

## AGENCY IN EARTH SYSTEM GOVERNANCE

The modern era is facing unprecedented governance challenges in striving to achieve long-term sustainability goals and to limit human impacts on the earth system. This volume synthesizes a decade of multidisciplinary research into how diverse actors exercise authority in environmental decision-making, and their capacity to deliver effective, legitimate, and equitable earth system governance. Actors from the global to the local level are considered, including governments, international organizations, and corporations. Chapters cover how state and non-state actors engage with decision-making processes, the relationship between agency and structure, and the variations in governance and agency across different spheres and tiers of society. Providing an overview of the major questions, issues, and debates, as well as the theories and methods used in studies of agency in earth system governance, this book provides a valuable resource for graduate students and researchers, as well as practitioners and policymakers working in environmental governance.

MICHELE M. BETSILL is a professor of political science at Colorado State University. She has more than twenty years' experience in researching nonstate and subnational actors in global environmental governance. Her books include *Transnational Climate Change Governance* (coauthored with members of the Leverhulme Network on Transnational Climate Change Governance, Cambridge University Press, 2014), *NGO Diplomacy: The Influence of Nongovernmental Organizations in International Environmental Negotiations* (coedited with Elisabeth Corell, 2008), and *Cities and Climate Change: Urban Sustainability and Global Environmental Governance* (with Harriet Bulkeley, 2003). She was one of the founding leaders of the Earth System Governance Research Network and served on the scientific steering committee from 2008 to 2018.

TABITHA M. BENNEY is an assistant professor in the University of Utah's Department of Political Science and affiliated faculty in the Environmental and Sustainability Studies Program and the Center on Global Change and Sustainability. Her research focuses on mapping interactions within complex coupled systems. She is also a research fellow for the Earth System Governance Network and an affiliated researcher with the Evolving Securities Initiative (ESI) at the University of Cape Town, South Africa. Her books include *Making Environmental Markets Work: The Varieties of Capitalism in Emerging* 



*Economies* (2014/2017) and *Toward a New Energy Future* with Jan Froestad, Cameron Holley and Clifford Shearling (forthcoming).

ANDREA K. GERLAK is an associate professor at the School of Geography and Development and research professor with the Udall Center for Studies in Public Policy at the University of Arizona. Her research examines the causes of – and innovative solutions to – some of our world's most pressing water problems. Her work focuses on how we can better design institutions to promote adaptive, flexible policies to improve human and ecosystem well-being and produce fair and equitable decisions. She is the author of *Mapping the New World Order* (coauthored with Thomas J. Volgy, Zlatko Šabič, and Petra Roter, 2009). She is a research fellow with the Earth System Governance Project and a lead author of the *Earth System Governance Science and Implementation Plan* (2018).



The Earth System Governance Project was established in 2009 as a core project of the International Human Dimensions Programme on Global Environmental Change. Since then, the Project has evolved into the largest social science research network in the area of sustainability and governance. The Earth System Governance Project explores political solutions and novel, more effective governance mechanisms to cope with the current transitions in the socio-ecological systems of our planet. The normative context of this research is sustainable development; earth system governance is not only a question of institutional effectiveness, but also of political legitimacy and social justice.

The **Earth System Governance series** with Cambridge University Press publishes the main research findings and synthesis volumes from the Project's first ten years of operation.

#### **Series Editor**

Frank Biermann, Utrecht University, the Netherlands

### Titles in print in this series

Biermann and Lövbrand (eds.), Anthropocene Encounters: New Directions in Green Political Thinking

van der Heijden, Bulkeley and Certomà (eds.), *Urban Climate Politics: Agency and Empowerment* 

Linnér and Wibeck, Sustainability Transformations: Agents and Drivers across Societies

Betsill, Benney and Gerlak (eds.), Agency in Earth System Governance



# AGENCY IN EARTH SYSTEM GOVERNANCE

Edited by

MICHELE M. BETSILL

Colorado State University

TABITHA M. BENNEY

University of Utah

ANDREA K. GERLAK

University of Arizona





# CAMBRIDGE

University Printing House, Cambridge CB2 8BS, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,
New Delhi – 110025, India

Cambridge University Press is part of the University of Cambridge.

79 Anson Road, #06-04/06, Singapore 079906

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org Information on this title: www.cambridge.org/9781108484053 DOI: 10.1017/9781108688277

©Cambridge University Press 2020

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2020

Printed in the United Kingdom by TJ International Ltd, Padstow Cornwall A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data
Names: Betsill, Michele Merrill, 1967– editor. | Benney, Tabitha M., 1973– editor. | Gerlak,

Andrea Kristen, editor.

Title: Agency in Earth system governance / edited by Michele M. Betsill, Colorado State University;
Tabitha M. Benney, University of Utah; Andrea K. Gerlak, University of Arizona
Description: Cambridge, United Kingdom; New York, NY, USA: Cambridge University Press, 2019

Series: Earth System Governance series | Includes index.

Identifiers: LCCN 2019027819 | ISBN 9781108484053 (hardback) | ISBN 9781108688277 (epub)

Subjects: LCSH: Environmental law, International. | International organization. | BISAC: LAW /

Environmental

Classification: LCC K3585 .A329 2019 | DDC 344.04/6-dc23 LC record available at https://lccn.loc.gov/2019027819

ISBN 978-1-108-48405-3 Hardback ISBN 978-1-108-70587-5 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



## Contents

List of Contributors Acknowledgments		<i>page</i> ix xi
Pai	rt I Introduction and Overview	1
1	Introduction: Agency in Earth System Governance MICHELE M. BETSILL, TABITHA M. BENNEY, ANDREA K. GERLAK, CALUM BROWN, SANDER CHAN, OKECHUKWU ENECHI, RONALD B. MITCHELL, INA MÖLLER, JAMES J. PATTERSON, MICHELLE SCOBIE, SANDRA VAN DER HEL, AND OSCAR E. WIDERBERG	3
2	Conceptualizing Agency and Agents in Earth System Governance MICHELLE SCOBIE, TABITHA M. BENNEY, CALUM BROWN, AND OSCAR E. WIDERBERG	25
3	Theories and Methods of Agency Research in Earth System Governance TABITHA M. BENNEY, AMANDINE ORSINI, DEVON CANTWELL, AND LAURA IOZZELLI	38
4	How Geographies and Issues Matter in ESG-Agency Research andrea K. Gerlak, megan mills-novoa, alison elder, okechukwu enechi, pritee sharma, and kanak singh	52
Pai	rt II Agency and the Dynamics of Earth System Governance	63
5	Power(ful) and Power(less): A Review of Power in the ESG-Agency Scholarship  ANDREA K. GERLAK, THOMAS R. EIMER, MARIE-CLAIRE BRISBOIS, MEGAMILLS-NOVOA, LUUK SCHMITZ, JORRIT LUIMERS, AND PAIVI ABERNETH	65 N

vii



viii	Contents		
6	The Performance of Agency in Earth System Governance MICHELE M. BETSILL AND MANJANA MILKOREIT	73	
7	Agency and Knowledge in Environmental Governance: A Thematic Review MANJANA MILKOREIT, JENNIFER S. BANSARD, AND SANDRA VAN DER HEL	86	
8	Agency and Architecture: Producing Stability and Change JAMES J. PATTERSON	97	
9	Agency in a Multiscalar World MICHELLE SCOBIE, MICHELE M. BETSILL, AND HYEYOON PARK	108	
10	Agency and Norms: Who Defines What Ought to Be?  MICHAEL ANGSTADT AND INA MÖLLER	120	
11	Agency in the Allocation of and Access to Natural Resources PRITEE SHARMA, OKECHUKWU ENECHI, AND SALLA NITHYANTH KUMAR	131	
12	Agency and Adaptiveness: Navigating Change and Transformation JAMES J. PATTERSON	143	
13	Accountability in the Governance of Global Change CALUM BROWN AND MICHELLE SCOBIE	155	
14	How to Evaluate Agents and Agency SANDER CHAN AND RONALD B. MITCHELL	168	
Part III Policy Implications and the Future of Agency			
	in Earth System Governance Research	181	
15	Conclusion: Policy Implications of ESG–Agency Research and Reflections on the Road Ahead Andrea K. Gerlak, Michele M. Betsill, James J. Patterson, Sander Chan, Tabitha M. Benney, Marie-Claire Brisbois, Thomas R. Eimer, and Michelle Scobie	183	
	pendix: ESG–Agency Harvesting Database	198	
	References		
Ind	Index		



## Contributors

**Paivi Abernethy** School of Environment, Resources, and Sustainability, University of Waterloo, Waterloo, ON, Canada and The Center for Global Studies, University of Victoria, Victoria, BC, Canada

**Michael Angstadt** Environmental Studies Program, Colorado College, Colorado Spring, CO, USA

**Jennifer S. Bansard** Department of Economics and Social Sciences, University of Potsdam, Potsdam, Germany

**Tabitha M. Benney** Department of Political Science, University of Utah, Salt Lake City, UT, USA

**Michele M. Betsill** Department of Political Science, Colorado State University, Fort Collins, CO, USA

**Marie-Claire Brisbois** Science Policy Research Unit, University of Sussex, Brighton, UK

**Calum Brown** Institute of Meteorology and Climate Research – Atmospheric Environmental Research, Karlsruhe Institute of Technology, Garmisch-Partenkirchen, Germany

**Devon Cantwell** Department of Political Science, University of Utah, Salt Lake City, UT, USA

Sander Chan German Development Institute, Bonn, Germany

**Thomas R. Eimer** Department of Political Science, Radboud University, Nijmegen, the Netherlands

**Alison Elder** School of Geography and Development, University of Arizona, Tucson, AZ, USA

ix



X

Cambridge University Press 978-1-108-48405-3 — Agency in Earth System Governance Edited by Michele M. Betsill, Tabitha M. Benney, Andrea K. Gerlak Frontmatter More Information

List of Contributors

**Okechukwu Enechi** Department of Environmental Policy Analysis, Institute for Environmental Studies, Amsterdam, the Netherlands

**Andrea K. Gerlak** School of Geography and Development, University of Arizona, Tucson, AZ, USA

Laura Iozzelli The Institute for European Studies, Brussels, Belgium

**Jorrit Luimers** Department of Political Science, Radboud University, Nijmegen, the Netherlands

Manjana Milkoreit Department of Political Science, Purdue University, West Lafayette, IN, USA

**Megan Mills-Novoa** School of Geography and Development, University of Arizona, Tucson, AZ, USA

**Ronald B. Mitchell** Department of Political Science, University of Oregon, Eugene, OR, USA

Ina Möller Department of Political Science, Lund University, Lund, Sweden

**Salla Nithyanth Kumar** School of Humanities and Social Sciences, Indian Institute of Technology Indore, Madhya Pradesh, India

**Amandine Orsini** Research Center in Political Science, Université Sant Louis Bruxelles, Brussels, Belgium

**Hyeyoon Park** Department of Political Science, Colorado State University, Fort Collins, CO, USA

**James J. Patterson** Copernicus Institute of Sustainable Development, Utrecht University, Utrecht, The Netherlands

**Luuk Schmitz** Department of Political Science, Radboud University, Nijmegen, the Netherlands

**Michelle Scobie** Institute of International Relations, University of the West Indies, St Augustine, Trinidad and Tobago

**Pritee Sharma** School of Humanities and Social Sciences, Indian Institute of Technology Indore, Madhya Pradesh, India

**Kanak Singh** School of Humanities and Social Sciences, Indian Institute of Technology Indore, Madhya Pradesh, India

**Sandra van der Hel** Copernicus Institute of Sustainable Development, Utrecht University, Utrecht, the Netherlands

**Oscar E. Widerberg** Department of Environmental Policy Analysis, Institute for Environmental Studies, Amsterdam, the Netherlands



## Acknowledgments

This book would not have been possible without the support of a variety of colleagues and friends. From the start, we benefitted from a real collaborative spirit and enthusiasm from a team of colleagues who participated in the coding of the articles that form the basis of this project. Many thanks to our exceptional coders, including Mike Angstadt, Tabitha Benney, Michele Betsill, Sander Chan, Hamish Clarke, Desirée Fiske, Andrea K. Gerlak, Kat Hodgson, Cristina Inoue, Julie Liebenguth, Manjana Milkoreit, Ron Mitchell, Ina Möller, Hyeyoon Park, Sandra van der Hel, Michelle Scobie, James Patterson, Calum Brown, Melanie Boeckmann, Kathryn Brown, and Okechukwu Enechi. Special thanks to Oscar Widerberg for setting up the infrastructure for the collaborative coding exercise.

Professors Diana Liverman and Oran Young offered valuable feedback on an earlier version of the manuscript, for which we are grateful. Many thanks also to Julie Liebenguth, Anne Peterson, and Sam Baty for their constant support and input on the book project. At the Earth System Governance (ESG) Project, Ruben Zondervan and Frank Biermann provided encouragement and linkages to parallel ESG landscape efforts. Finally, we would like to thank Sarah Lambert, Emma Kiddle, the anonymous reviewers, and other helpful staff at Cambridge University Press who made this process so easy for us.