

4TH GEO

JULY 4-6, 2018 TOULOUSE, FRANCE

BLUE PLANET SYMPOSIUM

Our Future is Blue: Linking Ocean and Coastal Information with Societal Needs

Ocean and Coastal Information in the Sixth Assessment (AR6) of the Intergovernmental Panel on Climate Change

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Co-Chair of IPCC Working Group I



@valmasdel

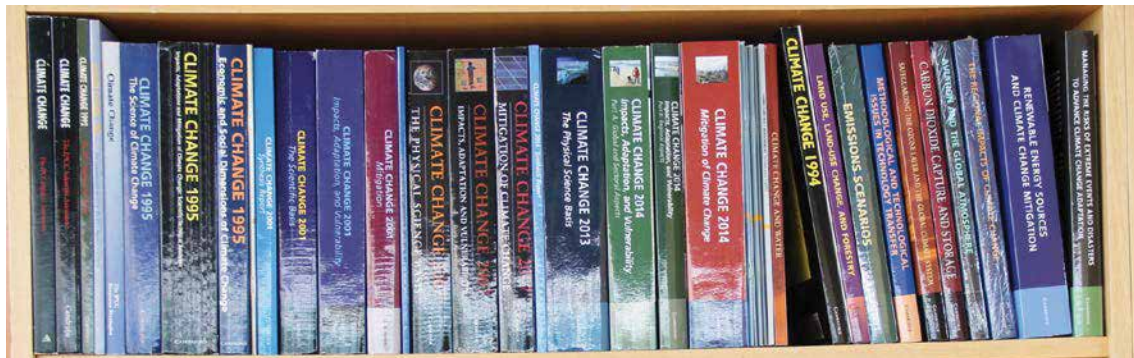
ipcc

INTERGOVERNMENTAL PANEL ON climate change



The Sixth Assessment cycle (AR6) of the IPCC

- ❖ Mandate and work principles
- ❖ Context and motivations for innovation
- ❖ IPCC AR6 context and timeline



Mandate of the IPCC

- ❖ The IPCC assesses the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation.
- ❖ The IPCC is organized in Working Groups and one Task Force :
 - WGI : the physical science basis
 - WGII : impacts, adaptation and vulnerability
 - WGIII : mitigation of climate change
 - Task Force on national greenhouse gas inventories
- ❖ IPCC reports must be **policy-relevant** but **not policy-prescriptive**

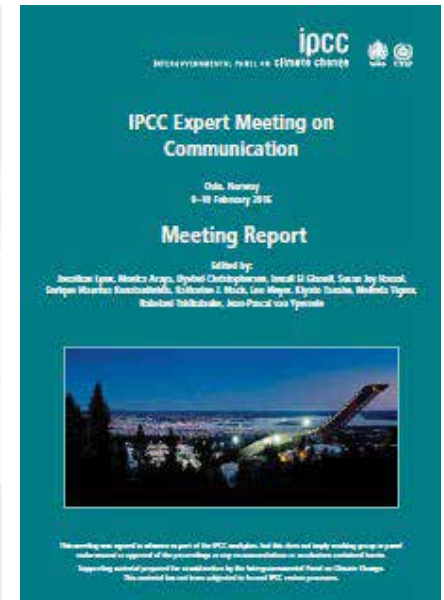
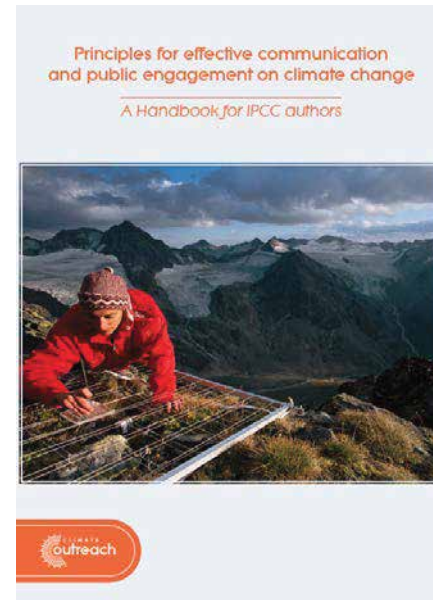
Work principles (1/2)

- ❖ An assessment is not a review, an encyclopedia or a text book
- ❖ Key findings are traceable to the assessed literature and confidence is reported using a calibrated language
- ❖ Identification of key uncertainties and knowledge gaps

Work principles (2/2)

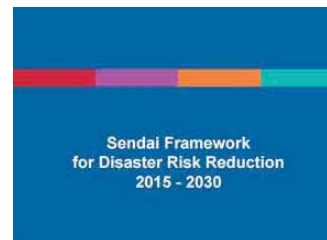
❖ Concision, clarity and readability of text and figures

- *Primary stakeholders :*
policymakers at international, national, local levels
- *Secondary audiences :*
business, NGOs, education, general public, media

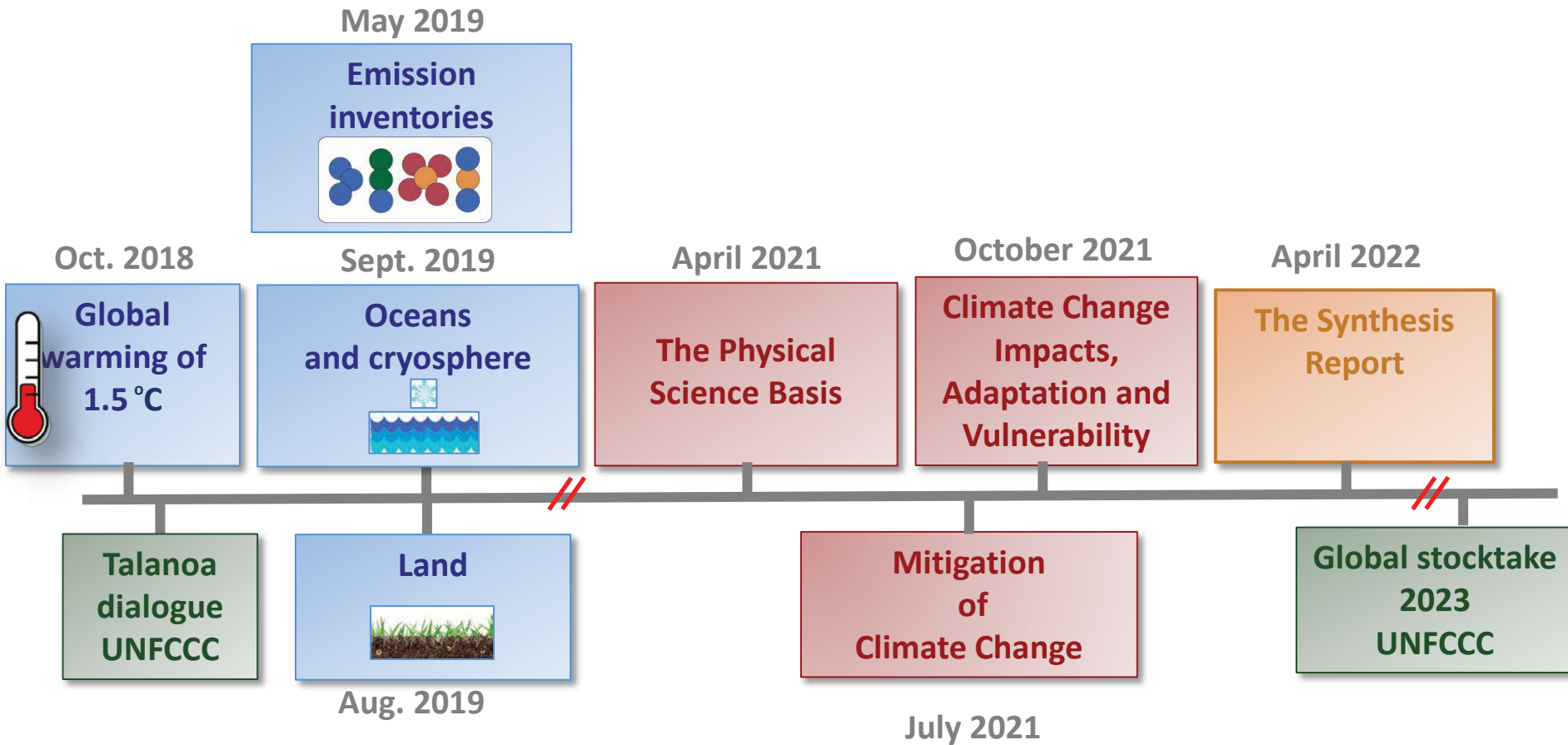





AR6 context

- ❖ UN Agenda 2030 context : Paris Agreement ; Sendai Framework for Disaster Risk Reduction ; Sustainable Development Goals; New Urban Agenda
- ❖ Focus on solution and knowledge to inform action
- ❖ Three IPCC Special Reports underway for 2018 and 2019
- ❖ New outline for Working Group I
- ❖ Stronger integration across Working Group reports towards the Synthesis



AR6 timeline



- March 2018:**  Cities and Climate Change Science Conference
- May 2018:**  Expert Meeting on Assessing Climate Information for Regions
- May 2018:**  Expert Meeting on Short-Lived Climate Forcers

Report preparation steps



Scoping



Approval of Outline



Nomination of authors



Government and Expert Review - 2nd Order Draft



Expert Review - 1st Order Draft



Selection of authors



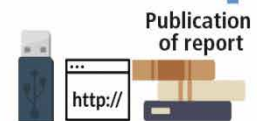
Final draft report and SPM



Government review of final draft SPM



Approval & acceptance of report



Publication of report



Global warming of 1.5°C (SR1.5)

Fourth Lead Author Meeting, Gaborone, Botswana





Global warming of 1.5°C (SR1.5)

Chapter 1: Framing and context

Chapter 2: Mitigation pathways compatible with 1.5°C in the context of sustainable development

Chapter 3: Impacts of 1.5°C global warming on natural and human systems

Chapter 4: Strengthening and implementing the global response to the threat of climate change

Chapter 5: Sustainable development, poverty eradication and reducing inequalities



Global warming of 1.5°C (SR1.5)

Chapter 1: Framing and context

**Cut-off date : papers accepted
before May 15th, 2018**

Chapter 2: Mitigation pathways compatible with 1.5°C in the context of sustainable development

Chapter 3: Impacts of 1.5°C global warming on natural and human systems

First Order Draft :

Expert Review:

12 895 comments

489 experts

61 countries

Second Order Draft :

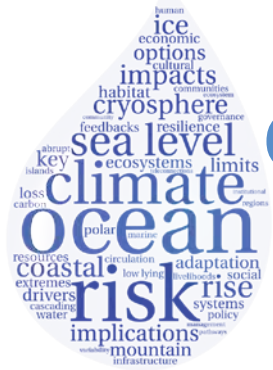
Gouvernement and Expert Review

25 590 comments

570 experts

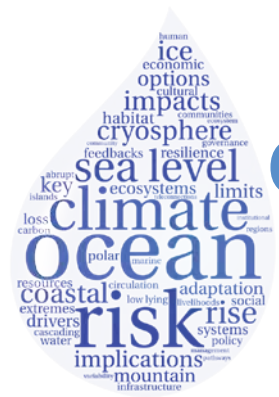
71 countries

IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC)



Second Lead Author Meeting, Quito, Ecuador

IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC)



Chapter 1: Framing and context

Chapter 2: High mountain areas

Chapter 3: Polar regions

Chapter 4: Sea level rise and implications for low lying islands, coasts and communities

Chapter 5: Changing ocean, marine ecosystems, and dependent communities

Chapter 6 : Extremes, abrupt changes and managing risks

Box : Low lying islands and coasts

IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC)



Cut-off dates

Manuscripts submitted before 15 Oct 2018

Papers accepted for publication before 15 May 2019

Chapter 1: Framing and context

Chapter 2: High mountain areas

Chapter 3: Polar regions

Chapter 4: Sea level rise and implications for low lying islands, coasts and communities

Chapter 5: Changing ocean, marine ecosystems, and dependent communities

Chapter 6 : Extremes, abrupt changes and managing risks

Box : Low lying islands and coasts

Expert and Government Review of the Second Order Draft

6 Nov 2018 – 11 Jan 2019

Working Group I AR6 report

WORKING GROUP I CONTRIBUTION TO THE IPCC SIXTH ASSESSMENT REPORT
FIRST LEAD AUTHOR MEETING
GUANGZHOU, CHINA, 25-29 JUNE 2018



Working Group I

Summary for Policy Makers

Technical Summary

Large-scale climate change

Chapter 1: Framing, context, methods

Chapter 2: Changing state of the climate system

Chapter 3: Human influence on the climate system

Chapter 4: Future global climate: scenario-based projections and near-term information

Chapter 5: Global carbon and other biogeochemical cycles and feedbacks

Chapter 6: Short-lived climate forcers

Chapter 7: The Earth's energy budget, climate feedbacks, and climate sensitivity

Chapter 8: Water cycle changes

Chapter 9: Ocean, cryosphere, and sea level change

Chapter 10: Linking global to regional climate change

Chapter 11: Weather and climate extreme events in a changing climate

Chapter 12: Climate change information for regional impact and for risk assessment

Atlas of Regional Climate Information

Annexes

Glossary

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Atlas of Regional Climate Information

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Climate processes

Working Group I

Summary for Policy Makers
Technical Summary

Regional climate information

Chapter 1: Framing, context, methods

Chapter 2: Changing state of the climate system

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Atlas of Regional Climate Information

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Glossary

Cut-off dates

Manuscripts submitted before 30 Dec 2019

Papers accepted for publication before 30 Sept 2020

Working Group II

Chapter 1: Point of departure and key concepts

SECTION 1: Risks, adaptation and sustainability for systems impacted by climate change

Chapter 2: Terrestrial and freshwater ecosystems and their services

Chapter 3: Ocean and coastal ecosystems and their services

Chapter 4: Water

Chapter 5: Food, fibre, and other ecosystem products

Chapter 6: Cities, settlements and key infrastructure

Chapter 7: Health, wellbeing and the changing structure of communities

Chapter 8: Poverty, livelihoods and sustainable development

SECTION 2: Regions

Chapter 9: Africa

Chapter 10: Asia

Chapter 11: Australasia

Chapter 12: Central and South America

Chapter 13: Europe

Chapter 14: North America

Chapter 15: Small Islands

CROSS-CHAPTER PAPERS

- Biodiversity hotspots (land, coasts and oceans)
- Cities and settlements by the sea
- Deserts, semi-arid areas, and desertification
- Mediterranean region
- Mountains
- Polar regions
- Tropical forests

SECTION 3: Sustainable development pathways: integrating adaptation and mitigation

Chapter 16: Key risks across sectors and regions

Chapter 17: Decision-making options for managing risk

Chapter 18: Climate resilient development pathways* **connection to WG III*

Working Group III on mitigation

Framing (1 chapter)

1. Introduction and framing

Set up sustainable development as key framing concept

High-level assessment of emission trends, drivers and pathways (3 chapters)

2. Emissions trends and drivers

3. Mitigation pathways compatible with long-term goals

4. Mitigation and development pathways in the near- to mid-term

Balancing sources and sinks/warming levels

NDCs, emissions peaking, mid-century long-term low greenhouse gas emission development strategies

Sectoral chapters (8 chapters)

5: Demand, services and social aspects of mitigation

Orients sectors to human needs

6: Energy systems

9. Buildings

7. Agriculture, Forestry, and Other Land Uses

10. Transport

8. Urban systems and other settlements

11. Industry

The sectoral core: maps on to inventories

12. Cross sectoral perspectives

Responses not captured by sectoral framing

Institutional drivers (2 chapters)

13. National and sub-national policies and institutions

14. International cooperation

Institutions, policies and cooperation

Financial and technological drivers (2 chapters)

15. Investment and finance

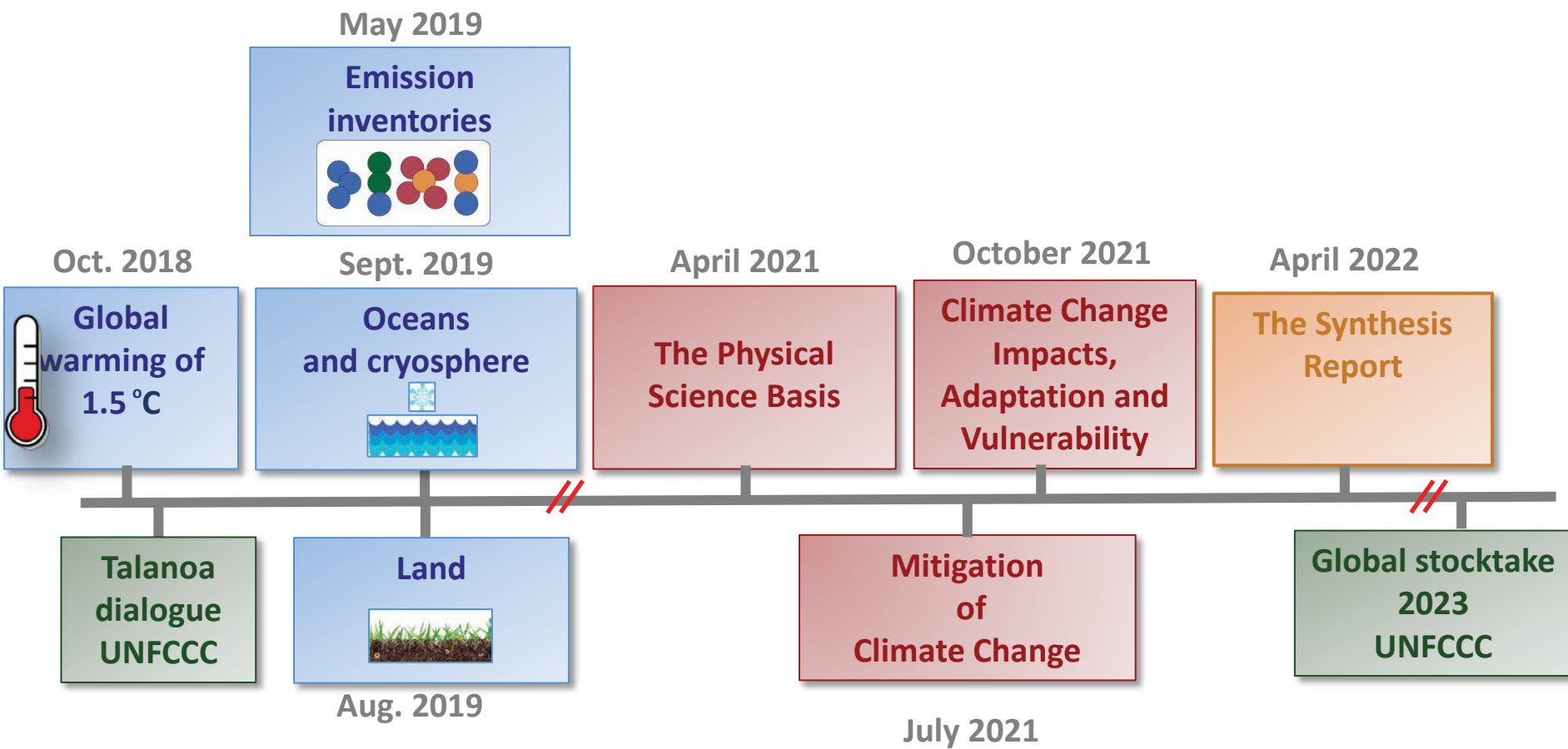
16. Innovation, technology development and transfer

Financial flows + technological innovation

Synthesis (1 chapter)

17. Accelerating the transition in the context of sustainable development

Synthesis sustainable development in different geographical scales



An unprecedented effort

Thank you for your attention

For more information:

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IPCC Press Office: ipcc-media@wmo.int

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