

# Contents

## Forewords

Global Environmental Change and Sustainability Transition <i>Heide Hackmann</i> Executive Director, International Council for Science (ICSU)	v
Climate Change and Sustainable Development Goals <i>Hoesung Lee</i> Chairman, Intergovernmental Panel on Climate Change (IPCC)	vii
The Larger Challenge <i>Paul Raskin</i> President, Tellus Institute	ix

<b>Acknowledgments</b>	xv
------------------------	----

<b>Permissions and Credits</b>	xix
--------------------------------	-----

<b>Part I Moving towards Sustainability Transition</b>	1
--	---

<b>1</b> Sustainability Transition and Sustainable Peace: Scientific and Policy Context, Scientific Concepts and Dimensions <i>Hans Günter Brauch and Úrsula Oswald Spring</i>	3
<b>2</b> Contextual Changes in Earth History: From the Holocene to the Anthropocene – Implications for Sustainable Development and for Strategies of Sustainable Transition <i>Simon Dalby</i>	67
<b>3</b> Paradigm and Praxis Shifts: Transitions to Sustainable Environmental and Sustainable Peace Praxis <i>Carolyn M. Stephenson</i>	89
<b>4</b> Transition Studies: Basic Ideas and Analytical Approaches <i>John Grin</i>	105
<b>5</b> Transformative Science for Sustainability Transitions <i>Uwe Schneidewind, Mandy Singer-Brodowski and Karoline Augenstein</i>	123

<b>Part II Aiming at Sustainable Peace</b>	137
--	-----

<b>6</b> The Psychological Components of a Sustainable Peace: An Introduction <i>Morton Deutsch and Peter T. Coleman</i>	139
<b>7</b> The Essence of Peace? Toward a Comprehensive and Parsimonious Model of Sustainable Peace <i>Peter T. Coleman</i>	149
<b>8</b> Development with Sustainable-Engendered Peace: A Challenge during the Anthropocene <i>Úrsula Oswald Spring</i>	161

<b>9</b>	Sustainable Peace in the Anthropocene: Towards Political Geoecology and Peace Ecology <i>Hans Günter Brauch</i>	187
<b>Part III</b>	<b>Meeting Challenges of the 21<sup>st</sup> Century: Demographic Imbalances, Temperature Rise and the Climate-Conflict Nexus</b>	237
<b>10</b>	Population Imbalances: Their Implications for Population Growth over the Twenty-first Century <i>Hania Zlotnik</i>	239
<b>11</b>	The Challenge of a 4°C World by 2100 <i>Hans Joachim Schellnhuber, Olivia Maria Serdeczny, Sophie Adams, Claudia Köhler, Ilona Magdalena Otto and Carl-Friedrich Schleussner</i>	267
<b>12</b>	The Climate-Conflict Nexus: Pathways, Regional Links, and Case Studies <i>Tobias Ide, P. Michael Link, Jürgen Scheffran and Janpeter Schilling</i>	285
<b>13</b>	From a Climate of Complexity to Sustainable Peace: Viability Transformations and Adaptive Governance in the Anthropocene <i>Jürgen Scheffran</i>	305
<b>Part IV</b>	<b>Initiating Research on Global (Environmental) Change, Limits to Growth and Decoupling of Growth and Resource Needs</b>	347
<b>14</b>	The First Decade of Initiatives for Research on the Human Dimensions of Global (Environmental) Change (1986–1995) <i>Lourdes Arizpe, Martin F. Price and Robert Worcester</i>	349
<b>15</b>	From HDP to IHDP: Evolution of the International Human Dimensions of Global Environmental Change Programme (1996–2014) <i>Eckart Ehlers</i>	359
<b>16</b>	From The Limits to Growth to 2052 <i>Marit Sjøvaag</i>	377
<b>17</b>	Preparing for Global Transition: Implications of the Work of the International Resource Panel <i>Mark Swilling</i>	391
<b>Part V</b>	<b>Developing Theoretical Approaches on Sustainability and Transitions</b>	419
<b>18</b>	Sustainability and Complexity: A Few Lessons from Modern Systems Thinking <i>Czesław Mesjasz</i>	421
<b>19</b>	Critical Approaches to Transitions Theory <i>Bonno Pel, Flor R. Avelino and Shivant S. Jhagroe</i>	451
<b>20</b>	Subnational, Inter-scalar Dynamics: The Differentiated Geographies of Governing Low Carbon Transitions—With Examples from the UK <i>Mike Hodson, Simon Marvin and Philipp Späth</i>	465

<b>Part VI</b>	<b>Analysing National Debates on Sustainability in North America</b>	479
<b>21</b>	Policy, Politics and the Impact of Transition Studies <i>Twig Johnson</i>	481
<b>22</b>	Geopolitics, Ecology and Stephen Harper's Reinvention of Canada <i>Simon Dalby</i>	493
<b>23</b>	Regime Change, Transition to Sustainability and Climate Change Law in México <i>Juan Antonio Le Clercq</i>	505
<b>Part VII</b>	<b>Preparing Transitions towards a Sustainable Economy and Society, Production and Consumption and Urbanization</b>	525
<b>24</b>	Sustainability Transitions: A Discourse-institutional Perspective <i>Audley Genus</i>	527
<b>25</b>	New Business Models: Examining the Role of Principles Relating to Transactions and Interactions <i>Jan Jonker and Linda O'Riordan</i>	543
<b>26</b>	Sustainable Consumption <i>Sylvia Lorek</i>	559
<b>27</b>	Sustainable Consumption and Production in China <i>Hongmin Chen</i>	571
<b>28</b>	The Eco-restructuring of the Ruhr District as an Example of a Managed Transition <i>Philipp Schepelmann, René Kemp and Uwe Schneidewind</i>	593
<b>29</b>	Transition towards Sustainable Urbanization in Asia and Africa <i>Belinda Yuen and Asfaw Kumssa</i>	613
<b>30</b>	The Role of University Partnerships in Urban Sustainability Experiments: Evidence from Asia <i>Gregory Trencher and Xuemei Bai</i>	631
<b>Part VIII</b>	<b>Examining Sustainability Transitions in the Water, Food and Health Sectors from Latin American and European Perspectives</b>	655
<b>31</b>	Future Global Water, Food and Energy Needs <i>Cecilia Tortajada and Martin Keulertz</i>	657
<b>32</b>	Sustainability Transition in a Vulnerable River Basin in Mexico <i>Úrsula Oswald Spring</i>	675
<b>33</b>	Sustainability Transition in the Health Sector in Brazil <i>Monica de Andrade</i>	705

<b>Part IX</b>	<b>Preparing Sustainability Transitions in the Energy Sector</b>	719
<b>34</b>	Enabling Environments for Sustainable Energy Transitions: The Diffusion of Technology, Innovation and Investment in Low-Carbon Societies <i>Jürgen Scheffran and Rebecca Froese</i>	721
<b>35</b>	Considering a Structural Adjustment Approach to the Low Carbon Transition <i>Karlson 'Charlie' Hargroves</i>	757
<b>36</b>	Drivers and Barriers to Wind Energy Technology Transitions in India, Brazil and South Africa <i>Britta Rennkamp and Radhika Perrot</i>	775
<b>37</b>	Sustainability Transitions and the Politics of Electricity Planning in South Africa <i>Lucy Baker</i>	793
<b>38</b>	Low Carbon Green Economy: Brazilian Policies and Politics of Energy, 2003–2014 <i>Eduardo Viola and Larissa Basso</i>	811
<b>39</b>	Sustainable Electricity Transition in Thailand and the Role of Civil Society <i>Carl Middleton</i>	831
<b>Part X</b>	<b>Relying on Transnational, International, Regional and National Governance for Strategies and Policies Towards Sustainability Transition</b>	853
<b>40</b>	Governance of Sustainable Development in Knowledge Democracies—Its Consequences for Science <i>Roeland Jaap in 't Veld</i>	855
<b>41</b>	Discourse and Practice of Transitions in International Policy-making on Resource Efficiency in the EU <i>Sander Happaerts</i>	869
<b>Part XI</b>	<b>Conclusions and Mapping Future Research Needs</b>	885
<b>42</b>	Sustainability Transition with Sustainable Peace: Key Messages and Scientific Outlook <i>Úrsula Oswald Spring, Hans Günter Brauch, and Jürgen Scheffran</i>	887
	<b>Abbreviations</b>	929
	<b>Biographies of Editors</b>	937
	<b>Biographies of the Authors of Forewords</b>	943
	<b>Biographies of Contributors</b>	947
	<b>Index</b>	961
	<b>Five Springer Book Series</b>	1005



<http://www.springer.com/978-3-319-43882-5>

Handbook on Sustainability Transition and Sustainable  
Peace

Brauch, H.G.; Oswald Spring, Ú.; Grin, J.; Scheffran, J.  
(Eds.)

2016, XXXI, 1014 p. 149 illus. in color., Hardcover

ISBN: 978-3-319-43882-5