



Building on the IPCC Special Reports: Plans for the Working Group III Sixth Assessment Report

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IPCC Symposium 2019
Tranomon Hulls Forum
Tokyo, 6 March 2019

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INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



Main Products during the AR6 cycle

1) The Special Reports

Special Report on Global Warming of
1.5°C (SR15)

Approved
October 2018



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11



Special Report on Ocean and
Cryosphere (SROCC)



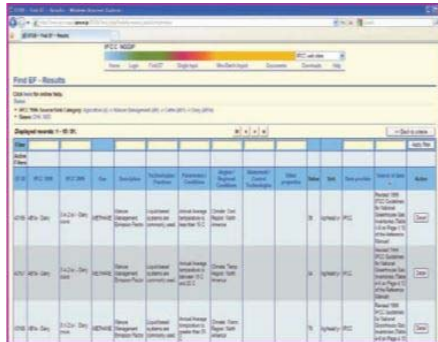
Approval
September 2019

Special Report on Climate
Change and Land (SRCCL)



Approval
August 2019

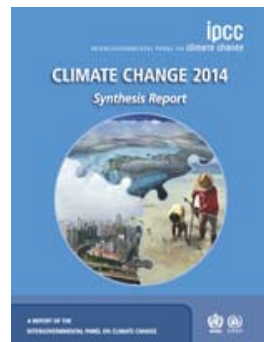
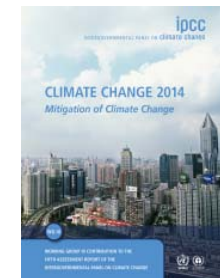
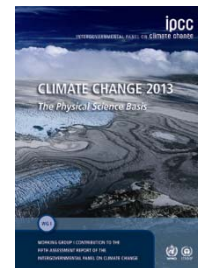
Main Products during the AR6 cycle



Year	Working Group	Report Title	Lead Author	Co-Editors	Working Group	Session	Year	IPCC Session	IPCC Report
2007	II	Working Group II Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change	Core Working Group II	Core Working Group II	II	30th	2007	WGII	Working Group II Contribution to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change
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2) A methodology report (inventories)

3) Three Working Group reports

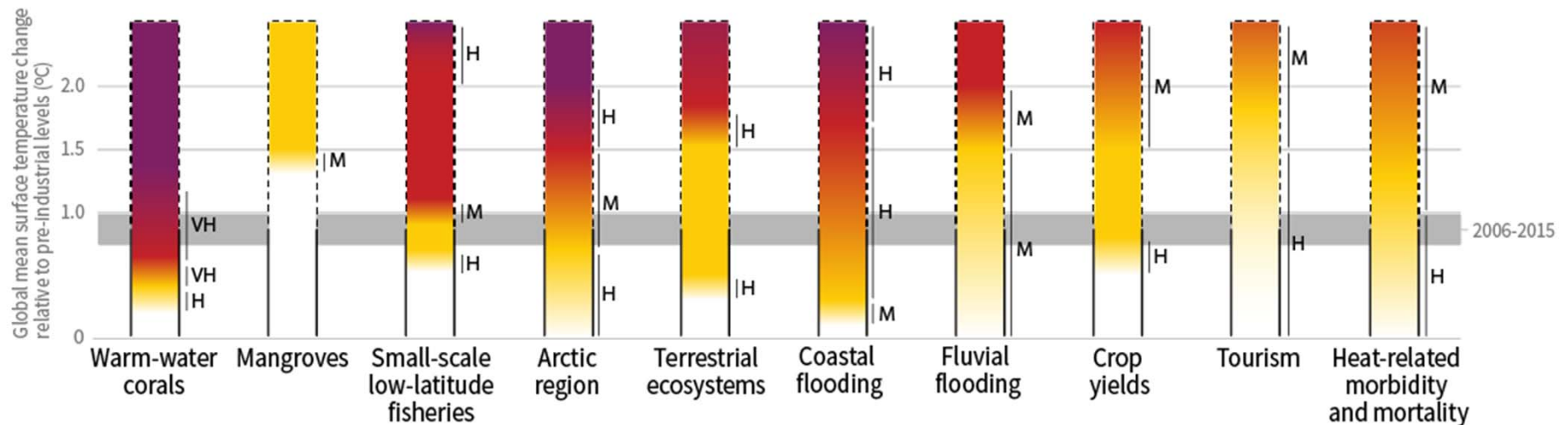


4) A Synthesis Report

SPM2 |

SR1.5: discernible differences between 1.5 °C and 2 °C warming

Impacts and risks for selected natural, managed and human systems



Confidence level for transition: L=Low, M=Medium, H=High and VH=Very high

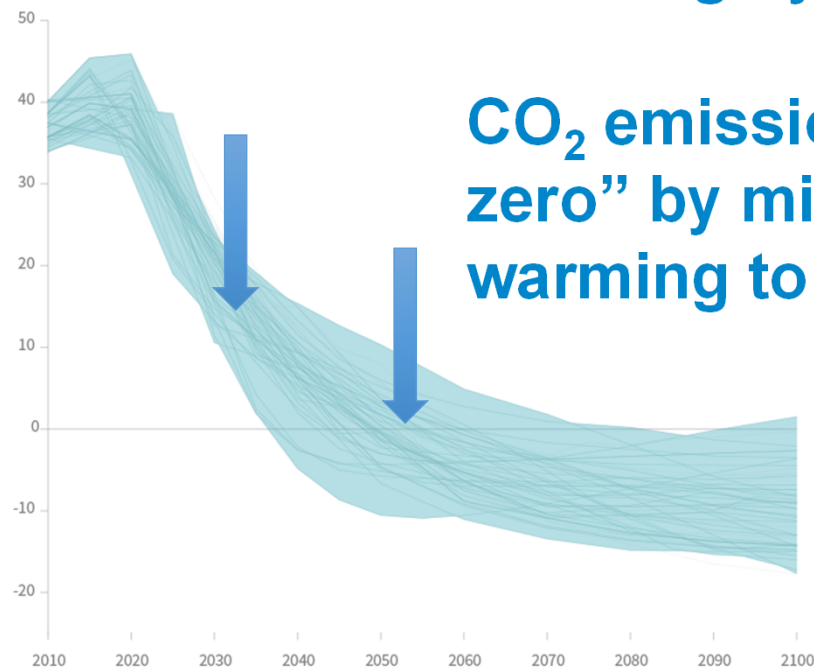
SPM3a |

SR1.5:

CO₂ emissions need to fall by ~45% by 2030 on the path to limiting global warming by 1.5 °C;

CO₂ emissions need to fall to “net zero” by mid-century to limit global warming to 1.5 °C

Global total net CO₂ emissions
Billion tonnes of CO₂/yr



Timing of net zero CO₂
Line widths depict the 5-95th percentile and the 25-75th percentile of scenarios

Pathways limiting global warming to 1.5°C with no or low overshoot

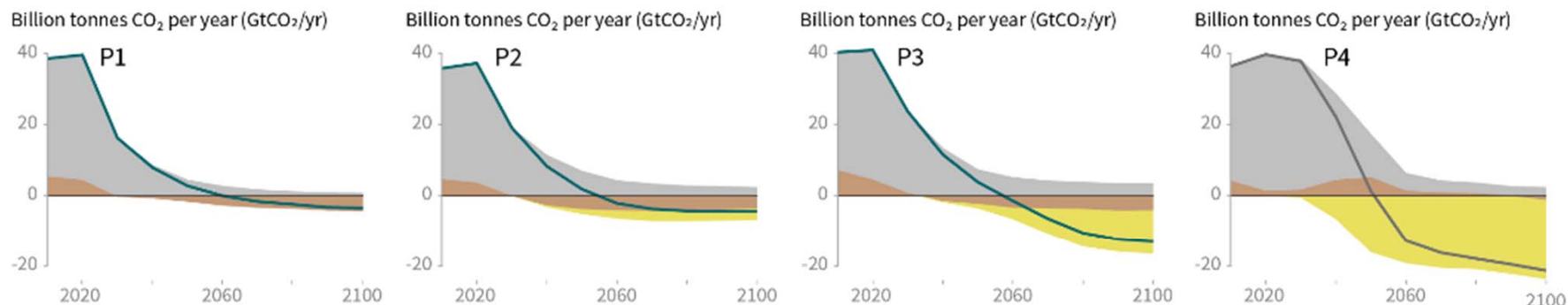
SPM3b |

SR1.5:

There are multiple mitigation pathways compatible with 1.5 °C warming

Breakdown of contributions to global net CO₂ emissions in four illustrative model pathways

● Fossil fuel and industry ● AFOLU ● BECCS



P1: A scenario in which social, business and technological innovations result in lower energy demand up to 2050 while living standards rise, especially in the global South. A downsized energy system enables rapid decarbonization of energy supply. Afforestation is the only CDR option considered; neither fossil fuels with CCS nor BECCS are used.

P2: A scenario with a broad focus on sustainability including energy intensity, human development, economic convergence and international cooperation, as well as shifts towards sustainable and healthy consumption patterns, low-carbon technology innovation, and well-managed land systems with limited societal acceptability for BECCS.

P3: A middle-of-the-road scenario in which societal as well as technological development follows historical patterns. Emissions reductions are mainly achieved by changing the way in which energy and products are produced, and to a lesser degree by reductions in demand.

P4: A resource- and energy-intensive scenario in which economic growth and globalization lead to widespread adoption of greenhouse-gas-intensive lifestyles, including high demand for transportation fuels and livestock products. Emissions reductions are mainly achieved through technological means, making strong use of CDR through the deployment of BECCS.

Government questionnaire: priority topics for WG III

Policy relevant information on the Paris Agreement goals (well below 2°C, efforts to achieve 1.5°C, climate neutrality); anticipate the global stocktake; transformation pathways to meet 2°C and 1.5°C; social + financial + technological + sectoral + regional implications of pathways	19
Geo-engineering, including limits, negative emissions	7
The role of short-lived climate pollutants and other benefits	6
Options for decarbonization pathways, including solutions from business	6
Links between climate change and SDGs	5
Technological, economic, social, and institutional barriers to realizing mitigation targets and benefits from carbon offset mechanisms	4
Opportunities, challenges, barriers and co-benefits of climate change mitigation policies and measures	3
Impacts on land-use change, including ecosystem restoration, biodiversity and ecosystem functions and services	3

Challenges for AR6

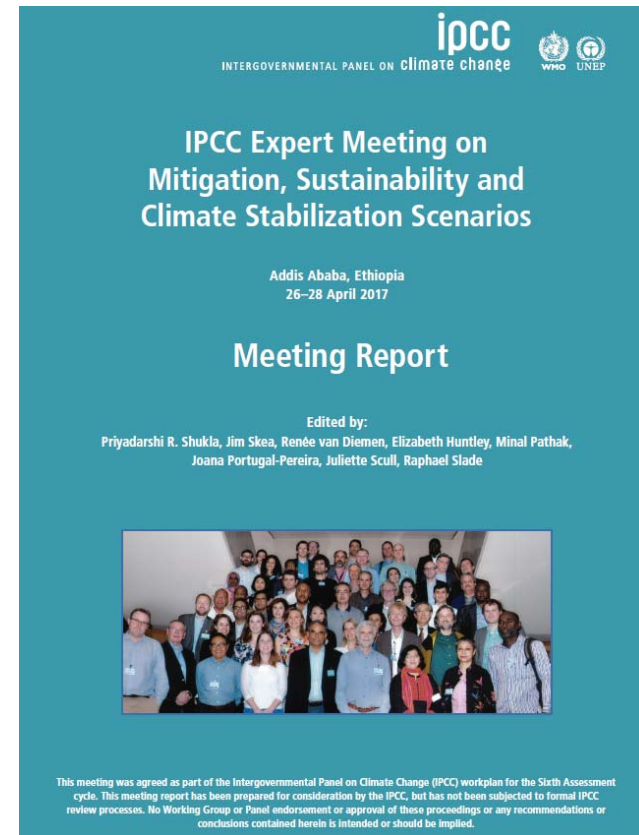
AR5 achieved a systemic view of mitigation opportunities. But there is a need to include a wider range of approaches in the assessment, including national and regional modelling as well as global models.

Challenges for AR6:

- To assess the linkages between high-level climate stabilization goals and scenarios on the one hand and the practical steps needed in the short- and medium-term to make the realisation of these goals possible
- To make greater use of social science disciplines, in addition to economics, especially for gaining insight into issues related to lifestyle, behaviour, consumption, technological choices and socio-technical transitions.
- To link climate change mitigation better to other agreed policy goals nationally and internationally (e.g. the Sustainable Development Goals - SDGs).

Expert Meeting on IPCC Expert Meeting on Mitigation, Sustainability and Climate Stabilisation Scenarios: April 2017

- 54 scientists from 27 countries covering a wide range of disciplines and perspectives - not just modellers
- Also included participants from:
 - Business
 - Government
 - WGs I and II communities

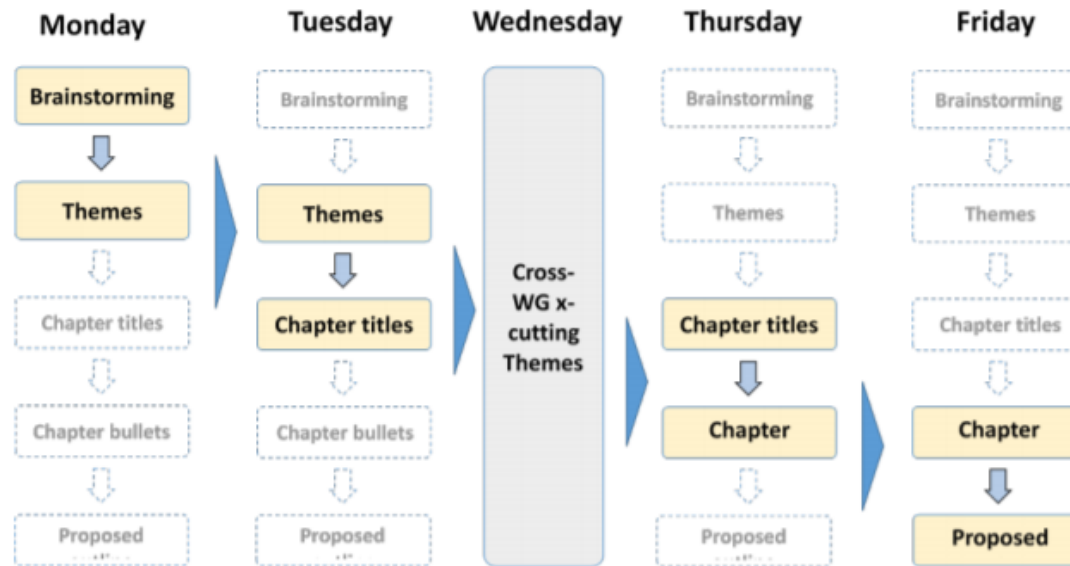


Expert meeting recommendations

- Start discussion of the synthesis report (and accompanying scenario requirements) early to promote coherence across WGs
- Hold a dedicated x-WG Breakout Group on scenarios during the AR6 scoping meeting
- Establish a cross-WG contact group for scenarios during AR6
- Consider authorship cutting across chapters and WGs
- Gather documentation of the treatment of scenarios in IPCC in one place
- Have a scenarios chapter that is common to all three WGs
- Hold cross-WG discussions on best practices for model intercomparison projects (MIPs), and presentation/communication of scenario ranges
- Be clear as to the use of the Shared Socio-Economic Pathways (SSPs)

AR6 scoping Meeting (1-5 May 2017)

- Structured bottom-up process: no draft outline to start the meeting.
- Outline emerged over the course of the week through interactive series of discussions.

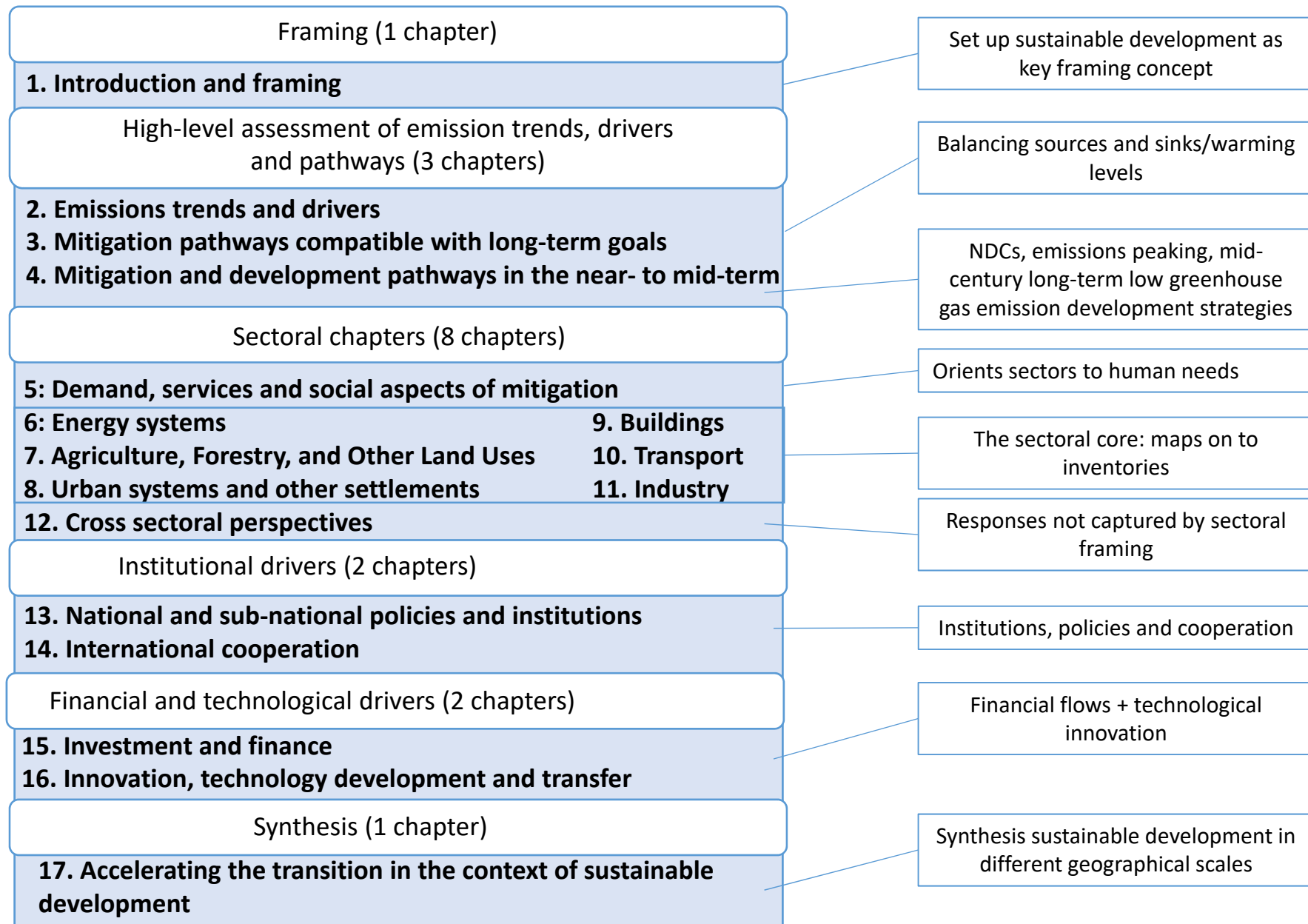


To better inform the scoping of AR6, an expert meeting was held in advance of the meeting to address some of the specific challenges identified for AR6.

Outline approval: 46th session of the IPCC in Montreal (September 2017)



Agreed outline of WG III AR6



Chapter 6: Energy systems

- Energy services, energy systems and energy sector, integrations with other systems (including food supply system, buildings, transportation, industrial systems)
- Energy resources (fossil and non-fossil) and their regional distribution
- Global and regional new trends and drivers
- Policies and measures and other regulatory frameworks; and supply and demand systems
- Fugitive emissions and non-CO2 emissions
- Global and regional new trends for electricity and low carbon energy supply systems, including deployment and cost aspects.
- Smart energy systems, decentralized systems and the integration of the supply and demand
- Energy efficiency technologies and measures
- Mitigation options (including CCS), practices and behavioral aspects (including public perception and social acceptance)
- Interconnection, storage, infrastructure and lock-in
- The role of energy systems in long-term mitigation pathways
- Bridging long-term targets with short and mid-term policies
- Sectoral policies and goals (including feed-in tariffs, renewables obligations and others)
- Mainstreaming climate into energy policy

How to get involved in AR6: Report writing process

Coordinating Lead Author
Lead Author
Review Editor
Contributing Author

Expert Reviewer

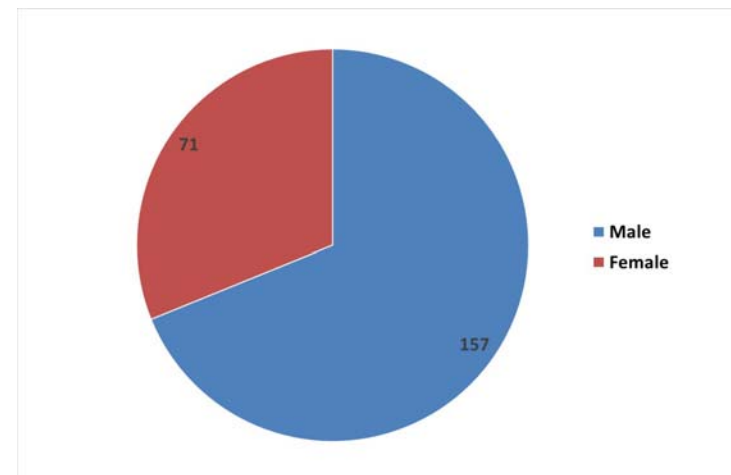
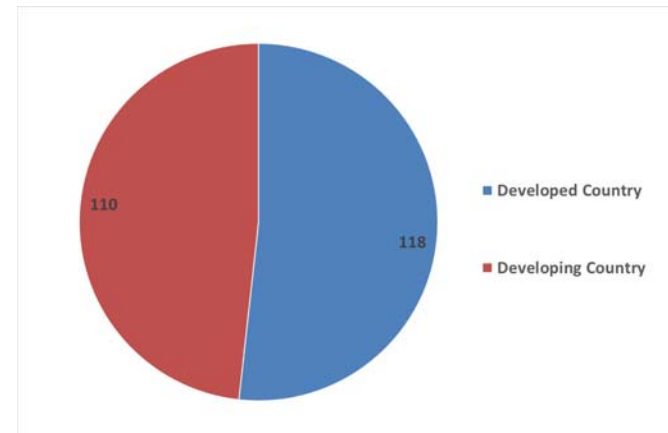
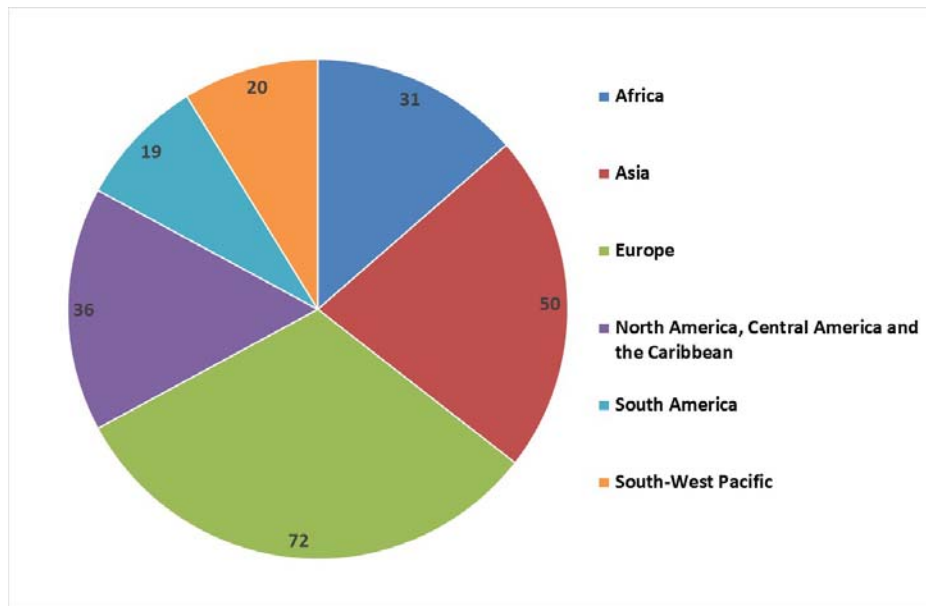


Key statistics

- **Two thousand experts** from 124 different countries registered to be reviewers (based on citizenship)
- Overall, the First Order Draft of the Special Report on 1.5 °C attracted **12,895 review comments**.
- These comments came from 489 expert reviewers representing **61 different countries**.
- Based on citizenship, half of expert reviewers were from Europe (51%). North America, Central America and the Caribbean accounted for a further 19%, Asia (13%), South America (7%), South West Pacific (6%) and Africa (5%).
- A third (31%) of expert reviewers were female, two thirds (69%) were male.

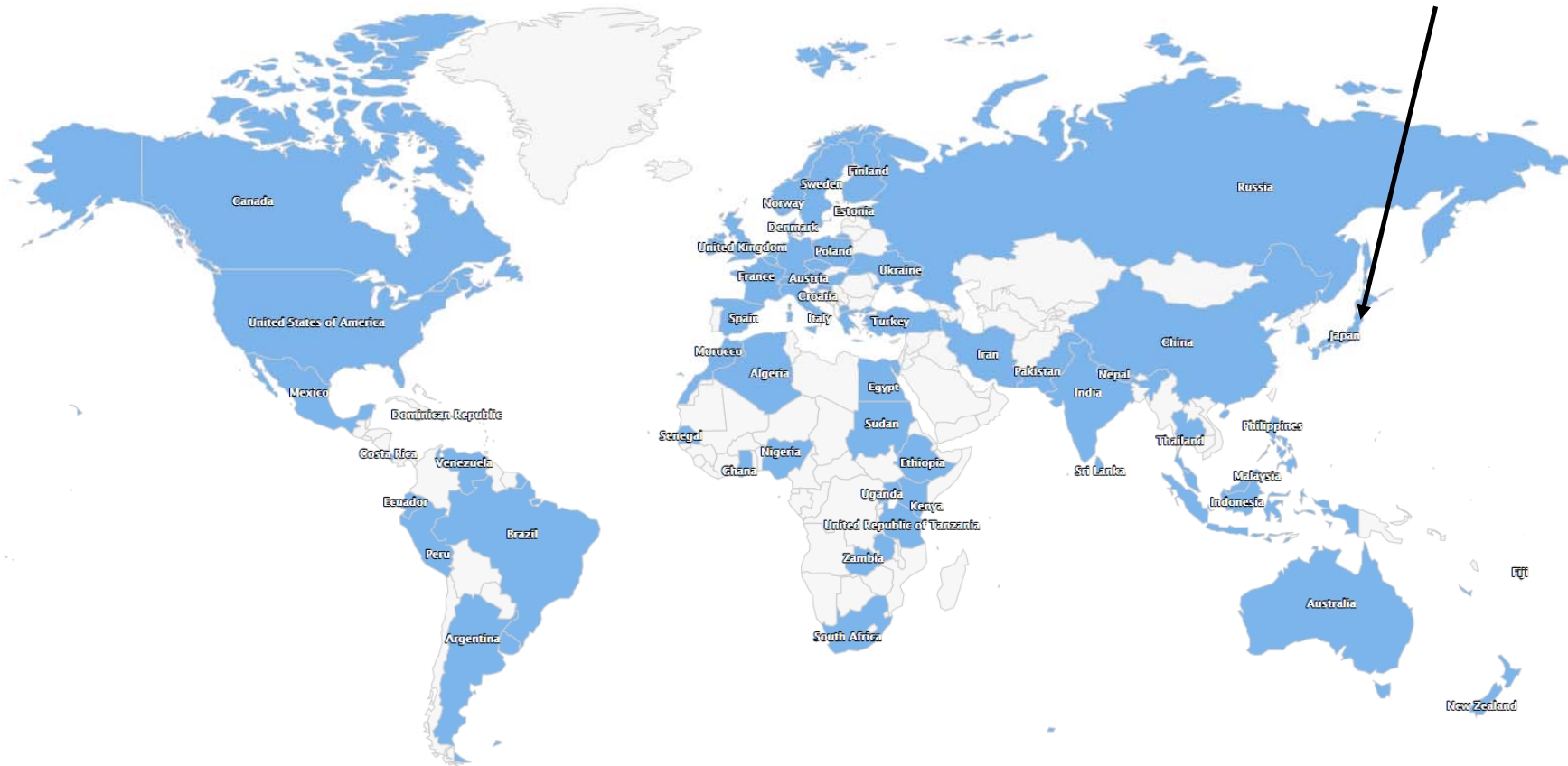


Breakdown of WG III AR6 authors



Countries nominating

Japan:
67 nominations
14 selections



How to get involved in AR6: Meetings, workshops



Shaping the industry

A review of International Petroleum

Energy policy and the transition to a low carbon future



Speakers at the 'Pathways to a better energy system' session, chaired by Professor Jim Skea CBE, President, Energy Institute and Co-chair of the IPCC Working Group III, fielded a number of questions from the floor during what proved to be a lively session during IP Week

Speaking at IP Week's 'Pathways towards a better energy system' session, Dr Hoesung Lee, Chair, Intergovernmental Panel on Climate Change (IPCC), confirmed that in late 2018, the IPCC is due to provide a special report on the impacts of global warming of 1.5°C. The following year, two additional IPCC reports will be released that will fill in the knowledge gaps on land and sea. 'We need to develop a greater understanding of climate change mitigation,' he said. But it is clear that a lot needs to be done to decarbonise both energy and the economy.

New rules proposed

In December 2016, the European Commission released its 'Clean Energy Package', which contains proposals for new rules for a consumer-centred clean energy transition. The most substantial measures concern renewables and energy efficiency and amendments to the electricity market design. The proposal includes a revised Renewable Energy Directive. It identifies six key areas for action – further deployment of renewables in the electricity sector; increasing renewables in the heating and cooling sector; decarbonising and diversifying the transport

Striding forth

ard march towards a low carbon world is unstoppable, writes Nyadike.

Oil and gas will play an important part in the overall global energy

A surprising number of oil industry executives seem remarkably relaxed about the role of tougher fiscal measures on their industry to act as a driver towards achieving low carbon energy. A poll conducted among delegates at the IP event asked 'What is the most




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How to get involved in AR6: Produce the literature

OCT	23-29 October Third Lead Author Meeting
NOV	1 November Literature submission cut-off
DEC	17 December Second Order draft submitted to TSU 18-24 December TSU compile Second Order Draft
JAN	8 January-25 February
FEB	Expert and Government Review Deadline 25 February
MAR	4 March TSU send compiled Review comments to CLAs
APR	9-15 April Fourth Lead Author Meeting
MAY	15 May Literature acceptance cut-off 20 May Final draft submitted to TSU 21 May-3 June TSU compile Final Draft
JUNE	4 June-29 July Final Government Review Deadline 29 July
SEPT	3 September (TBC) Pre-IPCC48 SR15 meeting
OCT	1-7 October 48th Session of IPCC - Approval of SR1.5

2018

RPR Review of Policy Research 

744

Narrowing the Climate Field: The Symbolic Power of Authors in the IPCC's Assessment of Mitigation

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Abstract

This article provides a critical analysis of the Intergovernmental Panel on Climate Change (IPCC) as a boundary organization using Bourdieu's concepts of field, habitus, and symbolic power. The article combines quantitative, network, and survey data to explore the authorship of Working Group III's contribution to the IPCC Fifth Assessment Report (AR5). These data reveal the dominance of a small group of authors and institutions in the production of knowledge that is represented in the AR5 report, and illuminates how the IPCC's centrality to the field of climate politics is shaping the research and publication strategies of researchers within that field. As a result, the study is able to identify organizational avenues for deepening the involvement and symbolic power of authors from the global South in IPCC assessments of climate change. While empirically, the results of this study lead us to question the IPCC as an assessor of knowledge, theoretically, it suggests that particularly in the international sphere, the use of the boundary organization concept risks overlooking powerful networks of scientific actors and institutions and their broader implication in the politicization of science.

KEY WORDS: IPCC, climate change: mitigation, boundary organization, Bourdieu, field, symbolic power, knowledge inequalities

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Timeline for WGIII contribution to AR6

26-28 April 2017	Expert Meeting on Mitigation, Sustainability and Climate Stabilization Scenarios
1-5 May 2017	AR6 Scoping Meeting
6-10 Sept	Panel consideration of outline for AR6
15 Sept – 27 Oct 2017	Call for CLA/LA/RE Nominations
29-30 Jan 2018	Decision on selection of CLA/LA/RE
1-5 Apr 2019	1st Lead Author Meeting (LAM1, Edinburgh)
30 Sep – 4 Oct 2019	2nd Lead Author Meeting (LAM2)
9 Dec 19 – 31 Jan 20	1st Order Draft (FOD) Expert Review
30 Mar – 3 Apr 3 2020	3rd Lead Author Meeting (LAM3)
1 Jun – 24 Jul 2020	2nd Order Draft (SOD) Expert Review
19-23 Oct 2020	4th Lead Author Meeting (LAM4)
1 Feb – 26 Mar 2021	FGD Government Review of SPM
12-14 Jul 2021	IPCC acceptance/adoption/approval

Scoping

Author Selection

Drafting and Review

AR6 Approval

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Thank you for your attention

Jim Skea
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