

Contents

<i>List of figures and tables</i>	vii
<i>List of contributors</i>	ix
<i>List of abbreviations</i>	xiv
<i>Preface</i>	xvi

PART I AN OUTLINE OF THE SOCIAL SCIENCE POTENTIAL

1. Introducing the social embeddedness of industrial ecology <i>Frank Boons and Jennifer Howard-Grenville</i>	3
2. Ecology in the social sciences: an overview <i>Frank Boons</i>	28
3. Don't fence me in . . . <i>Henrikke Baumann</i>	48
<i>First intermezzo</i> Out into the open: the promise of dialogue <i>Frank Boons</i>	65

PART II REGIONAL APPROACHES

4. Eco-industrial parks and industrial ecology: strategic niche or mainstream development? <i>David Gibbs</i>	73
5. Facilitating regional industrial symbiosis: network growth in the UK's national industrial symbiosis programme <i>Raymond Paquin and Jennifer Howard-Grenville</i>	103
6. The social embeddedness of industrial symbiosis linkages in Puerto Rican industrial regions <i>Marian R. Chertow and Weslynn S. Ashton</i>	128
<i>Second intermezzo</i> A transdisciplinary perspective on industrial ecology research <i>Cynthia Mitchell</i>	152

<i>Third intermezzo</i> Regional eco-industrial development: views from different stakeholders	162
<i>Anthony Chiu</i>	

PART III PRODUCT CHAIN APPROACHES

7. Transgenic crops in Brazil: scientific decision-making for social ambiguities?	171
<i>Jeremy Hall and Stelvia Matos</i>	
8. Commodities, their life-cycle and industrial ecology	193
<i>Timothy M. Koponen</i>	
9. Sustainable supply chain management	217
<i>Stefan Seuring, Romy Morana and Yan Liu</i>	

<i>Fourth intermezzo</i> Product chain management and social sciences: path dependency, cultural validity and short- and long-term feedback loops	238
<i>Claudia R. Binder</i>	

<i>Fifth intermezzo</i> The exchange of ideas between social science and engineering approaches to product chain industrial ecology	248
<i>Bart van Hoof</i>	

PART IV THE SOCIAL SCIENCE CONTRIBUTION RECONSIDERED

10. A critical view on the social science contribution to industrial ecology	257
<i>John Ehrenfeld</i>	
11. The social embeddedness of industrial ecology: exploring the dynamics of industrial ecosystems	273
<i>Jennifer Howard-Grenville and Frank Boons</i>	
<i>Index</i>	283