The Governance of Socio-Technical Systems
Explaining Change

Edited by

Susana Borras
Professor of Innovation and Governance, Head of Department of Business and Politics, Copenhagen Business School, Denmark

Jakob Edler
Professor of Innovation Policy and Strategy, Executive Director, Manchester Institute of Innovation Research, University of Manchester, UK

EU-SPRI FORUM ON SCIENCE, TECHNOLOGY AND INNOVATION POLICY

Edward Elgar
Cheltenham, UK • Northampton, MA, USA
Contents

List of figures vii
List of tables viii
List of boxes ix
List of contributors x
Preface xiv
List of abbreviations xvi

1. Introduction: on governance, systems and change 1  
   Susana Borras and Jakob Edler

2. The governance of change in socio-technical and innovation systems: three pillars for a conceptual framework 23  
   Susana Borras and Jakob Edler

3. Anticipatory markets: technical standards as a governance tool in the development of biodegradable plastics 49  
   Arthur Daemmrich

4. Transitioning sustainability: performing 'governing by standards' 70  
   Allison Loconto and Marc Barbier

5. Governance and technological change: the effects of regulation in medical devices 96  
   David Barbera-Tomas and Jordi Molas-Gallart

6. The discontinuation of socio-technical systems as a governance problem 111  
   Peter Stegmaier, Stefan Kuhlmann and Vincent R. Visser

1. Translational research: entrepreneurship, advocacy and programmatic work in the governance of biomedical innovation 132  
   Etienne Vignola-Gagne, Peter Biegelbauer and Daniel Lehner
8. Governing radical change through the emergence of a governance arrangement
   *Aurelie Delemarle and Philippe Laredo*

9. The who, what, how and why of governing change: first lessons and ways forward
   *Susana Borras and Jakob Edler*

*Index*