

Contents

Part I Social Aspects of Climate Change

- 1 Adaptive Capacities of European City Regions in Climate Change: On the Importance of Governance Innovations for Regional Climate Policies** 3
Sybille Bauriedl
- 2 An Assessment of Climate-Induced Conflict Risks Over Shared Water Resources in Africa** 15
Samir A. Algamal
- 3 Indigenous Communities and Climate Change Policy: An Inclusive Approach** 27
Vinita Krishna
- 4 Mitigating Climate Change Via Clean Energy Financing: An Assessment of the Asian Development Bank’s Mitigation Efforts in Southeast Asia** 51
Laurence L. Delina
- 5 Nikan oti (the future): Adaptation and Adaptive Capacity in Two First Nations Communities** 69
Willie Ermine and Jeremy Pittman
- 6 Mitigation of the Earth’s Economy: A Viable Strategy for Insurance Systems** 81
Liam Phelan, Ann Henderson-Sellers, and Ros Taplin
- 7 Contribution of Urban Agriculture to Food Security, Biodiversity Conservation and Reducing Agricultural Carbon Footprint** 99
Neeraja Havaligi

8	Temporal Metaphor in Abrupt Climate Change Communication: An Initial Effort at Clarification	113
	Chris Russill	
9	The Increase of Global Temperature as a Result of the Greenhouse Effect: Assessing the Reasons for Disagreement Among Scientists	133
	Stilianos A. Tampakis, Vasileios E. Pantazis, and Evangelos I. Manolas	
10	The Social Dilemma of Climate Change: Socio-economic Implications	143
	Martin Beckenkamp	
11	Towards a Psychology of Climate Change	153
	Christian A. Kloeckner	
12	Worldviews and Climate Change: Harnessing Universal Motivators to Enable an Effective Response	175
	Judith Ford	
Part II Economic Aspects of Climate Change		
13	Analysis of Green Investment Scheme for Energy Efficiency Measures in Latvia	193
	Andra Blumberga, Gatis Zogla, Marika Rosa, and Dagnija Blumberga	
14	Carbon Credit Currency for the Future	207
	Neeraj Singhal and Himani Gupta	
15	Climate Change and Agricultural Production in Vietnam	227
	Nguyen Van Viet	
16	Climate Change and Economic Uncertainty in the Wine Sector: A Case Study of the Maule Region, Chile	245
	Monica Hadarits	
17	Critical Parameters for Mass-Cargo Affine Industries Due to Climate Change in Germany: Impacts of Low Water Events on Industry and Possible Adaptation Measures	267
	Anja Scholten, Benno Rothstein, and Roland Baumhauer	
18	Financing Adaptation: For Whom, By Whom, and How	289
	Nazmul Huq	

19	GIS-Based Flood Risk Management for Thermal Power Plants in Germany	301
	Jeannette Schulz	
20	Release of Carbon Dioxide by Terrestrial Ecosystems Over Indonesia During the 1997–1998 ENSO Warm Event	311
	Pavel Propastin	
21	The Potential of Major Hydro and Wind Energy Projects for Seeking Carbon Credits Under the Clean Development Mechanism and Voluntary Markets	325
	Nitin Chaudhary and Shubhangi Lamba	
Part III Political Aspects of Climate Change		
22	An Assessment of Adaptation Strategies in the Baltic Sea Region: A Two-Country Analysis	337
	Hye R. Yoon, Fernanda Rivas, and Walter Leal Filho	
23	Climate Change and Protected Areas in Bolivia	355
	Dirk Hoffmann and Imke Oetting	
24	Climate Change Policies and Issues: A Tool for Increased Wood Production in Developing Countries	373
	Abiodun Oluwafemi Oluwadare	
25	Climate Policy Integration in the EU	385
	Claire Dupont	
26	Exploring Economic and Political Drivers for the Introduction of Innovative Mitigation Policies	405
	Valentino Piana	
27	How to Achieve Global-Scale Climate Change Mitigation? An Integrative Global Policy Framework Beyond Kyoto	425
	Vicente Rappaccioli-Navas	
28	ITU: Moving Towards a Global Policy Framework on ICTs and Climate Change	439
	Catherine Candano	
29	Managing the Ecological and Social Ambivalences of Bioenergy: Sustainability Criteria Versus Extended Carbon Markets	455
	Felix Ekardt and Hartwig von Bredow	

30	Normative Principles for Adaptation to Climate Change Policy Design and Governance	481
	Ieva Bruneniece and Maris Klavins	
Part IV Practical Aspects, Initiatives, Frameworks and Projects		
31	Accurate Estimation of CO₂ Background Level from Near Ground Measurements at Non-Mixed Environments	509
	Francis Massen and Ernst-Georg Beck	
32	Adaptation to Climate Change: Challenges for Transboundary Water Management	523
	Jos G. Timmerman, Sonja Koeppel, Francesca Bernardini, and Joost J. Buntsma	
33	Carbon, Conservation, Communities Under Sustainability (C3S) Paradigm for Forests	543
	Pallavi Pant	
34	Changing Climate Change Communication	555
	A. Henderson-Sellers	
35	Climate Change along Italian Coasts: Consciousness for Actions	575
	Edi Valpreda	
36	Climate Change Impacts on East Africa	589
	Muawya Ahmed Hussein	
37	“CO₂ Causes a Hole in the Atmosphere”: Using Laypeople’s Conceptions as a Starting Point to Communicate Climate Change	603
	Kai Niebert and Harald Gropengießer	
38	Integrating Environmental, Sociopolitical, Economic, and Technological Dimensions for the Assessment of Climate Policy Instruments	623
	Stelios Grafakos, Alexandros Flamos, Vlasios Oikonomou, and Dimitrios Zevgolis	
39	Mitigating the Climate Impact of Aviation: What Does Hydrogen Hold in Prospect?	649
	Kolja Seeckt, Philip Krammer, Malte Schwarze, and Dieter Scholz	

40 Opportunities and Constraints for Climate Adaptation in Regional Water and Land Use Planning	669
Saskia E. Werners, Jennifer West, Rik Leemans, J. David Tàbara, Xingang Dai, Zsuzsanna Flachner, Francesc Cots, Henry Neufeldt, Darryn McEvoy, and Giacomo Trombi	
41 Path to the Future for Climate Change Education: University Project Approach	693
Maruf Sanni, James O. Adejuwon, Idowu Ologeh, and William O. Siyanbola	
42 Predicted Impact of Climate Change on Coffee Supply Chains ..	703
Peter Laderach, Mark Lundy, Andy Jarvis, Julian Ramirez, Emiliano Perez Portilla, Kathleen Schepp, and Anton Eitzinger	
43 Preparing Communities for the Impacts of Climate Change in Oregon, USA	725
Bob Doppelt, Roger Hamilton, and Stacy Vynne	
44 Prioritizing Climatic Change Adaptation Investment at Local Government Levels	733
Supriya Mathew, Ann Henderson-Sellers, and Ros Taplin	
45 Reducing Vulnerability to Climate Change and Global Market Developments	753
Franziska Mannke and Kathrin Rath	
46 Social, Economic, and Political Aspects of Climate Change	779
Anandi Sharan	
47 The IPY Legacy: Better Awareness of International Cooperation as the Basis for Increasing Arctic Navigation	795
Danilo Comba	
48 The Role of Climate Change in the Darfur Crisis	815
Salah Hakim	
49 Virtual Ocean Acidification Laboratory as an Efficient Educational Tool to Address Climate Change Issues	825
Géraldine Fauville, Jason Hodin, Sam Dupont, Pam Miller, Julie Haws, Michael Thorndyke, and David Epel	

**50 “Pace of Change”: Climate Change and the Empowerment
of Local Communities** 837
Lia Carol Sieghart and Delfin Ganapin

About the Authors 847

Index 873



<http://www.springer.com/978-3-642-14775-3>

The Economic, Social and Political Elements of Climate
Change

Leal Filho, W. (Ed.)

2011, XII, 875 p. 160 illus., Hardcover

ISBN: 978-3-642-14775-3