated chapter or more consistent approach, possibly as a cross-WG topic. CHILE also noted the importance of the Antarctic in the food chain for all regions and underscored that most of the research is being undertaken in developing countries. NORWAY supported dedicated chapters on droughts, polar areas, and mountainous regions.

GUINEA supported including monsoons, highlighting the importance of their positive and negative impacts not only on single countries but entire regions in several parts of the world.

INDIA requested deletion of several references to climate action and mitigation, saying these topics are beyond WGII's scope.

TÜRKIYE and SWITZERLAND underscored the importance of addressing maladaptation and adaptation limits.

SWITZERLAND, AUSTRIA, NEPAL, and CHILE expressed disappointment that mountains had not been included in the outline.

SWEDEN lamented the removal of the qualifier "context-specific" across the report.

TUNISIA called for inclusion of climate migration and displacement.

On a **revised Chapter 1**, BELGIUM and FRANCE requested retaining references to polycrisis, citing the importance of the interconnected character of several ongoing crises.

On Saturday morning, presented text with further revisions, SAUDI ARABIA proposed a new general framing bullet point that puts the chapter "in the context of IPCC AR7." LUXEMBOURG, with DENMARK, proposed using the language of the framing bullet that had just been agreed in WGIII. This was opposed by SAUDI ARABIA and INDIA. The Group then agreed to SAUDI ARABIA's proposal.

On a **revised Chapter 2**, CHILE, LUXEMBOURG, CHINA, AUSTRIA, and FRANCE expressed concern about the inclusion of SRM as a response without qualifiers. CHINA suggested its deletion. NIGERIA called for guiding authors to prioritize vulnerability hotspots.

On Thursday afternoon, KENYA, with SAUDI ARABIA, INDIA, ECUADOR, CHAD, ITALY and others, suggested a

reference to “projected economic and non-economic losses and damages” be moved to Chapter 5, the dedicated chapter on this matter. The NETHERLANDS, with TIMOR-LESTE, BELGIUM, LUXEMBOURG, ANTIGUA AND BARBUDA, the UK, and CHAD, lamented deletion of “overshoot lines.” On a newly added cross-WG box on SRM, ITALY requested the addition of a bullet indicating the content of the box. Several countries, including BELGIUM, LUXEMBOURG, CANADA, the UK, the MALDIVES, and SWITZERLAND, queried why the first-ever cross-WG box is dedicated to SRM.

The WGII TSU presented some proposed changes, noting, *inter alia*, losses and damages must be addressed in this chapter for a comprehensive assessment, and suggesting “Risks, Impacts, and Losses and Damages” as revised title.

SAUDI ARABIA, with INDIA, opposed deletion of “vulnerability” from the title. CHINA also opposed the title change, warning about duplication with Chapter 5. ITALY, with GERMANY and BELGIUM, requested reinstating language on the risks of SRM.

ITALY, the UK, and others continued to query the contents of the cross-WG box on SRM. PALAU, VANUATU, MALDIVES, SAINT KITTS and NEVIS, and TIMOR-LESTE said they were satisfied with the revisions.

Delegates continued discussions in a huddle.

On Friday night, Co-Chair van den Hurk reported the huddle had failed to reach agreement on the contents and relevance of the cross-WG box on SRM. He said the Bureau had made some suggested changes to the chapter outline, including a new bullet on “risks from SRM,” considering this language had just been agreed upon in WGI.

INDIA, with SAUDI ARABIA, KENYA, and CHINA, reiterated their desire for a bullet on economic and non-economic losses and damages to be moved to Chapter 5. VANUATU, NEPAL, and PALAU, supported by the UK and DENMARK, strongly opposed this suggestion, noting the current text already represented a compromise and that losses and damages must be assessed scientifically, separately from questions of policy relevance. VANUATU stressed her country is “in a near-constant state of recovery,” and PALAU lamented that “larger developing countries” are at odds with SIDS and LDCs, and that the “science fiction” of SRM is receiving “more attention than the realities on the ground.”

On Saturday morning, delegates returned to a bullet point reading “Synthesis of observed and projected economic and non-economic losses and damages, building on both slow to rapid onset events and climate extremes, including quantification, detection and attribution as appropriate.” Views continued to be opposed on quantification of losses and damages, with NEPAL, JAMAICA, KENYA, DENMARK, VANUATU, and PALAU and others stressing the need for quantification of losses and damages. SAUDI ARABIA opposed this and suggested referring instead to synthesis “of methodologies” of observed and projected losses and damages.

Various proposals were tried by members and the WGII Bureau, including one to refer simply to “Observed and projected [...] including quantification and methodologies, as appropriate.” After prolonged discussion and concern expressed on the time spent on this bullet early on Saturday morning, with delegates having to leave, a huddle facilitated by NEW ZEALAND was formed. The huddle returned with the text “assessment of methodologies and synthesis of observed and projected economic and non-economic losses and damages, building on both slow to rapid onset events and

climate extremes, including quantification,” which was then agreed by the Group.

On SRM, SWITZERLAND, LUXEMBOURG, CANADA, and AUSTRIA called for adding ethics and governance alongside risks of SRM, as in WGIII. INDIA questioned the reference to governance and proposed to refer to risk management instead. The Group agreed to “risks, risk management and ethics of SRM.”

On a **revised Chapter 3**, the DOMINICAN REPUBLIC called for including costs of inaction and maladaptation, highlighting the importance of assessing unintended consequences. GERMANY objected to reference to “adequacy” of adaptation in the title.

On Thursday afternoon, an attempt by the Co-Chairs to replace “adequacy” with “scope” to avoid normative language was opposed by INDIA, CHILE, the MALDIVES, KENYA, TIMOR-LESTE, ZAMBIA, COMOROS, and others. No consensus was found either on the insertion of maladaptive practices or on a bullet point addressing adaptation costs, trade-offs, benefits, and co-benefits.

CHINA, SUDAN, and BRAZIL stressed the importance of including reference to technology in this chapter. After further discussion, the Group eventually agreed to an amended suggestion by GERMANY to leave “adequacy” in the title but to replace it with “scope” in the bullet on “evidence of effectiveness and scope of state and non-state actions.” They also agreed to add a reference to capacity building to address suggestions related to technology.

On a **revised Chapter 4**, on Thursday afternoon, SAUDI ARABIA, with INDIA and EGYPT, requested greater emphasis on adaptation as an iterative learning process. SWITZERLAND suggested that, should emphasis on learning be added, it should be accompanied by “including to avoid maladaptation.”

SAUDI ARABIA requested deletion of “path dependency.”

CHINA, with EGYPT and BRAZIL, called for mentioning the development of technologies such as early warning systems, digitalization, and AI to improve adaptation capacity. SWITZERLAND warned about creating a “hierarchy” between natural and technical solutions.

ICC warned against referring to Indigenous Peoples and local communities in the same way, as the former are rights-holders.

On Friday, KENYA, with INDIA, SOUTH AFRICA, SAUDI ARABIA and others, opposed inclusion of “maladaptive practices,” saying the term is unfairly applied in many countries.

BELGIUM, SWITZERLAND, NEW ZEALAND and GERMANY asked for flexibility, underscoring that maladaptation is a clear and important concept for their countries and is already included in the IPCC Special Report on Cities and elsewhere. ITALY proposed, and the Group agreed, to refer instead to “to avoid adverse outcomes.”

INDIA and SAUDI ARABIA also opposed reference to “path dependencies.” The WGII Bureau proposed “flow on effects” instead, but this suggestion was not supported by INDIA. ITALY suggested “interdependencies.” The Bureau supported ITALY’s proposal, adding as well “and a range of climate scenarios, and different levels of global warming, development, and adaptation.”

On a **revised Chapter 5**, TIMOR-LESTE requested the authors to account for both slow onset and extreme weather events.

The DOMINICAN REPUBLIC, supported by FRANCE, expressed surprise that NbS are not included, given their crucial role in adaptation. SAUDI ARABIA and CHINA requested removal of all references to legislation and legal aspects, saying they risk



politicizing the report. SOUTH AFRICA and GERMANY cautioned against references to “responses” related to losses and damages, but the reference remained in the text.

KENYA called for the inclusion of assessment and quantification of losses and damages, with the final chapter referring to “metrics to assess losses and damages.”

On a **revised Chapter 6**, TIMOR-LESTE and NIGERIA emphasized that finance is a climate justice issue. The DOMINICAN REPUBLIC proposed including different and innovative insurance schemes. SWITZERLAND, DENMARK, LUXEMBOURG, and GERMANY suggested the chapter title should state “finance and investments.” CHILE called for adding “cost-benefit analysis tools of adaptation policies.” The MALDIVES stressed the need for greater emphasis on means of implementation. INDONESIA stressed finance should not be only about “accelerating” but also “enhancing” adaptation.

On Saturday morning, SAUDI ARABIA and INDIA, opposed by AUSTRIA, FRANCE, and others, requested “cost of inaction” be deleted. VANUATU and PALAU objected to SAUDI ARABIA’s request to delete “climate” from climate finance.

Delegates were then presented with a revised text in which a reference to the cost of inaction had been replaced with “costs and benefits at different levels of adaptation action” and climate “finance” was changed to climate “funding.” A discussion ensued on the latter, with INDIA and VANUATU, among others, requesting to revert to the original wording. After a proposal for “financial architecture” suggested by the Bureau was rejected, the Group agreed to “funding.”

On **revised regional and thematic assessment chapters**, the Co-Chairs explained on Friday morning that revisions included, in the bullets common to all regional assessment chapters, an added point on integration of issues specific to LDCs across regional chapters with a cross-synthesis box. Instead of cross-chapter boxes on polar, dryland and deserts, and high-altitude and mountain regions, the Bureau also proposed: a revised Chapter 14 adding a focus on drylands and deserts; a revised Chapter 15 centered on oceans and coastal ecosystems; and a new chapter on mountain and polar systems.

INDIA opposed the latter proposal, and a huddle, facilitated by IPCC Vice-Chair Chang’a, considered the matter without reaching consensus.

On revised common bullets across regional chapters, ITALY requested highlighting the Mediterranean or making the existing list less exclusive. LUXEMBOURG suggested replacing “such as” with “including but not limited to.” SOUTH AFRICA, KENYA, and NEPAL warned against a list that would lack guidance for authors. WGII Co-Chair Chow agreed to remove phrases like “such as” and “including but not limited to,” and added a specific mention of the Mediterranean.

INDIA and SAUDI ARABIA, opposed by SWITZERLAND and NEPAL, called for removing “cost of inaction.” VANUATU and GRENADA strongly supported including references to “losses and damages.” SAUDI ARABIA opposed inclusion of this term. Cost of inaction was ultimately replaced by “cost of different options.”

GRENADA expressed concern that the proposed revisions resulted in the removal of “biodiversity” from all titles in the report, urged reconsideration, and emphasized the importance of close collaboration with IPBES.

SOUTH AFRICA, ANGOLA, and ALGERIA requested the addition of drought, which SOUTH AFRICA said was under-covered in AR6. Co-Chair van den Hurk explained that drought is assessed as part of impacts in Chapter 2.

CHINA, ECUADOR, and BRAZIL lamented deletion of a reference to capacity building, technology development and transfer. This reference was reinstated.

On revised bullets common to all thematic assessment chapters, Co-Chair van den Hurk explained the language now reflected what is in the thematic chapters that follow, and the Group agreed to them.

On a **revised Chapter 14** on Terrestrial, freshwater and cryospheric biodiversity, ecosystems and their services, Co-Chair van den Hurk explained this chapter resulted from a request for a chapter on ecosystem-based adaptation. The Group agreed to the chapter without changes.

On a **revised Chapter 15** on Ocean, coastal and cryospheric biodiversity, ecosystems and their services, CHILE requested “seagrasses and seaweeds” be added to the list of geographies. JAPAN requested a reference to the “emergence of novel biological communities.” After both requests were accommodated, the Group agreed to the chapter.

On a **revised Chapter 16**, opposing views were expressed on the inclusion of “transboundary” water management, with CHINA, supported by INDIA and SAUDI ARABIA, noting the sensitive nature of the term, while FRANCE, TUNISIA, and SENEGAL preferred an explicit reference. INDIA also opposed a reference to subnational. On Friday, after huddle discussions facilitated by IPCC Vice-Chair Chang’a, the Group agreed to remove transboundary, national, and subnational and replace these terms with “across scales.”

On a **revised Chapter 17**, JAPAN proposed amended wording on a bullet point on food security, saying the framing was too narrow. CHINA suggested focusing on effectiveness of existing options, instead of trade-offs with mitigation, and called for a reference to the role of international cooperation.

On Friday morning, the MALDIVES called for reference to “hunger” in the context of food and livelihood security. BANGLADESH called for adding “livestock” alongside “fisheries.” AUSTRALIA supported BRAZIL’s proposal to refer to Indigenous Peoples. Co-Chair Chow noted these references are included in the background document authors receive for additional guidance, and the Group agreed to the chapter.

On a **revised Chapter 18**, SAUDI ARABIA called for a clearer focus on adaptation, requesting deletion of mitigation-centered topics. On Friday, SAUDI ARABIA, INDIA, ECUADOR, CHINA, and NIGERIA proposed amending the title by replacing “energy, industry, infrastructure and human settlements” with “cities, settlements and key infrastructure.”

This proposal was opposed by SINGAPORE, AUSTRALIA, NEW ZEALAND, NORWAY, the UK, BELGIUM, BELIZE, and CHILE, with several highlighting the importance of looking at energy and industry through an adaptation lens. NEPAL, supported by KENYA, suggested including “energy system” in the title.

Following a huddle, IPCC-Vice Chair Chang’a presented an amended title stating “adaptation of human settlements, infrastructure and industry systems.” This was not agreed. Noting an impasse, Co-Chair Chow parked the sentence for later consideration.

On adaptation solutions, INDIA, ECUADOR, and CHINA proposed deletion of reference to “low greenhouse gas emission options,” which was opposed by AUSTRALIA.

Early on Saturday morning, Co-Chair Chow outlined changes made by the Bureau on a revised text, noting the terms “path dependency” and “infrastructure lock in” had been deleted based on comments from the Group. CHAD requested the addition of “energy infrastructure.” This was taken up in a huddle with SAUDI ARABIA, facilitated by IPCC Vice-Chair Chang’a. The huddle proposed the sentence “increasing energy in the context of sustainable development,” which was agreed on by the Group.

On a **revised Chapter 19**, on Friday night, INDIA, with SAUDI ARABIA, requested “non-climate drivers of” be added to a reference to health and well-being. SAUDI ARABIA also requested “physical and mental health” be removed from another bullet, and to change “sectors” to “factors.”

Noting she, like many others, had to leave the meeting and that her country would therefore not be represented going forward, PANAMA expressed “concern” about her first experience with the IPCC, underscoring she thought she was “supposed to be working on a scientific, not a political report. I see a lack of faith in the scientific community yet trust in science is crucial.”

After INDIA and SAUDI ARABIA’s requests were accommodated, the Group agreed to the chapter outline.

On a **revised Chapter 20**, CHINA questioned a reference to social unrest and conflict, given the lack of a clear definition. On Friday night, INDIA and SAUDI ARABIA requested retaining the term “differentiated” instead of the proposed term “asymmetric” in relation to capabilities, responsibilities, access to information, knowledge, finance, and decision-making fora, which, following discussions, was agreed by the Group.

On human mobility in the context of climate change, CHAD, KENYA, MONGOLIA, and FWCC requested reinserting “including internal and cross boundary.” CHINA opposed this request. KENYA proposed adding the term “transhumance,” which describes movement of humans together with livestock.

Following WGIII Vice-Chair Gervais Itsoua Madzous’ clarification that “transhumance” includes the notion of cross-border movement, the Group agreed to delete “including internal and cross boundary.”

On revised technical guidelines, KENYA, with the UK and INDIA, called for the title to better reflect the terminology agreed at IPCC-60.

On Saturday morning, Co-Chair van den Hurk presented revised text, which he said was closer to IPCC-60 terminology. INDIA queried the meaning of the phrase “thematic targets” in a section on monitoring, evaluation, and learning, and requested that “systems” approach be changed to “integrated” approach. He also asked to delete reference to “locally-led” approaches. After SAUDI ARABIA requested an addition to be reflected on the screen, the UK queried the process, saying comments should be collected for the Bureau to consider. After consulting with the Bureau, Co-Chair van den Hurk presented changes that accommodated the above comments, including that thematic targets were qualified “as appropriate.” The Group then agreed on the guidelines.

**Outcome:** On Saturday, Working Group II agreed to the revised chapter outlines for its contribution to AR7, as set out in IPCC-LXII/Doc. 12. The report, to be titled “Climate Change 202X: Impacts, Adaptation, and Vulnerability,” will include an initial framing

chapter: “Point of departure, framing and key concepts.” The Global Assessment chapters will include:

- Chapter 2: Vulnerabilities, impacts and risks;
- Chapter 3: Current adaptation progress, effectiveness and adequacy;
- Chapter 4: Adaptation options and conditions for accelerating action;
- Chapter 5: Responses to losses and damages; and
- Chapter 6: Finance.
- Chapters 7-13 are Regional Assessment chapters on Africa, Asia, Australasia, Central and South America, Europe, North America, and Small Islands.

Thematic Assessment Chapters will include:

- Chapter 14: Terrestrial, freshwater, and cryospheric biodiversity, ecosystems and their services;
- Chapter 15: Ocean, coastal, and cryospheric biodiversity, ecosystems and their services;
- Chapter 16: Water;
- Chapter 17: Agriculture, food, forestry, fibre and fisheries;
- Chapter 18: Adaptation of human settlements, infrastructure and industry systems;
- Chapter 19: Health and well-being; and
- Chapter 20: Poverty, livelihoods, mobility and fragility

Annex I will include an atlas with inter- and intra-regional mapping of hazards, vulnerability, exposure, impacts, risks, adaptation, and responses to losses and damages. Annex II will provide an overview of technical guidelines on impacts and adaptation.

### **Management of the Working Group Contribution to AR7**

**Work Programme and Schedule:** WGII Co-Chair Chow pointed to the implementation plan ([WG-II: 13th/Doc. 3](#)), containing the proposed timetable and a provisional budget estimate. Noting discussions on the implementation plan in WGI, he invited delegates to take note of the document and address comments during the Plenary of IPCC-62.

SAUDI ARABIA and INDIA opposed taking note of the document. WGII Co-Chair Chow deferred further discussion to the IPCC Plenary

### **Other Matters**

Outlining WGII activities undertaken for the IPCC Special Report on Climate Change and Cities, WGII Co-Chair Chow said the first LAM for this report will be held from 10-14 March 2025 in Osaka, Japan.

KENYA announced their offer to host the second LAM in Mombasa.

WGII Co-Chair Chow noted the coming sessions of WGII will deal with approving the Special Report on Climate Change and Cities in 2027, location pending decision, and the WGII report, time and location pending decision.

WGII Co-Chair van den Hurk expressed gratitude for the hard work put into WGII deliberations throughout the week and, with Co-Chair Chow, gavelled the thirteenth session of WGII to a close at 12:09 pm on Saturday, 1 March.

### **Working Group III – Fifteenth Session Report**

On Tuesday, WGIII Co-Chair Joy Jacqueline Pereira opened the session and the Group adopted the agenda ([WG-III: 15th/Doc. 1, Add. 1](#)).

**Chapter Outlines of the Working Group Contribution to AR7**

WGIII met on Tuesday, Wednesday, Thursday, Friday, and Saturday to review and agree on the chapter outlines of its contribution to AR7.

On Tuesday, WGIII Vice-Chair Fuglestad invited comments on the draft WGIII report outline ([WG-III: 15th/ Doc. 2](#)). Participants first commented on the outline as a whole and then considered individual chapters.

In general remarks, SAUDI ARABIA, with ALGERIA, objected to “extensive policy prescriptive language” and called for deletion of numerous bullet points, including any reference to evaluate or evaluation, trade, governance of finance, and, with SOUTH AFRICA, legal frameworks and litigation. SAUDI ARABIA called for, *inter alia*, clear differentiation between developed and developing countries, historical responsibility with regard to the remaining carbon budget, and energy access.

GERMANY also cautioned against extensive use of policy prescriptive language, citing terms including equity and justice.

CHINA said WGIII’s assessments should be restricted to scientific issues and highlighted several elements in the outline that should be addressed at the political level, including the assessment of current policies, nationally determined contributions (NDCs), long-term targets, and other national policies and scenarios.

SWEDEN, PANAMA, AUSTRALIA, and BELGIUM preferred a positive, solution-oriented framing to the outline. NEPAL and INDIA welcomed the focus on equity and justice throughout the outline, with INDIA emphasizing it is “a positive way forward” for the IPCC.

NORWAY, supported by AUSTRALIA, called for a stronger focus on human rights and, with LUXEMBOURG, on NbS. With the UK, he suggested addressing equity and justice in a more concentrated manner, noting references to the concepts are currently scattered all over the outline, and requested additional information on the interaction between public and private finance. Various countries, including DENMARK, SWITZERLAND, and the UK, expressed concern about duplication of topics across chapters.

ITALY, the UK, UKRAINE, and BELGIUM highlighted the importance of cross-WG integration. The UK cited finance and energy systems as relevant topics for coordination among the WGs. ITALY called for stronger integration of adaptation and mitigation, as well as common WGII and WGIII chapters addressing sectors and systems.

The NETHERLANDS noted a tendency towards the use of bottom-up, instead of top-down, analysis such as integrated modeling, highlighting the latter’s strength for providing additional information.

BRAZIL suggested a separate chapter on digitalization and digital technologies. The NETHERLANDS, with INDONESIA and KENYA, called for a chapter on waste. CHINA proposed a chapter on international cooperation.

Many countries called for including the cost of inaction.

UKRAINE highlighted the relevance of climate-resilient pathways, saying resilience is more important than sustainable development. She queried whether WGIII will also participate in the production of the Atlas, an interactive online tool jointly produced by WGI and WGII.

SWITZERLAND and the UK proposed taking into account different global warming levels.

SWITZERLAND also proposed: a focus on the solution space; harmonized terminologies; balanced communication of challenges and opportunities; and greater consideration of NDCs.

LUXEMBOURG called for greater recognition of IPBES processes.

PANAMA suggested the report address demand-side solutions and behavioral science. KENYA and INDONESIA called for including local knowledge alongside Indigenous Knowledge, with INDONESIA suggesting “local communities” be consistently added to references to Indigenous Peoples.

DENMARK and SWEDEN called for clear references to Paris Agreement goals or objectives. AUSTRALIA proposed having the 1.5°C temperature increase goal as an overarching framing point for policy relevance and emphasized the importance of meaningful participation of Indigenous Peoples and local communities in producing the report.

SOUTH AFRICA called for the report to acknowledge and address the underrepresentation of some regions within models and scenarios.

The EU requested the outline address the “rebound effect,” which refers to the unintended consequences of improvements in energy efficiency.

On **Past and current emissions and their drivers (Chapter 2)**, the NETHERLANDS suggested assessing current emission trends up to 2050 based on NDCs. NIGERIA asked which years are taken into account when assessing historical emissions, suggested including other global emission trends, such as for methane, and proposed assessing the impacts of economic and population growth on emissions and energy consumption.

On **National and global futures in the context of sustainable development and climate change (Chapter 3)**, the NETHERLANDS highlighted the importance of economic aspects.

The RUSSIAN FEDERATION suggested adding “anthropogenic” before “emissions.”

The EU said “remaining carbon budgets” should be addressed in this chapter.

On **Development, mitigation, sustainability (Chapter 4)**, BRAZIL requested inclusion of bioeconomy, saying it is a low-carbon model. CANADA, with PANAMA and the MALDIVES, requested the deletion of a reference to the “winners and losers” of mitigation transitions, noting “it is not a zero-sum game.”

SWITZERLAND called for including references to the social price of carbon.

On **Enablers and barriers (Chapter 5)**, BRAZIL noted that intellectual property rights can be enablers and barriers and suggested they should be explicitly mentioned in relation to international cooperation.

INDIA suggested the focus remain on international cooperation rather than international relations, as the latter refers to security matters.

The MALDIVES asked for a reference to food security in the context of sustainable development to be added, as well as a reference to the temperature goal of the Paris Agreement.

NORWAY suggested aerosol-GHG interactions be included.

REPUBLIC OF KOREA proposed addressing effects of changes from high carbon to low carbon industries for the labor market.

BELGIUM, with UKRAINE, said that the outline did not sufficiently address barriers to mitigation.



**On Policies and governance at national, international, and subnational levels (Chapter 6)**, NEPAL, INDIA, CANADA, SAINT KITTS AND NEVIS, FRANCE, UKRAINE and NORWAY requested the reference to SRM to be removed, stressing SRM is not a mitigation option. LUXEMBOURG suggested its inclusion could be an opportunity to speak to the governance dimension of SRM. SAINT KITTS AND NEVIS and FRANCE proposed that, should reference to SRM be retained, governance of net-negative emissions and governance of speculative interventions, such as SRM, should be addressed separately. NORWAY and the UK said risks with SRM should be covered in the WGII report.

**On Finance (Chapter 7)**, INDIA said market-based instruments should not be described as a financing mechanism.

SWITZERLAND called for adding references to subsidies and consumption and production patterns.

BELGIUM, supported by FRANCE, proposed including common aspects to finance related to both adaptation and mitigation.

INDONESIA proposed including non-market approaches as a type of financing mechanism.

On Wednesday afternoon, when WGIII reconvened, Co-Chair Pereira invited delegates to resume discussion of the outline, starting with comments on Chapters 8-14.

In general remarks on this group of chapters, NEW ZEALAND voiced concern about different perceptions of what qualifies as science. She said the evaluation of policies and legal frameworks fall under the remit of science. Emphasizing that science is value neutral, CHINA said that the evaluation of individual countries' policies is based on value judgements and thus does not constitute science. NORWAY, opposed by CHINA, suggested using "governance" as an umbrella term.

The RUSSIAN FEDERATION called for specific references to anthropogenic emissions as opposed to "natural" emissions and, with CHINA, objected to references to the local level, requesting the report focus on national, subnational and global levels.

**On common elements across Chapters 8-13**, CHINA requested deletion of: ex-post policy analysis and evaluation; links to national and global futures; and case studies. IRELAND, with the UK and NORWAY, called for including benefits and opportunities whenever costs are mentioned, as well as synergies with sustainable development.

The UK also proposed stronger links with Chapter 3 so sectoral benchmarks can be linked to climate change goals. NORWAY called for reference to the potential for NbS, and to the Paris Agreement and other relevant UN instruments and conventions.

On elements to be considered under finance, INDIA called for deletion of references to non-market instruments and non-state actors. REPUBLIC OF KOREA called for adding a reference to circular economies. DENMARK, supported by FWCC, stressed the importance of addressing renewable energy, including its cost-effectiveness.

The INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS (IIASA) suggested a bullet point on the impact of events such as the COVID-19 pandemic on the energy system.

**On Services and demands (Chapter 8)**, SAUDI ARABIA opposed describing the diffusion of demand-side measures as "fast," noting the necessary speed requires assessment. SWITZERLAND called for inclusion of supply side options. BELGIUM called for circular economy approaches.

**On Energy systems (Chapter 9)**, INDIA asked for the inclusion of the process of navigating from "traditional to modern" sources to energy. SAUDI ARABIA urged policy-neutral assessment of energy systems and suggested amending wording that indicates a specific direction for transition. AUSTRIA suggested incorporating the energy costs of digitalization. JAPAN proposed considering energy security.

CHINA said the scientific community should not decide on the direction of change, and requested deletion of a reference to "navigating transitions from unabated fossil fuels to electrification and clean energy carriers across sectors." FRANCE objected to the reference to unabated fossil fuels.

IRELAND, SWITZERLAND, and AUSTRALIA emphasized the importance of energy transitions and transformations.

BANGLADESH called for including the potential of leapfrogging in decentralized energy systems.

EDF said the chapter should be less specific to methane and include other SLCFs.

NIGERIA voiced concern over abatement potentials, noting their limitations.

**On Industry (Chapter 10)**, on a bullet on levels of emissions per industry, INDIA requested the addition "at different scales of production" to include the informal sector.

SAUDI ARABIA opposed a reference to assessment of governance and laws. AUSTRIA proposed including the concept of land squeeze to better understand the multiple pressures on land. The NETHERLANDS, VANUATU, FRANCE, and CHILE rejected inclusion of a reference to deep-sea mining, given its potential for irreversible harm and untested nature.

**On Transport and mobility services and systems (Chapter 11)**, BANGLADESH suggested inclusion of integrated transportation modes and systems.

**On Buildings and human settlements (Chapter 12)**, BANGLADESH drew attention to sustainable urban planning.

**On Agriculture, Forestry, and Other Land Uses (AFOLU) (Chapter 13)**, SAUDI ARABIA opposed inclusion of NDCs in the scope of the chapter.

**On Integration and interaction across sectors and systems (Chapter 14)**, SAUDI ARABIA and CHINA proposed deletion of the entire chapter, noting it is redundant and duplicating many contents from other chapters. FRANCE called for adding reference to plastic and to recycling options. IRELAND emphasized integration across sectors and understating systems transition and transformation.

Later on Wednesday, WGIII Co-Chair Pereira presented a **revised report outline** and invited delegates' comments on the revised Chapters 1-4 and 15.

SAUDI ARABIA inquired which process had been followed when addressing the comments made by delegates in the revised outline and requested that the background document will not be handed to authors, noting it will be outdated.

DENMARK, with the UK, proposed adding references to the long-term temperature goal of the Paris Agreement and net zero.

**On revised Chapter 1**, ITALY, LUXEMBOURG, SWITZERLAND, AUSTRALIA, UKRAINE, SAINT KITTS AND NEVIS, and the UK suggested an introductory bullet outlining framing, narrative and context as envisaged for the WGI and WGII

introductory chapters. SAUDI ARABIA suggested deletion of “key concepts and dimensions of integration across Working Groups,” noting this will be addressed in the SYR.

ITALY urged including social sciences and humanities in the assessment and suggested establishing relevant links in the outline.

FRANCE, BELGIUM, and INDIA cautioned against classifying oceans as a mitigation option.

UKRAINE proposed including “geoethics” to better capture human interactions with the Earth system.

On Friday, Panel members reiterated their views on introduction and framing, with the UK, DENMARK, and NORWAY, opposed by SAUDI ARABIA and INDIA, supporting ITALY’s proposal for a common cross-WG framing chapter. INDIA suggested referencing “cross-WG, as appropriate” instead of a framing chapter.

There was also divergence on proposals related to differentiation between developed and developing countries. These were solved by referring to “stages of development,” with “and circumstances,” as proposed by CHINA.

On **revised Chapter 2**, SAUDI ARABIA cited an “overemphasis” on policies, voicing concern that other key factors, such as socioeconomics, demographics, and lifestyles are neglected. SWITZERLAND expressed disappointment that trends in fossil fuel production have not been included in the outline. Emphasizing that mitigation is not only a burden but presents opportunities for development, SWITZERLAND, supported by AUSTRALIA, proposed highlighting the opportunities.

On Friday afternoon, differences centered on a bullet point on “emissions associated with existing and planned long-lived infrastructure.” SAUDI ARABIA, KENYA, INDIA, and ALGERIA, opposed by SWITZERLAND, NORWAY, and the UK, called for deleting a reference to “planned long-lived infrastructure.” CHINA suggested deleting the entire bullet point. SWITZERLAND and NORWAY opposed this suggestion, proposing instead to remove the qualifiers and leaving it at “emissions associated with long-lived infrastructure.”

CHINA, INDIA and SAUDI ARABIA, opposed by NORWAY, GERMANY, SWITZERLAND, and IRELAND, also suggested adding a reference to historical responsibility, with IRELAND noting such language goes far beyond the IPCC’s mandate. TOGO suggested including “historical” trends and drivers.

On Friday night, the Bureau presented changes, including deletion of the bullet point on “emissions associated with existing and planned long-lived infrastructure.” This was accepted by the Group.

On **revised Chapter 3**, INDIA suggested amending wording on “the costs and benefits of action and inaction,” noting there are no benefits of inaction.

The NETHERLANDS suggested amending the title to state “future emission trends and mitigation pathways for stabilizing temperature increase” to clarify the purpose of the chapter.

SAUDI ARABIA voiced concern over confining the analysis to the long-term temperature goal and said gaps should be addressed through a sustainable development lens.

On Friday, RUSSIAN FEDERATION, with SAUDI ARABIA, objected to a reference to “national” futures in the title. INDIA, supported by SAUDI ARABIA, proposed “projected” futures instead of “national and global” futures. The NETHERLANDS, opposed by INDIA, suggested projected futures should be in the

context of climate change goals. The Group agreed to “projected futures in the context of sustainable development and climate change.”

EGYPT and CHINA called for a global focus in the chapter. KENYA and SAUDI ARABIA supported deleting “costs of action and inaction.” GERMANY, SWITZERLAND, and the UK opposed this suggestion.

A lengthy debate ensued over reference to “NDCs, long term targets, and other national policies,” with CHINA, SAUDI ARABIA, RUSSIAN FEDERATION, and NIGERIA objecting to their inclusion and VANUATU, BELIZE, SWITZERLAND, and the UK urging their inclusion.

The Group ultimately agreed to state, “projected emissions pathways, considering current policies and projections, and relationships between national and global projected scenarios in the context of the UNFCCC and the Paris Agreement.” CHINA said diverging opinions should be communicated to the authors. SWITZERLAND, with the UK, voiced their disappointment about deleting reference to NDCs and long-term targets.

On **revised Chapter 4**, CHINA proposed an amended title stating “mitigation and sustainable development, poverty eradication, food and energy security” for better differentiation from Chapter 3. KENYA noted that the remaining carbon budget is deeply intertwined with considerations of sustainable development.

On Friday, SAUDI ARABIA requested that a bullet on pathways be reflective of national circumstances. KENYA, supported by SOUTH AFRICA and INDIA, requested “in the light of remaining carbon budgets” be added to that sentence. A suggestion by CHINA to refer to “different” national circumstances was accepted.

INDIA requested the title of words in the chapter be reversed to start with “sustainable development” and end with “mitigation.” This was accepted by the Bureau, and the chapter was agreed.

On **revised Chapter 15**, IRELAND questioned a reference to marine carbon dioxide removal, saying it is pre-emptive at this point.

CIEL read an extract from a letter by 100 civil society organizations to the IPCC, sent the previous week, that warned the Panel against over-reliance on unproven and dangerous technologies such as CDR and carbon capture and storage. HEINRICH BÖLL FOUNDATION also cautioned against including CDR in AR7 scenarios.

On Saturday morning, SAUDI ARABIA, opposed by the NETHERLANDS, SWITZERLAND, and FRANCE, called for changing the title to simply “CDR,” as well as removing reference to “adverse effects,” add “opportunities,” replace “risks” with “sustainability considerations,” and other word changes.

INDIA, supported by SWITZERLAND and FRANCE, proposed removing a reference to non-CO2 GHG removal.

The Group agreed to replace “risks” with “sustainability aspects,” and to a proposal by INDIA to replace “oceans” with “waterbodies.”

Later on Wednesday, WGIII Co-Chair Pereira invited delegates’ comments on the revised **Chapters 5-7** of the draft outline.

Co-Chair Pereira explained the WGIII Bureau’s continued consideration of how to address conflicting comments, particularly on the chapter on finance and treatment of SRM. She also presented small text revisions, including revised language to avoid being policy prescriptive and references to international cooperation.

Many countries reiterated their urge for caution in the treatment of SRM. GERMANY also stressed the need to avoid normative and value-laden wording, asking the Co-Chairs to convey this concern to authors.

On **revised Chapter 5**, DENMARK and SWITZERLAND lamented the lack of references to fossil fuel subsidies as barriers to mitigation.

NORWAY and AUSTRALIA proposed integrating rights-based approaches as enablers.

The MALDIVES highlighted that the provision of adequate and predictable finance is a key enabler.

On Friday, SWITZERLAND and IRELAND lamented the removal of a reference to trade.

SAUDI ARABIA, opposed by UKRAINE, PANAMA, DENMARK, the EU, NORWAY, AZERBAIJAN, and IRELAND, requested deletion of a bullet on peace, conflict, and security as enablers or barriers to mitigation. INDIA suggested finding alternative language, and a suggestion by KENYA and NIGERIA to refer to peace, security, and conflict “including in the context of resource competition” was agreed.

SAUDI ARABIA, with INDIA, NIGERIA, BRAZIL, and CHINA, requested the concept of just transitions to be addressed in a separate bullet point from labor. This request was accepted.

SAUDI ARABIA requested deletion of a reference to “production and consumption patterns.” The Group agreed on the chapter after the word “patterns” was deleted.

On **revised Chapter 6**, BELARUS said policies and governance should only be assessed at the international level, noting national and subnational levels are out of IPCC’s scope.

SAUDI ARABIA, supported by INDIA and opposed by SWEDEN, called for changing the title to governance and international cooperation and, with EGYPT, ALGERIA, NIGERIA, KENYA and others but opposed by BELGIUM and the UK, called for references to “national and subnational” policies to be removed and for the chapter to focus on the international level. SAUDI ARABIA also requested deletion of references to NDCs. CHILE suggested “policy” be deleted from “ex-post policy and governance assessment,” but the rest be retained in order to allow for learning from past experiences.

JAPAN, with INDIA and INDONESIA, drew attention to international agreements on technology transfer, including those under the UNFCCC. CHINA proposed adding references to the impact of economic barriers on global green transition and cooperation and to technology transfer support from developed to developing countries.

KENYA said the governance of net-negative emissions and SRM should not be conflated in the same bullet and suggested instead referring to “emerging approaches to climate change,” which is broader.

On Friday night, the RUSSIAN FEDERATION, SAUDI ARABIA, CHINA, and INDIA reiterated their strong objection to “national and subnational” policies in the title, with CHINA calling the reference “intrusive” and emphasizing their preference for “international cooperation” instead. They also requested the deletion of several bullets on policy or government assessments on the grounds these are policy prescriptive. FRANCE asked for clarification on why “national and subnational” policy was problematic, noting AR6 WGIII features a chapter on the matter.

SAUDI ARABIA, opposed by SWITZERLAND, called for the deletion of “corporate climate action.”

Several countries, including SWITZERLAND and NORWAY, expressed strong concern at the inclusion of a bullet on SRM in this chapter, noting it is not a tool for mitigation.

CHINA and SAUDI ARABIA called for deletion of a list of policy examples.

Discussions continued in a huddle facilitated by Vice-Chair Chang’a.

Early on Saturday morning, Vice-Chair Chang’a reported agreement had been reached on everything but the last two bullet points on “Diverse climate regulatory and governance frameworks and other public instruments,” and “Long-term policy, governance, and international cooperation for climate action and net zero emissions and beyond.” SAUDI ARABIA suggested referring to “other policy frameworks” instead of “other public instruments.” On a fourth bullet on climate and non-climate agreements, she also proposed “within the context of international cooperation” or to add “as appropriate.”

SWITZERLAND and IRELAND noted that “as appropriate” is language used mainly in negotiations, saying “it is not appropriate here” since these are indicative bullet points, and it is up to scientists to assess what is appropriate. Several attempts were made to finding consensus language, including by DENMARK, CHINA, AUSTRIA and others. Eventually, the Group agreed to SAUDI ARABIA’s proposal to refer to other policy frameworks, and to international climate and “relevant” non-climate agreements.

On a **revised Chapter 7**, BELIZE, ITALY, SWITZERLAND, GERMANY, and others recalled their support for streamlining the finance chapters in the adaptation and mitigation reports and keeping its scope broad, with BELIZE proposing to use WGII’s finance chapter as a model for this one. DENMARK, with AUSTRALIA, suggested renaming the chapter “finance and investments,” while INDIA objected on the grounds this was not broad enough, and suggested “financial needs” instead.

SWITZERLAND also called for referencing the price of carbon.

SAUDI ARABIA, supported by INDIA, preferred to keep finance for adaptation and mitigation separate. INDONESIA proposed adding “subnational” in the scope of financial scale.

On Thursday afternoon, WGIII Co-Chair Pereira announced that a contact group, co-chaired by SAINT KITTS AND NEVIS and SWITZERLAND, would convene with the mandate to seek agreement on the title and bullets of Chapter 7. Reporting back to plenary on Friday afternoon, the contact group Co-Chairs noted growing convergence on key issues. The Group continued its work.

On Friday evening, SWITZERLAND reported from 14 hours of contact group discussions. He noted that consensus had been achieved on all bullet points but one, for which he presented two options: either referencing financial flows “to support mitigation” or “in the context of mitigation.” He added that, after extensive exchanges, no consensus had been achieved on the title.

INDIA and SAUDI ARABIA supported the first alternative and called for the title to include “finance,” with INDIA reminding delegates of TIMOR-LESTE’s point that “finance is a matter of justice and solidarity, not a matter of profit.”

Highlighting relevant financial flows other than for mitigation purposes in the private and public sector, and noting “finance and investment are two sides of the same coin,” DENMARK and



FRANCE supported the second option and a title referencing “finance and investment.”

After a bridging proposal by CHILE to combine the two alternatives by stating “financial flows in the context of meaningful and ambitious mitigation action,” reflecting wording agreed in the UNFCCC process, did not garner support, the group agreed to “financial flows to support mitigation” and to the title “finance.”

On **revised common elements across Chapters 8-13**, on Thursday afternoon, SAUDI ARABIA, with INDIA, requested deletion of “sectoral policies” and “links to sectoral targets.” INDIA suggested “sectoral futures” as alternative wording.

BELGIUM queried why human rights and gender aspects are not included, citing their importance for mitigation. Co-Chair Pereira requested the WGIII Bureau to consider these views.

Early on Saturday morning, a lengthy discussion ensued over reference to “sectoral policies and implementation” and “sectoral implications and interactions between relevant UN Conventions and other relevant international instruments.” SAUDI ARABIA, CHINA and INDIA requested deletion of both bullet points, with INDIA proposing to merge them by stating “sectoral implementations, interactions and implementation.” IRELAND, SWITZERLAND, FRANCE and others supported retaining both elements.

CHINA, supported by SAUDI ARABIA, proposed referencing “projected” instead of “sectoral” futures. GERMANY, supported by the EU and SWITZERLAND, and opposed by INDIA, requested including “cost of inaction.”

IPCC Vice-Chair Diana Ürge-Vorsatz, supported by HUNGARY and MONTENEGRO, expressed concern about the IPCC’s continued policy relevance, citing the importance of assessing policies and looking at future emissions. She added that “if we cannot talk about sectoral policies, it is a major step backwards in our 30-year history,” and cautioned against “amending language that we always accepted” and “questioning science that we always assessed.”

CHINA, with SAUDI ARABIA, called for following the IPCC mandate to refrain from policy-prescriptiveness. NEW ZEALAND responded that “assessing sectoral policies is not policy prescriptive.” SWITZERLAND cautioned against being “science prescriptive.”

Chair Skea then recalled the IPCC mandate of providing “comprehensive, objective, transparent, and relevant” information about the state of knowledge on climate change, noting this should be kept in mind as the Panel reaches the “bottom stage” of the meeting, which is when the “difficulty of the task before us dawns on us.”

Several delegates proposed the addition of an introductory bullet to the list of common elements, highlighting their indicative character.

After further WGIII Bureau consultations, CHINA, SAUDI ARABIA, and CHINA reiterated their objection to “cost of inaction,” opposed by SWITZERLAND and others. Instead of “cost of inaction,” the UK suggested “benefits of avoided impacts.”

Saying that reference to international UN conventions appeared in the background document only in the section on the AFOLU sector, SAUDI ARABIA opposed the reference in this section, which deals with common elements across Chapters 8-13. NORWAY suggested language from other chapters on “relevant” climate and non-climate agreements.

Other attempts were made by the Bureau to find consensus language using the UK and NORWAY’s proposal, but they were not accepted.

On cost of inaction, GERMANY proposed adding at the beginning of the bullet reference to “benefits.” INDIA suggested, and the group agreed, to keep it simply as “assessment of costs and benefits of mitigation options.” Eventually, the group also agreed to a proposal by SAUDI ARABIA to delete “Implications and” and leave it just at “Interactions” between relevant UN conventions and other relevant frameworks, as appropriate.

On **revised Chapter 8**, SAUDI ARABIA, supported by CHINA, INDIA, and NIGERIA proposed adding “affordability” to “demand, equity, and access to services across regions and social groups.” SAUDI ARABIA also requested removal of lists in several bullet points that provide examples, saying they would unnecessarily narrow guidance to authors.

The Group agreed to the proposed changes.

On **revised Chapter 9**, SAUDI ARABIA, supported by CHINA, requested deletion of reference to “lock-in” in relation to energy system infrastructure. AUSTRIA opposed this suggestion.

The Group agreed to a Bureau proposal stating “changes and timescales” instead of “lock-in.”

On **revised Chapter 10**, the Group agreed to the title “industry” instead of “industrial processes, product use and waste,” with the understanding that waste will be discussed as cross-cutting element, and to deletion of reference to “deep sea mining.” CHINA’s proposal to characterize mitigation options as “potential” was accepted by the Group. A discussion ensued over reference to “international aspects” or “international trade,” with many delegates proposing this aspect should be included in the list of common elements. The Group agreed to “international cooperation and related aspects.”

On **revised Chapter 11**, on Thursday afternoon, participants considered a revised proposal. Some expressed concern about the removal of references to cost and mitigation potentials of different options for this chapter. Co-Chair Pereira explained this would be taken up in a discussion of common elements to all chapters. Participants also discussed references to zero emissions transport, with some preferring to refer to “low-emissions” transport. The Group eventually agreed to having both low- or zero-emission transport, and to add a reference to public transport, as proposed by INDIA. A suggestion by CHILE and NORWAY to add references to technology and innovation was not accepted.

On **revised Chapter 12**, on Thursday afternoon, in response to CONGO’s request for clarification, Co-Chair Pereira said that costs and financing are discussed as a cross-cutting element and, in order to streamline the chapter, have been removed from the individual chapters. Accommodating BRAZIL’s and SAUDI ARABIA’s request to avoid redundant references to embodied emission reductions and SAUDI ARABIA’s proposal to widen the list of examples, the Group agreed to reference “alternative building materials” in addition to “biomaterials and material efficiency.”

CHINA’s proposal to state “potential” mitigation options was accepted by the Group. SAUDI ARABIA, with INDIA, requested adding “retrofitting” to the list of potential mitigation options and strategies for buildings and human settlements. The Bureau’s proposal to add “retrofitting and renovation” was accepted.

On **revised Chapter 13**, a revised draft was taken up on Thursday afternoon. Panel members disagreed on a bullet point on “consideration of how the AFOLU sector is treated in the NDCs

under the Paris Agreement and interactions with other relevant UN Conventions and other relevant international instruments,” with DENMARK and SWITZERLAND expressing support, opposed by INDIA, SAUDI ARABIA, CHINA and others.

JAPAN, supported by INDIA, CHINA and others, called for references to food security and rural livelihoods. SOUTH AFRICA suggested adding references to limits of mitigation in the AFOLU sector. A revised version of the chapter was presented to the WG on Friday.

On Saturday morning, INDIA, supported by JAPAN, proposed adding “food” to “security,” which was accepted by the Group. GERMANY voiced regret that “costs of inaction” could not be included in this chapter, noting its inclusion will be requested in the section on common elements across Chapters 8-13.

**Revised Chapter 14** was taken up again on Thursday afternoon. Views differed on a bullet point on “water-energy-food-ecosystem-climate change nexus, food systems, bioeconomy,” with INDIA and SAUDI ARABIA, opposed by TÜRKIYE, BELGIUM, SWITZERLAND and others, calling for its deletion. TÜRKIYE and BELGIUM also expressed support for the bullet point in relation to the IPBES Nexus report. Attempts were made by some, including LUXEMBOURG, BRAZIL and CHINA, to find alternatives to retain the idea of interlinkages. Noting that bioeconomy was a well-established notion and pointing to the G-20 agreement on 10 principles of bioeconomy, BRAZIL, opposed by INDIA, supported its inclusion. While INDIA and CHINA suggested the issue could be better taken up by WGII on adaptation, NEW ZEALAND recalled that these terms had been suggested by government-nominated WGIII scientists.

The chapter was further revised by the Co-Chair and the Bureau.

Early on Saturday morning, a request by TÜRKIYE and SWITZERLAND to maintain a reference to “nexus” was discussed, with the Group agreeing to “intersections between water, energy, food, ecosystems, climate change, food systems and bioeconomy.”

**Outcome:** On Saturday, Working Group III agreed to the revised chapter outlines for its contribution to AR7, as set out in IPCC-LXII/Doc. 13. The report will include the following chapters:

- Chapter 1: Introduction and framing;
- Chapter 2: Past and current anthropogenic emissions and their drivers;
- Chapter 3: Projected futures in the context of sustainable development and climate change;
- Chapter 4: Sustainable development and mitigation;
- Chapter 5: Enablers and barriers;
- Chapter 6: Policies and governance and international cooperation;
- Chapter 7: Finance;
- Chapter 8: Services and demand;
- Chapter 9: Energy systems;
- Chapter 10: Industry;
- Chapter 11: Transport and mobility services and systems;
- Chapter 12: Buildings and human settlements;
- Chapter 13: Agriculture, Forestry, and Other Land Uses (AFOLU);
- Chapter 14: Integration and interactions across sectors and systems; and
- Chapter 15: Potentials, limits, and risks of carbon dioxide removal.

## **Management of the Working Group Contribution to AR7**

**Work Programme and Schedule:** On Saturday morning, SAUDI ARABIA and INDIA said that, just like in other Working Groups sessions, they were unable to accept the timeline and associated budget.

NEPAL queried whether the process involved “taking note of” the implementation plans, stressing the Group could “send a positive message” from the session that way.

SAUDI ARABIA and INDIA responded they would object to “taking note of.”

CHILE and IRELAND lamented the lack of progress. AUSTRALIA said the process was not “fair nor inclusive” as “all Pacific colleagues” had now left the room due to the late hour.

CHINA underscored that agreement on the outline already represented “a milestone of our multilateral process.”

## **Other Matters**

On Saturday at noon, WGIII Co-Chair Pereira reported on ongoing work of WGIII saying activities undertaken included a call to experts to the Special Report on Climate Change and Cities.

In closing, Co-Chair Pereira thanked delegates for their flexibility and gavelled the fifteenth session of WGIII to a close on Saturday at 12:33 pm.

## **A Brief Analysis of IPCC-62**

As the planet continues to break warming records and communities around the world contend with unprecedented floods, fires, and droughts, the need for immediate and impactful action on climate change is clear. However, collective ambition to tackle climate change seems to have lost its way: in many countries, governments and corporations are backtracking on their emission reduction commitments and reinvesting in fossil fuels.

This turmoil provided a backdrop for the 62nd session of the Intergovernmental Panel on Climate Change (IPCC), where participants faced a heavy agenda and the need to resolve key outstanding issues, including the timeline for outputs of the Seventh Assessment Cycle (AR7). The Panel also needed to reach agreement on the outlines for the reports of the three Working Group and the scoping of a methodology report on carbon dioxide removal and carbon capture, utilization and storage.

Ultimately the meeting overran its scheduled time by over a day, with delegates working over 38 hours straight from Friday morning to Saturday night as they sought to reach agreement and finalize their work. Despite their exhaustion and, once again, diminished numbers, the Panel successfully concluded significant elements of its work, paving the way for Working Groups (WGs) to initiate the substantive production of their contributions to AR7. However, some key issues remain unresolved, including the implementation plan for AR7.

This brief analysis considers what happened at IPCC-62 and its implications for the Panel’s next steps.

## **Policy Relevance and Inclusion: Two Sides of the Same Coin**

Once again, the IPCC was unable to reach agreement on its implementation plan for AR7. This marks the first time in IPCC’s history that a decision on the timeline of an assessment cycle has taken so long. At stake is the possibility of providing information that policymakers in other processes—particularly the UN

Framework Convention on Climate Change—can draw on at critical points in their own decision making. While many countries want all the AR7 outputs to be available to feed into the Second Global Stocktake, the longer timelines preferred by some would not allow this. This would call into question the Panel’s mandate to be policy-relevant.

Ironically—and once again—the IPCC didn’t finish its work for hours after the scheduled conclusion of the meeting, which meant the majority of delegates from developing countries had already departed. This issue has come up in every recent meeting of the IPCC, including in the last cycle, as it results in decisions that directly affect countries that are most vulnerable to climate change being taken without them. Many countries, as well as IPCC Chair Jim Skea have repeatedly underscored this injustice and emphasized the need for the IPCC to complete its work on schedule.

For many small island developing states (SIDS) and least developed countries (LDCs) who are at the forefront of climate change impacts and lack the capacity to produce much literature and depend on IPCC assessments to inform policymaking, failure to produce a clear timeline to feed into the Global Stocktake, Global Goal on Adaptation, and other UNFCCC processes was, again, deeply frustrating.

Many participants made interventions objecting to the excessive amount of speaking time taken by a small number of large and resource-rich developing countries, to the detriment of others. It was also evident that the Chair and Co-Chairs were making efforts to ensure that delegations who had not spoken had a chance to do so before others intervened for a second or third time. The WG Co-Chairs consistently tried to ensure that countries who hadn’t been able to speak went first, and they invited countries to provide submissions online before they started revisions of the chapter outlines. Some even announced tallies of participation; for example, at one point Working Group III Co-Chair Pereira announced that 15 more countries had made interventions that day than the previous, and they had received over 500 written submissions. Still, the problem persists.

### ***The Challenges of Reviewing New Technologies***

In contrast, the inability to agree on the methodology report on carbon dioxide removal (CDR), carbon capture and storage (CCS) and carbon storage and utilization (CSU) was welcomed by many and provided temporary relief that highly uncertain and risky technologies would not be so easily included in the report. As emphasized by some observers, the IPCC itself in the AR6 identified CDR as one of the least efficient and most expensive mitigation options. It also noted risks of some of the more speculative technologies. Having the Task Force on Inventories (TFI) now provide guidance on methodologies for countries to report on these technologies as part of their inventories, many of which have not been properly tested, was sure to be controversial. Of particular concern to many was marine CDR, which includes ideas such as increasing the ocean’s alkalinity by adding minerals to the water, and ocean iron fertilization, the impacts of which are not well understood but are most likely to be irreversible and difficult, if not impossible, to contain.

Discussions of the methodology report illuminated the delicate line the IPCC must tread. As a technical body supporting countries’ reporting on their emissions, the TFI does not endorse particular technologies; rather, countries are free to decide how they account

for and reduce their emissions. It is also countries who request IPCC to assess technological options and, through the TFI, methodologies to calculate their climate change impact. But IPCC has also come to be counted on to provide advice on what constitutes dangerous interference with the climate system, and to assess climate change in a policy-relevant way. Many participants fear that including technologies with highly uncertain impacts on the marine environment would send a positive signal on their deployment, even if the report were to include caveats and disclaimers.

Ultimately, Panel members could not reach agreement on whether to include these technologies. The IPCC will have to take the question up again in the near future, possibly in time to allow Working Group III, on mitigation, to assess these technologies as part of its contribution to AR7.

### ***Balancing Integration and Independence***

IPCC-62’s main task was to agree on the substantive topics to be covered for assessment by authors during the AR7 cycle. The IPCC includes three Working Groups, each with its own assessment mandate. While the Groups are structurally independent, cross-Working Group coordination is a central topic for the IPCC: assessing vulnerability, impacts and options for adaptation (WGII) and mitigation (WGIII) depend on knowledge about the physical science basis of climate change (WGI). Despite these interconnections, deliberations highlighted different perceptions about the desirability of increased WG integration. While some delegates supported a proposal to identify key concepts common to all WGs, with the aim of enhancing joint framing and the narrative of the key AR7 outputs, others called for maintaining the autonomy of each Working Group and working with concepts native to their mandate and scope.

In particular, opponents of the proposal pointed out that integration is not as straightforward as it may seem; for some, it is convenient to separate questions about the physical science of climate change from consideration of future emission pathways or historical responsibility for this problem. This was also evident in discussions of “maladaptation.” While this is a critical concept for some countries, others object to what India has referred to as a “mitigation-centric” view of adaptation, which they fear implies limits to adaptation options when the impact of associated emissions is included.

However, as understanding of climate change has grown, calls for integration across the Working Groups have grown as well. It is more and more difficult to separate issues: solar radiation modification is an issue for WGI on the physical basis of climate change, and for WGII because this technology could have impacts on ecosystems and sectors such as agriculture. In most cases, establishing boundaries in innately interconnected Earth systems reflects the need for human organization, rather than physical realities. Ultimately, the agreed outlines provide numerous examples of integrated approaches, including for the first time a chapter that looks at the mitigation potential of system integration (WGIII Chapter 14), framing chapters on key concepts for each WG report, parallel chapters on finance for adaptation and mitigation, and consideration of carbon dioxide removal by WGI and III.

### ***Looking Ahead***

The Panel’s agreement on the chapter outlines for each Working Group represents a key milestone in this cycle, as it sets the work for authors for the next three to four years. The scope of the reports



is much broader than that of previous cycles, as there has been an exponential increase in relevant literature. A key issue going forward will be finding ways to assess the expanding and rich body of work, as well as meaningfully incorporating Indigenous and local knowledge. Technology may offer new ways to address not only the climate crisis, but, with rapid developments in artificial intelligence, the challenges of producing a comprehensive review of the state of the science and options for action.

Hovering above all of this work is the persistent challenge of achieving inclusiveness, both in the selection of diverse authors, incorporating different types of knowledge, and in the Panel's meetings. As the Vice-Governor of the Zhejiang province of China advised at the opening of IPCC-62, "If you want to go fast, go alone, if you want to go far, go together." Figuring out how to accomplish this will be a major challenge for the remainder of this assessment cycle.

## Upcoming Meetings

### 8th Session of the Global Platform for Disaster Risk

**Reduction:** This global multistakeholder forum will review progress on the implementation of the Sendai Framework for Disaster Risk Reduction. **dates:** 2-6 June 2025 **location:** Geneva, Switzerland **www:** [globalplatform.undrr.org](https://globalplatform.undrr.org)

**OEWG 3.2: Science-Policy Panel to Contribute Further to the Sound Management of Chemicals and Waste and to Prevent Pollution:** The resumed session of the Open-ended Working Group (OEWG) tasked with negotiating a new science-policy panel for chemicals and waste will seek to finalize the foundational document to establish the panel and the rules of procedure that will guide decision-making and operational aspects of the panel. **dates:** 14-18 June 2025 **location:** Punta del Este, Uruguay **www:** [unep.org/events/conference/oewg-32-science-policy-panel-contribute-further-sound-management-chemicals-and](https://unep.org/events/conference/oewg-32-science-policy-panel-contribute-further-sound-management-chemicals-and)

**62nd Sessions of the UNFCCC Subsidiary Bodies:** The 62nd sessions of the UNFCCC Subsidiary Body for Implementation (SBI) and Subsidiary Body for Scientific and Technological Advice (SBSTA) will consider a range of issues, including follow-up from COP 29. **dates:** 16-26 June 2025 **location:** Bonn, Germany **www:** [unfccc.int/calendar/events-list](https://unfccc.int/calendar/events-list)

**47th meeting of the Montreal Protocol OEWG:** The 47th meeting of the Open-ended Working Group of the Parties to the Montreal Protocol is expected to consider reports from the Scientific Assessment Panel, the Environmental Effects Assessment Panel, and Technology and Economic Assessment Panel, among other work. **dates:** 7-11 July 2025 **location:** Bangkok, Thailand **www:** [ozone.unep.org/meetings/47th-meeting-open-ended-working-group-parties](https://ozone.unep.org/meetings/47th-meeting-open-ended-working-group-parties)

**High-level Political Forum 2025:** With the theme "Advancing sustainable, inclusive, science- and evidence-based solutions for the 2030 Agenda for Sustainable Development and its Sustainable Development Goals for leaving no one behind," HLPF 2025 will conduct in-depth reviews of five of the SDGs. **dates:** 14-23 July 2025 **location:** UN Headquarters, New York **www:** [hlpf.un.org/2025](https://hlpf.un.org/2025)

**Plastics INC-5.2:** The second part of the fifth session of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment (INC-5.2) will convene to

conclude its negotiations. **dates:** 5-14 August 2025 **location:** Geneva, Switzerland **www:** [unep.org/inc-plastic-pollution/session-5.2](https://unep.org/inc-plastic-pollution/session-5.2)

**37th Meeting of the Parties to the Montreal Protocol:** MOP37 will discuss issues related to implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer. **dates:** 3-7 November 2025 **location:** Nairobi, Kenya **www:** [ozone.unep.org/meetings/thirty-seventh-meeting-parties](https://ozone.unep.org/meetings/thirty-seventh-meeting-parties)

**UNFCCC COP30:** The UN Climate Change Conference – Belém will consist of the 30th session of the Conference of the Parties (COP 30), the 20th meeting of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP 20), and the sixth meeting of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA 7) to further implementation of the Convention. **dates:** 10-21 November 2025 **location:** Belém, Brazil **www:** [unfccc.int/cop30](https://unfccc.int/cop30)

**IPCC-63:** During the 63rd session of the IPCC, delegates will advance work related to the seventh assessment cycle. **dates:** fourth quarter 2025 (TBC) **location:** TBC **www:** [ipcc.ch](https://ipcc.ch)

For additional upcoming events, see: [sdg.iisd.org](https://sdg.iisd.org)

## Glossary

AFOLU	Agriculture, Forestry, and Other Land Uses
AI	Artificial intelligence
AR	Assessment Report
CDR	Carbon dioxide removal
CIEL	Center for International Environmental Law
EDF	Environmental Defense Fund
FiTT	Financial Task Team
FWCC	Friends World Committee for Consultation
GHG	Greenhouse gas
GST	Global Stocktake
ICC	Inuit Circumpolar Council
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
LAM	Lead Author Meeting
LDCs	Least developed countries
NbS	Nature-based Solutions
NDCs	Nationally-determined contributions
SLCF	Short-lived climate forcers
SPM	Summary for Policymakers
SRM	Solar radiation modification
SYR	Synthesis Report
TFI	Task Force on National Greenhouse Gas Inventories
TG Data	Task Group on Data Support for Climate Change Assessments
TSU	Technical Support Unit
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WG	Working Group
WMO	World Meteorological Organization