

THIRTY-SEVENTH SESSION OF THE IPCC Batumi, Georgia, 14 - 18 October 2013

IPCC-XXXVII/Doc. 21 (13.IX.2013) Agenda Item: 6.3 ENGLISH ONLY

PROGRESS IN THE PREPARATION OF FIFTH ASSESSMENT REPORT (AR5)

Working Group III Progress Report

(Submitted by the Co-Chairs of the IPCC Working Group III)



PROGRESS IN THE PREPARATION OF THE AR5

Working Group III Progress Report

Overview

IPCC-XXXV/Doc.21 presented to and agreed to by the 35th Session of the IPCC (IPCC-35) described progress in Working Group III's (WGIII) contribution to the Fifth Assessment Report (AR5). This document provides an update since IPCC-35, and highlights major achievements through the end of 2013. Specifically, the status of WGIII AR5 drafting including progress of summary documents, WGIII activities/meetings, writing team development, and conflict of interest policy-implementation are discussed. Finally, the remaining milestones are mapped out.

1. AR5 Drafting

1.1 General progress

During the 35th Session of the IPCC, Working Group III was in the process of writing the First Order Draft (FOD) of the Working Group III contribution to the AR5. Experts were invited to comment on the FOD from 20 July 2012 to 14 September 2012. In total, 1,554 experts registered for submitting comments. Of those 602 reviewers from 58 countries reviewed WGIII First Order Draft (FOD) and submitted a total number of 16,188 comments. During an expert review meeting held in Washington D.C., 6-8 August 2012, Coordinating Lead Authors discussed the state of the FOD with selected expert reviewers from the scientific, Non Governmental Organizations (NGO) and business communities. Subsequently author teams deliberated about FOD comments and chapter development during the Third Lead Author meeting held in Vigo, Spain, 5-9 November 2012, and agreed on a roadmap for the writing of the Second Order Draft (SOD). After responding to all comments and completing the draft, experts and governments were invited to review the SOD. In total 445 experts and 24 governments submitted a total of 19554 comments. Author teams deliberated about how to respond to these comments and how to develop the draft further during the Fourth Lead Author Meeting in Addis Ababa, Ethiopia, 1-5 July 2013. Working Group III is now approaching completion of the Final Draft.

1.2 Summary Documents

Initial deliberations on the summary writing process and a general outline for the Summary for Policymakers (SPM) were held with Coordinating Lead Authors (CLAs) in a dedicated Management Team Meeting during the Second Lead Author Meeting in Wellington, 19-23 March 2012. These discussions were continued during the business review meeting in Washington D.C, 6-8 August 2012. During the Third Lead Author Meeting in Vigo, 5-9 November 2012, two dedicated meetings for discussing the Technical Summary and the SPM were held with the respective writing teams. In these meetings first views on emerging key findings were exchanged and the outline was reconciled. Subsequently, the drafting was initiated alongside the chapters in an iterative process with writing and review periods. The drafts of the summary documents were finalized for the government and expert review of the SOD. During the Fourth Lead Author Meeting, two meetings for the Technical Summary, and one executive team meeting for the SPM took place. The writing teams carefully discussed how to most appropriately respond to the comments received on the summary documents during the review process. Adjustments to the outline and a roadmap for the finalization of the summary documents were agreed.

1.3 Changes to the Outline

The bracketed text in the section headings of some chapters will be removed for the Final Draft. This step will only be taken to improve the clarity of the table of contents. The contextual guidance that had been provided by the Plenary to the authors in the brackets was followed during the drafting of the sections.

Chapter 2 has included the word "decision aids" in its section 2.3 which now reads "Tools and decision aids for analyzing uncertainty and risk". This addition has been made to clarify the content of the underlying discussion in the chapter. In addition, the title of section 2.5 has been changed from "Conclusions and gaps in knowledge and data" to "Gaps in knowledge and data" to achieve full harmonization with the other chapters.

Chapter 3 has added a new heading titled "Values and wellbeing". The chapter's main task is to provide an adequate framing of the relevant social, economic and ethical concepts and methods for the rest of the report. The concepts of value and well-being mark two key concepts in economics and ethics, which are indispensable for such a framing. It is very important to have this discussion at the same outline level as similar concepts such as "Economics, rights and duties" or "Justice, equity and responsibility". Since it would be misleading to subsume the discussion on values and wellbeing under any of these, the CLAs see the strong need to have a dedicated section on "Values and wellbeing" at the same level.

Chapter 4 has combined the bullet points on 'Mitigative capacity and mitigation' and 'Links to adaptive capacity and adaptation' to provide a better linked and more comprehensive treatment of the topics and to avoid redundancies. The new section reads "Mitigative capacity and mitigation, and links to adaptive capacity and adaptation".

Chapter 5 has changed the title of its introductory section from "Introduction: breaking trends, a hard and soft approach" to the broader title "Introduction and overview". In addition, and in order to achieve full harmonization with the sector chapters and the glossary, the bullet point on "Co-benefits and trade-offs of mitigation actions" has been renamed to "Co-benefits and adverse side-effects of mitigation actions".

Chapter 10 has included the word 'mineral' in the title of its section 10.2 to emphasize the distinction to Chapter 7 where energy based extractive industries are covered. The title reads now "New developments in extractive mineral industries, manufacturing industries and services". In addition, an appendix on "Waste" has been added to the chapter as the authors considered this important topic to deserve a more comprehensive and focused treatment.

Chapter 11 has included an appendix on "Bioenergy: Climate effects, mitigation options, potential and sustainability implications". This appendix is the result of a cross-chapter agreement, because the issue of bioenergy is relevant for various chapters and therefore cross-cutting in nature. Authors felt the need to have one dedicated place, where an integrated discussion of these various aspects can take place in order to do justice to the topic. Moreover, this appendix allows for a more comprehensive and focused treatment of one of the fastest growing areas in the literature on climate change mitigation, where a substantive amount of new literature has already emerged since the literature cut-off for the Special Report on Renewable Energy Sources and Climate Change Mitigation.

In section 13.3 "International agreements: Examples and lessons for climate policy" the term 'examples' has been removed from the title to expand the scope of the section to draw on the theoretical literature on international agreements and negotiation structures.

Chapter 16 introduced a new section "Introduction" in order to be consistent with the other chapters of the report. In addition, the chapter team agreed to revert a change previously accepted at IPCC-34 and merged the two sections on "Financing mitigation activities in and for developing countries" and "Financing technology development and transfer" again. Section 16.8 now has the title "Financing mitigation activities in and for developing countries including for technology development, transfer and diffusion". The authors acknowledge that the original title was more comprehensive because financing mitigation activities in and for developing countries includes to a large degree financing for technology transfer.

2. Status Conflict of Interest (COI)

Working Group III submitted the complete set of COI data for 2012 together with the WGIII COI report to the IPCC Secretariat during the 46th Session of the IPCC Bureau in Geneva (28 February – 1 March 2013). In 10 May 2013, the WGIII Technical Support Unit (TSU) initiated the COI renewal process for the WGIII members which is almost completed. Working Group III TSU will provide the annual update to its 2012 COI report to the IPCC Secretariat by the end of 2013.

3. Writing Team Development

Co-Chairs of Working Group III report with great sadness that Luxin Huang, lead author of chapter 12 "Human Settlements, Infrastructure and Spatial Planning", passed away. He is already greatly missed by his fellow authors and the entire Working Group III family (http://www.ipcc-wg3.de/news/in-memoriam-luxin-huang-1965-2013).

Since the 35th Session of the Panel the following changes in the Working Group III author team have taken place:

- <u>Chapter 2:</u> Joanne Linnerooth-Bayer (Austria) replaced Martin Weitzmann (USA) as RE and Varun Dutt (India) replaced Edgar Ortiz (Mexico) as LA.
- <u>Chapter 3:</u> Kevin Urama (Kenya) moved as LA from Chapter 4 to be CLA in Chapter 3 replacing Martin Khor (Switzerland).
- <u>Chapter 4:</u> Chukwumerije Okereke (Nigeria) was selected as LA, replaced Kevin Urama (Kenya).
- Chapter 5/6: David Keith (Canada) resigned from the process for personal reasons.
- Chapter 7: Helena Chum (Brazil) was selected as LA.
- Chapter 9: Ashok Gadgil (USA) replaced Mark Levine (USA) as LA.
- <u>Chapter 10:</u> Adolph Acquaye (Ghana) replaced Yacob Mulugetta (Ethiopia) as LA. Estela Santalla (Argentina) replaced Dario Gómez (Argentina) as LA. Roland Clift (UK) replaced Monique Hoogewijk (Netherlands) as RE.
- <u>Chapter 11:</u> Emmanuel Nzunda (Tanzania) replaced Robert Zougmore (Burkina Faso) as LA.
 Robert Zougmore continues in the process as a CA. Francesco Tubiello (Italy) was selected as I A
- <u>Chapter 12:</u> Jin Murakami (China) was selected as LA. Shu-Li Huang (Taiwan, China) resigned as LA. Arnu Ramaswami (USA) replaced Cecilia Tacoli (UK) as LA.
- <u>Chapter 14:</u> Leonardo Barenetto (Austria) was added as LA to complete the vacant position left by the move of Axel Michaelowa to Chapter 13. Volodymyr Demkine (Ukraine/UNEP) replaced Fedor Veselov (Russia) in his role as RE.

4. Activities

Expert Review Meeting

6 - 8 August 2012, Washington D.C., USA

Working Group III AR5 authors and expert reviewers from the scientific, business and NGO communities of different world regions discussed the First Order Draft (FOD) - including all 16 chapters as well as 8 cross-cutting topics. The purpose of these discussions was to foster critical analysis of the current draft and increase understanding on the nature of expert reviewer's comments. Participants were further encouraged to formally submit their comments to Working Group III during the review process. During this very fruitful exchange, participants also provided additional insights into topics covered in the AR5 to ensure balance in the text of subsequent drafts. The comments were summarized and fed into the chapter team discussions during the Third Lead Author Meeting held in Vigo, Spain (see below). This successful meeting allowed authors to get a

better understanding of reviewer concerns and better respond to many comments provided on the Working Group III First Order Draft.

Third Expert Meeting on Scenarios as an Integrative Element for WG III AR5

3 - 4 November 2012, Vigo, Spain

The meeting was kindly organised in collaboration with the University of Vigo and the Economics for Energy Research Centre under the lead of Working Group III lead author Xavier Labandeira. SIE-3 was attended by 21 WG III C/LAs and 5 Bureau Members. During the first part of this very successful meeting, authors from different chapters consulted on how different strands of the literature can be synthesized for a balanced assessment of the role of sectors in long-term mitigation scenarios across various scientific communities. The second part of the meeting focused on the development of a consistent approach to the assessment of costs and potentials for different mitigation options available. These cross-cutting processes were continued subsequent to the Vigo meeting making an important contribution to the Second Order Draft.

Third Lead Author Meeting (LAM3) for WG III AR5

5 - 9 November 2012, Vigo, Spain

The meeting was kindly organized in collaboration with the University of Vigo and the Economics for Energy Research Centre under the lead of Working Group III lead author Xavier Labandeira. During the Opening Plenary the participants were welcomed by the Director of the Spanish Climate Change Office, Susana Magro; the Galician Environment Minister, Rosa Quintana; the President of the University of Vigo, Salustiano Mato; and the Mayor of Vigo, Abel Caballero. Afterwards, the IPCC Chair, Rajendra Pachauri, and the Executive Secretary of the UN Framework Convention on Climate Change (UNFCCC), Christiana Figueres, addressed the experts to underline the relevance of the Working Group III for the synthesis report as well as the forthcoming climate change negotiations. LAM3 was critical in the preparation of the WGIII contribution to AR5. Chapter teams met to advance their discussions on the more than 16 000 comments received during the expert review and how to adequately reflect them in the writing of the Second Order Draft (SOD). Review editors joined for the first time and have been playing a vital role in this process ever since. Moreover, important cross-chapter liaisons were established and further deepened for an in-depth and consistent exploration of the available mitigation options, policies as well as relevant institutional structures.

Cost and Potentials Expert Workshop

18 - 19 April 2013, Berlin, Germany

The Expert Workshop addressed methodological approaches to metrics of costs and potentials. It served as a gateway for chapters to come to a mutual understanding on how to address, harmonise, synthesize and present information on costs and potentials of specific mitigation options as found in the scientific literature in the WGIII report. The workshop paved the way for concluding discussions on this cross-cutting topic at the Fourth Lead Author Meeting (LAM4).

Fourth Meeting on Scenarios as an Integrating Element in WG III AR5

29 - 30 June 2013, Addis Ababa, Ethiopia

The two-day Expert Meeting Scenarios as an Integrative Element in WG III AR5 (SIE-4) directly preceding LAM4 continued the integration of scenarios providing a long-term cross-sectoral systems perspective and sectoral assessment focusing on short-term option-specifics. In this highly productive meeting, the last steps for finalizing this long-term process were agreed. This included final deliberations of open issues including the treatment of lock-in effects as well as the role and representation of energy demand reductions in long-term scenarios. Overall, the series of meetings was met its target of establishing a sound scenario backbone across chapters in the Working Group III report.

Expert Workshop on Policies

30 June 2013, Addis Ababa, Ethiopia

The two-day Expert Workshop on Policies took place in parallel to SIE-4 directly preceding LAM4. The meeting was pivotal for ensuring a consistent treatment of policy related issues throughout the Working Group III contribution to AR5. Co-Chairs and authors from several policy chapters also jointly worked on cross-cutting policy issues with a view of synthesizing insights for the Technical Summary as well as the Summary for Policymakers.

Fourth Lead Author Meeting for WG III AR5

1-5 July 2013, Addis Ababa, Ethiopia

The meeting was held in cooperation with the UN Economic Commission for Africa at the UN Conference Center in Addis Ababa. The 234 authors and media were greeted during the public plenary by Dr Youba Sokona, Co-Chair of the IPCC WGIII, Dr Rajendra Pachauri, Chair of the IPCC, H.E. Carlos Lopes, UN Under-Secretary-General and Executive Secretary of ECA, H.E. Mr Alemayehu Tegenu, Minister of Water and Energy of Federal Democratic Republic of Ethiopia. Afterwards, authors were informed about outcomes of SIE4 and the Policy Meeting during the closed plenary, before the meeting commenced.

LAM4 was critical in progressing towards a final draft, as comments on the Second Order Draft (SOD) were reviewed and scientists discussed the integration of these comments as well as the further development of chapters and cross-cutting topics. In three dedicated sessions comments on and development of the summary documents were carefully discussed. The Co-Chairs held dedicated meetings throughout the meeting to clarify pending issues related to individual chapters or cross-cutting activities as surfaced in the expert and government comments of the SOD. During this highly productive meeting all necessary decision were taken to allow for a consistent preparation of the final draft.

WG III AR5 Consistency Meeting (upcoming)

28 - 30 October 2013, Potsdam, Germany

The meeting brings together coordinating lead authors, Working Group III authors of the Core Writing Team to the Synthesis Report (SYR) as well as individual lead authors with key crosscutting responsibilities to improve the consistency in the report across chapters and take the last steps towards the finalization of the Technical Summary and Summary for Policymakers.

5. Communications

Since June 2012, a number of news items have been published on the Working Group III website. These include news on the progress of the AR5 production i.e. calls for experts to register for the two rounds of review and updates on the status of the draft. WGIII reported on its Expert Review Meeting in Washington D.C. and the third and fourth Lead Author Meetings. A press release on the third Lead Author Meeting, held in Vigo, Spain, in November 2012, was issued in Spanish and English. The meeting itself and the Nobel Prize Lecture on Global Commons by Ottmar Edenhofer, to the Spanish Barrié Foundation, were covered extensively by Spanish media.

For the fourth Lead Author Meeting in Addis Ababa, Ethiopia, in July 2013, Working Group III issued a media advisory. The meeting was extensively covered by Ethiopian and international media. At the meeting, WGIII organized filming of interviews with the IPCC Chair, Rajendra Pachauri, WGIII Co-Chairs, and a group of Coordinating Lead Authors and Lead Authors and of B-roll material. The interview videos are to be published on the WGIII AR5 website that will go online about a month before the closing of the WGIII Session in April 2014. The B-roll material will be offered on request to broadcasters who would like to use it for their coverage of IPCC activities. At the end of the meeting, WGIII published news under the headline "IPCC WGIII authors prepare for report finish in Ethiopia."

Over the entire period, WGIII contributed to the preparation of communications materials to be published at the time of the release of the WGI SPM, but that will be used by all three Working Groups. On two occasions, Working Group III issued press statements in response to reports on material from a leaked version of the WGIII report. These were also distributed by the IPCC Secretariat.

6. Upcoming Milestones

- October 28 30 2013: WGIII AR5 Consistency Meeting (Potsdam, Germany)
- 13 December 2013 10 February 2014: Government distribution of final draft of chapters and Technical Summary and government review of Summary for Policymakers
- April 07 11 2014: 12th Session IPCC WG III (approval and acceptance of WGIII AR5)