



*Science in Society Series*

# **INSTITUTIONAL CAPACITY FOR CLIMATE CHANGE RESPONSE**

**A NEW APPROACH TO CLIMATE POLITICS**

Edited by  
Theresa Scavenius and Steve Rayner



This valuable volume exposes the failure of current institutional arrangements, in the form of cultural outlooks, governance arrangements, democratic consensus, purposeful regulation, and even innovation in technology and human behaviour, to come to terms with the overwhelming barriers to achieving the ambition of the Paris Agreement to remove the planet of dangerous climate change within three preciously short generations. It should be read with care and attention as it sets the marker for the scale of institutional reform that surely will be required in our lifetimes.

Tim O’Riordan, *Emeritus Professor of Environmental Sciences at the University of East Anglia*

The Paris Climate Agreement signals a fundamental change in policy architecture. This book offers much needed ammunition against too easy attribution of catastrophic events to global warming – overlooking the importance of institutional and political contexts – and too easy confinement of ‘solutions’ to individual actions or markets – overlooking the role of multi-level, polycentric responses.

Arthur C. Petersen, *Professor of Science, Technology and Public Policy, University College London*

Anthropogenic climate change is a global challenge that also needs to be tackled through decisions made at the local/national level. To date, little knowledge has accumulated on how and when different local/national institutional frameworks are mobilized to address global challenges. *Institutional Capacity for Climate Change Response* thought-provokingly addresses this knowledge gap.

Katherine Richardson, *Professor and Leader of the Sustainability Science Centre, University of Copenhagen*

For decades, Steve Rayner was part of a band of academics and practitioners who – heretically, at the time – argued that the Kyoto Protocol would not be fully implemented or renewed, as attempting to do so would far exceed the capacities of local, national and international institutions. Now that this one-time heresy has quietly become dogma in recent years, we should pay close attention to what he and his colleagues have to say on how to strengthen the institutions responsible for climate change adaptation and mitigation. That is the theme of this excellent volume. Importantly, the book punctures the myth that authoritarian regimes are necessarily ‘better’ at combating climate change, while it also provides valuable insights into how democratic institutions can be strengthened and utilised better. I strongly recommend this book to all those interested in effectively addressing climate change now that the Kyoto Protocol has collapsed.

Marco Verweij, *Professor of Political Science, Jacobs University Bremen*



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# Institutional Capacity for Climate Change Response

In a period of rapid climate change and climate governance failures, it is crucial to understand and address how effectively different political institutions can and should react to climate change.

The term ‘institutional response capacity’ can be defined as a measurement for how effective political institutions may respond to threats and challenges such as climate change. This book sets out to provide a venue for the discussion of how to conduct climate politics by offering new perspectives on how social and political institutions are capable of responding to climate change. In doing so, the book explores how democracy, institutional design and polycentric governance influence social and political entities’ capacity to mitigate, adapt, address and transform climate change. The book offers building blocks for a new agenda of climate studies by focusing on institutional response capacity and by offering a new approach to climate governance at a time when many political initiatives have failed.

This interdisciplinary volume is a valuable resource for academics, researchers and policy-makers in the areas of anthropology, political science, geography and environmental studies.

**Theresa Scavenius** is an associate professor at the Department of Planning, University of Aalborg, Copenhagen, Denmark.

**Steve Rayner** is James Martin Professor of Science and Civilisation and Director of the Institute for Science, Innovation, and Society, University of Oxford, UK.

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A New Approach to Climate  
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*Theresa Scavenius and  
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# **Institutional Capacity for Climate Change Response**

A New Approach to Climate Politics

**Edited by Theresa Scavenius and  
Steve Rayner**

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# Contributors

**Neil Adger** is Professor of Human Geography at the University of Exeter, UK. His research spans the social dynamics of environmental change including political economy, demographic and resilience dimensions. He is a Highly Cited Researcher in the Social Sciences. He has served as a senior author to reports of the Intergovernmental Panel on Climate Change, on the Millennium Ecosystem Assessment, The Lancet Commission on Climate Change and Health, and the UK's Climate Change Risk Assessment. He is currently working on social dynamics of well-being, health, migration and climate change in the UK, India, Bangladesh, Ghana and Australia.

**Jessica Nihlén Fahlquist** is a senior lecturer in biomedical ethics at the Centre for Research Ethics and Bioethics at Uppsala University. Her research focuses on ethical aspects of risk in the context of technology, public health and environmental issues, and she has a particular interest in notions of moral responsibility. She has published articles on public health ethics, the philosophy of risk, the ethics of technology and environmental ethics. Jessica received her PhD in Philosophy at the Division of Philosophy at the Royal Institute of Technology in Stockholm in 2008. During the years 2007–2011 and 2012–2015, she worked as a postdoctoral researcher at the Philosophy department at Delft University of Technology.

**Peter Healey** is a sociologist whose main interest is the governance of science and technology, particularly in an international context. He has recently been working on climate geoengineering and on the issues raised by public participation in scientific practice.

**Jens Villiam Hoff** is a Professor at the Department of Political Science, University of Copenhagen. His research covers areas such as sustainability and climate change governance, citizen and user participation, and the use of digital media in politics. He is currently engaged in research projects on 'Developing and Implementing the Green GDP' and 'Collective Movements and Pathways to a Sustainable Society'. His most recent publications in English include 'The Green "Heavyweights": the Climate Policies of the Nordic Countries' (in P. Nedergaard & A. Wivel (Eds.), *Handbook of*

*Scandinavian Politics*, Routledge 2017) and J. Hoff & Q. Gausset (Eds.) *Community Governance and Citizen-Driven Initiatives in Climate Change Mitigation*, Routledge 2015.

**Riadadh Hossain** is an international development practitioner with a focus on climate change adaptation, urban resilience, climate policy, climate finance and governance. He is currently a Programme Coordinator at the International Centre for Climate Change and Development (ICCCAD) based in Dhaka, Bangladesh where he is overlooking a number of projects on climate finance, loss and damage, urban resilience, etc. in varying capacities. He is also responsible for guiding Monitoring, Evaluation and Learning (MEL) at ICCCAD. Riadadh has previously supported the Cities Development Initiative for Asia (CDIA) in their capacity development and outreach work and was responsible for the development of climate financing profiles for cities in Asia, as well as the design and implementation of an internal know-how learning series regarding urban resilience and climate change.

**Saleemul Huq** has been the Director of the International Centre for Climate Change & Development (ICCCAD) since 2009 and intends to support the growing capacity of Bangladesh stakeholders, while enabling people and organisations from outside to benefit from training in Bangladesh. ICCCAD runs regular short courses as well as an MSc programme in Climate Change and Development. Dr Huq is also a Senior Fellow at the International Institute for Environment & Development (IIED) in the UK, where he is involved in building negotiating capacity and supporting the engagement of the least developed countries (LDCs) in UNFCCC, including through holding negotiator training workshops for LDCs, policy, as well as research into vulnerability and adaptation to climate change in the least developed countries. Dr Huq has published numerous articles in scientific and popular journals, was a lead author of the chapter on Adaptation and Sustainable Development in the third assessment report of the Intergovernmental Panel on Climate Change (IPCC), and was one of the coordinating lead authors of 'Inter-relationships between adaptation and mitigation' in the IPCC's Fourth Assessment Report (2007).

**Malene Rudolf Lindberg** gained an MSc in Sociology (University of Copenhagen, 2015). She has worked as research assistant on the research project 'Mapping Value–Action Gap' at the Department of Political Science, University of Copenhagen, and has contributed to articles on climate behaviour and governance. Currently, Malene is working as a research assistant at The National Centre of Applied Social Science. Lindberg has studied in Copenhagen and at the Department of Social Sciences at Humboldt University of Berlin.

**Irene Lorenzoni** is Senior Lecturer at the University of East Anglia, UK. Her research focuses on individual, social and institutional engagement with environmental change; including perceptions of and responses to climate

change and flooding; understandings of risk; and the evolution of climate policy. Irene's work is theoretically and methodologically interdisciplinary. Her work is highly cited; she was a contributing author to the IPCC 4th Assessment Report. Her current work focuses on responses to multiple hazards, climate change communication, comprehensibility of climate graphics, and diffusion of climate policy.

**Conor Murphy** is Senior Lecturer in Geography at Maynooth University and PI with the Irish Climate Analysis and Research UnitS (ICARUS). His research interests span the physical and human dimensions of climate change, from the detection and attribution of climate change from observations to understanding the social dynamics of adaptation to extreme events. At Maynooth University Conor also directs the MSc in Climate Change. He has worked with communities in Ireland, Europe and Africa on climate change adaptation. He sits on the Irish National Adaptation Committee and is on the editorial board of the *Journal of Extreme Events*. Conor is also review Editor for the Urban Climate Change Research Network.

**Naznin Nasir** is ICCCAD's migration programme coordinator. She joined ICCCAD in June 2016 and has since been involved with several programmes of the Centre such as the Climate Governance, Climate Finance, and Loss and Damage Programme. Naznin previously worked as a Research Associate with the Centre for Climate Change and Environmental Research at BRAC University, Dhaka. She received her Master's from the University of Western Ontario, Canada in Environment and Sustainability. She did another Master's in International Relations at the University of Dhaka, Bangladesh. Naznin has also worked as a broadcast journalist for the past 10 years.

**Steve Rayner** is James Martin Professor of Science and Civilisation at Oxford University's School of Anthropology and Museum Ethnography where he directs the Institute for Science, Innovation and Society. He previously held senior research positions in two US National Laboratories and has taught at leading US universities, including Cornell, Virginia Tech and Columbia. He has served on various US, UK and international bodies addressing science, technology and the environment, including Britain's Royal Commission on Environmental Pollution, the Intergovernmental Panel on Climate Change and the Royal Society's Working Group on Climate Geoengineering. Until 2008, he also directed the national Science in Society Research Programme of the UK Economic and Social Research Council.

**Alexander Ruser** is currently a Senior Researcher at Zeppelin University Friedrichshafen and Postdoctoral Fellow at the OIS Institute Vienna. In 2016 Alexander was deputy professor for cultural theory and analysis at Zeppelin University, Friedrichshafen. He holds a PhD in Sociology from the Max-Weber Institute of Sociology at Heidelberg University and was a Dahrendorf Postdoctoral Fellow at the Hertie School of Governance in Berlin and at the London School of Economics and Political Sciences and a Visiting Fellow at

Punjab University, Chandigarh, India. Alexander's research focuses on expertise and decision-making in climate, economic and social politics and he has published in peer-reviewed journals such as *Global Policy*, *Current Sociology*, *Innovation* and *Journal of Civil Society* and is an active member of an international research network on social philosophy of science coordinated by the Russian Academy of Science.

**Theresa Scavenius** is associate professor in the Department of Planning, University of Aalborg Copenhagen, Denmark. She has published widely on climate politics, global justice, and the relationship between facts and norms. Her recent publications include 'Fact-Sensitive Political Theory', published in *CRISPP* (2017), 'The Issue of No Moral Agency in Climate Action', published in *Journal of Agricultural & Environmental Ethics* (2017), and 'The Tragedy of the Few', published in *Res Publica* (2016). She co-edited the book on *Compromise and Disagreement in Contemporary Political Theory* (Routledge New York, 2018).

**Nico Stehr** is Karl Mannheim Professor of Cultural Studies at the Zeppelin University, Friedrichshafen, Germany. He is a Fellow of the Royal Society (Canada) and the European Academy of Sciences and Arts. His research interests centre on the transformation of modern societies into knowledge societies. He is one of the authors of the *Hartwell Paper* on climate policy. His books have been translated into Chinese, Russian, Czech, Slovenian, Japanese, Hungarian and German. Among his recent book publications (in English) are: *Experts: The Knowledge and Power of Expertise* (with Reiner Grundmann, Routledge 2011); *The Power of Scientific Knowledge* (with Reiner Grundmann, Cambridge University Press, 2012); *Information, Power, and Democracy. Is Liberty a Daughter of Knowledge?* (Cambridge University Press, 2016), *Understanding Inequality. Social Costs and Benefits* (with Amanda Machin, Springer, 2016); *Knowledge. Is Knowledge Power?* (with Marion Adolf, Routledge, 2017) and *Climate & Society* (with Amanda Machin and Hans von Storch, World Scientific, 2017).

**Tara Quinn**, Dr, is an Associate Research Fellow in Geography at the University of Exeter, UK. Her research interests centre on experience of environmental change and include a focus on demographic change, sense of place and perceptions of risk.



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# Introduction

*Theresa Scavenius and Steve Rayner*

This book seeks to stimulate wider discussion of how to locate climate politics in the current landscape of social and political institutions. In a period of rapid climate change and shifting patterns of governance both nationally and internationally, it is essential to understand and address both how different institutions at various levels react to climate change, and how the characteristics of institutions both enable and constrain their ability to respond effectively to it.

Much scholarly attention has been paid to the urgent need for immediate implementation of mitigation and adaption climate policies at regional and global levels. There are repeated calls for new policy strategies and innovative, proactive solutions to overcome the current gap between rhetoric and action with regard to climate change policy. However, many of these policies neglect or underestimate the importance of understanding the capacity of institutions to recognise, respond and act upon climate change. The established paradigm is deeply rooted in methodological individualism, leading to two kinds of policy solutions that dominate current political debates, responses and practices – market-based emissions trading and market-based voluntarism (Ronit, 2012). While emissions trading was favoured for its supposed efficiencies in reducing greenhouse gas emissions, and worked well as a domestic instrument to reduce sulphur emissions in the USA, the anticipated global market in carbon and other greenhouse forcing agents shows no sign of becoming a reality more than two decades after the ratification of the Kyoto Protocol. The second set of market-based policy solutions, aimed at greening the production of goods and services by voluntary certification and offset schemes, is an example of a policy solution that transfers the moral responsibility to buy greener products to individual consumers. If the consumers are not willing to pay a higher price for the greener product, nothing is accomplished.

In contrast with these approaches, the institutional capacity approach adopted in this book seeks to understand how, why and when diverse institutions, rather than individuals, respond to threats and challenges such as climate change. It is a theoretical approach concerned with institutional opportunities for, and hindrances to, political action. One might develop any number of good ideas to better manage the multiple challenges presented by climate change, but if political, economic and social institutions are incapable of implementing them in an effective and legitimate manner, then they will have no impact.



The contributors to this book approach climate action and politics as a polycentric, multi-level governance challenge. The failure of the Kyoto architecture has given rise to a growing recognition that an effective human response to climate variability and change cannot simply be driven by national governments agreeing and implementing international treaties. Indeed, numerous studies have illustrated the expanding role of sub-state and non-governmental actors in developing climate change responses (e.g. Rabe, 2004; Bulkeley & Betshill, 2005; Acuto, 2013). The past two decades have shown that it will require the engagement of multiple agents (citizens, municipalities, states, international institutions and organisations) at multiple institutional levels (neighbourhood, municipal, national, regional and international).

Calls for a multi-level 'polycentric' approach were made as long ago as the late 1980s (Gerlach & Rayner, 1988), and arguments for a specific focus on institutions date from the 1990s (Rayner, 1993; O'Riordan et al., 1998). However, it was not until the collapse of the Kyoto architecture at Copenhagen in 2009 and Nobel Prize Laureate Elinor Ostrom's (2012) call for a multi-level and polycentric approach to climate change and sustainability that scholars and activists began to take real notice of the roles and capabilities of a wide range of institutions, at multiple levels, in the effort to counteract climate change.

The study of institutions is central to understanding the organisation and functioning of all societies (O'Riordan et al., 1998). The meaning of institutions contains several highly interrelated concepts, such as norm regulation, cognitive structures, and facilitation of identity and meaning. The institutional approach is inherently interdisciplinary and combines empirical knowledge about people's behaviour with insights from theoretical models of agency. Each scholarly discipline focuses on particular nuances. In political science and law, institutions are often thought of as formal organisations, frequently associated with the state, or legal obligations, such as contracts and treaties between individuals or states. On the other hand, sociologists and anthropologists generally regard almost any persistent pattern or non-randomness of social behaviour as an institution (Thompson, 2008). As argued by DiMaggio and Powell (1991), institutional analysis requires a multidimensional theoretical approach.

It is important to distinguish 'economic' from 'sociological' and 'historical' forms of institutional theory. Economic institutional theory ultimately remains wedded to the single agent's behavioural choices and the instrumental rationality behind these choices. By contrast, sociological institutionalism focuses on the institutionalised structure which surrounds the acts of the agents and historical institutionalism on the historical continuity and the path dependencies to which institutions are thought to be subjected (Hall & Taylor, 1996).

A thoroughgoing institutional approach differs from rational choice theories that are derived from assumptions about individual behaviour, by rejecting both an overwhelmingly rationalistic understanding of agency and an exclusively economic approach to politics (Rayner, Lach, & Ingram, 2005). In contrast to rational-economic premises, the institutional perspective takes a non-reductionist approach to agency, i.e. that there is no single (rational) strategy that can explain