

Mitigation pathways and sustainability in the context of the Paris Agreement

Jim Skea and PR Shukla, Co-Chairs IPCC WG III

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Bonn, 10 May 2017



Possible IPCC contributions to the GST: x-WG breakout at the AR6 scoping meeting

Mitigation

- Provide insight into temperature and emission pathways (WG I and WG III), including peaking and balancing sources and sinks (WG III)
- Provide up-to-date assessment of climate sensitivity and carbon cycle/climate feedbacks and the carbon budget (mainly WG I)
- Provide insight into mitigation options, and their effectiveness and sustainability, perhaps drawing upon case studies (WG III)
- Assess options for decarbonization in different sectors, and the effectiveness of options such as technology development and dissemination (WG III)

Financing and support

- Assessment of relation between adaptation needs, and its limits, and mitigation efforts required at different levels of global temperature change (WG II and WG III)
- Potential assessment of effectiveness of financial support (WG III)
- Help inform distinction between “development” and “adaptation” (mainly WG II)
- Synthesize literature/concepts related to financial flows (WG III)

Proposed outline of WG III AR6

- Chapter 1: Introduction and Framing
- Chapter 2: Recent trends and drivers
- Chapter 3: Long term mitigation goals and pathways
- Chapter 4: Mitigation and development pathways in the near to mid-term
- Chapter 5: Demand, services and social aspects of transformation
- Chapter 6: Energy systems
- Chapter 7: AFOLU
- Chapter 8: Urban systems and other settlements
- Chapter 9: Buildings
- Chapter 10: Transport
- Chapter 11: Industry
- Chapter 12: Responses across and beyond sectors
- Chapter 13: National and sub - national policies and institutions
- Chapter 14: International co-operation
- Chapter 15: Mobilising finance
- Chapter 16: Innovation, technology development and technology transfer
- Chapter 17: Accelerating the transition in the context of sustainable development

Sets up sustainable development/SDGs

Balancing sources and sinks/warming levels

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

Orients sectors to human needs

Mobilising financial flows + technology development and transfer

The sectorial core: maps on to inventories

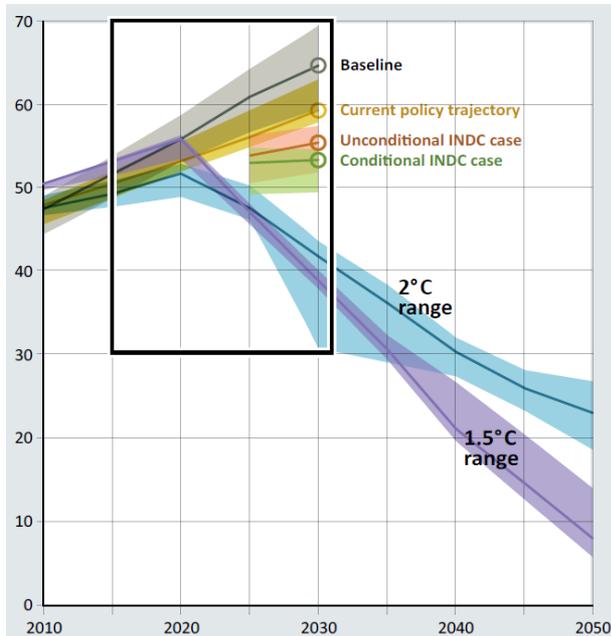
Synthesises sustainable development + regional

Possible elements of the AR6 Synthesis Report

For consideration at IPCC P-46 (September 2017) and the 2nd Synthesis Report Scoping Meeting

1. Global stocktake
2. Interaction among emissions, climate, risks and development pathways
3. Economic and social costs and benefits of mitigation and adaptation in the context of development pathways
4. Adaptation and mitigation actions in the context of sustainable development
5. Finance and means of support

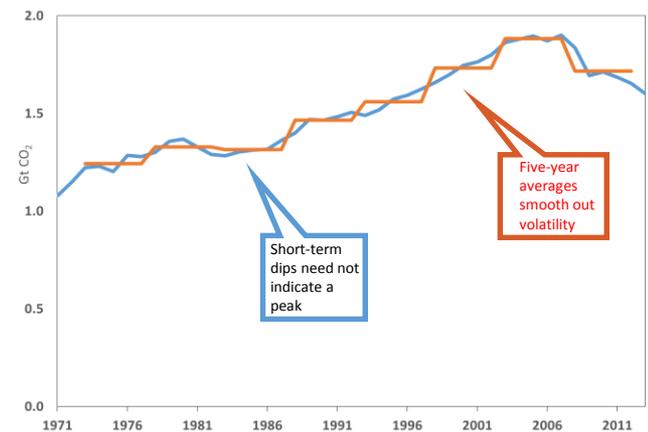
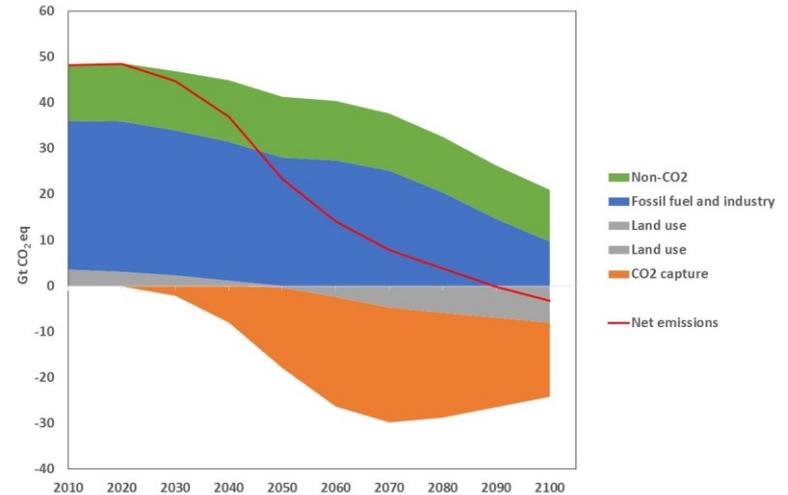
Possible analytical elements



Aggregate NDCs benchmarked against least cost pathways: new 1.5°C and AR6 scenario databases

Methodology is within the proposed scope for AR6!!

Balancing sources and sinks



Identifying a peak

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INTERGOVERNMENTAL PANEL ON climate change



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