

# Maritime Transport and the Climate Change Challenge

# Edited by Regina Asariotis and Hassiba Benamara

**Regina Asariotis** is a Senior Legal Affairs Officer and Chief of the Policy and Legislation Section in the Division on Technology and Logistics of the United Nations Conference on Trade and Development (UNCTAD), where she is responsible for the Secretariat's work in the field of transport law and policy.

**Hassiba Benamara** is an Economic Affairs Officer in the Policy and Legislation Section of UNCTAD, where she is working in the field of trade logistics, including on issues such as the implications of climate change and energy costs for maritime transport.

# Maritime Transport and the Climate Change Challenge Edited by Regina Asariolis and Hassiba Benamara

# About the book

International maritime transport is the backbone of the world globalized economy. It is a significant contributor to global CO2 emissions but also likely to be affected by wide-ranging and potentially devastating climate change impacts associated with rising sea levels and increased frequency/intensity of extreme weather events.

This book offers key information and analysis to anyone interested in learning more about the climate change challenge from the perspective of maritime transport and trade. It covers:

- the scientific background
- greenhouse gas emissions from international shipping
- potential approaches to mitigation in maritime transport
- the state of play in terms of the relevant regulatory and institutional framework
- potential climate change impacts and approaches to adaptation in maritime transport
- relevant cross-cutting issues such as financing and investment, technology and energy.

Including contributions from 25 experts from academia, international organizations such as the IMO, the UNFCCC secretariat, OECD, IEA and the World Bank, as well as the shipping and port industries, this is essential reading for professionals in the transport industry, governments and policymakers, trade bodies, investors, as well as researchers and students in the field of climate change and international transport.

## **Contents**

Preface Secretary-General of UNCTAD Foreword Editors Part I: Understanding the Challenge 1. Climate Change: State of the Science Stefan Rahmstorf 2. The World Energy Outlook 2010: Where is the World Heading After Copenhagen? Raffaella Centurelli and Timur Gül 3. The Impacts of a World in Transformation on the Prospects for Maritime Transport R. Martin Lees 4. Transport Costs, Trade and Climate Change Andreas Kopp Part II.Mitigating GHG Emissions from International Shipping 5. International Maritime Transport Under the UNFCCC Process Iulian Florin Vladu and Bernd Hackmann 6. Climate Change: A Challenge for IMO Too Andreas Chrysostomou and Eivind S. Vågslid 7. A Rebate Mechanism for an Equitable Maritime Emission Reduction Scheme Andre Stochniol 8. Market-based Instruments to Reduce Greenhouse-gas Emissions From Ships: Taxonomy and Assessment Marc D. Davidson and Jasper Faber 9. Mitigating Greenhouse Gas Emissions from Shipping: Potential, Cost and Strategies Philippe Crist Part III: Industry Perspectives and Initiatives 10. International Shipping and Climate Change Peter Hinchliffe 11.

Controlling GHGs: For Love or Money? Paul Gunton 12. Climate Initiatives of the World's Ports Satoshi Inoue Part IV: Adapting Ports and Other Coastal Infrastructure to the Impacts of Climate Change 13. Extreme Flood Events and Port Cities Through the 21st Century: Implications of Climate Change and Other Drivers Susan Hanson and Robert J Nicholls 14. Climate Change and Ports in America's Gulf Coast: Planning for Change Michael J. Savonis, Alan Meyers and Joanne R. Potter 15. Investigation of Potential Climate Change Impacts on Ports & Maritime Operations around the Southern African Coast Marius Rossouw and Andre Theron 16. Approach to Climate Change Adaptation in the Port of Rotterdam Tiedo Vellinga and Michiel de Jong



April 2012 | 360 pages | Hardback 978-1-84971-238-5: £65.00

**UNITED NATIONS** 





