Working Group I (WG I) - The Physical Science Basis

Final Report from IPCC Special Report on Global Warming of 1.5°C Review Editor (RE)

To the Co-Chairs of the IPCC Working Group I, Working Group II, and Working Group III

From: Andreas Fischlin, ETH Zürich, Switzerland and IPCC Vice-Chair WGII, Ismail Elgizouli, Sudan, and Xuejie Gao, China

Final Report from Review Editors of chapter 1 «Framing and Context»

Comments to the First (FOD) and Second Order Draft (SOD) have been treated well and adequately. The author team has responded to all issues, especially the more important and difficult ones in their responses to the review comments. We are adequately satisfied that the chapter was thoroughly reviewed and is in a very good shape. The review editors (Res) would like to thank the Lead-Author team for their hard work and their cooperation with us during the 3rd Lead Author Meeting (LAM) and the 4th LAM and in particular during the preparation of the Final Government Draft (FGD) and the Summary for Policymakers (SPM) enabling a fruitful cooperation of mutual benefits.

As a framing chapter the challenge is always coordination and cooperation with all other chapters, while everyone moves ahead working in parallel. Many comments at every stage of preparation related to these aspects. In the end the authors were able to clarify and organize the work such that overlaps were minimized while avoiding inconsistencies and ensuring that no significant gaps remained. In contrast to the typical framing chapter, our chapter was not only a framing chapter, but had also to assess latest literature on key physical aspects of the climate system such as assessing the current level of global warming.

The 11,074 comments¹ our chapter had to deal with touched on many topics. Among the more delicate ones were under- or overrepresentation of positive, respectively negative consequences of ambitious mitigation and the proper balancing and framing of several other concepts and scientific findings in order to properly represent the underlying science, while maintaing policy relevance. Further comments addressed uncertainty assessment and language, suggested another text structure for the chapter, suggested the use of guiding questions throughout the entire report, and asked for shortening the text while nevertheless suggesting the addition of new material. It may also be worth noting that several comments called for future inclusion of the glossary into the review process, which IPCC has not done in the past.

More detailed topics addressed were the definition of the 1.5°C limit and as it relates to various scenarios. In this context not only emission pathways, but also climate change scenarios, including temperature overshoot scenarios², were addressed by many comments. In particular also as some of these, e.g. the overshoot scenarios, may temporary increase risks from climate change impacts on natural and human system and may come with their particular risks in terms of reversibility. All these calling for a proper framing of all the related issues. Some reviewers objected to how the term pre-industrial was described as being consistent with AR5 findings, pointing at a common difficulty with this term. The authors then made great efforts to clarify, define, and use such terms consistently, not only within our chapter, but also throughout the report as used by other authors from other chatpers.

Another group of comments called for better describing the role of other gases than CO_2 . Several comments criticised the report to be weak on land use change (LUC) and the roles of agriculture and forestry (AFOLU/LULUCF) in the global C-cycle. Yet, these comments needed also to be seen in the context of how those topics are treated in the SRCCL where they already receive special emphasis. Further issues were pointed out with time scales, e.g. long-term vs. short-term, and others called for more precise framing of the risk and impact concept underlying the report's

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¹ Those comments were pertaining to (i) Chapter 1: 390 (ZOD), 2833 (FOD), 3355 (SOD); to (ii) the entire report: 135 (ZOD), 314 (FOD), 413 (SOD); to (iii) the SPM: 3630 (FGD)

² Those scenarios were largely missing from the AR5 assessment, which discussed rather GHG concentration, notably CO₂ concentration, overshoot than temperature overshoot scenarios.
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impact assessments. Several comments repeatedly called for more attention on biodiversity risks, e.g. as may result from BECCS implemetned at large scale, and risks for ecosystem services in general, comments that rather pertained to chapter 3.

Another group of comments addressed the feasibility concept as developed and applied in this report, notably in the context of the 1.5°C limit for global warming. In this context many comments argued for a more appropriate, typically as seen from the reviewer's point of view, treatment of measures such as SRM or other geoengineering methodologies, CDR in general, CCS, and BECCS.

A final group of comments worth-mentioning here focused on framing principles used or needed while addressing the threat of climate change, its urgency and whether the chapter recognized properly the role equity, ethics, justice, sustainable development, SDGs, eradication of poverty, and human rights would play. The new emphasis on the Anthropocene concept drew also many comments. Similarly several comments addressed the use of Indigenous vs. traditional vs. local knowledge. Finally, several comments emphasized that sufficient attention would be given to particular approaches, e.g. cost-benefit analysis.

While some of aforementioned topics may be seen as controversial due to differing political interpretations and might therefore be potentially contentious in a policymaking context, the scientific basis for those is hardly of a truly controversial nature, in particular none that would impede authors from progressing in their assessment work. In all those cases where a range of views exists, authors made efforts to describe the entire range of ideas and scientific findings as they are currently found in the literature while framing the report.

Authors have given appropriate consideration to all issues that arose and that needed to be addressed as they were lying within the scope of their work.

Signature:

Andreas Fischlin Full Name:

Date: 23.Sep.2018

Je Mail (NY Signature:

Full Name:d Ismail .A.R . Elgizouli

Date: 21.Sep.2018

Signature:

Geno Xuejie

Full Name:

Xuejie Gao

Date: 24.Sep.2018

Working Group I (WG I) – The Physical Science Basis

Final Report from IPCC Special Report on Global Warming of 1.5°C Review Editor (RE)

To the Co-Chairs of the IPCC Working Group I, Working Group II, and Working Group III From: <u>Gregory M. Flato</u>, Environment and Climate Change Canada, CANADA; <u>Jan S. Fuglestvedt</u>, CICERO Center for International Climate Research, NORWAY; <u>Rachid Mrabet</u>, National Institute of Agricultural Research, MOROCCO; and <u>Roberto Schaeffer</u>, Universidade Federal do Rio de Janeiro, BRAZIL.

Final Report from Review Editors of Chapter 2, *Mitigation pathways compatible with 1.5°C in the context of sustainable development.*

Introduction

The First Order Draft of Chapter 2 received 1,960 individual review comments. The Second Order Draft received 3,724 individual comments, of which 2,088 were of substance. There were 280 individual reviewers of Chapter 2 in the Second Order Draft.

Review Editors (REs) are expected to attend both of the Lead Author Meetings (LAMs), where the writing teams consider the results of the two formal review rounds (i.e., LAM3 and LAM4). At LAM3, the Lead Author team held extensive discussions on the key issues raised by the reviewers on the First Order Draft, developed a workplan and division of tasks to address the review comments, and laid out a clear timeline to provide responses to all of the review comments.

Three of the four REs were able to attend LAM3 in person and followed the discussions closely. Later, the REs held teleconferences to discuss progress. In addition, the REs maintained regular e-mail contact, and provided notes and remarks to the CLAs regarding the responses to the review comments. The REs note the very tight timeline for revisions and review responses, which was a challenge for all of the author teams and for the REs themselves.

At LAM4, the Lead Author team held extensive discussions on the key issues raised by reviewers on the Second Order Draft. Essentially the same, effective approach used for dealing with the FOD comments was applied. Three of the four REs were able to attend LAM4 in person and provided feedback and advice on dealing with review comments and on making revisions to the chapter text and figures.

Main areas of concern arising from the review comments

Some of the key concerns noted by reviewers of the FOD include:

- Feasibility/realism of various scenarios and implications for land use and other aspects of sustainable development;
- Lack of non-overshoot scenarios;
- Shared Socioeconomic Pathways (SSPs), what they are, what they mean, how they should be interpreted;
- Assumptions/limitations of Integrated Assessment Models (IAMs), what they include or ignore;
- Non-CO₂ forcing;
- Connections and consistency with other chapters of the report; and
- Readability/utility/technical complexity of Executive Summary (ES), particularly for a policymaker audience.
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Some of the key concerns noted by reviewers of the SOD include:

- Traceability of key findings in the ES to the underlying chapter text;
- Lack of clarity in the presentation and interpretations of the carbon budget concepts;
- Role of non-CO₂ components in scenarios and for the calculated carbon budgets;
- Confusion on descriptions of overshoot vs non-overshoot scenarios and their properties;
- Inconsistencies with some material presented in other chapters (especially Ch. 4);
- Assumptions/treatment of Carbon Dioxide Removal (CDR) technologies and Bioenergy with Carbon Capture and Storage (BECCS);
- Analysis, description and properties of the scenario database;
- Presentation, transparency and underlying assumptions and use of scenarios;
- Use and limitations of, and strong dependence on, IAMs and MAGICC; and
- Lack of clarity on economic issues, e.g. discount rates and carbon prices.

The author team has responded to all of these issues in their responses to the review comments, and in their substantive revisions to the chapter text and structure. In particular, the author team has provided very detailed and comprehensive responses to the review comments, and has made very thoughtful revisions to the Chapter text.

Contentious or controversial issues that had to be addressed and how those have been handled

Some reviewers were concerned about the use of the Scenario Database, access to it, the lack of reference to scenarios not included in the Database, and the extent to which the 'literature' versus the 'Database' is being assessed. There were overall concerns about the IAMs themselves, how comprehensive/realistic they are, the extent to which they sample all possibilities (e.g. the potential role of Solar Radiation Management (SRM), CDR, technological change, etc.), and the transparency as to how they are formulated and constrained. Also, concern was raised about the number of citations to individual papers, and the preponderance of citations to papers authored by Chapter authors. As was the case for the key concerns noted above, the Author team has responded in detail to all of the review comments and has made substantive revisions to the chapter text to address these issues. The last issue, related to citations to papers authored by Chapter authors, is rather unavoidable, given the fact that the Author team is composed of leading scientists in the field. However, the REs note that there was a serious effort made by the Author team to assess the full available body of published literature in the field.

Summary

The REs are fully satisfied that the Chapter was comprehensively reviewed. The REs have been involved in relevant communication with the Lead-Author team, and would note the very prompt response of the CLAs to all advice and requests for information. The REs are satisfied that the Lead Author team has diligently and carefully considered, discussed and responded to the review comments for both rounds of review.

Gregory M. Flato

Jan S. Fuglestvedt Jan S. Fuglestvedt

11 September 2018

Rachid Mrabet

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Roberto Schaeffer

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Working Group I (WG I) – The Physical Science Basis Final Report from IPCC Special Report on Global Warming of 1.5°C Review Editor (RE)

To the Co-Chairs of the IPCC Working Group I, Working Group II, and Working Group III From: Jose Antonio Marengo (Brazil) & Joy Jacqueline Pereira (Malaysia)

Final Report from Review Editors of Chapter 3 on Impacts of 1.5°C global warming on natural and human systems

Introduction

The First Order Draft of Chapter 3 received 4,209 review comments. The Second Order Draft received 7,427 review comments, of which 3,874 were substantial and the rest were of editorial nature. Review Editors (REs) are expected to attend two Lead Author Meetings (LAMs), where the writing teams consider the results of the two formal round of reviews (i.e. LAM#3 and LAM#4).

Two of the three REs, Joy Pereira (Malaysia) and Boris Sherstyukov (Russian Federation) attended LAM#3 in Malmo, Sweden. RE Jose Marengo (Brazil) did not attend LAM#3 as he was hospitalized. The REs were assisted by Working Group 1 Vice-Chair, Prof. Carolina Vera (Argentina) at LAM#3. In addition to the discussion, a software developed by Working Group 2 Vice-Chair Prof. Andreas Fischlin (Switzerland) was used to delineate key comments. The findings were then cross-check with the outcome of the discussion. Generally, all the comments discussed during the LAM#3 were captured by the software. The author team held extensive discussions on key issues raised by the reviewers on the First Order Draft, developed a workplan and division of tasks to address the review comments, and laid out a clear timeline to provide responses to all of the review comments.

Two of the three REs, Joy Pereira (Malaysia) and Jose Marengo (Brazil) were able to attend LAM#4 in Gaborone, Botwsana. Boris Sherstyukov (Russian Federation) decided to leave the team of REs after LAM#3. The REs present at LAM#4, with support from IPCC Vice-Chair, Dr. Ko Barret (USA), provided feedback and advice on dealing with review comments and making revisions to the chapter text and figures. The discussion was open and transparent in dealing with the comments. The TSU of Working Group II also worked hard to support Chapter 3, particularly in helping to cluster the review comments by sections and highlighting cross-chapter issues, among others.

The REs note that the very tight timeline for revisions and unprecedented number of over 7000 review comments posed a tremendous challenge for the entire author team. The fact that only two REs remained for the rest of the process after LAM#3 was also a challenge for the REs.

Main areas of concern arising from the review comments

Key concerns noted by reviewers of the SOD include the following:

- Impacts of 1.5 C vs current and 2 C, there is no clear difference on impacts of these 2 levels of warming.
- Lack of similar structure in all chapter's sections
- Some references do not include year of publication or name of the journal
- Focus on high risk areas (Mediterranean, SW Asia, N Africa)
- Some statements poorly supported by references and missing references
- Impacts are mostly qualitatively described
- Statements about confidence levels and IPCC uncertainty language

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- Need to include climate change and cultural heritage
- No references to gender differentiated impacts of climate change and little reference to indigenous
- Regional and no global focus on drought and dryness
- Use of impacts and risk terminology in the chapter
- Better clarification of SLR section
- Impacts on the Arctic environment
- Projected impacts listed do not delineate between different temperature scenarios
- Recognition of the impacts of BECCS and afforestation and biodiversity
- Non clarity of the "Ice regions" section

We believe that the author team has addressed all these issues as reflected in their responses to the review comments on the substantive revisions that have been made. Thoughtful revisions have been made to the chapter text, structure and figures. The chapter has been revised to have sharp focus on 1.5 degrees with removal of parts not focused on 1.5 degrees. Repetitions were deleted, sections were shortened and subsections were restructured to reduce the level of sub-topics. Specific revisions have been made to address the above-mentioned concerns. The author team has also provided detailed responses to the review comments.

Contentious or controversial issues that had to be addressed and how those have been handled

There were review comments that cautioned the introduction of new figures after LAM#3, which will not be subject to expert review and may give rise to controversy during the approval session. However, this could not be avoided given the substantial amount of new literature that has since become available.

The involvement of Contributing Authors from developing countries and economies in transition is a potential issue of controversy. The REs are satisfied that the author team has made considerable effort to contact potential Contributing Authors from such countries and note that such invitations were declined due to the tight timelines.

Other potentially controversial issues that were identified include aspects that relate to solar radiation management, treatment of regional issues, sea level rise and sea ice and adaptation as well as interpretation of temperature in the Paris Agreement. These have been addressed in the substantially revised drafts and detailed responses have also been provided by the author team for specific reviewer comments.

We note that the authors rejected 330 comments and did not respond to one comment. Many comments were considered non-applicable by the authors for reasons that the REs consider correct. There have been cases where references suggested by the reviewers were considered not relevant to the 1.5 degrees report and will be considered in the AR6. The REs commend the serious effort made by the author team to assess the full body of published literature available in the field given the limited timeframe.

Summary

The REs are fully satisfied that Chapter 3 was comprehensively reviewed. The REs have been involved in relevant communication with the author team, and note the prompt response of the CLAs to all advice and requests for information. The REs are satisfied that the author team has diligently and carefully considered, discussed and responded to the review comments for both rounds of review.

Jose A. Marengo (Brazil) 21 September 2018

foyfacquelineReverse

Joy J. Pereira (Malaysia) 21 September 2018

Working Group I (WG I) – The Physical Science Basis

Final Report from IPCC Special Report on Global Warming of 1.5°C Review Editors (RE) Chapter 4

To the Co-Chairs of the IPCC Working Group I, Working Group II, and Working Group III From: Diana Urge-Vorsatz, Central European University

Mark Howden, Climate Change Institute, Australian National University, Canberra, ACT, 2601, Australia

Amjad Abdulla, Ministry of Environment and Energy, Maldives

Final Report from Review Editor of Chapter 4: Strengthening and implementing the global response

The First Order Draft received 2998 comments, while the Second Order Draft received 4409 comments.

After the first set of comments were received on the First Order Draft (FOD), the then appointed two Review Editors (Rizaldi Boer and Diana Urge-Vorsatz) attended the Third Lead Author meeting. The Review Editors identified a number of issues that emerged particularly strongly from the review comments. These were the following:

- there was a strong wish from a large number of reviewers that the chapter focuses more concretely on 1.5°C climate change rather than general mitigation, not to present a "mini AR6"
- many reviewers pointed to the importance of an assessment rather than a review
- solar radiation management received a very large number of comments, many of them suggesting opposite developments. Some pointed at the inconsistency with SAI
- BECCS and AFOLU also featured highly in the comments
- there was disagreement among the reviewers whether the chapter should refer more or less to the Paris Agreement
- many reviewers commented on the balance between adaptation and mitigation, but drew slightly
 opposing conclusions. Nevertheless, most wanted a more balanced treatment and thus more
 discussion on adaptation; while others wanted to see also transformative mitigation and not only
 transformative adaptation.
- Reviewers consistently wanted to have more guidance from the chapter on what the key options were. They expected more help from the chapter on the selection of options and what works.

In addition, following the suggestion from IPCC Bureau members for a consistent treatment of comments, some critical high-priority comments have been highlighted in the Excel spreadsheet containing comments, enabling effective work by the authors. The Author team worked mostly in break-out groups to address comments, with some joint sessions on more controversial or overarching issues.

After the Second Order Draft (SOD), when over 4400 comments were received, and one of the Review Editors was unable to attend the Third Lead Author meeting, it became clear that the work load had become unmanageable and more Review Editors were requested.



The TSU reacted positively. Two more Review Editors were appointed: Mark Howden and Amjad Abdulla. Amjad had already been following the chapter during LAM3, therefore was in a good position to take over this task.

Based on the SOD and the review comments received, the Review Editors have highlighted a number of issues that seemed to be critical for a successful chapter, or were particularly pushed by the reviewers. These included:

Overall comments:

- The reviewers have commended the chapter for the overall high quality, major improvement since FOD, despite the extremely ambitious time frames and very high number of comments
- They also praised the work on successfully addressing the FOD comments
- However, they pointed out that the responses "not relevant, text revised" and "no space" were felt to be overused and the reviewers asked for more concrete responses, especially where the text has been modified
- They reiterated, consistently since the FOD, that the core business of the chapter was to assess options to strengthen and implement the global response consistent with 1.5°C. In this context, they felt there were too many "philosophical" and theoretical, academic discussions in the text rather than an assessment of concrete options towards 1.5°C.
- Reviewers requested consistency between Chapter 4 and Chapter 2 (and 5) at a high level: e.g. grouping of options were requested to be the same in order for being able to compare and contrast options
- The feasibility assessment was a rather controversial area. Reviewers requested that authors make sure to root assessment in as much evidence as possible; and re-emphasised that the authors should avoid policy prescriptiveness as much as possible
- There were comments on the adaptation/mitigation balance and presentation; integration of the two was viewed by some reviewers as not being warranted by the asymmetrical importance of the two in a 1.5°C context
- On societally, politically and environmentally more controversial issues (e.g. nuclear, Solar Radiation Management, Bioenergy Carbon Capture and Storage, loss and damage, etc), acknowledging the diversity of insights emerging from the literature was found to be very important by the reviewers
- The reviewers pointed at a few long sections that relied on a single reference that needed to be diversified in its literature source
- Reviewers pointed out that 4.3 has little quantitative information (costs (e.g. in USD/tCO₂), potentials, deployment and phase out rates, investment needs, emissions reduction rates, demand levels, electricity and fuel shares)
- Substantially strengthening the coverage of agriculture, forestry, ecosystem and other land-based emission-reduction options was needed
- Substantially strengthening the coverage of demand-side options such as energy efficiency, especially in buildings and infrastructure was also needed
- There was a need to revisit the FOD concerns about the balance of coverage of options (e.g. SRM vs those delivering the co-benefits in Chapter 5, and options identified in Chapter 2 as important)

The Chapter team decided to put most of their time at LAM4 into revising the feasibility table in a way where all entries are more traceable and thus defendable. This did come at the cost of addressing some other categories of reviewer comments.

Much work remained for the short period following the LAM4 when the Chapter had to be finalized. Therefore, due to the lack of coverage of certain issues within the writing team, the Chapter team decided to add a Contributing Author to deal with agriculture (and forestry) related comments and in order to add more substantial coverage. This section has been substantially expanded and revised, broadly addressing the concerns of the reviewers. The speed of the whole writing process and the limited time for each stage (both writing and review) limited the opportunity for full responses to all review comments (particularly in relation to the comments on broader structure, the need for synthesis and length reduction) and for effective interaction between the Review Editors and the Author teams. Nevertheless, the vast majority of SOD reviewer comments have been explicitly addressed and the six comments that were not explicitly responded to in the spreadsheet are not critical to the chapter. The Chapter has benefited from the extensive review process.

Signature:

Full name: Prof.Diana Urge-Vorsatz

Date: September 25, 2018

Signature:

Full Name:

Prof Stuart Mark Howden

Date: 25 September 2018

Signature:

Man;

Full Name: Amjad Abdulla

Date: 25 September 2018

Working Group I (WG I) - The Physical Science Basis

Final Report from IPCC Special Report on Global Warming of 1.5°C Review Editor (RE)

To the Co-Chairs of the IPCC Working Group I, Working Group II, and Working Group III From: Roberto Sánchez Rodríguez, El Colegio de la Frontera Norte, Mexico Final Report from Review Editor of chapter 5: Sustainable Development, Poverty Eradication and Reducing Inequalities

The First Order Draft of Chapter 5 received 1005 comments and the Second Order Draft received 2299 comments. The CLAs and the LAs discussed these comments and reached consensus on the most appropriate way to respond to them during the LAM3 and LAM4 Leading Author Meetings and the teleconferences after these meetings. The RE were invited to participate in these teleconferences too. Participation in these discussions allowed me to assess the commitment and efficiency of the author team addressing the reviewer's comments. Areas of concern were: the need to improve the storyline of the chapter, the use of confidence language, designing informative and clear figures and tables, duplication with other chapters, making sure relevant issues were included in the Executive Summary, and making sure the chapter meets its page limit.

Key concerns noted by reviewers of the SOD included: the need to focus what is unique to 1.5°C, more literature needed to support some statements, and what some reviewers considered policy prescriptive language, particularly in topics perceived to be outside the scope of the IPCC. The author team addressed and responded to all comments received carefully and properly.

Signature:

Full Name: Roberto Alejandro Sánchez Rodríguez

Date: September 21, 2018



Working Group I (WG I) – The Physical Science Basis

Final Report from IPCC Special Report on Global Warming of 1.5°C Review Editor (RE)

To the Co-Chairs of the IPCC Working Group I, Working Group II, and Working Group III From: **Svitlana Krakovska**, Ukrainian Hydrometeorological Institute, UKRAINE Final Report from Review Editor of Chapter 5: Sustainable Development, Poverty Eradication and Reducing Inequalities

Introduction

During the review process Chapter 5 has received 1005 comments for the First Order Draft (FOD) and 2299 comments for the Second Order Draft (SOD). The expert reviewers' comments were widely discussed at the Leading Author Meetings LAM3 and LAM4 attended by REs and at the regular teleconferences after the meetings where REs were invited to participate too. Such personal involving in the process of Chapter team discussion gave REs a possibility to judge about ability and efficiency of the leading author team to deal with the challenge to assess pretty sparse literature on social aspects of warming on 1.5-2°C and to formulate statements in a brief, but a fully understandable way.

Main areas of concern

It should be noted that the text of the Chapter 5 has been modified substantially from FOD to SOD and to the final version mainly due to requests from expert reviewers to shorten the text to allocated number of pages, be more precise in statements, but not policy prescriptive and don't repeat the information from the other Chapters. Some of the main concerns after the FOD were deficiency of storyline, not relevance of assessed literature and resulted statements to scenarios of 1.5-2°C warming and improper usage of confidence language. At the LAM3 the leading author team mainly worked on the storyline and restructuring of the Chapter accordingly. All LAs and CLAs were involved in producing cross-chapter boxes that greatly facilitate consistency across the whole Special Report.

At LAM4 the main focus was on discussion and formulation of statements for Executive Summary (ES), their traceability and respective confidence language. Great attention was devoted to figures in order to make them enough informative, but readable and intuitively understandable. Expert reviewers' comments were essentially helpful for leading author team in their work on ES and figures.

New published literature was accommodated to the Final Draft for Governments, but some references were excluded due to substantial shortening of the text and lack of relevance any more. Such exclusion was main reason of "rejected" answers by LAs to SOD expert comments. Some proposed references by reviewers were rejected to include too due to they were published before AR5.

Summary

As a summary, I can assure that the author team of Chapter 5 carefully and properly has considered and responded to all received comments. The work on writing and compilation of the chapter text was carried out in a constructive way with an impartiality and respect to each other, expert reviewers and REs. The Chapter 5 itself has been reviewed by experts at two rounds in a comprehensive and satisfactory way.

Signature:

Full Name: Svitlana Krakovska

Date: 21.09.2018

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Working Group I (WG I) – The Physical Science Basis Final Report from IPCC Special Report on Global Warming of 1.5°C Review Editor (RE)

To the Co-Chairs of the IPCC Working Group I, Working Group II, and Working Group III From: Ramón Pichs Madruga, Centre for World Economy Studies (CIEM) Final Report from Review Editor of Chapter 5: Sustainable Development, Poverty Eradication and Reducing Inequalities

In general, review comments referred to several areas of concern, including:

- Overlaps with other chapters implying that more harmonization with those other chapters would avoid repetitions / potential for cross-references.
- Limited information relevant to 1.5°C / need of focus on what is unique to 1.5°C
- Policy prescriptive language in some parts of the text.
- Several comments on terminology (e.g. consistency in the use of some terms across the chapter, some terms needing definition, confusing use and SD and SDGs).
- A number of reviewers asked for more evidence / more literature to support the statements

The resulting text reflects a reasonable treatment of the substantive comments received, including those referred to controversial and contentious issues. All substantive comments were adequately considered by the authors' team in the preparation of the Chapter.

During the final stage of the drafting process, the prioritized actions by the Chapter team were oriented to refine a storyline for the chapter, to reduce the gaps within sections, to increase coherence among sections and with other chapters, and to improve the graphics and figures.

After the LAM4, the team focused its work on the need to shorten the chapter according to the allocated page limit; the traceability of the whole product (ES-Chapter); the well documented confidence language; agreements with other chapters with regard to cross-cutting issues and overlapping; and the treatment of new literature.

The responses to the substantive comments by sections, provided by the Chapter team in the excel format, reflect a well-prepared process, where the substantive comments were identified from the very beginning of the process and the responses to them were monitored by the CLAs during the preparation of the Chapter.

In my opinion, all substantive expert and review comments were afforded appropriate consideration.

Signature:

Full Name: Ramón Pichs-Madruga

Date: 19.09.18



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