

Olav Hohmeyer • Klaus Rennings
Editors

Man-Made Climate Change

Economic Aspects and Policy Options

Proceedings of an International Conference
held at Mannheim, Germany, March 6-7, 1997

With 45 Figures
and 13 Tables



Til • -% r 1
Physica-Verlag
A Springer-Verlag Company

ZEW

Zentrum für Europäische
Wirtschaftsforschung GmbH

Centrefor European
Economic Research

Contents

1	Introduction: Economic Aspects of and Policy Options for Climate Protection.....	1
	<i>by Olav Hohmeyer and Klaus Rennings</i>	

Part I: What Do We Know about Climate Change ?

2	The Science and Impacts of Climate Change - Conclusions from the Second IPCC Assessment Report.....	7
	<i>by Hartmut Grassl</i>	

Part II: Economic Aspects of Climate Change

3	Decision-Making Frameworks for Addressing Climate Change.....	23
	<i>by Gonzague Pillet</i>	
4	What is Sustainable Development ?.....	42
	<i>by Graciela Chichilnisky</i>	
5	Linking Weak and Strong Sustainability Indicators: The Case of Global Warming.....	83
	<i>by Klaus Rennings and Olav Hohmeyer</i>	
6	Discounting of Long Term Costs: What Would Future Generations Prefer Us to Do ?.....	111
	<i>by Ah Rabl</i>	
7	Is Adaptation Cheaper than Prevention ? The Applicability of Cost-Benefit Analysis to Global Warming.....	126
	<i>by Peter Hennicke and Ralf Becker</i>	
8	Some Critical Remarks on Today's Bottom-up Energy Models.....	165
	<i>by Eberhard Jochem</i>	
9	Double Dividend of Climate Protection and the Role of International Policy Coordination in the EU - An Applied General Equilibrium Analysis with the GEM-E3 Model.....	180
	<i>by Klaus Conrad and Tobias F.N. Schmidt</i>	

Part III: Policy Options

10 Possible Contributions of Renewable Energies to the Solution of the Global Climate Problem.....	219
<i>by Helmut-Michael Groscurth and Sigurd Weinreich</i>	
11 What Hope for a Sustainable Energy System ?.....	236
<i>by Nick Eyre</i>	
12 Comment on: Potentials of Joint Implementation Measures.....	244
<i>by Henning Rentz</i>	
13 Assessment of Voluntary Agreements in Environmental Policy - A Neoliberal Perspective.....	247
<i>by Klaus Rennings, Karl Ludwig Brockmann, and Heidi Bergmann</i>	
14 The Political Context for Emissions Trading in the Climate Change Negotiations.....	282
<i>by Michael Grubb</i>	
15 The Kyoto Protocol and the Emergence of " <i>Contraction and Convergence</i> " as a Framework for an International Political Solution to Greenhouse Gas Emissions Abatement.....	291
<i>by Aubrey Meyer</i>	

Annex

A1 United Nations Framework Convention on Climate Change.....	349
A2 The Kyoto Protocol.....	377