



Climate change science and the IPCC: mitigation

IPCC Media Workshop

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Jim Skea

Co-Chair IPCC Working Group III

ipcc

INTERGOVERNMENTAL PANEL ON climate change



IPCC Working Group III covers climate change *mitigation*

Climate change mitigation efforts reduce pressure on the climate system by:

- a. Reducing emissions of greenhouse gases
- b. Increasing removals of carbon dioxide from the atmosphere

Chapter 1 Introduction and Framing

Chapter 2: Emissions trends and drivers

Chapter 3: Mitigation pathways compatible with long-term goals

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

Chapter 5: Demand, services and social aspects of mitigation

Chapter 6: Energy systems

Chapter 7: Agriculture, Forestry, and Other Land Uses (AFOLU)

Chapter 8: Urban systems and other settlements

Chapter 9: Buildings

Chapter 10: Transport

Chapter 11: Industry

Chapter 12: Cross sectoral perspectives

Chapter 13: National and sub-national policies and institutions

Chapter 14: International cooperation

Chapter 15: Investment and finance

Chapter 16: Innovation, technology development and transfer

Chapter 17: Accelerating the transition in the context of sustainable development

**The outline of the IPCC
Working Group III
report to be published
in 2021**

In the context of sustainable development

Chapter 1: Introduction and Framing

Chapter 17: Accelerating the transition in the context of sustainable development



The past and the future: a helicopter perspective

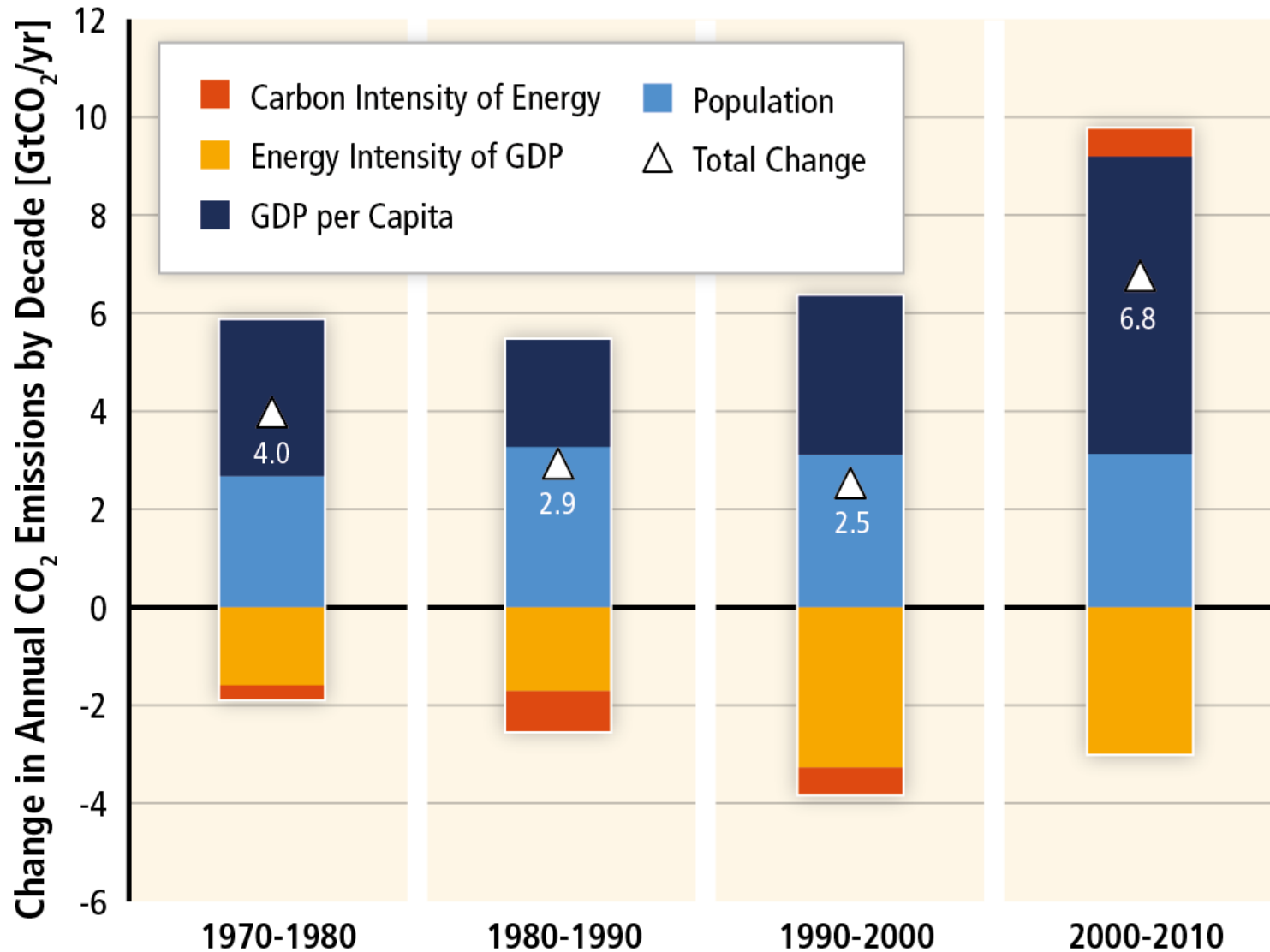
Chapter 2: Emissions trends and drivers

Chapter 3: Mitigation pathways compatible with long-term goals

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



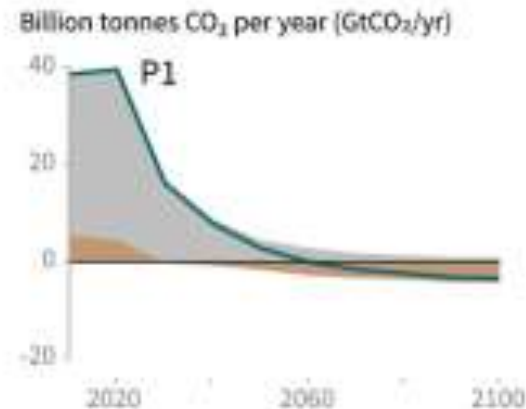
Explaining the past and the present



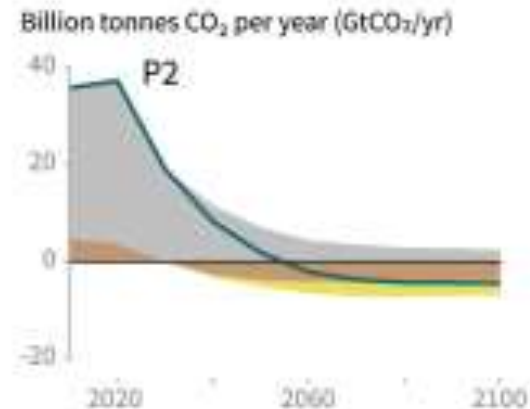
Exploring possible futures

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

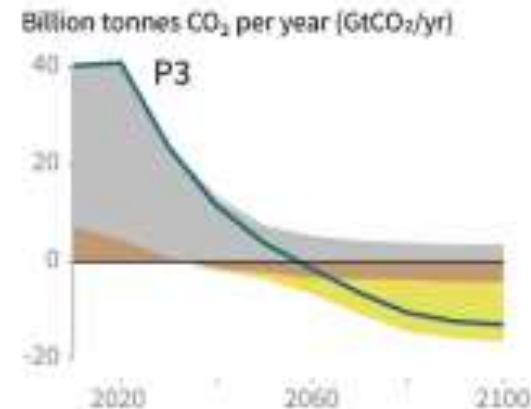
● Fossil fuel and industry ● AFOLU ● BECCS



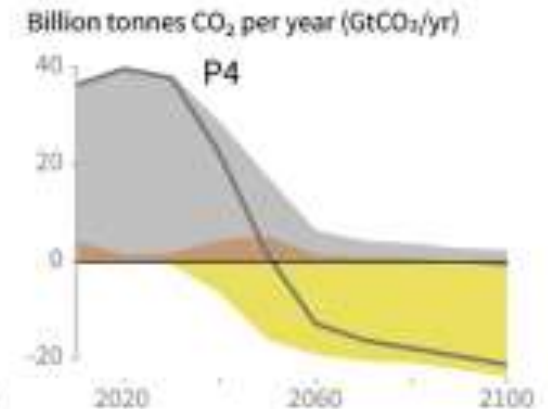
P1: A scenario in which social, business and technological innovations result in lower energy demand up to 2050 while living standards rise, especially in the global South. A downsized energy system enables rapid decarbonization of energy supply. Afforestation is the only CDR option considered; neither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



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



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



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

Sectors and systems

- Chapter 6: Energy systems
- Chapter 7: Agriculture, Forestry, and Other Land Uses (AFOLU)
- Chapter 8: Urban systems and other settlements
- Chapter 9: Buildings
- Chapter 10: Transport
- Chapter 11: Industry
- Chapter 12: Cross sectoral perspectives

Clean energy



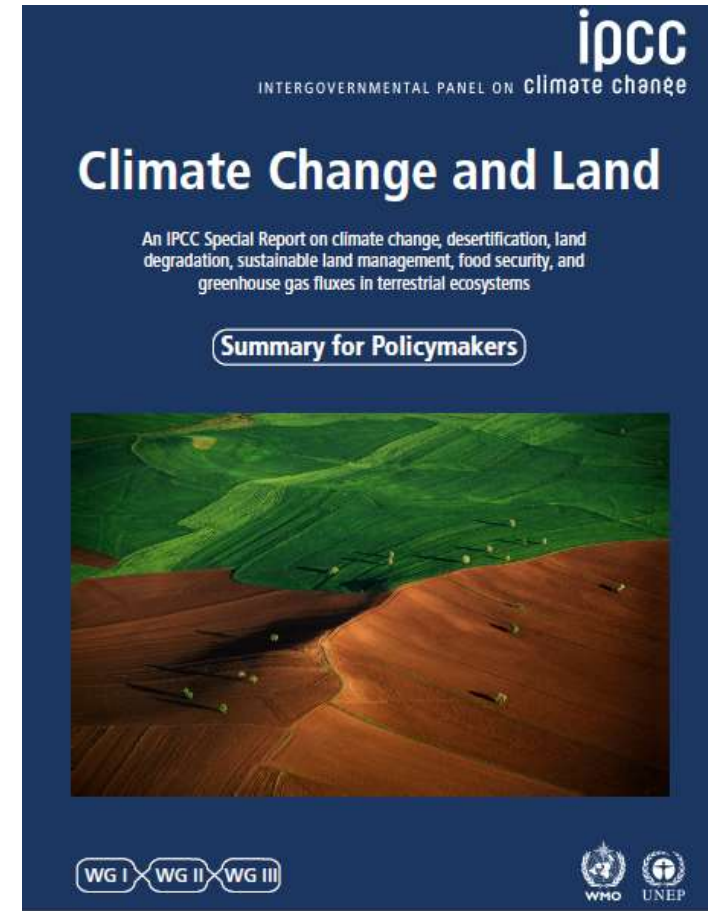
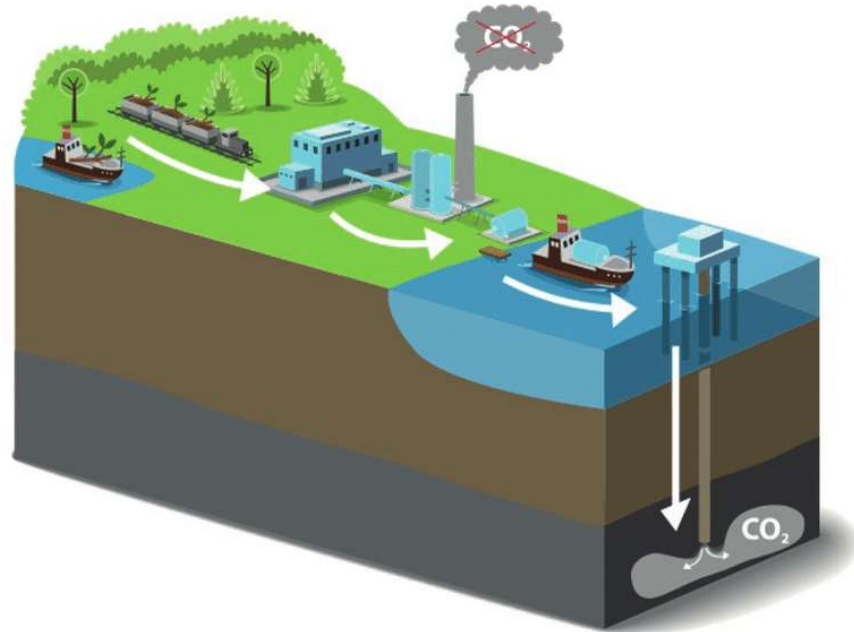
Using energy more efficiently...but watch for rebound



Electrification



Carbon dioxide removal



Enabling climate change mitigation

- Chapter 13: National and sub-national policies and institutions
- Chapter 14: International cooperation
- Chapter 15: Investment and finance
- Chapter 16: Innovation, technology development and transfer



And don't forget people.....

Chapter 5: Demand, services and social aspects of mitigation



We're people too!



THANK YOU FOR YOUR ATTENTION!

For more information:

Website: <http://ipcc.ch/>

IPCC Secretariat: ipcc-sec@wmo.int

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