Contents

List	of contributors	vii
PAR	RT I: INTRODUCTION TO SUSTAINABLE DEVELOPMENT INDICATORS	
1.	Introduction Philip Lawn	3
2.		13
PAR	RT II: SUSTAINABLE DEVELOPMENT AND NATIONAL ACCOUNTING	
3.	The economic rationale for green accounting Salah El Serafy	55
4.	Environmental accounting and policy making John Lintott	78
5.	Estimating the economic impacts of climate change by means of green accounting H. Asbjørn Aaheim	96
6.	·	117
PAR	RT 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 Matthew Clarke	166
9.	Some constructive criticisms of the Index of Sustainable Economic Welfare Simon Dietz and Eric Neumayer	186

vi Contents

PART IV:	SUSTAINABLE DEVELOPMENT AND NATURAL
	CAPITAL ACCOUNTING

10.	Measurement of the natural capital stock: conceptual foundations and preliminary empirics Richard W. England	209
11.	Indicators and measures of critical natural capital Rudolf de Groot, Lars Hein, Carolien Kroeze, Rik Leemans and David Niemeijer	221
12.	Ecological Footprint accounts for advancing sustainability: measuring human demands on nature Mathis Wackernagel, Dan Moran, Sahm White and	246
13.	Michael Murray Managing for sustainability: ecological footprints, ecosystem health and the Forest Capital Index David Rapport and Ola Ullsten	268
PAR	TY: SUSTAINABLE DEVELOPMENT AND INDICATOR OF HUMAN–ENVIRONMENT INTERACTION	S
14.	Sustainability scenarios as interpretive frameworks for indicators of human–environment interaction Janne Hukkinen	291
15.	Getting the most out of eco-efficiency indicators for policy Nigel Jollands	317
16.	Eco-efficiency indicators applied to Australia and their policy relevance Philip Lawn	344
17.	Material flow-based indicators for evaluation of eco-efficiency and dematerialisation policies Stefan Giljum	376
PAR	CT VI: CONCLUDING ASSESSMENTS OF SUSTAINABLE DEVELOPMENT INDICATORS	į.
18.	Sustainable development indicators and human needs John Peet	399
19.	Selecting headline indicators for tracking progress to sustainability in a nation state Murray Patterson	421
Inde	x	449