

Table of Contents

| | |
|---|------|
| Preface | |
| <i>Carlo Carraro and Jerzy A. Filar</i> | vii |
| Introduction: The Environmental Game | |
| <i>O.J. Vrieze</i> | xvii |

Part 1: Models of Global Change and Sustainable Development

| | |
|--|----|
| Differential Game Models of Global Environmental Management | |
| <i>A. Haurie and G. Zaccour</i> | 3 |
| Sustainability and the Greenhouse Effect: Robustness Analysis of the Assimilation Function | |
| <i>Herman Cesar and Aart de Zeeuw</i> | 25 |
| Consumption of Renewable Environmental Assets, International Coordination and Time Preference | |
| <i>Andrea Beltratti</i> | 47 |
| Sustainable International Agreements on Greenhouse Warming — A Game Theory Study | |
| <i>Veijo Kaitala and Matti Pohjola</i> | 67 |
| The Environmental Costs of Greenhouse Gas Emissions | |
| <i>Michael Hoel and Ivar Isaksen</i> | 89 |

Part 2: Environmental Taxes and Related Issues

| | |
|---|-----|
| Taxation and Environmental Innovation | |
| <i>Carlo Carraro and Giorgio Topa</i> | 109 |
| Environmental Quality, Public Finance and Sustainable Growth | |
| <i>Jenny E. Ligthart and Frederick van der Ploeg</i> | 141 |
| Environmental Pollution and Endogenous Growth: A Comparison Between Emission Taxes and Technological Standards | |
| <i>Thierry Verdier</i> | 175 |
| Rate-of-Return Regulation, Emission Charges and Behavior of Monopoly | |
| <i>Anastasios Xepapadeas</i> | 201 |

| | |
|--|-----|
| Polluter's Capital Quality Standards and Subsidy-Tax Programs for Environmental Externalities: A Competitive Equilibrium Analysis <i>Michele Moretto</i> | 231 |
| Part 3: Pollution, Renewable Resources and Stability | |
| The ESS Maximum Principle as a Tool for Modeling and Managing Biological Systems <i>Thomas L. Vincent</i> | 259 |
| Pollution, Renewable Resources and Irreversibility <i>Olli Tahvonen</i> | 279 |
| The Economic Management of High Seas Fishery Resources: Some Game Theoretic Aspects <i>Veijo Kaitala and Gordon Munro</i> | 299 |
| Pollution-Induced Business Cycles: A Game Theoretical Analysis <i>David W.K. Yeung</i> | 319 |
| Management of Effluent Discharges: A Dynamic Game Model <i>Jacek B. Krawczyk</i> | 337 |