

Sustainable Development Indicators in Ecological Economics

Edited by

Philip Lawn

Flinders University, Adelaide

CURRENT ISSUES IN ECOLOGICAL ECONOMICS

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

Contents

<i>List of contributors</i>	vii
PART I: INTRODUCTION TO SUSTAINABLE DEVELOPMENT INDICATORS	
1. Introduction <i>Philip Lawn</i>	3
2. Sustainable development: concept and indicators <i>Philip Lawn</i>	13
PART II: SUSTAINABLE DEVELOPMENT AND NATIONAL ACCOUNTING	
3. The economic rationale for green accounting <i>Salah El Serafy</i>	55
4. Environmental accounting and policy making <i>John Lintott</i>	78
5. Estimating the economic impacts of climate change by means of green accounting <i>H. Asbjorn Aaheim</i>	96
6. A critical appraisal of genuine savings as an indicator of sustainability <i>Simon Dietz and Eric Neumayer</i>	117
PART III: SUSTAINABLE DEVELOPMENT AND WELFARE	
7. An assessment of alternative measures of sustainable economic welfare <i>Philip Lawn</i>	139
8. Policy implications of the Index of Sustainable Economic Welfare: Thailand as a case, study <i>Matthew Clarke</i>	166
9. Some constructive criticisms of the Index of Sustainable Economic Welfare <i>Simon Dietz and Eric Neumayer</i>	186

PART IV: SUSTAINABLE DEVELOPMENT AND NATURAL
CAPITAL ACCOUNTING

- | | | |
|-----|--|-----|
| 10. | Measurement of the natural capital stock: conceptual foundations and preliminary empirics
<i>Richard W. England</i> | 209 |
| 11. | Indicators and measures of critical natural capital
<i>Rudolf de Groot, Lars Hein, Carolien Kroeze, Rik Leemans and David Niemeijer</i> | 221 |
| 12. | Ecological Footprint accounts for advancing sustainability: measuring human demands on nature
<i>Mathis Wackernagel, Dan Moran, Sahn White and Michael Murray</i> | 246 |
| 13. | Managing for sustainability: ecological footprints, ecosystem health and the Forest Capital Index
<i>David Rapport and Ola Ullsten</i> | 268 |

PART V: SUSTAINABLE DEVELOPMENT AND INDICATORS " "
OF HUMAN-ENVIRONMENT INTERACTION

- | | | |
|-----|--|-----|
| 14. | Sustainability scenarios as interpretive frameworks for indicators of human-environment interaction
<i>Janne Hukkinen</i> | 291 |
| 15. | Getting the most out of eco-efficiency indicators for policy
<i>Nigel Jollands</i> | 317 |
| 16. | Eco-efficiency indicators applied to Australia and their policy relevance
<i>Philip Lawn</i> | 344 |
| 17. | Material flow-based indicators for evaluation of eco-efficiency and dematerialisation policies
<i>Stefan Giljum</i> | 376 |

PART VI: CONCLUDING ASSESSMENTS OF SUSTAINABLE
DEVELOPMENT INDICATORS

- | | | |
|-----|--|-----|
| 18. | Sustainable development indicators and human needs
<i>John Peet</i> | 399 |
| 19. | Selecting headline indicators for tracking progress to sustainability in a nation state
<i>Murray Patterson</i> | 421 |

- | | | |
|--------------|--|-----|
| <i>Index</i> | | 449 |
|--------------|--|-----|