



WMO

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE



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

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

This document is a revised version of WG-III: 7th/Doc. 3 and
has been adopted by the Seventh Session of Working Group III.

Summary for Policy Makers

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

- The scope of the global climate change problem
- Climate change mitigation and sustainable development
- Mitigation, vulnerability and adaptation relationships
- Regional dimensions
- Technology research, development, deployment, diffusion and transfer
- Risk and uncertainty
- Distributional and equity aspects
- Cost and benefits concepts
- Decision making and implementation

Regional differentiation will be emphasized in all chapters in part B, C and D 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.

Part B – Issues related to mitigation in the long-term context

3. Issues related to mitigation in the long-term context

Executive summary

- Emission scenarios: assessment of new literature since SRES
- Mitigation and stabilization scenarios and strategies, and costs and socio-economic implications (with appropriate uncertainties) including multiple gases
- Development pathways, trends and goals
- Role of technologies in long-term mitigation and stabilization: research, development, deployment, diffusion and transfer
- Interaction of mitigation and adaptation, in the light of climate change impacts and decision making under long-term uncertainties
- Linkages between short and medium term mitigation and long-term stabilization, including the implications of inertia, risk and uncertainty for decision making

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

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, development trends including production and consumption, and implications
- Emission trends (global and regional)
- Description and assessment of mitigation technologies and practices, options and potentials (technical, economic, market and social), costs and sustainability
- 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
- Co-benefits of greenhouse gas mitigation policies
- Technology research, development, deployment, diffusion 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 management¹**

Part D - Cross sectoral, national and international dimensions

11. 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 research, development, deployment, diffusion and transfer
- Synergies and trade-offs with other policies
- Overall mitigation potential and costs, including portfolio analysis and cross-sectoral modeling
- Macroeconomic effects
- Spill-over effects
- Assessment of bottom-up and top-down analysis
- Mitigation and adaptation - synergies and trade-offs

12. Sustainable development and 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)
- Sustainable development and climate change mitigation - issues and opportunities

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

13. Policies, instruments and co-operative arrangements

Executive summary

- Economic and other generic policy instruments (including taxes, emissions trading)
- Implementation of and interaction between policies
- Climate change agreements and other arrangements (including international co-operation and insights from and interactions with other inter-governmental arrangements)
- Insights from and interactions with private, local and non-governmental initiatives

List of authors and reviewers

Glossary

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