

**FIFTY-FOURTH (BIS) SESSION OF THE IPCC**  
**Written Session, 14 – 16 December 2021**

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ENGLISH ONLY

**IPCC TRUST FUND PROGRAMME AND BUDGET**

**Supporting documents**

(Submitted by the Secretary of the IPCC)

# PROGRESS REPORT

## Working Group I contribution to the Sixth Assessment Report

(Prepared by the Co-Chairs of Working Group I)

The following is a report on the activities of Working Group I during the IPCC Sixth Assessment Report cycle since the 53<sup>rd</sup> (bis) Session of the IPCC (IPCC-LIII(bis)/INF.1).

### 1. Finalisation of the WGI sixth assessment report

Key activities:

- A light-touch fourth Lead Author Meeting (eLAM4) was held on 15-19 February. The meeting focused on guidance for the last stages in the preparation of the chapter and Technical Summary, including final coordination activities. The meeting discussed the next steps towards the release of the report. A webinar was organised on the science policy interface - how the WGI assessment feeds the climate policy arena, with the participation of Laurence Tubiana and Saleemul Huq.
- Final government draft chapters and the Technical Summary were submitted to the Technical Support Unit (TSU) on 12<sup>th</sup> March and 22<sup>nd</sup> March respectively. The documents were compiled, including a scientific and technical review by the Technical Support Unit and Bureau members.
- Weekly Coordinating Lead Author (CLA) meetings were held to coordinate the final stages of the report preparation and to prepare for the Summary for Policymakers (SPM) drafting process.
- A highly iterative SPM drafting process was initiated on the 22<sup>nd</sup> March with regular Bureau meetings and SPM drafting team weekly touchdown meetings. Alongside the drafting process, the SPM figure design process continued in parallel, including a user testing carried out during the Final government draft review, as well as key message development meetings and author consultations to prepare for the release of the report once published. From the 26<sup>th</sup> April the draft was finalised by TSU and Bureau members.
- The Final government draft SPM was compiled on the 28<sup>th</sup> April, with final checks made until 30<sup>th</sup> April.
- The Final government draft review took place from the 3<sup>rd</sup> May to the 20<sup>th</sup> June.
- Informal and Q&A webinars were organized by the TSU (2 duplicated sessions, on 4 themes, and 2 Q&A webinars) during the week of May 26, related to the Final Government Distribution (FGD) review
- 3158 comments were received from 47 Governments (23 developed, 23 developing /EIT countries and EU) (the Fifth Assessment Report (AR5) Working Group I (WGI) FGD had received 1855 comments from 32 Governments)
- The final drafting phase of the SPM focused on addressing the FGD review comments to enhance clarity and accuracy, carefully documenting the changes made and how review comments have been considered. Weekly drafting meetings took place, as well as regular Bureau planning meetings, and the continued work by the design team on SPM visuals, and the communications team on the development of the report key messages.
- Pre-approval training sessions were held with the drafting team on the 20<sup>th</sup> and 22<sup>nd</sup> July.
- The Final draft SPM was submitted to delegates of the 54<sup>th</sup> Session of the IPCC on the 23<sup>rd</sup> July.

## 2. Organisation of the 14<sup>th</sup> Session of WGI - a virtual approval session

Key activities:

- Collaboration with the Secretariat since November 2020 to summarise for the IPCC Executive Committee (ExCom) the implications of COVID-19 for IPCC plenary sessions, considering opportunities, barriers and options submitted to the 89<sup>th</sup> meeting of the ExCom (EXCOM-89\_item 5.1\_COVID 19 implications to Plenary sessions.pdf).
- Refinement of the summary of COVID-19 implications, submitted as an Information document to the 60<sup>th</sup> Session of the Bureau (INF. 9 - Background Note on Possible implications resulting from COVID19 on the IPCC Plenary Sessions).
- Preparation with the Secretariat of a Discussion Paper on the organisation of the 14<sup>th</sup> Session of WGI and 54<sup>th</sup> Session of the IPCC presented at the 60<sup>th</sup> (bis) Session of the Bureau.
- To enhance the Final government draft review of the Summary for Policymakers, WGI organised for Government representatives participating in the review, informal webinars on four relevant cross cutting topics, an online question and answer portal available on the IPCC review portal, and two question and answer webinars. The webinars were repeated twice to facilitate participation from different time zones. The sessions recordings and written summary of all questions and answers were made available on the review portal.
- Through the ExCom, the establishment of a Task Group to advise the WGI Co-Chairs on the preparation of the 14<sup>th</sup> Session of WGI, as well as address the organisation of the 54<sup>th</sup> Session of the IPCC. The Task Group was chaired by Ko Barrett and included WGI Bureau members (Greg Flato, Edwin Aldrian, Fatima Driouech), WGI TSU (Anna Pirani, Sarah Connors) and the Secretariat (Ermira Fida). The group met regularly and developed a Guidance Note for participants on the modalities of the sessions that included the session schedules(<https://docs.google.com/document/d/1hFYV1YAoMXn-<moHF7222xJbhrMcrkyvweNpRal7VEqU/edit?usp=sharing>), building on a consultation process with national Focal Points, ExCom, the WGI Bureau and SPM drafting authors. A step-wise process for approval with a clearly defined schedule was designed based on past WGI approval experience was designed. The aim was to ensure that all participants knew what aspects of the SPM would be discussed when, including the provision of written documents (CRPs) tracking progress in the discussions. The scheduling included time zone considerations for the main drafting team representatives. The document was provided to participants alongside the invitation letter to participate in these sessions, sent on 29<sup>th</sup> June.
- WGI TSU contributed to briefing sessions for delegates on how the 54<sup>th</sup> IPCC session and 14<sup>th</sup> WGI sessions were organised on 19-22 July.
- The 14<sup>th</sup> WGI Session took place from the 26<sup>th</sup> July to the 6<sup>th</sup> August. The meeting schedule was implemented successfully, with the step-wise assessment process explained in the Guidance Note. Government delegates facilitated contact groups, including a briefing provided before each meeting by WGI TSU. In total, the online meeting took place over 186 hours (including parallel sessions).
- The press conference took place on the 9<sup>th</sup> August with a presentation by the WGI Co-Chairs. Over 9,000 viewers watched the press conference being streamed on YouTube, and over 370 interviews were given over the 7<sup>th</sup> and 9<sup>th</sup> August. Between the 9<sup>th</sup> and 23<sup>rd</sup> August, there were more than 739,000 pieces of media coverage and social media posts about the report. Of these, more than 300,000 appeared on the day of the launch. Another 170,600 were released the following day and further 265,300 were published by 23 August. During the same period, media coverage of the report was recorded in 195 countries and in 72 languages.

## 3. Communication and outreach

Media training

- Individual coaching sessions were organized from January to August 2021. A total of 97 authors benefited from at least one individual training session as part of this activity.

- In addition, a media skills workshop was held on July 16, 2021, and a final preparatory communication workshop was held for all authors on Saturday August 7, immediately after the approval session. These two workshops were offered twice to cover all time zones and recordings were made available after the events.
- The TSU coordinated, with the support of the IPCC Secretariat, the preparation of a press kit which was published, under embargo, between 6 and 9 August. The press kit is available here: <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>

#### Videos

- WGI has prepared several videos including a video "trailer" that was shown at the press conference (<https://vimeo.com/582884673>).
- The production of a series of explainer videos for social media is underway ("climate change explained"). These feature report authors explaining key concepts (for example carbon budget, cities, COVID19, water cycle, human attribution) in plain language (#climatechangeexplained, available on <https://www.youtube.com/c/IPCCGeneva/videos> with "Climate Change Explained").
- A mini-documentary was produced, including interviews with six authors and the co-chairs. It was broadcast on the 4<sup>th</sup> November ahead of the presentation of the report to SBSTA (<https://youtu.be/e7xW1MfXjLA>).

#### Bureau outreach activities

- Presentations have been given to an event with President of the General Assembly, a United Nations (UN) Session on insurance / economics and net-zero, a UN Security council Arria-formula meeting on sea level rise, the UN human rights council, the UK mission in Geneva with Italy as part of the preparations for COP26, and Geneva Environment Network (GEN) for the Geneva diplomatic and non-governmental organization (NGO) community.
- Bureau members have been involved with outreach activities across regions including at national press conferences, parliamentary bodies, academies of sciences, public and private sectors, and academic audiences.

#### COP26

- WGI presented the report at four events organised by SBSTA: Phase 2 of the Structured Expert Dialogue sessions on global and regional aspects, Earth Observations Day, and a Special Event on the WGI report.
- WGI contributed to the coordination of the Science Pavilion. Events were organised for Africa, Asia, Australasia, Europe, Central and South America, North and Central America, an event was organised on the use of Climate emulators, on the ocean and cryosphere, and WGI contributed to events on emerging risks, what science contributes to climate action, climate and SDGs, the future of climate modelling, adaptation and risk, water and climate, short-lived climate pollutants, and cities.

#### Regional fact sheets

- Regional fact sheets have been developed to provide, in two pages, the key messages from the report for the corresponding region with direct links to relevant maps and data from the Interactive Atlas: Africa, Asia, Australasia, Europe, Central and South America, North and Central America, the polar regions, the oceans, the Small Islands, the Mountains and urban regions.
- A survey was carried out with focal points and authors of all three WGs on the clarity, usefulness, relevance and thoroughness of the information selected by region (more than 700 comments were received).
- The fact sheets were released with the report August 9, they are available here: <https://www.ipcc.ch/report/ar6/wg1/#Regional>

Fact sheets of physical climate information relevant for sectors

- The TSU has started to prepare summary sheets by sector of activity. At this stage, twelve sectors have been identified: Cities, Transport, Energy, Health, Tourism, Agriculture, Fishing, Forestry, Water, Ecosystems, Insurance, Natural disasters. The format will be similar to that of the regional files.
- A consultation with users from different sectors in different regions, as well as Focal points has been carried out. See the questionnaire: <https://www.surveymonkey.com/r/N8XKZ3V>

Additional Outreach products

- Work is underway to prepare a summary for actuaries, in collaboration with the International Associate for the Association of Actuaries, and a summary for all of the report.
- An infographic summary of the WGI assessment process is in preparation.
- WGI will contribute to the AR6 Summary for Urban Policymakers (<https://www.resilienceshift.org/new-summary-for-urban-policymakers-initiative-announced> )

#### 4. WGI contribution to TG-Data and the implementation of FAIR data principles

- WGI has provided a summary of the implementation of FAIR data principles as part of the WGI assessment to the 2nd face-to-face meeting of TG-Data held on the 22<sup>nd</sup> October.
- WGI is working with the Data Distribution Centre to document and curate datasets that underpin the report figures, including a meticulous process of quality control. The data of the SPM figures was made available with the report publication on the 9<sup>th</sup> August (<https://catalogue.ceda.ac.uk/uuid/ae4f1eb6fce24adcb92ddca1a7838a5c>). Work is underway to archive chapter figures as well as code underpinning the figures on the WGI GitHub repository (<https://github.com/IPCC-WG1> ).
- Regional outreach events are being organised with TG-Data, the Interactive Atlas and the WGI regional author teams. These will include summaries of the key findings of the report, information on what data is assessed and how to access it, and training on the use of the Interactive Atlas.
- The final version of the Interactive Atlas (IA) was launched on the 27<sup>th</sup> September in a special outreach event hosted by the Government of Spain. Since the report was published and the IA was available online, there have been 595, 000 unique users. The tool has been visited by users from almost every country in the world. After a peak of 500K users during the first two weeks, this has now stabilized at about 200 users per day. The number of issues (errata and problem/suggestion reporting) that have been submitted are 75 (22 after the final version on the 27<sup>th</sup> September). All issues correspond to minor problems and suggestions. There are no errata reported for the final version. About 20 information/support requests have been sent to the [ipcc-ddc@ifca.unican.es](mailto:ipcc-ddc@ifca.unican.es) helpdesk. The IA is fully compliant with FAIR data principles, including reusability. It is based on open source software (the R package `climate4R`) and includes provenance information (based on the METACLIP provenance framework). The code reproducing some intermediate products (e.g. warming levels, re-gridded indices for common grids, etc.), and some of the figures underpinning the assessment from in the Atlas chapter (regional synthesis figures) and in the Interactive Atlas (currently the spatial maps) are available from the IPCC-WGI GitHub repository (doi: 10.5281/zenodo.3691646). Short “how-to” videos, each dedicated to a specific Interactive Atlas functionality will be prepared by the TSU, the IA team and authors of the Atlas chapter.

## PROGRESS REPORT

### Working Group II contribution to the Sixth Assessment Report

(Prepared by the Co-Chairs of Working Group II)

The following is a report on the activities of Working Group II during the IPCC Sixth Assessment Report cycle since the 53<sup>rd</sup> (bis) Session of the IPCC (IPCC-LIII(bis)/INF.4).

#### 1. Summary

Recent key activities and meetings for Working Group II, in chronological order, include:

- Fourth Lead Author Meeting for the Working Group II contribution to the IPCC Sixth Assessment Report, Guatemala (virtual), 1–12 March 2021;
- Summary for Policymakers Writeshop for the for the Working Group II contribution to the IPCC Sixth Assessment Report, held virtually 11–15 June 2021;
- Publication of the Workshop Report for the IPBES-IPCC Co-Sponsored Workshop on Biodiversity and Climate Change, doi:10.5281/zenodo.4659158, 24 June 2021;
- Participation in the Second Core Writing Team Meeting of the Synthesis Report for the IPCC Sixth Assessment Report, held virtually 16–20 August 2021;
- Completion of the Final Draft of the Working Group II contribution to the IPCC Sixth Assessment Report, September 2021;
- Final Government Distribution of the Final Draft of the Working Group II contribution to the IPCC Sixth Assessment Report and Government Review of the Summary for Policymakers, 1 October – 26 November 2021;
- IPCC-UN HABITAT- GCoM Co-Sponsored Innovate4Cities Conference, held virtually 11–15 October 2021;
- Participation in the Writeshop for the preparation of the Summary for Policymakers of the Synthesis Report for the IPCC Sixth Assessment Report, held virtually 19–20 October 2021;
- Preparation of the ICOMOS-UNESCO-IPCC Co-Sponsored Meeting on Culture, Heritage, and Climate Change, to be held 6–10 December 2021;
- Preparation of the 12<sup>th</sup> Session of Working Group II, February 2022.

#### 2. Activities in support of the Working Group II Sixth Assessment Report

Key activities completed or in preparation since the report prepared for the 53<sup>rd</sup>(bis) Session of the IPCC:

- From 11–15 June, Working Group II organized a ‘Writeshop’ to support the preparation of the Summary for Policymakers. The meeting built on the outcomes of Fourth Lead Author Meeting, with the goal to advance the next iteration of the Summary for Policymakers, including finalizing the structure and storyline, agreeing indicative content as well as a set of figures and tables to support the narrative, and envisioning the next steps to complete the Final Draft and respond to the Expert and Government Review comments. The authors of the Technical Summary joined the Drafting Authors of the Summary for Policymakers on the last day of the meeting to facilitate the handshake between the Technical Summary and Summary for Policymakers and discuss common figures.
- The IPBES-IPCC Co-Sponsored Workshop Report on Biodiversity and Climate Change was launched on 10 June 2021. It met wide interest in the media and was discussed by the G7 and G20 meetings, as well as CBD-COP15. The Workshop Report is considered in the relevant sectoral and regional chapters of the WGII AR6 Final Draft.

- In support of the preparation of the WGII AR6 Final Draft, an interim ‘pre-Final Draft’ was delivered by the 18 Chapters and 7 Cross-Chapter Papers between 1 and 8 July. An internal commenting period was held from 9 to 30 July. The period offered an opportunity for authors to access a working version of the chapters and papers and provide any feedback in support of the quality control of the report. This stage also allowed for an improved calibration opportunity within Working Group II as well as across the Sixth Assessment Report. 43 authors submitted 1,679 comments on the ‘pre-Final Draft’.
- On 3 September 2021, the Final Draft of the Working Group II contribution to the IPCC Sixth Assessment Report was submitted to the Working Group II Technical Support Unit for compilation ahead of the Final Government Distribution and Government Review of the Summary for Policymakers.
- On 1 October 2021, the Final Drafts of the 18 Chapters, 7 Cross-Chapter Papers, Technical Summary, Annex I: Global to Regional Atlas and Annex II: Glossary were made available to Focal Points for the Final Government Distribution and the Summary for Policymakers submitted for Government Review. The eight-week period will close on 26 November 2022.
- The IPCC-UN HABITAT-Global Covenant of Mayors Co-Sponsored Innovate4Cities Conference was held virtually from 11 to 15 October 2021. The conference is a follow up to the co-sponsored Cities and Climate Change Science Conference held in 2018. The Innovate4Cities Conference was an international gathering at the nexus of cities, climate change science and innovation. Over 7000 individuals registered to participate in the 220 sessions and engage with the more than 200 speakers. During the week the conference platform included over 20,000 visits. A report of the conference is currently being produced. Additional information on the co-sponsored conference, including the detailed programme, is available from the Innovate4Cities [website](#).
- Work continues towards the ICOMOS-UNESCO-IPCC Co-Sponsored Meeting on Culture, Heritage and Climate Change. The Scientific Steering Committee for the meeting, which includes representatives from the three Working Group Bureaux and is co-chaired by the three sponsor organizations, is currently finalizing the participant list and programme for the meeting. Three white papers are being developed to initiate discussion among the participants. The co-sponsored meeting will be held virtually from 6 to 10 December 2021.

### 3. Meetings in support of the Working Group II Sixth Assessment Report

Key meetings completed or in preparation since the report prepared for the 53rd(bis) Session of the IPCC:

- The Working Group II Fourth Lead Author Meeting (eLAM4) was held virtually over two weeks from 1–5 and 8–12 March. The meeting, originally scheduled for 1–7 November 2020, in Guatemala, at the kind invitation of the Government of Guatemala, was postponed in response to the challenges arising from the COVID-19 pandemic. Although it was not possible to travel to Guatemala, efforts undertaken by the Government of Guatemala, the authors from Guatemala, and the Technical Support Unit attempted to support a virtual Guatemala and introduce participants to the culture of Guatemala. In addition, traditional music was shared before the start of each call, all participants were provided with Zoom backgrounds with photos from Guatemala, and the daily newsletter included recipes and stories from the authors from Guatemala. The Opening Ceremony was offered with Spanish/English interpretation and included introductory videos from Guatemala, an Opening Blessing by Mayan Elders, and Welcome Remarks from the Minister of Environment and Natural Resources.

More than 260 participants from over 60 countries attended the 28 virtual meetings organized over the two weeks. Cross-Working Group topics included participation of authors as well as Bureau and TSU members from WGI, WGIII and the Synthesis Report. During eLAM4 work was advanced on a number of cross-chapter topics as well as the Global to Regional Atlas, the Technical Summary, and the Summary for Policymakers.

Additional individual chapter, cross-chapter paper, and cross-chapter box meetings were held in the week before and in the week after the two weeks of the core of eLAM4. The authors considered comments received during the Government and Expert Review of the Second Order Draft and began work on the Final.

A media briefing, a national outreach event open to the public, and a regional outreach event targeting policymakers and stakeholders from Central America were organized with the Government of Guatemala. The events were offered in Spanish with English translation and were well-received, drawing unprecedented participant numbers.

- The Twelfth Session of Working Group II is currently scheduled for 14–18 February 2022 and will be hosted by the Government of Germany. During this Session the Summary for Policymakers will be approved and the underlying report accepted. Recognising the close proximity of the Working Group II and Working Group III Sessions, the two Working Groups intend to harmonise meeting arrangements as closely as possible for the benefit of all participants while building on the experience from the Working Group I approval session. A consultation paper on the format and duration of the Working Group II and Working Group III Sessions was prepared and presented to the Executive Committee at its 98th Meeting on 6 October. The consultation paper was then circulated to IPCC member Governments for feedback on 14 October. To further facilitate the efficient approval of the Summary for Policymakers, webinars between SPM Drafting Authors and government representatives are planned for January 2022.

#### **4. Cross-Working Group Collaboration**

- The cross-Working Group collaboration with members of the Bureau, Authors, and Technical Support Units has continued. The move to virtual meetings due to the COVID-19 pandemic has subsequently resulted in increased cross-Working Group participation in online meetings. The strong cross-Working Group commitment and engagement have resulted in the preparation of cross-Working Group Boxes, progressed the cross-Working Group handshakes, and continue to improve the consistency across Working Groups.
- The Working Group II authors selected for the Synthesis Report Core Writing Team as well as members of the Working Group II Bureau and Technical Support Unit participated in the Second Core Writing Team Meeting of the Synthesis Report to the IPCC Sixth Assessment Report from 16 to 20 August January 2021 and in the Summary for Policymakers Writeshop held from 19 to 20 October 2021.



# PROGRESS REPORT

## Working Group III contribution to the Sixth Assessment Report

(Prepared by the Co-Chairs of Working Group III)

### 1. INTRODUCTION

The following is a report on the activities of Working Group III during the IPCC Sixth Assessment Report cycle, since the 53<sup>rd</sup> (bis) Session of the IPCC (IPCC-LIII(bis) INF. 2) in March 2021. The report covers:

- Preparation of the Working Group III contribution to the Sixth Assessment Report, including:
  - Collation of Government and Expert Review comments on the Second Order Draft
  - Fourth Lead Author Meeting, held virtually, April 2021
  - Interim Internal Review of pre-final draft
  - Light Touch Stocktake author meeting, held virtually, September 2021
  - Summary for Policymakers Writeshop, held virtually, October 2021
  - Preparation for the Fourteenth Session of Working Group III
  - Coordination of cross-Working Group topics
- Working Group III contribution to the Synthesis Report
- Stakeholder engagement
- Working Group III contribution to TG-Data
- COVID-19 impact on the Working Group III schedule
- Technical Support Unit
- Communications and outreach
- Proposal for Expert Meeting on Scenarios

### 2. PREPARATION OF THE WORKING GROUP III CONTRIBUTION TO THE SIXTH ASSESSMENT REPORT

#### 2.1 Collation of Government and Expert Review comments on the Second Order Draft

The Government and Expert review of the Second Order Draft closed on 14 March 2021. In total, 3,196 Experts registered to review the draft. Over 32,500 comments were received across the report, from 854 Experts and Governments. The Technical Support Unit (TSU) compiled all comments received and circulated to the chapter teams. The TSU Science Team conducted a careful triage process to identify priority issues to be addressed during its fourth Lead Author Meeting.

#### 2.2 Fourth Lead Author Meeting

The fourth Lead Author Meeting of the Working Group III report took place 19-23 April 2021 and was kindly hosted by the government of Italy. Due to restrictions associated with COVID-19, the Working Group III Bureau consulted with its authors on their ability and willingness to travel to a physical Lead Author Meeting. Based on the results of this consultation, it was noted that neither a physical nor a hybrid meeting would allow for an inclusive event with balanced participation across the author team and so the Working Group III Bureau made the decision to hold the meeting virtually.

In total, 290 participants took part in the virtual meeting, including Working Group III Coordinating Lead Authors, Lead Authors, Review Editors, Chapter Scientists, Bureau Members and the TSU, as well as authors and Bureau members from Working Group I and Working Group II, IPCC Vice-Chairs and members of the IPCC Secretariat. Twelve Breakout Group meetings took place on topics of cross-chapter interest, with many resulting in ongoing discussions after the meeting. A separate meeting on the Summary for Policymakers was held with all Coordinating Lead Authors and Working Group III Bureau participating.

#### 2.3 Interim Internal Review of pre-final draft

As part of quality assurance, to ensure consistency across chapters and summary products, an Interim Internal Review of pre-final draft chapters and annexes and integrative elements of the Technical Summary was held at

the end of August and into September 2021. An earlier review of the Summary for Policymakers was held July to August 2021.

## **2.4 Light Touch Stocktake author meeting**

Following the model of the successful Light Touch Stocktake author meeting held in October 2020, the Working Group III Bureau convened another such meeting in September 2021. The objective of the meeting was to assess progress and prepare chapter teams for submission of the final draft of the Working Group III contribution to the Sixth Assessment report in November 2021.

The meeting was held virtually, with plenary sessions (repeated to accommodate western and eastern time zones) and dedicated meetings to consider topics of cross-chapter relevance. The meeting was attended by approximately 200 participants, including Working Group III authors, Bureau Members and the TSU.

## **2.5 Summary for Policymakers Writeshop**

To prepare the Final Draft Summary for Policymakers (SPM) for its government review commencing in November 2021, a Writeshop meeting of all SPM drafting authors was convened on 6-8 October 2021. The SPM author team, supported by Bureau Members and the TSU, reviewed the overall SPM narrative and made revisions to headline statements and figures in response to government and expert comments received on the first draft SPM, included as part of the Second Order Draft review, and in light of new developments in chapter material. Supporting the work on figures, an external graphic design contractor also attended the session.

## **2.6 Preparation for the Fourteenth Session of Working Group III**

The Fourteenth Session of Working Group III is currently scheduled for 21-25 March 2022 and will be hosted by the Government of the United Kingdom of Great Britain and Northern Ireland. During this Session the Summary for Policymakers will be approved and the underlying report accepted. Recognising the close proximity of the Working Group II and Working Group III Sessions, the two Working Groups intend to harmonise meeting arrangements as closely as possible for the benefit of all participants while building on the experience from the Working Group I approval session. A consultation paper on the format and duration of the Working Group II and Working Group III Sessions was prepared and presented to the Executive Committee at its 98th Meeting on 6 October. The consultation paper was then circulated to IPCC member Governments for feedback on 14 October. To further facilitate the efficient approval of the Summary for Policymakers, webinars between SPM drafting authors and government representatives are planned for January 2022.

## **2.7 Coordination of cross-Working Group topics**

Working Group III Bureau Members, the TSU and authors have continued to engage in cross-Working Group activity, with participation facilitated by virtual meetings. Particular attention has been paid to cross-Working Group boxes and Working Group III and Working Group II have collaborated closely to this end, developing cross-Working Group boxes for inclusion in the Working Group III Second Order Draft.

There have been extensive discussions with Working Group I regarding handover issues such as climate emulators and carbon budgets.

Productive work continues on the definition of key terms in the shared AR6 glossary.

## **3. WORKING GROUP III CONTRIBUTION TO THE SYNTHESIS REPORT**

Working Group III Bureau Members, authors nominated to the Core Writing Team or as Review Editors for the Synthesis Report, and TSU members participated in the second Core Writing Team meeting of the Synthesis Report in August 2021, and the Synthesis Report SPM Writeshop in October 2021.

## **4. STAKEHOLDER ENGAGEMENT**

In March 2021, the University of Southern California's Public Exchange programme (Price School of Public Policy) commenced a project that involved user testing of draft SPM figures from the Government and Expert Review on a sample of individuals engaged in policymaking. These individuals represented the range of policymakers expected to use the SPM for practical policymaking purposes post-approval.

## **5. WORKING GROUP III CONTRIBUTION TO TG-DATA**

Working Group III continues to support the application of TG-Data principles as part of its assessment, participating in TG-Data Executive Meetings and supporting reviews of TG-Data guidance that will be adopted by the Data Distribution Centres.

Working Group III has finalised the process for archiving its SPM and Technical Summary figures with the new service provider MetadataWorks. The archival process for the SPM figures has already started, and it will be followed with the archival of Technical Summary figures.

## **6. COVID-19 IMPACT ON THE WORKING GROUP III SCHEDULE**

At the time of its last Progress Report to the Panel, the Working Group III Bureau remained hopeful that the Final Draft for Final Government Distribution (FGD) and second draft Summary for Policymakers (SPM) could be submitted for review by governments by 09 August 2021; however, following further consultation with authors on their progress on chapters, together with an assessment of the review comments received on the Second Order Draft, the Working Group III Bureau concluded that it would not be possible to prepare a credible Final Draft in terms of scientific rigour and inclusivity by that date. As a consequence, it was requested that Panel approve the following changes to the Working Group III schedule:

- The Working Group III Government Review of the SPM postponed to 29 November 2021 to 30 January 2022, instead of 9 August to 3 October 2021.
- The Working Group III Approval Plenary is moved later to 21-25 March 2022, instead of 5 days between 10-30 January 2022.

These changes had implications to the schedules of Working Group II and the Synthesis Report.

## **7. TECHNICAL SUPPORT UNIT**

In light of the impacts of COVID-19 (see above), the Co-Chairs have discussed with the co-sponsors of the Working Group III Technical Support Unit, the Engineering and Physical Sciences Research Council (EPSRC) and the UK Department for Business, Energy and Industrial Strategy (BEIS), the extension of financial support to cover completion of the AR6 cycle including outreach. EPSRC funding now extends to March 2023 and that of BEIS to December 2022. We expect a further extension of BEIS support to March 2023, the anticipated end of the AR6 cycle.

## **8. COMMUNICATIONS & OUTREACH**

During the Working Group III fourth Lead Author Meeting in April 2021, media training was provided to Working Group III authors. This training aimed to help authors develop skills and techniques for delivering interviews with press/media after approval of the report.

Also, as part of the fourth Lead Author Meeting, Working Group III held an outreach event open to the public and hosted with the Centro Euro-Mediterraneo sui Cambiamenti climatici (CMCC) and the RFF-CMCC European Institute on Economics and the Environment (EIEE). Titled 'Climate Change and Our Future: Driving the Transition', the event provided members of the public with the opportunity to engage with scientific experts, young leaders and artists, and government representatives.

In June, Working Group III (with the support of Working Groups I and II) led a programme for IPCC authors on communicating effectively with policymakers. The first set of associated webinars were run for Working Group I authors in advance of their approval session. Another set will be run for Working Group II and III authors in early 2022.

The Sixth Assessment Report communications strategy continues to be implemented. The Working Group III Co-Chairs, Bureau Members, authors, and TSU members remain actively engaged in communicating the plans and work of Working Group III. A number of media interviews and outreach activities have been undertaken in Working Group III after the approval of the Working Group I report.

## **9. PROPOSAL FOR EXPERT MEETING ON SCENARIOS**

Working Group III, in collaboration with Working Group I and Working Group II, is developing a cross-Working Group proposal for an Expert Meeting on Scenarios. In line with Rule 7.1 on IPCC Workshops and Expert Meetings in Appendix A to the Principles Governing IPCC Work, a proposal for the workshop is provided for consideration by the Panel (IPCC-LIV(bis)/Doc. 2, Add. 2) to support the request for addition of budget line “WG III Expert Meeting on Scenarios” (increase of CHF 187,200) included in IPCC-LIV(bis)/Doc. 2 (Annex 13).

## **PROGRESS REPORT**

### **Synthesis Report of the Sixth Assessment Report**

(Prepared by the Chair of the IPCC)

The following is a report on the activities of the Synthesis Report of the IPCC Sixth Assessment Report cycle since the 53<sup>rd</sup> (bis) Session of the IPCC (IPCC-LIII(bis)/INF. 3).

#### **1. Development and Internal Review of the Synthesis Report Pre-Draft**

After the First Meeting of the Core Writing Team (CWT-1) held virtually from the 25<sup>th</sup> to 29<sup>th</sup> of January 2021, the CWT successfully developed the SYR Pre-Draft from January to May 2021. This Pre-Draft was submitted for an 8-week internal review on the 31<sup>st</sup> of May until the 25<sup>th</sup> of July 2021. Internal reviewers include the Core Writing Team (CWT), Synthesis Report (SYR) Scientific Steering Committee (SSC), all Working Group authors, and members of the Working Group (WG) Technical Support Units (TSUs). The internal Pre-Draft received a total of 1905 comments, from 52 reviewers. The Core Writing Team examined those comments and how to address them during the Second Meeting of the Core Writing Team (CWT-2) in August 2021.

#### **2. SYR Key Messages Development**

After the SYR Pre-Draft was submitted for internal review, the Technical Support Unit for the AR6 Synthesis Report (SYR TSU) organized a series of 3 workshops in June and July 2021 to develop the key messages for each Section of the SYR. The Section Facilitators developed a first draft of key messages, to use as 'discussion starters' during the workshop. The CWT provided their feedback on those during the workshop moderated by communications specialist. After the workshop, the Section Facilitators, with the help of the SYR TSU and communications specialist, revised the draft key messages to include feedback received from the CWT, with the understanding that these would continue evolving as the draft developed. The set of key messages developed were strong ground work for the development of the SYR SPM strawperson, later in September 2021.

#### **3. Second Meeting of the Core Writing Team**

The second meeting of the Core Writing Team (CWT-2) was held virtually from the 16<sup>th</sup> to the 20<sup>th</sup> of August 2021, organized by the SYR TSU with a support from the IPCC Secretariat. In attendance were the CWT members – thirty (30) authors from nineteen (19) countries, the IPCC Vice-Chairs, the Working Group Co-Chairs, members of the Technical Support Units (TSU) of the Working Groups, and the IPCC Secretary. The Scientific Steering Committee of the SYR (SYR SSC) provided scientific guidance to the CWT in the meeting.

Over five days, the main objectives of the meeting were to consider the 1905 internal review comments received on the Pre-Draft of the SYR, deal with cross-sectional issues, as well as to adjust the SYR to revisions in the underlying Working Group material. The first day involved presentation by the three WGs on revisions on key elements of their respective reports and implications for the SYR sections. Section meetings were conducted on the second and third days to identify critical issues from the internal review comments, implications for key messages, and to establish a work plan for the coming months. The fourth day was spent in meetings to address cross-sectional issues emerging from the review comments, emphasizing the need for consistency and a truly integrated AR6 Synthesis Report. Those cross-sectional issues were: treatment of regional information in the SYR; equity and just transitions; carbon budgets, net zero and negative emissions; Nationally Determined Contributions; and consistent messaging around 1.5°C.

Despite the inherent challenges of a virtual meeting across different time zones, the deliverables expected from CWT-2 were successfully achieved thanks to the outstanding work of all the participants, and with valuable learnings from CWT-1. A detailed workplan has been established for the development of the SYR Draft and schedules leading up to the Third Meeting of the Core Writing Team (CWT-3).

#### **4. Section Team Bi-Weekly Call**

The sections team and Section Facilitators continue to conduct regular bi-weekly calls and dedicated figures/subsection calls as the CWT authors work hard in preparing the SYR Draft which will be submitted for Government and Expert review from 10<sup>th</sup> January to 20<sup>th</sup> March 2022.

#### **5. Development of the SYR Summary for Policy Makers**

The process of developing the SYR Summary for Policy Makers (SPM) began in September 2021. Through a series of virtual meetings and consultations, the IPCC Chair, SYR TSU, and the Section Facilitators developed a strawperson structure with guidance and feedback of the SYR SSC. This SYR SPM strawperson structure was presented to the CWT members in a series of Q&A sessions on the 14<sup>th</sup> of October 2021. A SYR SPM Writeshop was then held over 2 days on the 19<sup>th</sup> and 20<sup>th</sup> of October 2021 to flesh out of the narrative under the strawperson structure. This included the development of preliminary text, and proposals for cross-sectional visual intents. In attendance were the CWT members, SYR SSC members, the SYR TSU, members of the WG TSU and the IPCC Secretary. The IPCC Secretariat and colleagues from the WG TSUs provided invaluable support to run the writeshop. Communications specialist (Sue Escott) provided feedback on the development of the strawperson document. The SYR SPM will now be developed by the SPM writing team comprising the IPCC Chair, IPCC Vice Chairs, WG Co-Chairs, Section Facilitators, the IPCC Secretary, and members of the SYR and WG TSUs. A preliminary draft of the SYR SPM will undergo an internal review from 29<sup>th</sup> November to 5<sup>th</sup> December 2021.

#### **6. Engagement with the WGs**

The SYR TSU has engaged in Working Group activities, to keep updated with the WG reports content. Particularly, the SYR TSU was invited to participate in:

- WGII SPM writeshop from 21-25 June 2021
- WGI Approval Session from 26 July to 6<sup>th</sup> August 2021
- WGII SPM writeshop from 8-9<sup>th</sup> September
- WGIII SPM writeshop from 4-6 October 2021

The CWT was also invited to participate in the Working Group I (WGI) internal review of its Technical Summary (TS) from 30 March to 11 April 2021; Working Group II (WGII) internal review of its chapters from 9 to 30<sup>th</sup> July 2020 and internal review of the SPM from 8 to 22 October 2021; and Working Group III (WGIII) interim review of the SPM from 26<sup>th</sup> July to 5<sup>th</sup> September 2021 and interim review of the TS and chapters from 30 August to Sunday 12 September 2021.

The first day of CWT-2 was dedicated to making the CWT aware of revisions that had been made to WGI SPM following its approval, and updates to WGII and III in response to their Second Order Draft review comments. For the SYR SPM writeshop, the WGIII co-chairs provided a pre-recorded video to inform the CWT of the outcomes of the WGIII SPM writeshop.

#### **7. The Technical Support Unit for the AR6 Synthesis Report.**

Three new staff members joined the SYR TSU: Dr. Yonghun Jung (based in Republic of Korea) joined in May 2021 as Senior Scientist; Ms. Arlene Birt (based in USA) joined in September 2021 as Graphics Officer;; Mr. Dan Jezreel A. Orendain (based in the Philippines) joined as Assistant to the SYR TSU in September 2021.

## **8. Monitoring the impacts of COVID-19 on the capacity of authors to contribute to AR6 SYR**

The impacts of the COVID-19 pandemic continue to affect authors, SYR SSC members and TSU members. It has led to delays in the Working Group schedules, which has impacted the SYR schedule. Indeed, with a hard stop to the SYR in September 2022, the delays in WG reports have meant that there is a considerable overlap of the SYR development especially with the finalization of WGII and WGIII reports, overwhelming the authors and their capacity to engage productively in the SYR. The impacts of the pandemic have also led to a fully online preparation of the report, replacing what would otherwise have been in-person meetings with virtual activities. Whilst considerable attention has been placed on not over-burdening authors, moving to online activities spread over multiple days compared to in-person meetings, has increased considerably the number of meetings that authors are participating in. This has also significantly increased the work of the TSU, for example, working to ensure inclusivity through fast and thorough documentation of discussions, repeating activities in multiple time zones. Additionally, while some authors had met prior to the pandemic through their WG activities, the SYR activities began only after the pandemic and have only ever been virtual. Many CWT authors are pointing to this limitation and to the challenges linked to being online from the get go.

## **PROGRESS REPORT**

### **Task Force on National Greenhouse Gas Inventories**

(Prepared by the Co-Chairs of the Task Force on National Greenhouse Gas Inventories)

This report describes the progress in the work of the Task Force on National Greenhouse Gas Inventories (TFI) since the 53<sup>rd</sup> (bis) Session of the IPCC in March 2021 (IPCC-LIII/INF. 5). It covers progress in:

- Methodological work on short-lived climate forcers (SLCFs);
- The development and maintenance of the IPCC Inventory Software;
- The data population and maintenance of the IPCC Emission Factor Database.

#### **1. Methodological Work on Short-lived Climate Forcers (SLCF)**

The preparatory work for the Methodology Report on SLCF (Decision IPCC-XLIX-7) is ongoing. In accordance with the Decision IPCC-XLIX-7, the TFI Technical Support Unit (TFI TSU) conducted technical analysis work together with other experts including those who were invited to the expert meetings mentioned below, by collecting and compiling information on relevant SLCF source categories and available methodologies for each inventory sector -Energy, Industrial Processes and Product Use (IPPU), Agriculture, Forestry and Other Land Use (AFOLU), Waste. The information collected was then summarized by TFI TSU in tables of SLCF source categories and lists of issues to support the work at the expert meetings.

The TFI originally planned to hold two expert meetings in 2020, but they were postponed to 2021 because of restrictions to travels and meetings caused by the COVID-19 outbreaks. The TFI held these expert meetings as a single virtual Joint 1<sup>st</sup> and 2<sup>nd</sup> expert meeting from 11 to 22 October 2021 covering all inventory sectors (See Annex I for the statistics of experts invited to this meeting who were selected by the Task Force Bureau in accordance with Section 7.1 of Appendix A to the Principles Governing IPCC Work. See Annex II for the list of participants.) At this expert meeting, a list of all significant source categories of SLCFs was compiled, and issues for further consideration were identified. The report of this expert meeting is under preparation and will be published in early 2022. It will inform the 3<sup>rd</sup> expert meeting planned for April 2022, and will eventually serve as the basis for the work at the Scoping Meeting for the Methodology Report that will be held during the IPCC seventh assessment cycle (AR7 cycle) in accordance with the agreement by the Panel at its 53<sup>rd</sup> bis Session.

#### **2. IPCC Inventory Software**

The TFI keeps improving the IPCC Inventory Software and supporting its users. A new beta version, ver. 2.80, is currently under testing. This new beta version is with enhanced capacity for all methodological tiers for Energy and AFOLU sectors and all approaches for the land representation in the AFOLU sector.

The TFI is currently working to enhance the capacity of the IPCC Inventory Software to enable use of all methodological tiers for IPPU and Waste sectors.

Although the COVID-19 pandemic has dramatically reduced the opportunities to reach out to inventory compilers, TFI TSU has been making efforts to help inventory compilers better understand and use the IPCC Inventory Software by participating in outreach events organized by other organizations. Recent examples of such outreach events are the Remote Training on the IPCC Inventory Software for the Asian-Pacific and Eastern Europe regions and for the Latin America and the Caribbean regions, organized by the UNFCCC Secretariat in June 2021 and December 2021, respectively, as



well as the 18<sup>th</sup> Workshop on Greenhouse Gas Inventories in Asia (WGIA18) organized by the Ministry of the Environment of Japan and the National Institute for Environmental Studies in July 2021.

TFI TSU has started a collaboration with the Food and Agriculture Organization (FAO) of the United Nations to develop add-ons for the IPCC Inventory Software that allow users to prepare consistent land representation data by using remotely sensed images.

### **3. Emission Factor Database (EFDB)**

The TFI has continued its work to maintain, improve and promote the Emission Factor Database (EFDB).

Because of restrictions to travels and meetings caused by the COVID-19 outbreaks, the TFI held virtually in April-May 2021 the 19<sup>th</sup> meeting of the EFDB Editorial Board (EB meeting) and the 18<sup>th</sup> Data meeting. The Data meeting was held in 5 sessions of the Energy sector break-out group from 12 April to 21 May 2021, while the EB meeting was held in 3 sessions from 13 April to 21 May 2021 for each of the following sectoral break-out groups: Industrial Processes and Product Use (IPPU), Agriculture, Forestry and Other Land Use (AFOLU), and Waste. The concluding plenary of EB meeting was held virtually on 28 May 2021. The break-out groups considered a total of 622 data, 237 of which were accepted for inclusion into the EFDB, and 300 pending further consideration at the next EB meeting.

The terms for 15 out of 36 current members of the EFDB Editorial Board will expire at the end of 2021 and for other 6 members the terms will expire at the end of 2022. Accordingly, a call for nominations will be made for these 21 positions that will fall vacant at the end of 2021 and 2022. Editorial Board members whose terms end can be nominated again.

### **4. Others**

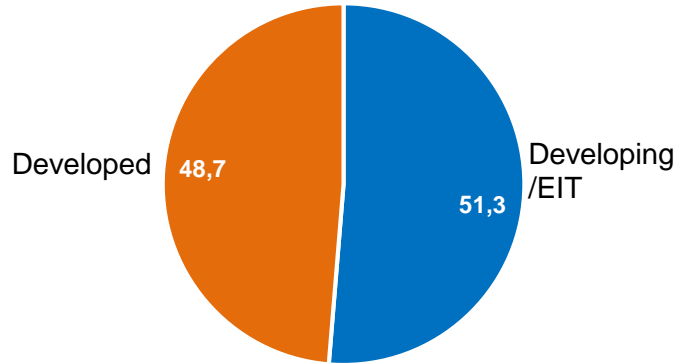
The 1<sup>st</sup> corrigenda to the *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2019 Refinement)* was released in September on the TFI website (<https://www.ipcc-nggip.iges.or.jp/public/2019rf/index.html>). Accordingly, the electronic file of the relevant chapter of the *2019 Refinement* on the TFI website was updated.

Because of restrictions to travels and meetings caused by the COVID-19 outbreaks:

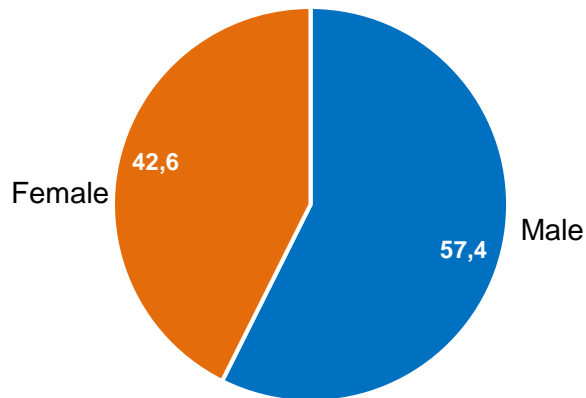
- The annual expert meeting to collect EFDB and Software users' feedback for the year 2021 was cancelled.
- The 33<sup>rd</sup> meeting of Task Force Bureau will be held virtually on 18-19 November 2021.

**Annex I: Statistics of experts invited to the expert meeting on SLCF**

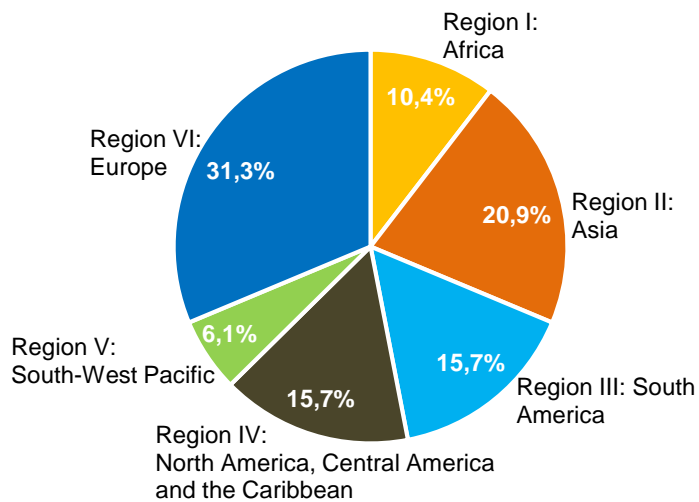
**Distribution of invitees by developed and developing/EIT countries**



**Distribution of invitees by gender**



**Distribution of invitees by region**



## Annex II: List of Participants

### *Joint 1<sup>st</sup> and 2<sup>nd</sup> IPCC Expert Meeting on Short-Lived Climate Forcers 11 – 22 October 2021*

**Komi Akpé Agbossou**

Université de Lomé  
Togo

**Gossi Awad Ahmed Babiker**

University of Khartoum  
Sudan

**Hiroko Akiyama**

National Agriculture and Food Research  
Organization  
Japan

**Anouk Aimée Bass**

Federal Office for the Environment  
Switzerland

**Maria de Fatima Andrade**

University of São Paulo  
Brazil

**Martial Bernoux**

Food and Agriculture Organization of the  
United Nations  
Italy

**Kendal Blanco Salas**

National Meteorological Institute  
Costa Rica

**Tami Bond**

Colorado State University  
United States

**Nathan Borgford-Parnel**

Climate and Clean Air Coalition  
Switzerland

**Bofeng Cai**

Chinese Academy for Environmental  
Planning  
China

**Vincent Camobreco**

Environmental Protection Agency  
United States

**Paula Soledad Castesana**

National Scientific and Technical Research  
Council (CONICET)  
Argentina

**Richard Claxton**

Aether Ltd  
United Kingdom

**Monica Crippa**

Joint Research Centre, European  
Commission  
Italy

**Laura Elena Dawidowski**

National Atomic Energy Commission  
Argentina

**Stefano Decesari**

National Research Council  
Italy

**Premakumara Jagath Dickella**

**Gamaralalage**  
Institute for Global Environmental Strategies  
Japan

**Julia Drewer**

UK Centre for Ecology & Hydrology  
United Kingdom

**Jan S. Fuglestedt**

CICERO  
Norway

**Qingxian Gao**

Chinese Research Academy of  
Environmental Sciences  
China

**Amit Garg**

Indian Institute of Management Ahmedabad  
India

**Savitri Garivait**

The Joint Graduate School of Energy and  
Environment (JGSEE)  
Thailand

**Rebecca M. Garland**

Council for Scientific and Industrial Research  
South Africa

**Sophie Générumont**

National Research Institute for Agriculture,  
Food and Environment  
France

**Veronika Ginzburg**

Yu.A.Izrael Institute of Global Climate and  
Ecology  
Russian Federation

**Andrew P. Grieshop**

North Carolina State University  
United States

**Céline Gueguen**

Transparency for Life  
France

**Kevin Hausmann**

German Environment Agency  
Germany

**Kentaro Hayashi**

National Agriculture and Food Research  
Organization  
Japan

**Detlev Helmig**

Boulder A.I.R. LLC  
United States

**Amara Holder**

Environmental Protection Agency  
United States

**Gill-Ran Jeong**

NOAA ARL - George Mason University  
United States

**Yugo Kanaya**

Japan Agency for Marine-Earth Science and  
Technology (JAMSTEC)  
Japan

**Sergey Kakareka**

National Academy of Sciences  
Belarus

**Zammath Khaleel**

Ministry of Environment and Energy  
Maldives

**Karin E. Kindbom**

IVL Swedish Environmental Research  
Institute  
Sweden

**Zbigniew Klimont**

International Institute for Applied Systems  
Analysis  
Austria

**Patricia Krecl Abad**

Federal University of Technology  
Brazil

**Hanna-Lii Kupri**

Estonian Environmental Research Centre  
Estonia

**Camila Labarca**

Ministry of Environment  
Chile

**Puji Lestari**

Bandung Institute of Technology  
Indonesia

**James Douglas MacDonald**

Environment and Climate Change  
Canada

**Guadalupe Alejandra Martinez Nuñez**

Climate Change Division  
Uruguay

**Aminata Mbow Diokhane**

Centre de Gestion de la Qualité de l'Air  
Senegal

**Jessica L. McCarty**

Miami University  
United States

**Erin McDuffie**

AAAS Science and Technology Policy Fellow  
United States

**Meimalin Moreno**

Venezuelan Institute for Scientific Research  
Venezuela

**Ole-Kenneth Nielsen**

Aarhus University  
Denmark

**Leonidas Ntziachristos**  
Aristotle University Thessaloniki  
Greece

**Josè Abraham Ortinez-Alvarez**  
Instituto Nacional de Ecología y Cambio  
Climático  
Mexico

**Naga Oshima**  
Meteorological Research Institute,  
Japan Meteorological Agency  
Japan

**Didin Agustian Permadi**  
National Institute of Technology  
Indonesia

**Cecilia Elena Penengo**  
Ministry of Environment  
Uruguay

**Robert W. Pinder**  
Environmental Protection Agency  
United States

**Polina Polumieva**  
Yu.A. Izrael Institute of Global Climate and  
Ecology  
Russian Federation

**S. Enrique Puliafito**  
Universidad Tecnologica Nacional  
Argentina

**Xavier Querol**  
Institute of Environmental Assessment and  
Water Research, IDAEA-CSIC  
Spain

**Kristina Saarinen**  
Finnish Environment Institute  
Finland

**Marlene Schmidt Plejdrup**  
Aarhus University  
Denmark

**Steven J. Smith**  
Joint Global Change Research Institute  
United States

**Luis Gerardo Ruiz Suárez**  
National Institute for Ecology and Climate  
Change  
Mexico

**Maheswar Rupakheti**  
Institute for Advanced Sustainability Studies  
Germany

**Francisco Salazar Sperberg**  
Instituto de Investigaciones Agropecuarias  
Chile

**Ute Maria Skiba**  
UK Centre for Ecology & Hydrology  
United Kingdom

**Michael Strogies**  
German Environment Agency  
Germany

**Toshihiko Takemura**  
Kyushu University  
Japan

**Nguyen Thi Kim Oanh**  
Asian Institute of Technology  
Thailand

**Aimable Uwizeye**  
Food and Agriculture Organization of the  
United Nations  
Italy

**Vigdis Vestreng**  
Norwegian Environment Agency  
Norway

**Jongikhaya Witi**  
Department of Forestry, Fisheries and the  
Environment  
South Africa

**Noureddine Yassaa**  
Centre de Développement des Energies  
Renouvelables  
Algeria

**Xunhua Zheng**  
Institute of Atmospheric Physics, Chinese  
Academy of Sciences  
China

**Songli Zhu**  
Energy Research Institute, National  
Development and Reform Commission  
China

## **IPCC TFI Bureau**

**Eduardo Calvo Buendia** (TFI Co-chair)  
UNMSM - Universidad Nacional Mayor de  
San Marcos  
Peru

**Kiyoto Tanabe** (TFI Co-chair)  
IGES - Institute for Global Environmental Strategies  
Japan

**Fahmuddin Agus**  
Indonesian Agency for Agricultural Research and Development  
Indonesia

**Said Abdallah Batouli**  
National Center of Documentation and Scientific Research  
Comoros

**Dominique Blain**  
Environment and Climate Change  
Canada

**Fatma Betül Demirok**  
Turkish Statistical Institute  
Turkey

**Dario Gomez**  
National Atomic Energy Commission  
Argentina

**Bundit Limmeechokchai**  
Sirindhorn International Institute of Technology, Thammasat University  
Thailand

**Riitta Pipatti**  
Statistics Finland  
Finland

**Yasna Rojas**  
Instituto Forestal de Chile  
Chile

**Rob Sturgiss**  
Department of Industry, Science, Energy and Resources  
Australia

**Tom Wirth**  
Environmental Protection Agency  
United States

# PROGRESS REPORT

## Task Group on Data Support for Climate Change Assessments

(Prepared by the Co-Chairs of the Task Group on Data Support for Climate Change Assessments)

This report describes the progress in the work of the Task Group on Data Support for Climate Change Assessments (TG-Data) since the 53<sup>rd</sup> (bis) Session of the IPCC in March 2021 (IPCC-LIII/INF. 6, Rev. 3).

### 1. SALIENT ACTIVITIES SINCE LAST REPORTING

#### 1.1 Data Distribution Centre (DDC)

- MetaDataWorks (MDW) is now officially part of the IPCC DDC. Courtney Irwin is now a TG-Data ex-officio member. The updated list of TG-Data and Ex-Officio members is presented in Table 1. The DDC MoU has been updated to reflect the change from CEDA<sup>1</sup> to MDW as the United Kingdom component of the DDC.
- TG-Data recognizes the enormous contribution of CEDA to DDC and TG-Data activities, and its international leadership regarding climate science. We suggest that this contribution should be underlined officially.
- An updated version of the DDC web site adhering to the IPCC web styling is going live for COP26. The transfer of material to the new web site will be done gradually. All links to the previous web site pages will stay functional, except for the home page. A catalog search interface is included and will be populated over the next months with both final datasets and input datasets.
- The UK BEIS<sup>2</sup> has communicated to TG-Data that UK funding for DDC activities will not be renewed at the end of the MDW contract in March 2023. New source of funding will need to be secured to maintain DDC services.

### 2. TABLE 1: TG-Data and Ex-officio Members

<b>TG-Data Members</b>				
<b>No.</b>	<b>Name</b>	<b>Country</b>	<b>Gender</b>	<b>Role</b>
1	David HUARD	Canada	Male	Co-Chair
2	Sebastian VICUNA	Chile	Male	Co-Chair
3	Kornelis BLOK	Netherlands	Male	Member
4	Winston CHOW	Singapore	Male	Member
5	Steven CRIMP	Australia	Male	Member
6	Wawan GUNAWAN	Indonesia	Male	Member
7	José Manuel GUTIÉRREZ	Spain	Male	Member

<sup>1</sup> The Centre for Environmental Data Analysis

<sup>2</sup> The Department for Business, Energy and Industrial Strategy

8	Kirstin HOLSMAN	United States of America	Female	Member
9	Michio KAWAMIYA	Japan	Male	Member
10	Nana Ama Browne KLUTSE	Ghana	Female	Member
11	Volker KREY	Germany	Male	Member
12	Silvina SOLMAN	Argentina	Female	Member
13	Gerard VAN DER SCHRIER	Netherlands	Male	Member
14	Rachel WARREN	United Kingdom	Female	Member
15	Songli ZHU	China	Female	Member
<b><i>Ex-officio Members (TSU Representatives)</i></b>				
1	Alaa AL KHOURDAJIE	United Kingdom	Male	WGIII
2	Andrés ALEGRIA	Germany	Male	WGII
3	Robin MATTHEWS	France	Male	WGI
4	Anna PIRANI	France	Female	WGI
5	Elvira POLOCZANSKA	Germany	Female	WGII
6	Ozge YELEKCI	France	Female	WGI
<b><i>Ex-officio Members (DDC Managers/DDC Representatives)</i></b>				
7	Robert CHEN	United States of America	Male	DDC Manager
8	Courtney IRWIN	United Kingdom	Female	DDC Manager
9	Martin JUCKES	United Kingdom	Male	DDC Manager
10	Martina STOCKHAUSE	Germany	Female	DDC Manager
11	Charlotte PASCOE	United Kingdom	Female	DDC Staff
12	Xiaoshi XING	United States of America	Male	DDC Staff

## 2.1 Outreach

- Between November 2021 and February 2022 TG Data together with WGI TSU and IPCC Secretariat will be running: IPCC TG-Data Interactive Atlas Regional Webinars. This would be the first formal outreach activity organized by TG Data from AR6.
- Objectives of these webinars:
  - Present the main results of the WGI report.
  - Engage with the regional research practitioner community over specific regional domains.
  - Present the data availability with special emphasis on the Interactive Atlas and Regional synthesis (from the Technical Summary and the regional chapters 10-11-12-Atlas Chapters).



- Format: Considering the current pandemic context, the training workshops for 2021 will be organized in a virtual mode. The workshops are intended for practitioners and the research community (also open to consultants and public sector representatives) and will focus on data aspects using the facilities of the Interactive Atlas (IA). These webinars will complement other outreach activities that will present the results of WGI. In terms of the number of workshops, they will be aligned with the organization of COP26 regional events. At minimum there will be four training activities focused on the following regions: Europe, Central and South America, Africa, and Asia. If there is enough support from IPCC authors this could be expanded to consider more divisions within these regions (e.g., by language restrictions) or include activities for developed countries regions. The first webinar should take place in November 2021 after COP26.
- Outreach plans for 2022 include WGI outreach activities concentrated in specialized research community and WGII and WGIII activities after release of reports. Similar to 2021 these activities will be organized in virtual mode without need of budget.

## 2.2 FAIR<sup>3</sup> Data Principles

- Final data from the WGI Summary for Policy Makers (SPM) has been archived and has been available in the CEDA catalog since the public release of the WGI report. Since then, Chapter 3 data has also been archived and other datasets will follow. This required an enormous amount of work for the WGI TSU, United Kingdom DDC, chapter scientists and authors. Data from the WG1 SPM has already been accessed thousands of times, and used in the press. Long time DDC members have hailed this achievement as nothing short of revolutionary, and an important cultural change within the IPCC. CEDA funding for this activity runs out at the end of October 2021.
- Multiple WGI chapters have also made the code and scripts used to prepare figures available on the [WGI Github repository](#). This content is however not ready to be advertised publicly.
- WGII will archive SPM data and possibly Technical Summary (TS) data as well. WGIII is planning to archive 10 SPM datasets. Both WGII and WGIII are in contact with MDW who will oversee the archival process.
- The AR6 Synthesis Report (SYR) has expressed interest in archiving its data using the FAIR guidelines.
- DKRZ<sup>4</sup> (German DDC) is archiving the core CMIP6<sup>5</sup> dataset also required for the European Copernicus program. Additional CMIP6 datasets used by AR6 authors have been identified by WGI TSU and will be communicated to DKRZ to be added to the long-term archives. There is a possibility to archive more than CMIP6 data but may take some time due to resource constraints.
- Some intermediate datasets from WGI Chapter 4 and Chapter 9 will also be archived (i.e. ocean heat content, sea level rise). Discussions are also underway to archive intermediate data used for the WGI Atlas. TG-Data has made a formal request for CIESIN<sup>6</sup> (US DDC) to archive a snapshot of the IIASA<sup>7</sup> scenario database (not the online application, only the data).

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<sup>3</sup> Findable, accessible, interoperable and reusable

<sup>4</sup> The *German* Climate Computing Center (Deutsches Klimarechenzentrum)

<sup>5</sup> Coupled Model Intercomparison Project Phase 6

<sup>6</sup> Center for International Earth Science Information Network

<sup>7</sup> The International Institute for Applied Systems Analysis

### **3. NEXT STEPS**

- Hold regional outreach WGI webinars (in virtual mode).
- Draft new guidance material regarding data access and use for AR6.
- Update FAIR guidelines in light of the AR6 experience.
- Hold a physical TG-Data face-to-face meeting in 2022.

### **4. DISCUSSION POINTS FOR THE PANEL**

- Secure DDC funding to ensure service continuity.
- Decide on minimum mandatory requirements for FAIR data in AR7. In AR6, TG-Data strongly recommended that SPM and TS data be archived, and it was up to each WGs to decide how much effort to dedicate to this. With the proper processes and planning, it would be possible to archive all chapter data.
- Approve the budget for TG-Data face-to-face meeting in 2022.