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SUMMARY OF THE 47TH SESSION OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE: 13-16 MARCH 2018

The 47th session of the Intergovernmental Panel on Climate Change (IPCC-47) convened from 13-16 March 2018, in Paris, France, at the headquarters of the UN Educational, Scientific and Cultural Organization (UNESCO) and brought together approximately 350 participants from over 130 countries.

Following the opening of IPCC-47, IPCC Chair Hoesung Lee suspended the plenary for a 30th anniversary celebration of the IPCC. The celebration, hosted by the Government of France, provided an overview of the origins and evolution of the IPCC, as well as the history of climate science. On Wednesday morning, 14 March, the IPCC plenary reconvened.

During IPCC-47, the Panel adopted decisions related to:

- extending the mandate of the *Ad Hoc* Task Group on Financial Stability, which will report back to IPCC-48;
- establishing a task group on gender;
- the terms of reference of a task group on the organization of the future work of the IPCC in light of the global stocktake under the Paris Agreement;
- expanding the IPCC Scholarship Programme to include funding for chapter scientists;
- enhancing developing country participation in IPCC activities;
- the IPCC Trust Fund and budget;
- the future of the Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA); and
- the admission of seven new observer organizations. The Panel heard presentations by Working Group (WG)

Co-Chairs on the reports from the WG Bureaux regarding the selection of Coordinating Lead Authors, Lead Authors, and Review Editors for WG contributions to the Sixth Assessment Report.

IPCC-47 also heard progress reports on communication and outreach activities and on additional sixth assessment cycle products, including the:

- Special Report on Global Warming of 1.5°C (SR15);
- Special Report on Climate Change and Land;
- Special Report on the Ocean and Cryosphere in a Changing Climate; and
- Methodology Report to refine the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

The next meeting of the IPCC will convene during the first week of October 2018 in Incheon, Republic of Korea, to approve the SR15. IPCC-49 will convene in May 2019 in Kyoto, Japan, to approve the Methodology Report to refine the 2006 IPCC Guidelines.

A BRIEF HISTORY OF THE IPCC

The IPCC was established in 1988 by the World Meteorological Organization (WMO) and the UN Environment Programme (UNEP) to assess, in a comprehensive, objective, open, and transparent manner, the scientific, technical, and socio-economic information relevant to understanding human-

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induced climate change, its potential impacts, and adaptation and mitigation options. The IPCC is an intergovernmental and scientific body with 195 member countries, and does not undertake new research or monitor climate-related data. Instead, it conducts assessments of the state of climate change knowledge on the basis of published and peer-reviewed scientific and technical literature. IPCC reports are intended to be policy relevant, but not policy prescriptive.

The IPCC has three WGs:

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

Each WG has two Co-Chairs and six Vice-Chairs. The Co-Chairs guide the WGs in fulfilling the mandates given to them by the Panel with the assistance of Technical Support Units (TSUs).

The IPCC also has a Task Force on National GHG Inventories (TFI) to oversee the IPCC National GHG Inventories Programme, also supported by a TSU. The Programme aims to develop and refine an internationally-agreed methodology and software for calculating and reporting national GHG emissions and removals, and encourage its use by parties to the UN Framework Convention on Climate Change (UNFCCC).

The Panel elects its Bureau for the duration of a full assessment cycle, which includes preparation of an IPCC assessment report. The Bureau plans, coordinates, and monitors the IPCC's work, and is composed of climate change experts representing all regions. Currently, the Bureau comprises 34 members, and includes the IPCC Chair and Vice-Chairs, WG Co-Chairs and Vice-Chairs, and TFI Co-Chairs.

In 2011, the IPCC established an Executive Committee to assist with intersessional work and coordination among the WGs. The IPCC Secretariat is located in Geneva, Switzerland, and is hosted by the WMO.

IPCC PRODUCTS: Since its inception, the IPCC has prepared a series of comprehensive assessment reports, special reports (SRs), and technical papers that provide scientific information on climate change to the international community.

The IPCC has completed five assessment reports, which were completed in 1990, 1995, 2001, 2007, and 2014. The Sixth Assessment Report (AR6) is expected to be completed in 2022. The assessment reports are structured in three parts, one for each WG. Each WG's contribution comprises a Summary for Policymakers (SPM), a Technical Summary and an underlying assessment report. Each report undergoes an exhaustive and intensive review process by experts and governments, which takes place in three stages: a first review by experts, a second review by experts and governments, and a third review by governments.

Each SPM is then approved line by line by the respective WG. A Synthesis Report (SYR) is produced for the assessment report as a whole, which integrates the most relevant aspects of the three WG reports and SRs of that specific cycle. The Panel then approves an SPM of the SYR line by line.

The IPCC produces SRs and technical papers on specific issues related to climate change, including:

- Land Use, Land-Use Change and Forestry (2000);
- Carbon Dioxide Capture and Storage (2005);
- Climate Change and Water (2008);
- Renewable Energy Sources and Climate Change Mitigation (2011); and

• Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (2011).

SRs for the sixth assessment cycle include: the SR15, Special Report on the Ocean and Cryosphere in a Changing Climate, and Special Report on Climate Change and Land.

In addition, the IPCC produces methodology reports, which provide guidelines to assist countries in reporting on GHGs. Good Practice Guidance reports were approved by the Panel in 2000 and 2003. The latest version of the IPCC Guidelines on National GHG Inventories was approved in 2006, and the sixth assessment cycle includes a Methodology Report to refine these guidelines. Additionally, in 2013, the IPCC adopted a Supplement to the 2006 IPCC Guidelines: Wetlands (Wetlands Supplement), and the Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol (KP Supplement).

In 2007, the IPCC was awarded the Nobel Peace Prize, jointly with former US Vice President Al Gore for its work and efforts "to build up and disseminate greater knowledge about manmade climate change, and to lay the foundations needed to counteract such change."

SIXTH ASSESSMENT CYCLE: IPCC-41 to IPCC-43: IPCC-41 (24-27 February 2015, Nairobi, Kenya) addressed future IPCC work; took a decision on the size, structure, and composition of the IPCC and TFI Bureaux; and adopted decisions relevant to the sixth assessment cycle. IPCC-42 (5-8 October 2015, Dubrovnik, Croatia) elected Bureaux members for the sixth assessment cycle.

IPCC-43 (11-13 April 2016, Nairobi, Kenya) agreed to undertake three SRs in the sixth assessment cycle on global warming of 1.5°C, (SR15), climate change and land (SRCCL), and the ocean and cryosphere in a changing climate (SROCC), and a Methodology Report to refine the 2006 IPCC Guidelines. The Panel also agreed that an SR on cities would be prepared as part of the seventh assessment cycle.

IPCC-44: During this session (17-21 October 2016, Bangkok, Thailand), the Panel adopted the outlines of SR15, and of the Methodology Report to refine the 2006 IPCC Guidelines. The IPCC also adopted decisions related to, *inter alia*: the Expert Meeting on Mitigation, Sustainability, and Climate Stabilization Scenarios; communications and the AR6 scoping process; and a meeting on climate change and cities.

IPCC-45: This meeting (28-31 March 2017, Guadalajara, Mexico) approved the SRCCL and SROCC outlines, and discussed, *inter alia*; the strategic planning schedule for the sixth assessment cycle; a proposal to consider short-lived climate forcers (SLCFs); and options for resourcing the IPCC, which led to the decision to establish the *Ad Hoc* Task Group on Financial Stability (ATG-Finance).

IPCC-46: During this session (6-10 September 2017, Montreal, Canada), the Panel, *inter alia*, approved the chapter outlines for the three WG report contributions to the AR6. The Panel also heard an update on progress of the ATG-Finance, discussed various funding options for the IPCC, and agreed to extend the Group's mandate until IPCC-47.

IPCC Cities and Climate Change Science Conference (**CitiesIPCC Conference**): This meeting (5-7 March 2018, Edmonton, Canada) brought together approximately 750 participants from the science, policy, and practice communities to help determine current and future sources of emissions and pathways for cities to pursue emission reductions and resilience strategies. The meeting resulted in the establishment of a research agenda to better understand climate change, its impacts on cities, and the critical role local authorities play in addressing the climate challenge.

IPCC 30TH ANNIVERSARY CELEBRATION

This celebration was hosted by the French government and took place on Tuesday, 13 March, following the opening of the IPCC plenary. In opening remarks, IPCC Chair Hoesung Lee called for reducing uncertainty by improving scientific understanding of, *inter alia*, thresholds for tipping points leading to irreversible changes in climate and socio-economic systems. He called for increased participation of social scientists in the AR6 in order to achieve a deeper understanding of social values, consumption and production patterns, differing risk calculations, and policy responses in light of differing stakeholder interests.

ORIGINS OF THE IPCC

Main Stages of Climate Knowledge: Introducing this session, Spencer Weart, American Institute of Physics (retired), summarized the history of climate science up to 1988. He paid tribute to the scientists who created models showing global warming with increasing levels of carbon dioxide (CO2) and who found that methane and other gases exacerbate this effect.

Valérie Masson-Delmotte, France and WGI Co-Chair, summarized the themes of the first five IPCC assessment reports, noting that the IPCC's purpose is to synthesize and critique the thousands of papers published annually on, and to help improve understanding of, climate science. She noted that AR6's focus on solutions to problems will enable the provision of scientific information for informed decision making.

Elena Manaenkova, WMO, highlighted the role of satellites and remote sensing in observing weather and climate. She noted that atmospheric CO2 in 2017 was equal to the equilibrium amount in the mid-Paleocene period, when the earth was 2° to 3° C warmer and sea levels were 10 to 12 meters higher.

Corinne Le Quéré, University of East Anglia and Director of the Tyndall Centre for Climate Change Research, paid tribute to: John Tyndall, whose communication skills raised the value, intellectual authority, and practical benefits of climate science to society; and Dave Keeling, who built the reputation of scientific measurement of CO2 through persistence and perseverance.

In the ensuing discussion, panelists discussed, inter alia:

- whether the current state of scientific knowledge is adequate to encourage policy implementation;
- that "incredible progress" in developing new methods has increased the accuracy and reach of measurement; and
- work on attribution of extreme events is scientifically interesting and relevant to the public and policymakers alike.

Creation of the IPCC in 1988: Amy Dahan, National Center for Scientific Research, introduced this panel, outlining the scientific and political context that enabled the creation of the IPCC. She discussed how, by the early 1980s, the scientific diagnoses of global climate change were already well established. She outlined both the "institutional excitement" that resulted in the creation of organizations and conferences addressing climate change, as well as political resistance from both developed and developing countries. She explained that this tension highlighted the need for an "expertise institution," which culminated in the IPCC's creation.

Michel Jarraud, France and former WMO Secretary-General, further elaborated on the tension between scientists and policymakers, noting that as the political debate around the human role in climate change heated up during the 1980s, it became clear that scientific evidence was needed to support intergovernmental processes. He explained that the IPCC was born to address the interests of both groups. Øyvind Christophersen, Norway, elaborated on the IPCC as a hybrid institution that includes scientists and policymakers, noting that this role allows it to have "more impact than just a scientific report." He added that the breadth of the IPCC's focus from the beginning—addressing both the physical impacts and the means to cope with those impacts—has been crucial to its success.

WGII Vice-Chair Sergey Semenov noted that the speed with which the UN General Assembly endorsed the creation of the IPCC demonstrated acknowledgement that climate issues could not be tackled by politicians alone. He remarked that international cooperation has always been a hallmark of both climate politics and science, providing the example of the Vostok ice core data collected by Russian and French scientists in the 1990s.

In ensuing discussion, panelists discussed the paradox between the rapid momentum following the IPCC's founding as the world reacted to the climate "alarm" and the lack of adequate progress 30 years later.

THE IPCC: THIRTY YEARS OF LIFE

Dialogue between Science and Politics on Environmental Issues from 1988 to 2018: Introducing the session, Laurence Tubiana, former French Climate Change Ambassador and Special Representative for the UNFCCC 21st meeting of the Conference of the Parties (COP 21), highlighted the scientific community's role in sounding the alarm, providing policymakers with information to address climate change, and designing innovative solutions. She called for harmonization of policy and science cycles to enhance national ownership of scientific assessments, and said that a new role for the scientific community should be to hold actors accountable for meeting their commitments.

Thelma Krug, Brazil and IPCC Vice-Chair, said that rapid ratification of the Paris Agreement was the result of the scientific community and policymakers listening closely to each other. She highlighted the importance of the IPCC's robust review process and of engaging different actors, including the private sector and local implementers.

Jim Skea, UK and WGIII Co-Chair, focused on the importance of clear communication with policymakers, noting that each WG now has a communications specialist to ensure that outputs are better communicated. He emphasized:

- policy relevance;
- alignment of IPCC cycles with the global stocktake (GST) process under the Paris Agreement;
- retaining core values while meeting the global community's expectations; and
- mutual learning between the scientific and policy-making communities.

Laurent Fabius, COP 21 President, France, attributed the success of the Paris Conference to the "alignment of three planets," namely the:

- political planet, with willing leaders in key countries;
- civil society planet, with cities, companies, NGOs, and spiritual authorities supporting the Paris Agreement; and
- scientific planet, which provided the knowledge to make agreement possible.

He advocated for:

- better harmonization of science-policy cycles, and called for the release of IPCC reports in time to influence public opinion before annual COPs;
- professional intermediaries to translate science for public and government consumption; and
- transdisciplinary research on topics that can influence public opinion, such as climate impacts on health, sanitation, and conflicts.

IPCC Reports: Between Continuity and Rupture: This panel discussed how the IPCC's message has become more refined over time and the impacts of the IPCC on climate science, including the development of interdisciplinarity and more rapid maturation of certain disciplines.

John Mitchell, Met Office, UK, noted progress on detection and attribution, including the increased attribution, over time, of climate change to human activities. He discussed the evolution of predictions of global temperature by 2100, and advocated for more progress on climate sensitivity. On how the IPCC has changed climate science, he pointed to:

- a closer link between scientists and policymakers;
- an increase in the number of modeling institutes; and
- more widely available climate data.

He questioned whether the assessment process has become too large, noting that as the subject matures, progress slows, as does the response to new issues.

Wolfgang Cramer, Mediterranean Institute of Marine and Terrestrial Biodiversity and Ecology, noted that conserving biodiversity has the same societal importance as addressing climate change. Lamenting that research and monitoring are unequal among countries in terms of detection and attribution of impacts, he called for an unbiased observation system and a substantial upgrade of observation capacity in developing countries.

Mariane Diop Kane, Senegal, remarked that the accessibility and coverage of data and the geographical and gender representation of authors have improved over the years. She called for:

- improving cooperation between scientists from developed and developing countries;
- enhancing consideration of mid-term climate projections and better alignment of these with policy timetables; and
- improving climate observation networks in developing countries, noting this would better enable countries to achieve the Sustainable Development Goals (SDGs).

Anna Pirani, Head, WGI TSU, Italy, discussed the TSUs, noting they are in constant contact with one another and with the WG Bureaux and Co-Chairs, and praised the commitment of TSU staff, especially considering how much of their work is voluntary. She posited that enhancing parity of representation in author selection has more to do with ensuring complementary expertise than with finding expertise itself.

In the ensuing discussion, panelists addressed the need for:

- two-way communication between politicians and scientists;
- policy-relevant climate research; and
- data to empower vulnerable populations to adapt to climate impacts.

PREPARING THE FUTURE: EDUCATION AND RESEARCH

This session focused on preparing for the future, approaching the unknown, becoming flexible and resilient, unlocking human potential, and connecting disciplines.

Pierre Léna, French Academy of Sciences, lamented the significant global discrepancies in educational opportunities and called for new tools to enhance children's understanding of climate science and critical thinking.

Gaby Langendijk, Climate Service Center Germany, called for consideration of interdisciplinary and transdisciplinary approaches, such as transdisciplinary scientific networks. She noted that early career scientists are already connected globally and interested in combatting climate change. Douglas Nakashima, UNESCO, called for recognition and use of indigenous knowledge in IPCC's assessment cycles. He defined "transdisciplinary" as encompassing and linking diverse, complementary knowledge systems. He explained that while climate science is pursued at the global level, indigenous knowledge comes from actors on the ground.

Véronique Yoboué, Université Félix Houphouët-Boigny, Côte d'Ivoire, lamented "scientific underdevelopment" in Africa, saying that research has not been a priority for many African leaders. She said African researchers generally work outside the continent due to a lack of facilities and funding for research at home, but reported that some countries, such as Côte d'Ivoire, are increasing funding for research.

Johan Rockstöm, Stockholm Resilience Center, noted advancements in attributing impacts to climate change but lamented that impacts on humans are occurring earlier, faster, and at higher amplitude than first predicted. He called for a general framework for defining risk and summarizing the social costs of carbon, and questioned whether we are now at risk of crossing irreversible thresholds.

Léna and Masson-Delmotte then announced the imminent launch of the Office for Climate Education, a French initiative aimed at preparing peer-reviewed resources for school teachers, including nationally-relevant climate information prepared by a network of national actors. Léna noted the important role that knowledge and education played in doubling global life expectancy at the time of birth, highlighting the need to learn from that experience to tackle climate change.

VIDEO PRESENTATIONS

Throughout the day, participants viewed a number of videos produced by the eParticipatory Observers Project (ePop), a network of young people from Pacific islands who facilitate citizen observation on climate and environmental changes that impact island populations in order to produce video reports.

Introducing ePop, Marie-Lise Sabrié, Institut de Recherche pour le Développement, said young people record the impact of climate change on their cultures using smart phones, and then use the videos to engage in dialogue with older generations. Max Bale, RFI Planète Radio, France, emphasized the importance of knowing how people experience climate change for charting the way forward.

Guilhem Chamboredon, a 16-year-old student from New Caledonia, described his experience with ePop, remarking that the ability to meet and share the voices of his elders is what has touched him the most. He lamented the vast divide that is accepted as normal between younger and older generations, noting that climate change affects us all regardless of age.

Videos from Fiji and New Caledonia showed, *inter alia*, how Cyclone Winston affected Nabukadra village in Fiji, and how climate change impacts local customs. More videos can be viewed here: https://epop.network/en/epop-network/

CLOSING

Anne Poelina, aboriginal leader and Australian scientist and philosopher from Charles Darwin University, questioned the values and ethics that are destroying Mother Earth, while acknowledging the 30 years of collective wisdom in the IPCC. She highlighted the importance of indigenous knowledge and the role of non-state actors in deconstructing and reframing systems.

In closing, Nicolas Hulot, French Minister for the Ecological and Inclusive Transition, observed that while the IPCC had helped the world frame clear objectives, the pace of achieving them remains insufficient. Quoting Victor Hugo's comment that freedom begins when ignorance ends, he commended the IPCC's role in silencing climate deniers. He said climate change is a "serial killer" targeting the poorest and most vulnerable, and called for a focus on the protection of indigenous peoples.

IPCC-47 REPORT

On Tuesday morning, 13 March, IPCC Chair Hoesung Lee opened IPCC-47, emphasizing the aim of geographical and gender balance in the AR6 author selection process, and said the AR6 will have an increased focus on cross-disciplinary solutions, including cities' contributions to mitigation.

UNESCO Director-General Audrey Azoulay noted the currently "chaotic and multipolar" nature of the world. She emphasized UNESCO's global citizenship education programme and adoption of the "Declaration of Ethical Principles in Relation to Climate Change" by UNESCO member states in 2017.

WMO Secretary-General Petteri Taalas emphasized the close relationship between the WMO and IPCC and encouraged government representatives to foster relationships with atmospheric scientists and meteorologists. He noted the IPCC's essential role in the successful communication of climate science to policymakers and the need for the IPCC to support countries in their efforts to implement the goals of the Paris Agreement.

Anne Le More, Chief of Staff, UNEP, presenting on behalf of UNEP Executive Director Erik Solheim, praised the IPCC for its crucial role in delivering climate science to facilitate policy responses, noting that its influence extends to citizens of all stripes as they work to shift the world to a more sustainable path.

Patricia Espinosa, Executive Secretary, UNFCCC, lauded the IPCC's role in driving the adoption of the UNFCCC itself, the Kyoto Protocol, the Bali Action Plan, and the Paris Agreement. She highlighted the IPCC's critical role in the future, including in:

- the adoption of an effective "operating manual" for the Paris Agreement in 2018;
- driving ambition by informing the 2018 Talanoa Dialogue, the next round of Nationally Determined Contributions (NDCs), and future GSTs;
- · transforming behavior and business models; and
- aligning climate action with the SDGs.

Frédérique Vidal, French Minister of Higher Education, Research and Innovation, said the IPCC's work forces decision makers to acknowledge their responsibilities to respond to climate change and highlighted the IPCC's ability to universalize thinking on climate change by incorporating a diversity of countries, disciplines, gender considerations, and sciences.

Jean-Yves Le Drian, French Minister of Europe and Foreign Affairs, announced an additional €1 million annual contribution to the IPCC from France, and called on other countries to follow suit. He highlighted the need for transformational change, driven by science, and linkages between the IPCC and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) to raise awareness regarding the causes and consequences of global warming and declining biodiversity.

Chair Lee then suspended the plenary for the IPCC's 30th anniversary celebration.

When the IPCC plenary resumed Wednesday morning, IPCC Chair Lee introduced the provisional agenda (IPCC-XLVII/Doc.1) and the proposed organization of work, which were both adopted as presented. The Panel also adopted the draft report of IPCC-46 (IPCC-XLVII/Doc.5, Rev.1).

IPCC TRUST FUND PROGRAMME AND BUDGET Budget for 2018, 2019, 2020 and 2021: On Wednesday

morning, the Secretariat introduced this sub-agenda item (IPCC-XLVII/Doc.2, Rev.1), which included the revised budget for 2018, a proposed budget for 2019, a forecast budget for 2020, and an indicative budget for 2021. Chair Lee requested the Financial Task Team (FiTT), co-chaired by Helen Plume (New Zealand) and Amjad Abdulla (Maldives) to undertake discussions on, *inter alia*, the financial implications of additional draft decisions to be considered by the plenary during this session.

On Friday morning, FiTT Co-Chair Plume presented the draft decision agreed to by the FiTT. She pointed to text on more useful ways to present the financial information so that it is easier to understand, and said that the expert meeting on communicating science had been postponed from 2018 to 2020. The Panel adopted the decision as presented.

Final Decision: It its decision (IPCC-XLVII-2), the Panel, based on the FiTT's recommendations, *inter alia*:

- approves the revised budget for 2018 and the proposed budget for 2019, and notes the forecast budget for 2020 and the indicative budget for 2021;
- decides to continue preparing the budget of the IPCC Trust Fund using standard costs, bearing in mind that expenditures may be lower than the budget;
- welcomes contributions and pledges from members, especially from developing countries, and intergovernmental organizations;
- encourages IPCC members to maintain or increase their financial support, including through multiyear pledges, to ensure the IPCC's financial stability;
- encourages members to make first-time contributions to the IPCC Trust Fund in order to broaden the donor base;
- encourages members to transfer funds as soon as practicable;
- expresses gratitude to the WMO and UNEP for financing one Secretariat position each; and
- expresses its gratitude to the UNFCCC for its contribution to the Trust Fund.
- In addition, the decision requests the Secretariat to:
- present the statement of financial position and financial performance on a modified cash basis, which categorizes expenditure by activity and by natural account;
- report on its efforts to continue reducing Secretariat costs, prepare a proposal for the level of the working capital reserve of the IPCC, and report back at IPCC-49; and
- provide the panel with interim statements of expenditure covering the first six months of the year, as well as the projection of expenditure for the rest of the year.

Resource Mobilization: On resource mobilization efforts for the sixth assessment cycle (IPCC-XLVII/INF.8), IPCC Secretary Abdallah Mokssit noted that CHF 38.4 million was needed for the 2018-2022 period, and that as of December 2017, CHF 5.1 million had been received, with outstanding pledges totaling CHF 271,748. Urging members to fulfill their pledges as soon as possible, he announced that contributions had been received from first-time donors and donors who resumed their contributions after a gap of several years. He also cited additional contributions and multi-year pledges. He said the number of contributions had increased from CHF 4.5 million in 2016 to almost CHF 5.4 million in 2017, to over CHF 7 million in 2018.

A number of countries then announced new or additional contributions. The European Union (EU) reported it was negotiating with member states to raise annual contributions from $\notin 4$ million to $\notin 5$ million in 2019. Norway announced that it had

contributed CHF 900,000 for 2018. France confirmed its annual €1 million contribution for five years. Luxembourg announced a €15,000 contribution in 2018. Japan stated its proposal to its congress for a 50% increase in its 2018 contribution. Morocco, a first-time donor, contributed CHF 15,000 for 2018 and announced its intention to continue to contribute in the future. The Republic of Korea said it will provide in-kind contributions as host of IPCC-48 and will continue to support the IPCC. China announced its intention to host two LA meetings in 2018 and continue consideration of further support.

While several countries acknowledged that the IPCC's immediate financial needs are secure, they called for continued efforts to ensure the future financial stability of the Panel. The Panel took note of document.

AD HOC TASK GROUP ON FINANCIAL STABILITY

On Wednesday morning, IPCC Vice-Chair Thelma Krug presented the report of the ATG-Finance (IPCC-XLVII/Doc.10, Rev.1), stating that questionnaires had been sent asking delegates to rank eight funding options identified at IPCC-46. Noting that they had only received 22 responses, which were inadequate to produce concrete recommendations at IPCC-47, she nevertheless drew delegates' attention to the top three options identified: 1) increasing voluntary contributions from member governments; 2) requesting contributions from UN entities and international and regional financial institutions; and 3) soliciting voluntary and assessed contributions in the UN system and contributions from scientific, research, and philanthropic institutions.

- She also reported on outreach to various UN bodies, including:the UN Secretary-General, from whom they had received no response;
- WMO, with whom a meeting took place in February 2018;
- UNEP, with whom a meeting is scheduled following IPCC-47; and
- the Global Environment Facility (GEF) and Green Climate Fund (GCF), with whom meetings are to be confirmed.

IPCC Vice-Chair Youba Sokona presented the outcome of an ATG-Finance meeting that convened earlier that morning. He said that the group agreed to draft short-, medium- and long-term work plans while continuing to collect information and elicit suggestions. He noted that none of the financing options are being taken off the table at this time. The ATG-Finance also agreed to identify barriers to participation by countries in the questionnaire process and, potentially, to introduce teleconferences in addition to email exchanges.

Chair Lee opened the floor for delegates to consider the ATG-Finance report and, referencing the low number of questionnaire responses received, suggested that the Panel agree to extend the mandate of the ATG-Finance so that it may continue its work and present concrete recommendations at IPCC-48. Germany, the Maldives, Hungary, Belgium, Japan, Norway, and the UK supported extending the mandate of the ATG-Finance.

Belgium proposed that the ATG-Finance concentrate primarily on middle- and long-term financial stability, noting that this may necessitate the consideration of finance together with other issues, such as future work products and alignment with other processes. She suggested increased contributions by smaller/developing countries would increase their "ownership" of the process.

Switzerland supported adopting the option of voluntary contributions using the UN indicative scale and urged caution regarding finance from the private sector. WGI Vice-Chair Edvin Aldrian (Indonesia) suggested a "semi-mandatory" contribution approach, noting the difficulty in making voluntary contributions given his country's budgetary system. Saudi Arabia opposed the option of assessed contributions and encouraged increased outreach to countries that have made voluntary contributions. The UK suggested reaching out to countries that have not contributed funds in order to identify potential barriers.

Germany, the Maldives, the UK, Switzerland, Belgium, Sweden, and Saudi Arabia urged the ATG-Finance to continue working with other UN organizations. Belgium suggested approaching the GEF and GCF for more funding. The UK suggested approaching the WMO and World Health Organization to learn from their expertise in fundraising efforts. Switzerland and Belgium suggested asking the UNFCCC to contribute more because of their reliance on IPCC products. Belgium, Saudi Arabia, Switzerland, and the Maldives expressed concern at the lack of response from UN organizations. Saudi Arabia suggested that conversations with UN bodies take place at a high level with direct engagement of Chair Lee and the ATG-Finance Co-Chairs.

ATG-Finance Co-Chair Krug outlined next steps, including: sending out another round of questionnaires with more lead time and more carefully crafted, detailed questions; assessing barriers to contributions; and enhancing communication with UN bodies at higher levels.

The Panel agreed to extend the mandate of the ATG-Finance until IPCC-48, at which time the group's recommendations will be presented. On Thursday afternoon, in response to a query from Germany, Chair Lee assured participants that the IPCC-47 report would include all comments, advice, and suggestions from the floor. The Panel then adopted the decision.

Final Decision: The decision (IPCC-XLVII-10) states that the IPCC:

- acknowledges the valuable work of the ATG-Finance;
- recognizes that while the IPCC's financial situation for the forthcoming years has improved, a discussion of options for sustainable financing in the medium- and long-term is still required; and
- decides to extend the mandate of the ATG-Finance and requests it to report back to IPCC-48.

IPCC SCHOLARSHIP PROGRAMME

On Wednesday, IPCC Vice-Chair and Scholarship Programme Science Board Chair Ko Barrett introduced this agenda item (IPCC-XLVII/Doc.6), reporting a successful fourth funding cycle (2017-2019). She said the Prince Albert Foundation had awarded seven scholarships, the Cuomo Foundation had awarded six scholarships, and 30 students had received funding.

She noted Board concerns regarding, inter alia:

- the need to reform the Scholarship Programme toward achieving stronger developing country participation in IPCC activities;
- limited capacity in the IPCC to administer the Scholarship Programme and the need for dedicated administrative personnel;
- the fact that completion of a Ph.D. takes longer than the two years funded by the Programme; and
- lack of engagement of scholarship recipients in IPCC work.
 WGI Vice-Chair Carolina Vera (Argentina), supported by

Canada, Germany, WGII Co-Chair Hans-Otto Pörtner (Germany), WGIII Co-Chair Jim Skea (UK), and WGI Co-Chair Valérie Masson-Delmotte, suggested shifting Scholarship Fund resources to finance the involvement of post-doctorate students in drafting IPCC reports as chapter scientists. Vera noted that, in the past, funding for chapter scientists has varied greatly due to lack of a formal IPCC funding process. With Ecuador and India, she said the selection of chapter scientists should be transparent and open and focus on funding those from developing countries. Pörtner added that funding chapter scientists would be more efficient than funding Ph.D. scholarships.

WGII Vice-Chair Andreas Fischlin (Switzerland) and WGI Co-Chair Masson-Delmotte stressed that funding should only go to scientists from developing countries. Zimbabwe said that chapter scientists should be funded from other resources, such as the budget for assessment reports, while recalling that the Scholarship Programme was specifically aimed at disseminating and building greater knowledge of climate change, which funding chapter scientists would not necessarily fulfill.

South Africa, supported by Chad, Tanzania, WGII Vice-Chair Fischlin, and WGI Vice-Chair Aldrian, cautioned against eliminating funding for Ph.D. students altogether but expressed openness to new uses of these funds if they can increase developing country participation. India, supported by the UK, suggested the possibility of funding short-term student visits to TSUs. Chad suggested extending the Scholarship Programme to Master's students from developing countries.

Canada, supported by Trinidad and Tobago and the UK, expressed openness to any uses of these resources that would help develop scientific capacity, and, with China and WGI Vice-Chair Aldrian, suggested developing partnerships with academic institutions or academies of science to improve the distribution of funds or help with administration. TGICA Co-Chair Timothy Carter suggested supporting early career scientists to work in the IPCC's Data Distribution Centres (DDCs).

Norway asked for more information on cost implications, querying whether chapter scientists should be expected to attend author meetings.

Barrett proposed a Panel decision to support developing country scientists as chapter scientists in the short term, which would not obviate the possibility of strengthening the effectiveness of the scholarship approach. Chair Lee proposed that the decision address funding for both Ph.D. candidates and chapter scientists. New Zealand, Norway, Switzerland, and Zimbabwe objected, asking for more details on this proposal.

On Friday morning, reporting back after informal discussions, Barrett presented a draft decision proposing a dual approach for the Scholarship Programme to support both scholarships and climate scientists. She noted a delicate balance in the draft to ensure that funding for chapter scientists does not supplant funding for scholarships, while highlighting that 10-15 chapter scientists could potentially be supported by the dual approach up to three times more than the four or five currently supported through the Trust Fund.

Tanzania, Zambia, Chad, and Malawi supported maintaining and enhancing support for the Scholarship Programme. Saint Kitts and Nevis, supported by Cuba, Comoros, and Trinidad and Tobago, proposed adding reference to small island developing states as a priority group for the Scholarship Programme, Costa Rica proposed prioritizing women, and Botswana suggested a focus on Africa. Barrett proposed using language from the Trust Deed of the Scholarship Fund, which only refers to least developed countries (LDCs). Germany and Venezuela supported broad and inclusive language.

WGI Vice-Chair Noureddine Yassaa (Algeria) proposed learning from and engaging IPCC observer organizations in the programme.

The draft decision was revised to reflect these changes and adopted.

Final Decision: In its decision (IPCC-XLVII-6), the Panel expresses gratitude to the Prince Albert II of Monaco Foundation and the Cuomo Foundation for financial support for ten new

scholarships to developing country recipients during 2017-2019, and to the donors who have provided support to the Nobel Peace Prize Fund since its inception.

The decision recognizes the importance of the Scholarship Programme in advancing its dual objectives of:

- providing scholarships for young post-graduate or postdoctoral students from developing countries, especially from LDCs, for research that advances the understanding of the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation; and
- supporting other capacity-building activities in developing countries, in line with the Fund's general aim as agreed by the IPCC.

The decision requests the Science Board to continue to prioritize and enhance funding of post-graduate or post-doctoral scholarships in developing countries and to explore ways to further enhance the Scholarship Programme, including by continuing to learn from and collaborate with other scholarship programmes, academic institutions, observer organizations, and donors to increase the funding provided to developing country scientists and to address administrative challenges encountered by the Scholarship Programme to date.

The decision notes that having developing country scientists function as chapter scientists for the sixth assessment cycle is a good way to:

- build their capacity;
- engage them in the IPCC's work;
- provide for participation in a peer network that can support their professional growth; and
- advance their careers as respected scientists in their field.

The decision, therefore, requests the Science Board to consider using the Scholarship Programme to supplement the ongoing support for PhD students by funding travel and honoraria for early career, developing country scientists to function as chapter scientists for the sixth assessment cycle. The decision further states that the chapter scientists should be selected through an open and transparent solicitation and selection process managed by the TSUs.

PROGRESS REPORTS

Progress reports were presented in plenary on Wednesday, 14 March.

Special Report on Global Warming of 1.5°C: WGI Co-Chair Masson-Delmotte presented the SR15 progress report (IPCC-XLVII/INF.6). She noted that the review process of the First Order Draft received 12,895 comments from almost 500 reviewers, and 126 contributing authors were added to help with the second order draft, for which almost 30,000 comments were received. She informed the Panel that six Lead Authors/Review Editors had stepped down and been replaced, and flagged a request for an additional meeting to work on the SPM, saying this will be brought to the FiTT's attention.

The Philippines called for clarity in SR15 messaging, including on whether the 1.5°C target is feasible and the potential consequences of missing it. Mali proposed that a summary of the review comments be included in the progress report. Masson-Delmotte responded that many of the comments called for shorter, sharper, clearer, and more focused text, and a more explicit expression of confidence related to statements.

The Friends World Committee for Consultation called for the SPM to reflect the range of new research to increase understanding of how human behavior can help address climate change. The Russian Federation said the SR15 should elaborate on the dangers of moving from 1.5°C to 2°C and the costs of mitigation to keep global average temperatures below 1.5°C.

The panel took note of the report.

Special Report on the Ocean and Cryosphere in a Changing Climate: WGII Co-Chair Pörtner presented the SROCC progress report (IPCC-XLVII/INF.11), stating that two LA meetings have taken place. He said the First Order Draft is being developed and will be circulated for review in May-June 2018. He noted that all experts nominated but not selected for a role in the SROCC will be invited to serve as expert reviewers.

UNESCO's Intergovernmental Ocean Commission urged caution when making recommendations on the rapidly evolving issue of ocean governance and management. He announced that the SROCC will be used in launching the UN Decade of Ocean Science in 2021.

The Panel took note of the report.

Special Report on Climate Change and Land: WGIII Co-Chair P.R. Shukla presented the SRCCL progress report (IPCC-XLVII/INF.1), noting that comments are currently being gathered on the zero draft. He cited special efforts to gather nominations for volunteer chapter scientists from developing countries and said 131 applications had been received, of which seven were selected, one for each chapter. He noted work was underway on cross-chapter coordination and coherence for the glossary and scenarios. In response to a request from the EU, a timetable for the second order draft review was expanded to include governments as well as experts.

The Panel took note of the report.

Task Force on National GHG Inventories: TFI Co-Chairs Eduardo Calvo and Kiyoto Tanabe presented the TFI progress report (IPCC-XLVII/INF.4). Co-Chair Calvo reported that development of the 2019 Refinement to the 2006 IPCC Guidelines is ongoing, with 190 experts working on it as Coordinating Lead Authors (CLAs), Lead Authors (LAs) and Review Editors.

He reported that the next LA meeting will prepare a second order draft that will be open for government and expert review from July-September 2018. He explained that the TFI is continuing its work in maintaining, improving, and promoting the Emission Factor Database (EFDB), in collaboration with the International Energy Agency, and the IPCC Inventory Software.

TFI Co-Chair Tanabe reported on:

- the ongoing selection of new members for the EFDB Editorial Board;
- developments on agriculture, forestry, and other land use, and short-lived climate forcers; and
- collaboration with the UNFCCC to help those compiling inventories understand and use TFI products.

The Panel took note of the report.

Task Group on Data and Scenario Support for Impact and Climate Analysis: TGICA Co-Chair Timothy Carter presented a progress report on TGICA activities since IPCC-45 (IPCC-XLVII/ INF.9). He outlined developments on: a new DDC support group; curation of IPCC summary figures and tables; Fifth Assessment Report (AR5) climate change scatter plots; general guidelines on scenario use; a fact sheet on climate downscaling; and an update of the TGICA web page.

The Panel took note of the report.

Communication and Outreach Activities: IPCC Communications Officer Jonathan Lynn presented the report on communications and outreach activities undertaken since IPCC-46 and plans for the coming year (IPCC-XLVII/INF.7). Noting that the draft SR15 was leaked following its distribution to expert reviewers in January 2018, he said the IPCC communication team's statement, explaining that the draft report does not yet represent the voice of the IPCC, minimized negative impacts. He said that a crisis consultant has been hired to assist with potential crises in the future.

He called attention to a communications handbook for IPCC authors, which includes information on how to relate to different audiences and communicate issues in different ways. He also disclosed additional support from the UN Foundation to assist the IPCC with media training.

Lynn summarized communications activities that were undertaken during the Cities and Climate Change Science Conference, and previewed the new streamlined IPCC website.

Mali, supported by Switzerland, Guinea, and Chad, suggested that the communications team award certificates of recognition to country focal points for their hard work, to motivate their continued and increased involvement. Chad proposed national activities to promote and raise awareness of the IPCC's work. Tanzania expressed interest in hosting an event to celebrate the IPCC's 30th anniversary.

The Panel took note of the report.

REPORT BY THE WG BUREAUX ON THE SELECTION OF COORDINATING LEAD AUTHORS, LEAD AUTHORS AND REVIEW EDITORS FOR THE AR6

On Wednesday afternoon, Chair Lee introduced this agenda item, and orally reported on the outcome of the 55th session of the IPCC Bureau held in Geneva, Switzerland, from 29-31 January 2018. He said that the WG Bureaux had convened to select CLAs, LAs, and Review Editors for AR6, and the outcome documents from these meetings were then forwarded to and noted by the IPCC Bureau. He said the IPCC Bureau also agreed to include a scientific segment to consider cross-cutting issues in its agenda, aimed at improving coordination and coherence between IPCC products.

WORKING GROUP I: WGI Co-Chair Masson-Delmotte presented the report of the WGI Bureau on the selection of CLAs, LAs, and Review Editors for the AR6 (IPCC-XLVII/INF.5). She said that of the 911 nominations received, 232 CLAs, LAs, and Review Editors were selected. Of those chosen, 42% are from developing countries and countries with economies in transition and 27% are female, compared to 23% and 18% in the AR5, respectively. Masson-Delmotte said 8 of the selected scientists had declined and a process was underway to replace them, with the aim of maintaining balance with regard to regions, expertise, and gender.

During discussions, Saudi Arabia, supported by Mali, called for a process to increase the number of authors from vulnerable underrepresented regions, such as Africa, noting that the contents of previous IPCC reports reflect the regional imbalance among authors. Masson-Delmotte lamented that a large number of the declined invitations were from underrepresented regions, but that the number of authors from Africa had increased to 13 from seven in the AR5.

Mexico, supported by Bolivia, called for the creation of a database of applicants for each region and greater sensitivity in the selection process to prevent discouraging scientists who are not selected. Masson-Delmotte responded that regional lists of experts could be drawn up for use by LAs and chapter teams. Ecuador, supported by Togo, called for greater involvement of national focal points in contacting experts and resolving potential difficulties in their participation. Masson-Delmotte said that focal point involvement should be discussed with the Secretariat.

The Panel took note of the report.

WORKING GROUP II: WGII Co-Chair Pörtner presented the report of the WGII Bureau on the selection CLAs, LAs, and Review Editors of WGII to the AR6 (IPCC-XLVII/INF.2). He noted the final author selection includes 260 experts from 67 countries, with 43% from developing countries compared to 41% in the AR5, and 32% female compared to 27% in the AR5. Pörtner noted that the candidates who were not selected will be proposed as contributing chapter authors.

WGII Vice-Chair Semenov commended the Bureau for its careful examination of underrepresentation during author selection, and its success in securing first-time authors, while urging the selection of authors with "truly relevant expertise." Pörtner noted that country focal points should carefully consider the chapter outlines before making their nominations, calling for improvement in this regard.

Responding to a comment from Japan, Pörtner said the author list will only be available after the conflict of interest process has been completed, and that, while the Bureau is responsible for author selection, non-governmental actors are also able to nominate authors.

Poland, supported by WGIII Vice-Chair Diana Ürge-Vorsatz (Hungary), lamented the underrepresentation of Eastern European authors. Pörtner responded that an Eastern European author had been added to the SYR. Responding to a comment from Mali, Pörtner said that at least one African author was assigned to each chapter that deals with Africa.

The Panel took note of the report.

WORKING GROUP III: WGIII Co-Chair Jim Skea presented the report of the WGIII Bureau on the selection of CLAs, LAs, and Review Editors for the WGIII contribution to the AR6 (IPCC-XLVII/INF.3). The final author selection includes 226 authors from 62 countries, with 48% from developing countries compared to 46% in the AR5, and 31% female, up from 18% in the AR5.

During the discussion, Future Earth encouraged countries to support transdisciplinary research and commended the selection of researchers with non-traditional backgrounds.

Germany, supported by Skea, lamented the lack of mechanisms to fund non-resident national experts and authors, and said that the distinction between developed and developing countries is not helpful for author diversity, as scientific and societal backgrounds are at least equally as important in this regard.

The panel took note of the report.

AR6 OUTLINE MATTERS FOR CONSIDERATION

On Wednesday afternoon, Chair Lee introduced this agenda item, noting that Saudi Arabia had requested its inclusion. Providing background on his delegation's request, Saudi Arabia recalled recurrent difficulties in obtaining visas for IPCC sessions, noting that at IPCC-46 in Montreal, some experts from his delegation were unable to get a visa and, thus, their views on the AR6 outlines could not be reflected. He recalled his delegation's statement at IPCC-46 reserving the right to return to the outlines. He expressed concern about some of the concepts and terminology in WGIII Chapter 15 on climate finance and investment in particular and suggested that the language is policy prescriptive, which is contrary to IPCC procedure. He proposed reopening the chapter for discussion.

WGIII Co-Chair Skea recalled that significant time had been spent discussing this chapter outline, and said the WGIII Bureau does not believe that the outline contains wording that is inherently policy prescriptive. He suggested that the relevant guidance to authors (WG-III:13th/INF.1) could be revised to take Saudi Arabia's concerns into account. The US noted that he did not view the text as policy prescriptive and, supported by Switzerland, said the chapter lays out empirical aspects of issues broadly related to finance and investment, and aims to assess relevant literature in a manner consistent with IPCC procedure.

IPCC Chair Lee proposed that Saudi Arabia and the WGIII Co-Chairs consult to resolve the issue.

On Wednesday afternoon, WGIII Co-Chair Skea reported three modifications to the text in the WGIII Chapter 15 guidance for authors on investment and finance, as agreed during the informal consultations:

- the focus will be on scenarios of, and needs for, investment and financial flows related to mitigation pathways;
- discussion will focus on synergies and trade-offs between mitigation and adaptation financing and sustainable development priorities, especially in developing countries; and
- in interpreting the bullet points associated with Chapter 15, authors should take care to apply terminology in a neutral and non-prescriptive manner, reflecting the scientific use of terms in the underlying literature, including any cited grey literature.

The Panel agreed to these amendments.

ADMISSION OF OBSERVER ORGANIZATIONS

On Thursday, introducing this agenda item (IPCC-XLVII/ Doc.3), the Secretariat reported that seven organizations had applied for observer status since IPCC-46. The decision admitting the seven observer organizations was adopted without comment.

Final Decision: This decision (IPCC-XLVII-3) states that IPCC-47 decides to grant observer status, in accordance with the IPCC Policy and Process for Admitting Observer Organizations, to:

- the Inter-American Institute for Global Change Research;
- the International Union of Geodesy and Geophysics;
- Rutgers University;
- · SouthSouthNorth Projects Africa;
- Oasis;
- the International Energy Agency Greenhouse Gas R&D Programme; and
- · the InterAcademy Partnership.

REPORT OF THE CONFLICT OF INTEREST COMMITTEE

On Thursday, 15 March, IPCC Vice-Chair Youba Sokona orally reported on the activities of the Conflict of Interest Committee since IPCC-46, noting that updates were received from 47 members and found to be in good order. The Panel took note of the report.

REPORT OF THE AD HOC TASK FORCE ON THE FUTURE OF THE TASK GROUP ON DATA AND SCENARIO SUPPORT FOR IMPACT AND CLIMATE ANALYSIS (ATF-TGICA)

On Thursday, ATF-TGICA Co-Chair Aldrian introduced the report of the ATF-TGICA (IPCC-XLVII/Doc.9), which included new draft terms of reference (ToR) for the Task Group and draft guidelines for the DDC associated with it.

Describing the results of the Task Force's work, ATF-TGICA Co-Chair Andreas Fischlin (Switzerland) explained, *inter alia*, that issues remain regarding a longer-term vision, including:

- the resource intensity required for storage and modeling;
- TGICA's dependence on external countries, organizations, and facilities, which creates questions over control of the data;
- the growing number of TGICA tasks that cannot be fully integrated into the work of the IPCC WGs; and
- the undefined legal status of TGICA and the DDC.

He presented two options for the future for the Panel's consideration on: narrowing the activities of TGICA and the DDC to focus on IPCC assessments; or providing larger-scale climate services, which would build capacity and benefit developing countries but require additional resources.

An open-ended meeting of the ATF-TGICA took place during lunch on Thursday to further discuss the issues and refine the group's report.

On Friday morning, ATF-TGICA Co-Chair Aldrian introduced revised draft text. Co-Chair Fischlin highlighted changes made in the draft ToR and in guidance for the DDC during the open-ended meeting, noting that for both of these the ATF-TGICA opted for a narrower set of responsibilities as per the first option. In the TGICA ToR, he also highlighted amendments reflecting that:

- the Task Group's workplan is subject to review by the IPCC Bureau and will be presented to the Panel for approval;
- the workplan's approval is contingent on the availability of funds; and
- the Task Group is accountable to the Bureau and reports through the IPCC Bureau to the Panel.

Regarding guidance for the DDC, he noted that the DDC will collaborate as appropriate with other data centers, and contribute to a sustainable structure to provide data and information, which should be relevant at regional scales.

He said the group agreed to rename TGICA the "Task Group on Data Support for Climate Change Assessments" (TG-Data), and to adopt new ToR for TG-Data and guidance for the DDC.

During discussion, the Philippines urged consideration of climate data accessibility. WGII Vice-Chair Taha Zatari (Saudi Arabia) requested language on how developing countries will benefit from TG-Data. In response to a query from Zambia, Co-Chair Aldrian said that under IPCC principles, task groups fall under the Bureau. Germany requested clarification of the DDC's legal status. With Mali and the UK, Germany also highlighted the lack of sustainable resources for the DDC and the need to look for additional funding.

Following further informal consultations, language was added to reflect that current in-kind contributions for the DDC are insufficient to fully implement its activities. Participants also agreed to include text regarding the need for more resources.

The decision was then adopted.

Final Decision: In the final decision (IPCC-XLVII-9), IPCC-47:

- takes note of the work of the ATF-TGICA;
- renames TGICA as TG-Data;
- adopts new ToR for TG-Data;
- adopts guidance for the DDC;
- takes note that current in-kind contributions for the DDC are insufficient to fully implement the DDC's activities and are not long-term commitments; and
- requests the Secretariat to work with the IPCC Bureau to seek additional and more sustainable resourcing options.

Annex 1 of the decision contains the new ToR and mandate of the TG-Data, and Annex 2 contains guidance for the DDC's core functions.

ALIGNING THE WORK OF THE IPCC WITH THE NEEDS OF THE GLOBAL STOCKTAKE UNDER THE PARIS AGREEMENT

On Thursday, IPCC Chair Lee introduced this agenda item (IPCC-XLVII/Doc.8), and invited participants to decide on the ToR of a task group on aligning the work of the IPCC with the needs of the GST.

The IPCC Secretariat said that submissions received from governments were appended to the document and form the basis for the proposed ToR for the group, which include, *inter alia*:

- preparing a report on options to align the IPCC's work with the GST, while considering implications on the IPCC's budget and procedures;
- continuing the work of the task group until 2020;
- opening the group to all governments, including Bureau members;
- limiting the number of members to about 20;
- meeting during plenary sessions, with intersessional work via email and teleconferences; and
- reporting on the group's progress at IPCC-48. Saudi Arabia, with China, WGII Vice-Chair Zatari, Ghana, Iran, South Africa, and Pakistan, cautioned against, *inter alia*:
- changing IPCC procedures solely to align with the five-year cycles of the GST;
- pre-judging the needs of the UNFCCC; and
- imposing additional technical and financial burdens on developing countries.

South Africa urged consideration of a hybrid approach to allow the IPCC to remain relevant for UNFCCC processes while maintaining the quality of IPCC products. China said reducing the duration of IPCC assessment cycles may compromise quality.

WGII Vice-Chair Semenov cautioned against hastily changing IPCC procedures before an official request is received from the UNFCCC. Germany, supported by Belgium, Luxembourg, and Poland, said the IPCC does not need to wait for a request from the UNFCCC. Saudi Arabia questioned whether establishment of such a task group is consistent with the IPCC's mandate.

Many delegates, including Jamaica, the Philippines, Ireland, Senegal, Austria, Trinidad and Tobago, the Maldives, Hungary, Chad, Australia, Sudan, Luxembourg, Switzerland, and Canada, supported the task group, citing the essential role of the IPCC in supporting the UNFCCC. The Philippines supported identifying financial challenges, and considering preparation of a special report on the GST. Japan called for consideration of budgetary and non-budgetary implications.

Saudi Arabia, China, Ghana, Austria, Germany, Belgium, Senegal, WGIII Vice-Chair Ürge-Vorsatz, Trinidad and Tobago, and others opposed limiting the group to 20 members. Mexico, supported by the UK, cautioned that a larger group could compromise efficiency.

Norway said the plenary should send a clear message to the UNFCCC that the IPCC is prepared to provide relevant and timely information for the GST, and that Bureau members should be consulted as advisors but not as task group members. The UK, supported by Belgium, called for a country-driven process with inputs from the Bureau and TSUs as advisors but not as members. WGIII Vice-Chair Andy Reisinger, with WGIII Vice-Chair Ürge-Vorsatz, WGI Vice-Chair Yassaa, and Hungary, requested that IPCC Bureau members provide routine input to the task group as members. WGI Co-Chair Masson-Delmotte said Bureau members could provide fruitful insights on the IPCC's future and GST needs.

The US, supported by Switzerland, noted that:

- IPCC reports have a broader audience than the UNFCCC;
- shortcuts that compromise the quality of IPCC products should be avoided;
- the experience of the 2018 Talanoa Dialogue and 2023 GST should inform any alignment efforts; and
- making recommendations before 2019 would be premature.

Australia preferred that the task group begin its work following the outcome of the Talanoa Dialogue. Others, including Ireland, urged that work should begin immediately, considering the busy schedule ahead. WGII Vice-Chair Fischlin added that the task group should carefully consider the IPCC's role in broader processes such as the assessment of the global goal under the Paris Agreement and research dialogues. Canada recommended that the ToR clearly recognize that IPCC products serve other purposes and audiences in addition to the UNFCCC.

WGI Co-Chair Masson-Delmotte said WG members are already considering whether the current IPCC model is fit for purpose, or whether new, hybrid, and innovative approaches to scientific assessments are needed, such as supplementary reports that revisit key findings of previous reports, and short, sharp summaries of recent literature.

Singapore, Trinidad and Tobago, and WGII Vice-Chair Semenov noted that the GST modalities are still being negotiated, with Trinidad and Tobago noting that the task group should remain flexible until they are finalized.

The panel agreed to establish an open-ended contact group to consider the task group's mandate and ToR.

The contact group, co-chaired by Éric Brun (France) and María Amparo Martínez Arroyo (Mexico) met on Thursday afternoon and Friday morning, with discussions revolving around the task group title, purpose, and ToR.

On Friday afternoon, IPCC Chair Lee presented and the Panel adopted the ToR, and over 60 member governments indicated their desire to participate in the task group.

Chair Lee then invited members to consider the draft decision on the ToR of the task group. He noted that the contact group had proposed that the task group be called the "Task Group on the organization of the future work of the IPCC in light of the GST." Luxembourg proposed adding a bullet point stating that the task group was established at IPCC-46 in Montreal. Pakistan and Saudi Arabia proposed changing the title of the decision and the agenda item to reflect the new title of the task group. New Zealand, Norway, and IPCC Vice-Chair Barrett, confirmed by the Secretariat, noted that decision titles should follow the names of the agenda item, which cannot be changed at this point. To take the concerns of Saudi Arabia and Pakistan into account, an additional sentence was added, stating that, from the next session, the agenda item will be: "Organization of the future work of the IPCC in light of the global stocktake."

Final Decision: In this decision (IPCC-XLVII-8), the Panel decides:

- to adopt the ToR for the task group;
- to rename it the "Task Group on the organization of the future work of the IPCC in light of the GST";
- that the group must operate with the resources available in the IPCC; and
- that from the next session, the name of the agenda item will be changed to be consistent with the name of the task group. The ToR, attached as an annex to the decision, specify that the

task group, co-chaired by France and Mexico, will, *inter alia*:

 identify issues and options for consideration by the Panel on the organization, including timing, of the future work of the IPCC, including with regard to the seventh assessment cycle, considering the scientific information needs of the GST and of the UNFCCC more generally, as well as of audiences and purposes served by IPCC assessments, in accordance with principles governing IPCC work, and with respect to the rate of progress in the state of knowledge of various aspects of climate change;

- consider the pros and cons of different options, including quality of reports and implications for operations, resourcing, budget, and contributions of the research community, while preserving the IPCC's scientific integrity and independence, and robustness, scope, and depth of its products;
- begin work following the adoption of the ToR, and deliver the outcomes of its work in time for the first 2020 plenary;
- work between plenaries through, *inter alia*, mail exchanges and teleconferences, with an option for physical meetings if appropriate, while ensuring inclusiveness;
- hold physical meetings during plenary sessions, beginning during IPCC-49;
- comply with IPCC procedures and ensure transparency and inclusiveness; and
- be open to IPCC members, and be advised by Bureau members and TSU representatives.

GENDER

On Thursday, IPCC Deputy Secretary Kerstin Stendahl introduced this agenda item (IPCC-XLVII/Doc.7), outlining growing interest and actions on this issue in various organizations, and proposed an IPCC decision to establish a task group for improving gender balance in the IPCC. Sweden commented that the task group's targets should be clear, ambitious, and concrete. The UK, Luxembourg, the US, and Switzerland called for specific ToR that estimate the resource implications of the task group's activities.

WGI Vice-Chair Vera, supported by Venezuela, called for the IPCC to ensure more nominations of women from developing countries. WGIII Vice-Chair Ürge-Vorsatz noted that significant gender imbalance persists within IPCC structures, including the Bureaux and CLAs.

Canada, supported by Norway, called for gender equity, not just balance, in the IPCC and for a report on the gender-related event that took place at IPCC-46. With Norway, Kenya, and Luxembourg, Canada recommended examining actions on gender being taken by other organizations, such as the UNFCCC and WMO. Benin, supported by Tanzania, said that when women participate and contribute ideas and solutions, organizations achieve better results.

A contact group was established to further consider this agenda item and to draft a decision.

On Friday, contact group facilitator Christiane Textor (Germany) presented the contact group's draft decision on gender to plenary. Norway, supported by IPCC Vice-Chair Barrett, WGII Vice-Chair Zatari, WGI Vice-Chair Vera, Luxembourg, Belgium, Venezuela, and Sudan, suggested broadening consideration of gender to cover more than just gender balance. Zatari stressed the difficulties faced by women in developing countries. Venezuela, supported by Senegal, called for incentives to increase participation of women in small delegations. IPCC Vice-Chair Barrett asked how Bureau nominations should be made and whether that should be included in the decision or in the ToR for the task group.

The decision was adopted with the addition of language to reflect that the task group will address gender-related issues, not just gender balance.

Final Decision: In the final decision (IPCC-XLVII-7), the IPCC decides to establish a task group with the aim of developing a framework of goals and actions to improve gender balance and address gender-related issues within the IPCC. The group is open to IPCC members, Bureau members, and TSU staff and will, at its first meeting, select two co-chairs, one who should be female.

The decision states that the group will:

- prepare a report on gender balance and gender-related issues within the IPCC;
- solicit submissions from IPCC members and observer organizations on relevant national and international gender policies and strategies;
- consult other relevant organizations;
- propose recommendations for further action;
- work through electronic means and face-to-face meetings during IPCC plenaries; and
- present the report with recommendations to IPCC-49.

REVIEW OF PRINCIPLES GOVERNING IPCC WORK

The Secretariat orally reported that while a review of principles governing the IPCC is required every five years, in practice, the principles are reviewed when needed. He said that further review should be considered when a need is brought to the Panel's attention. The Panel took note of the presentation.

PARTICIPATION OF DEVELOPING COUNTRIES IN IPCC ACTIVITIES

On Thursday, the IPCC Secretariat introduced this agenda item (IPCC-XLVII/Doc.4), noting that an evaluation of a briefing session held for developing countries prior to IPCC-45 is included in the document to inform a decision on whether such briefing sessions should be continued.

During the discussion, many delegates, including Swaziland, Kenya, South Africa, the Bahamas, Germany, Canada, Ethiopia, Australia, Mauritius, Bolivia, and South Sudan, supported the organization of pre-plenary briefing sessions. Germany, South Africa, Norway and others proposed ways to improve the briefing sessions and make them cost-efficient.

Mali, Bolivia, Ukraine, IPCC Vice-Chair Sokona, TFI Co-Chair Calvo and others highlighted problems with obtaining visas in a timely manner to attend meetings. Saudi Arabia, supported by the Bahamas, remarked that developing country participation at meetings was hampered by travel and visa arrangements, and, with India, proposed a balance between developed and developing country participants at important meetings, such as approval and scoping sessions. Germany supported special arrangements to enable developing country representatives to participate in extended sessions.

The Netherlands announced an e-learning programme, funded by Future Climate for Africa, to enhance participation by African countries.

IPCC Secretary Mokssit addressed Secretariat efforts regarding visa arrangements, including a specific request for help in facilitating visas in the letters of agreement with host governments of IPCC meetings. He noted that enabling developing country representatives to participate in extended sessions has financial implications, and called for direction from the Panel in this regard.

On Friday morning, the Secretariat introduced the decision and the Panel adopted it without amendment.

Final Decision: In its decision (IPCC-XLVII-4), the Panel notes support for pre-plenary briefing sessions and suggestions for improvement, and recommends that the Secretariat continue to organize them while keeping costs low, preferably without interpretation. The decision explains that the briefings will be open to all registered delegates and be periodically assessed to improve their usefulness and efficiency.

The decision also requests the Secretariat to:

• continue its efforts to facilitate the acquisition of entry visas for delegates attending IPCC meetings; and

• consider means to extend the stay of delegates funded by the IPCC Trust Fund during approval sessions of IPCC reports.

MATTERS RELATED TO UNFCCC AND OTHER INTERNATIONAL BODIES

On Thursday, the UNFCCC Secretariat updated the Panel on UNFCCC activities since IPCC-46 and upcoming activities that would benefit from IPCC participation (IPCC-XLVII/INF.10), and commended collaboration between the IPCC and UNFCCC, which he said contributed to successful adoption of the Paris Agreement. He noted discussions at the UNFCCC Subsidiary Body for Scientific and Technological Advice (SBSTA)-IPCC Joint Working Group held during UNFCCC COP 23 and a proposal for a joint retreat to discuss collaboration in preparation for the GST.

India called for effective linkages and synergies between the IPCC and other organizations, including the Convention on Biodiversity and the UN Convention to Combat Desertification, particularly in light of the topics covered in the SROCC and SRCCL.

Norway, opposed by Saudi Arabia, requested that the UNFCCC Secretariat provide information at IPCC-48 on UNFCCC decisions addressing how IPCC products will be used for the GST. Chair Lee invited submissions on the issue ahead of the next SBSTA-IPCC Joint Working Group session in Bonn, Germany, in May 2018. The plenary took note of the information presented.

ANY OTHER BUSINESS

The Secretariat introduced this agenda item on Friday afternoon. WGI Co-Chair Masson-Delmotte drew participants' attention to an upcoming expert meeting on assessing climate information for regions, to be held from 16-18 May 2018 in Trieste, Italy. She said the meeting is expected to advance work on, *inter alia*, the glossary, recommendations for authors, and the regional atlas.

Ukraine thanked IPCC Communications Director Jonathan Lynn for his help in organizing three successful outreach events last year in Kiev, noting that the IPCC's assistance enabled these events to be tailored to their specific audiences.

WGIII Vice-Chair Ürge-Vorsatz informed participants that a report on the Cities and Climate Change Science Conference will be presented at IPCC-48.

PLACE AND DATE FOR IPCC-48

IPCC Secretary Mokssit announced that IPCC-48 will take place the first week of October 2018 in Incheon, Republic of Korea. The Republic of Korea said it was honored to host IPCC-48. Japan announced that it will host IPCC-49 in Kyoto. The UK urged that adequate time be ensured for visa acquisition in advance of both of these meetings.

CLOSING OF THE SESSION

In closing, IPCC Chair Lee thanked the Government of France for hosting IPCC-47 and the 30th anniversary celebration. He remarked that the IPCC will continue to work to improve its financial health and to increase the policy relevance of its outputs for stakeholders in need of climate science. He noted that this year is one of celebration but also of action, with the selection of AR6 author teams completed and the finalization of SR15 later this year. He closed the session at approximately 4:40 pm.

A BRIEF ANALYSIS OF IPCC-47

Thirty years ago, the United Nations General Assembly established the Intergovernmental Panel on Climate Change. No one knew back in 1988 just how this intergovernmental scientific body would evolve. As IPCC-47 got underway in Paris, it was time to reflect on the past and look to the future as the Government of France hosted a 30th anniversary celebration.

After the day-long commemoration, IPCC-47 began its work. This meeting was more low-key than those where assessments or special reports are approved; however, delegates did take a number of important decisions. Many observed that this meeting was the "calm between the storms." IPCC-46 was so busy with the approval of the Sixth Assessment Report's (AR6) chapter outlines that there was not enough time to discuss many other agenda items; IPCC-48 is expected to be challenging since it has to approve the Special Report on Global Warming of 1.5°C.

This brief analysis provides a flavor of the celebrations and IPCC-47, highlighting some of the more salient outcomes on gender and aligning with the global stocktakes under the Paris Agreement, and identifying issues that are likely to challenge the Panel for the foreseeable future.

JOYEUX ANNIVERSAIRE

During the 30th anniversary celebration, speakers traced the IPCC's growth from a restrained scientific voice to a confident, trustworthy, and vital partner in the fight against climate change. The IPCC's job description was never simple: a scientific body was needed, which, in the face of widespread political resistance, would be able to convince the world that it faces an existential crisis and shine a light on pathways to avert it.

Some mentioned the crucial catalytic role that the Panel played before each milestone climate agreement-from the adoption of the UN Framework Convention on Climate Change (UNFCCC) itself in 1992 (two years after the IPCC's First Assessment Report), to the Kyoto Protocol in 1997 (two years after the Second Assessment Report), and the Paris Agreement (one year after the Fifth Assessment Report). Speakers held up the IPCC as the world's first, and only, model of an organization that provides a successful science-policy interface and a shining example of international cooperation in the face of a common enemy. Panelists also discussed advances in climate science that have been motivated by the IPCC, including improvements in modeling, improved databases, and more accessible data. After it was awarded the Nobel Peace Prize in 2007 for its efforts, some commented that the IPCC's visibility and stature were elevated, leaving it more open to both praise and criticism.

The 30th anniversary also provided an opportunity for introspection. As panelists discussed the paradox of the rapid momentum following the IPCC's founding, when the world reacted to its climate "alarm," contrasted with the lack of adequate progress 30 years later, they wondered whether the IPCC had communicated its message strongly enough. Would policymakers have reacted more strongly if the IPCC had communicated more effectively from the start? The IPCC has been accused of erring on the side of caution in the past, with some remarking that the IPCC still needs to improve its messaging and effectively communicate its findings. Others wondered if the IPCC's task has become too large, tackling a "beast" that has become unmanageably complex.

RETOUR Á LA RÉALITÉ

During the anniversary celebrations, UNFCCC COP 21 President Laurent Fabius and Laurence Tubiana, former French Climate Change Ambassador, urged the IPCC to work ambitiously to harmonize its processes with the UNFCCC. Fabius called for consistently releasing reports before COPs to put pressure on governments by influencing public opinion. However, as the IPCC's formal discussions began, it was apparent that not all of this advice could be heeded, because the IPCC is not, after all, *sans politique*. Its decisions, like its reports, are vetted by political representatives.

During IPCC-47, it became clear that harmonization with policy cycles will not be easy to achieve when the issue of aligning the work of the IPCC with the needs of the UNFCCC global stocktake (GST) came up for discussion. Although agreement had been reached at IPCC-46 to set up a task group to consider this issue, several delegates opposed the very idea of alignment, arguing that the IPCC is its own body and should not change its procedures solely for the UNFCCC—and certainly not before the UNFCCC issues a formal request for it to do so.

Others argued that the task group should be set up precisely *because* the IPCC is its own body and has the authority and responsibility to act without a formal request from the UNFCCC. Differences were resolved only by changing the task group's focus to consider the IPCC's future work "in light of" the GST, rather than "in alignment with" the GST.

Herein lies something of an identity crisis, as some delegates put it. Is the IPCC's chief role to inform the UNFCCC negotiations? Clearly, the IPCC also has a very important role to play in influencing public opinion. But to what extent is harmonization with the UNFCCC a primary goal? The answer to these questions was not as clear. While some governments were concerned that harmonization would result in shorter cycles for assessment reports that could perhaps negatively affect the integrity and quality of the reports, shortened cycles are not yet a given, nor were they even the subject of negotiation at IPCC-47.

While many delegates highlighted the opportunities and benefits of increased harmonization and synergies with the UNFCCC, others emphasized the need for IPCC to maintain independence and autonomy. A number of observers confided that they viewed some countries' concerns about "twisting science to satisfy political processes" as an attempt to keep science out of politics and reduce political pressure on policymakers in the UNFCCC negotiations to act.

IPCC-47 also discussed how to increase the participation of developing countries and women in IPCC processes. A gender task group was established to address gender imbalance, a necessary step considering that, when the IPCC first began its work, only 2% of contributing authors were women. Although now the percentage of female authors has increased to 30%, this still represents a major imbalance. The AR6 author selection process also showed progress regarding developing country representation since the AR5's lackluster performance in this area. This issue is not one of simply getting more participants from developing countries, however. Important also is to remedy the gaps in data and research on poorer regions, particularly in Africa. As Senegalese representative Mariane Diop Kane mentioned during the 30th anniversary celebration, absolute parity remains elusive.

DÉFIS FUTURS

The next big step for the IPCC will be the approval of the Special Report on Global Warming of 1.5°C, which is expected in October 2018. This report, due just before UNFCCC COP 24 in November, will play an essential role in informing the Talanoa Dialogue, and could help ratchet up the ambition of Nationally Determined Contributions under the Paris Agreement. Thus, the messaging of this report will be critical. As WGI Co-Chair

Valérie Masson-Delmotte informed delegates, of the over 12,000 comments received on the first draft of this special report, most called for shorter, sharper, clearer, and more focused text, as well as a more explicit expression of confidence.

In Paris, member governments pleaded for clarity in messaging, including on whether the 1.5°C target is feasible, what the costs would be to achieve it, and what the consequences would be of missing it. However, as one scientist put it, in order to ensure scientific integrity and objectivity, scientists may be restricted to describing the physiology of the "1.5°C unicorn," without making any comment on whether the unicorn actually exists.

As IPCC Chair Lee said in his opening statement, one can argue the IPCC is reinventing itself to ensure that it remains relevant to policymakers and other stakeholders amid our growing understanding of climate change. Clearer messaging about the dire consequences of climate change is part of this reinvention. After all, COP 21 President Fabius pointed out that the IPCC did not win the Nobel Prize for chemistry, meteorology, or physics, but for peace. He warned that climate change is about war and peace and the public needs to understand that it is not about the future, but about today. Effective communication of scientific knowledge empowers both the public and governments to act before it is too late.

UPCOMING MEETINGS

IPBES-6 Plenary: IPBES-6 is expected to adopt four regional assessment reports and an assessment on land degradation and restoration, as well as its future work programme. **dates**: 18-24 March 2018 **location**: Medellin, Colombia **contact**: IPBES Secretariat **email**: https://www.ipbes.net/contact **www**: https:// www.ipbes.net/event/ipbes-6-plenary

Second Coordinating Lead Author Meeting on SRCCL: This meeting is for WG I/II/III and is being organized by WGIII. dates: 25-30 March 2018 location: Christchurch, New Zealand contact: IPCC Secretariat phone: +41-22-730-8208/54/84 fax: +41-22-730-8025/13 email: IPCC-Sec@wmo.int www: http:// www.ipcc.ch/

World Symposium on Climate Change and Biodiversity: This meeting aims to address the need to better understand the impacts of climate change on biodiversity, and to identify, test, and implement measures aimed at managing the many risks climate change poses to fauna, flora, and microorganisms. It will also address how to better restore and protect ecosystems from the impacts of climate change, and aims to contribute to the achievement of SDG 1 (no poverty), SDG 2 (zero hunger), SDG 13 (climate action), SDG 14 (life below water) and SDG 15 (life on land). dates: 3-5 April 2018 location: Manchester, UK contact: Dr. Jelena Barbir, International Climate Change Information Programme email: jelena@barbir.com.es www: https://www.haw-hamburg.de/en/ftz-nk/events/biodiversity. html

Fourth Lead Author Meeting on SR15: This meeting is for WG I/II/III and will be organized by WGI. **dates:** 9-13 April 2018 **location:** Gabarone, Botswana **contact:** IPCC Secretariat **phone:** +41-22-730-8208/54/84 **fax:** +41-22-730-8025/13 **email:** IPCC-Sec@wmo.int **www:** http://www.ipcc.ch/

Africa Climate Week 2018: Africa Climate Week 2018 (ACW2018) will convene under the theme, "Climate Action for Sustainable Development: Driving Change in Africa" and include events on NDC support and implementation, the SDGs, and global climate action, among others. ACW2018 is the first of what is expected to be an annual gathering that supports NDC implementation and climate action to deliver on the SDGs. It is organized by the Nairobi Framework Partnership, which supports developing countries in preparing and implementing their NDCs. **dates:** 9-13 April 2018 **location:** Nairobi, Kenya **contact:** Fabiana Rodrigues, Nairobi Framework Partnership **email:** frodrigues@unfccc.int **www:** https://www. afdb.org/fr/news-and-events/africa-climate-week-acw2018-17877/

Third Lead Author Meeting for the Elaboration of the 2019 Refinement to the 2006 IPCC Guidelines: This meeting will continue to elaborate the methodology report. dates: 10-13 April 2018 location: Cairns, Australia contact: IPCC Secretariat phone: +41-22-730-8208/54/84 fax: +41-22-730-8025/13 email: IPCC-Sec@wmo.int www: http://www.ipcc.ch/

Tenth International Conference on Climate Change: Impacts and Responses: This conference will feature research addressing: scientific evidence; the assessment of impacts in divergent ecosystems; human impacts and impacts on humans; and technical, political and social responses. dates: 20-21 April 2018 location: Berkeley, California, US contact: Conference organizers email: http://on-climate.com/support/contact www: http://on-climate.com/2018-conference

The 9th Global Forum on Urban Resilience and Adaptation: This conference aims to: connect local government leaders and climate change adaptation experts to discuss adaptation challenges facing urban environments around the globe and forge partnerships that could have lasting impacts for cities. dates: 26-28 April 2018 location: Bonn, Germany contact: ICLEI Secretariat phone: +49-228-976299-28 email: resilient.cities@iclei.org www: https:// resilientcities2018.iclei.org/

48th Sessions of the UNFCCC Subsidiary Bodies: The fortyeighth sessions of the Subsidiary Body for Implementation (SBI 48) and Subsidiary Body for Scientific and Technological Advice (SBSTA 48) as well as the fifth part of the first session of the *Ad Hoc* Working Group on the Paris Agreement (APA 1-5) will meet as part of the Bonn Climate Change Conference. **dates:** 30 April - 10 May 2018 **location:** Bonn, Germany **contact:** UNFCCC Secretariat **phone:** +49-228-815-1000 **fax:** +49-228-815-1999 **email:** secretariat@unfccc.int **www:** http://unfccc.int/2860.php

Expert Meeting on Regional Assessment: The Expert Meeting on Climate Information for Regions will be organized by WGI. dates: 16-18 May 2018 location: Trieste, Italy contact: IPCC Secretariat phone: +41-22-730-8208/54/84 fax: +41-22-730-8025/13 email: IPCC-Sec@wmo.int www: http://www. ipcc.ch/

Expert Meeting on Short-lived Climate Forcers (SLCFs): The Expert Meeting on SLCFs will be organized by the TFI and WGI. **dates:** 28-31 May 2018 **location:** Geneva, Switzerland **contact:** IPCC Secretariat **phone:** +41-22-730-8208/54/84 **fax:** +41-22-730-8025/13 **email:** IPCC-Sec@wmo.int **www:** http:// www.ipcc.ch/

26th Meeting of the COP to the Inter-American Institute for Global Change Research: The IAI is a regional intergovernmental institution that promotes scientific research and capacity building to inform decision makers on the continent and beyond. IAI has 19 parties in the Americas, who meet annually to monitor and direct the IAI's activities. **dates:** 20-21 June 2018 **location**: Antigua, Guatemala **contact:** Inter-American Institute for Global Change Research **phone:** +59-8-2606-0126 **email:** http://www.iai.int/contact-us/ **www:** http://www.iai. int/26th-meeting-of-the-conference-of-the-parties/

GEF Sixth Assembly and Associated Meetings: The Global Environment Facility (GEF) Assembly is the governing body of the GEF and is composed of all 183 member countries. It meets every four years at the ministerial level to: review general policies; review and evaluate the GEF's operation based on reports submitted to Council; review the membership of the Facility; and consider, for approval by consensus, amendments to the Instrument for the Establishment of the Restructured GEF on the basis of recommendations by the Council. **dates:** 23-29 June 2018 **location:** Da Nang, Viet Nam **contact:** GEF Secretariat **email:** https://assembly.thegef.org/contact **www:** http://assembly.thegef.org/

First Lead Author Meeting for WGI: This meeting will begin elaboration of the WGI contribution to the AR6. **dates:** 25-29 June 2018 **location:** Guangzhou, China **contact:** IPCC Secretariat **phone:** +41-22-730-8208/54/84 **fax:** +41-22-730-8025/13 **email:** IPCC-Sec@wmo.int **www:** http://www.ipcc.ch/

High-level Political Forum on Sustainable Development (HLPF) 2018: The theme of HLPF 2018 will be "Transformation towards sustainable and resilient societies." The set of SDGs to be reviewed in depth are SDG 6 (water and sanitation), 7 (energy), 11 (sustainable cities), 12 (sustainable consumption and production patterns), 15 (life on land) and 17 (partnerships). dates: 9-18 July 2018 location: UN Headquarters, New York contact: UN Division for Sustainable Development email: https://sustainabledevelopment.un.org/contact/ www: https:// sustainabledevelopment.un.org/hlpf/2018

Third Lead Author Meeting on SROCC: This meeting is for WG I/II and is being organized by WGII. dates: 23-27 July 2018 location: Lanzhou, China contact: IPCC Secretariat phone: +41-22-730-8208/54/84 fax: +41-22-730-8025/13 email: IPCC-Sec@wmo.int www: http://www.ipcc.ch/

Third Lead Author Meeting on SRCCL: This meeting is for WG I/II/III and is being organized by WGIII. dates: 3-7 September 2018 location: TBC contact: IPCC Secretariat phone: +41-22-730-8208/54/84 fax: +41-22-730-8025/13 email: IPCC-Sec@wmo.int www: http://www.ipcc.ch/

Global Climate Action Summit: Convened by California Governor Jerry Brown and the US State of California, the Global Climate Action Summit will bring leaders from government, business, and the global community to inspire greater global ambition to act on climate change. The Summit will be co-chaired by Governor Brown, UNFCCC Executive Secretary Patricia Espinosa, the UN Secretary-General's Special Envoy for Climate Action Michael Bloomberg, and Mahindra Group Chairman Anand Mahindra. **dates:** 12-14 September 2018 **location:** San Francisco, California, US **www:** https:// globalclimateactionsummit.org/

48th Session of the IPCC: The IPCC's 48th session will meet to approve the SR15. **dates:** 1-5 October 2018 **location:** Incheon, Republic of Korea **contact:** IPCC Secretariat **phone:** +41-22-730-8208/54/84 **fax:** +41-22-730-8025/13 **email:** IPCC-Sec@wmo.int **www:** http://www.ipcc.ch

For additional meetings, see: http://sdg.iisd.org/

AR5	Fifth Assessment Report
AR6	Sixth Assessment Report
ATF-TGICA	Ad Hoc Task Force on the Future of TGICA
ATG-Finance	Ad Hoc Task Group on the Financial Stability of
	the IPCC
CLA	Coordinating Lead Author
COP	Conference of the Parties
DDC	Data Distribution Centre
FiTT	Financial Task Team
GHG	Greenhouse gases
GST	Global stocktake
IPBES	Intergovernmental Science-Policy Platform on
	Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
LA	Lead Author
NDC	Nationally Determined Contribution
SDGs	Sustainable Development Goals
SLCFs	Short-lived climate forcers
SPM	Summary for Policymakers
SR	Special Report
SR15	Special Report on Global Warming of 1.5 °C
SRCCL	Special Report on Climate Change and Land
SROCC	Special Report on the Ocean and Cryosphere in
	a Changing Climate
SYR	Synthesis Report
TFI	Task Force on National Greenhouse Gas
	Inventories
TGICA	Task Group on Data and Scenario Support for
	Impact and Climate Analysis
ToR	Terms of Reference
TSU	Technical Support Unit
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and
	Cultural Organization
UNFCCC	United Nations Framework Convention on
	Climate Change
WG	Working Group
WMO	World Meteorological Organization
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