

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



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PROPOSED CHAPTER OUTLINE OF THE WORKING GROUP III CONTRIBUTION TO THE IPCC FOURTH ASSESSMENT REPORT (AR4)

(Submitted by the Co-chairs of Working Group III)

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MITIGATION OF CLIMATE CHANGE

PROPOSED OUTLINE FOR THE WG III CONTRIBUTION TO THE AR4

Summary for Policymakers

Technical Summary

Part A - Introduction and framing issues

1. Introduction

- Article 2 of the Convention and mitigation
- Past, present, future; including previous IPCC reports
- Time scales
- Structure of the report, the rationale behind it, the role of Cross Cutting Themes and framing issues

2. Framing issues

- Climate change mitigation and sustainable development
- Mitigation, vulnerability and adaptation relationships
- Regional integration
- Technology development, deployment, diffusion and transfer
- Risk and uncertainty
- Distributional and equity aspects
- Cost and benefits concepts
- Decision making and implementation

Part B - Long-term atmospheric stabilization and emission paths

3. Long-term atmospheric stabilization and emission paths

Executive summary

- Emission scenarios: assessment of new literature since SRES
- Mitigation and stabilization scenarios and strategies, and costs (with appropriate uncertainties) including multiple gases
- Development pathways
- Role of technologies in long-term mitigation and stabilization: R&D, deployment, diffusion, transfer
- Mitigation/adaptation mix, in the light of avoided damages (as reflected in art 2 UNFCCC), decision making and how to deal with uncertainties
- Short and medium term mitigation consequences of long-term stabilization levels, including: how to deal with inertia and decision making issues

Part C - Specific mitigation options in the short and medium term

Regional differentiation will be emphasized in all chapters in this part (section 4-12) as far as literature is available. However, this regional disaggregation may differ by sector and could be along different characteristics, such as level of development, national circumstances or geographical location.

Chapters 4-10 will follow the following template. Template issues will only be incorporated when relevant and when literature is available.

Executive summary

- Introduction
- Status of the sector and critical developmental trends and implications
- Emission trends (global and regional)
- Description and assessment of mitigation technologies, options and potentials (technical, economic, market), costs and sustainability
- Positive and negative interactions of mitigation options with vulnerability and adaptation.
- Effectiveness of and experience with climate policies, potentials, barriers and opportunities / implementation issues
- Integrated and non-climate policies affecting emissions of greenhouse gases,
- Technology research, development and transfer
- Long-term outlook/ systems transitions, decision making; inertia and its relation with long-term/short-term choices, decision tools
- 4. Energy supply
- 5. Transport and its infrastructure (road, rail, aviation, shipping, including transport fuels)
- **6.** Residential/commercial (including services)
- 7. Industry
- 8. Agriculture (including land use and biological carbon sequestration)
- 9. Forestry (including land use and biological carbon sequestration)
- 10. Waste management 1

11. Short and medium term mitigation from a cross-sectoral perspective

Executive summary

- Introduction, including system perspective, relationship with chapter 3, key issues across sectors and use of models/analysis
- Cross-sectoral mitigation options: description, characterization and costs
- Technology development, deployment, diffusion and transfer
- Synergies and trade-offs with other policy areas (e.g. air quality, water)
- Overall mitigation potential and costs, including portfolio analysis and cross-sectoral modeling
- Macroeconomic effects
- Spill-over effects (positive and negative)
- Assessment of bottom-up and top-down analysis
- Economic and other generic policy instruments (including taxes, emissions trading)

¹ Recycling of industrial waste would be covered in chapter 7 as was done in TAR.

- Implementation aspects
- Mitigation and adaptation synergies and trade-offs

12. Sustainable development and short and medium term mitigation

- Executive summary
- Introduction
- Impact of mitigation policies on sustainable development goals
- Impact of sustainable development policies on climate change mitigation
- Determinants of mitigative capacity (link to adaptive capacity in Working Group II)
- Opportunities and incentives to make development more sustainable

Part D - International co-operation

13. International co-operation

- Executive summary
- Nature of climate as a global commons issue in the context of development
- Overview: Climate change agreements and other arrangements
- Interactions with other inter-governmental policies, processes and instruments (including development, environment and trade)
- Interactions with regional and national policies, processes and instruments
- Interactions with private, local and non-governmental initiatives
- Synthesis: International co-operation on climate change

List of	authors	and	reviewers
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Glossary

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