

DURABLE BY DESIGN?

Following the landmark Paris Agreement, policy makers are under pressure to adopt policies that rapidly deliver deep, society-wide decarbonisation. Deep decarbonisation requires more durable policies, but not enough is known about whether and how they actually emerge. This book provides the first systematic analysis of the determinants of policy durability in three high-profile areas: biofuel production, car transport and industrial emissions. It breaks new ground by exploring how key European Union climate policies have shaped their own durability and their ability to stimulate supportive political dynamics in society. It combines state-of-the-art policy theories with empirical accounts of landmark political events such as ‘Dieselgate’ and the campaign against ‘dirty’ biofuels, to offer a fresh understanding of how and why policy makers set about packaging together different elements of policy. By shining new light on an important area of contemporary policy making, it reveals a rich agenda for academic researchers and policy makers.

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Cambridge University Press
978-1-108-49001-6 — Durable by Design?
Andrew J. Jordan , Brendan Moore
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Policy Feedback in a Changing Climate

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CAMBRIDGE UNIVERSITY PRESS

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

Cambridge University Press is part of the University of Cambridge.

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/9781108490016
DOI: 10.1017/9781108779869

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First published 2020

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Jordan, Andrew, 1968– author. | Moore, Brendan (Brendan P.), author.
Title: Durable by design? : policy feedback in a changing climate / Andrew J Jordan, Brendan Moore.
Description: Cambridge ; New York, NY : Cambridge University Press, 2020. | Includes bibliographical references and index.
Identifiers: LCCN 2020007777 | ISBN 9781108490016 (hardback) | ISBN 9781108747929 (paperback)
Subjects: LCSH: European Union. | Climatic changes–Government policy–European Union countries. | Environmental policy–European Union countries. | European Union countries–Politics and government. | European Union countries–Environmental conditions.
Classification: LCC QC903.2.E85 J67 2020 | DDC 363.738/7456094–dc23
LC record available at <https://lcn.loc.gov/2020007777>

ISBN 978-1-108-49001-6 Hardback

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Abstract

Following the landmark Paris Agreement, policy makers are under mounting political pressure to design more durable climate policies that rapidly deliver deep, society-wide decarbonisation. But while the political rationale for adopting such policies is regularly articulated, far less is known about whether and how they emerge in the real world and thus what differentiates them from fragile policies that are amended at the first sign of political opposition.

This book provides the first systematic analysis of the determinants of policy durability in three high-profile areas: biofuel production, car transport and industrial greenhouse gas emissions. It breaks new ground by going beyond the adoption of key European Union (EU) climate policies, to study the policy feedbacks they have triggered over time. This new approach creates a fuller understanding of how these policies have shaped both their own durability and, crucially, their ability to stimulate supportive political dynamics in society.

Across nine chapters, it combines state-of-the-art policy theories with new empirical evidence to explore how and why designers in the EU set about packaging together different elements of policy – including broad, long-term goals and increasingly complex policy instruments. It reveals that the most durable and effective policies have incorporated a subtle mix of design features that lock certain aspects into place, but provide sufficient flexibility to prevent policy drift and redundancy.

In making fresh theoretical and conceptual linkages between the debates on policy durability, policy feedback and policy design, it opens up a rich new agenda for both academic researchers and policy makers.

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Preface

Climate change is a grand societal challenge. The landmark 2015 Paris Agreement committed participating nations to limit warming to ‘well below’ 2°C above pre-industrial temperatures and to ‘pursue efforts’ to limit the rise to just 1.5°C. It is widely accepted that achieving these commitments will require an entirely new phase of decarbonisation which is both deeper – i.e. genuinely society-wide – and more rapid than anything that has been achieved until this point. The Agreement interpreted ‘rapid’ to mean countries peaking their emissions ‘as soon as possible’ so as to ensure no net greenhouse gas emissions (‘net zero’) by the second half of this century. Deep decarbonisation is therefore a uniquely long-term challenge: 2050 is well beyond the term of office of today’s politicians, and the two temperature targets effectively apply forever.

Unfortunately, existing attempts to decarbonise are not deep or rapid enough. Globally, atmospheric concentrations and emissions continue to rise, and there is a significant gap between current mitigation efforts and the Paris commitments. Recent years have witnessed record heatwaves and fast-spreading wildfires, resonating with scientific warnings that the Earth is at grave risk of tipping into a hothouse state. The publication, in late 2018, of an international scientific report on the impacts of a 1.5°C temperature rise triggered fresh political demands for new sources of mitigation to achieve net zero emissions well before 2050. In many parts of the world, politicians are under mounting pressure both to establish very long-term net zero targets and, in the near term, to adopt the detailed policies in areas such as electricity generation, afforestation and car emissions, to ensure that they are eventually met.

Policy makers are not starting from a blank slate. In recent years, many new climate policies have been adopted, particularly in the industrialised countries. However, collectively, they are not delivering emission reductions rapidly enough to avert the risk of dangerous climate change. Often, it is not an absolute lack of understanding of the science of climate change or the unavailability of

technological solutions that is holding back new policy efforts. More commonly, it is the *politics* of policy formulation, policy adoption and policy implementation that is preventing more countries from peaking and, ultimately, rapidly reducing their greenhouse gas emissions. Many existing policies are simply not stringent enough. Others are not durable enough – they are weakened in the face of political opposition and thus fail to entrench deep decarbonisation dynamics in broader society.

In this book we explore the durability of climate policy making. Durability's importance has been repeatedly underlined by influential international bodies such as the Intergovernmental Panel on Climate Change and eminent economists such as Nicholas Stern. Durable policies should nurture a society-wide expectation that deep decarbonisation has begun and will persist through to the end of the twenty-first century and beyond. The most durable policies are sustained by positive policy feedbacks that create a more supportive form of politics around them that, in time, drives the next round of policy making to a higher level of ambition. Consequently, key actors such as car producers and electricity generators become advocates of the policies. And crucially, over time they perceive the policies to be durable: once durable policies have been adopted, deep and rapid decarbonisation is inevitable.

The aim of this book is to move from these well-known and widely deployed policy prescriptions and explore how far they are actually applied by policy makers in the cut and thrust of everyday policy design situations in the European Union, an enthusiastic adopter of new climate policies since the 1990s. In particular, we attempt to understand whether policy designers in such situations seek to intentionally create durable climate policies that are supported by positive policy feedback and, if so, why, how and with what effects. In order to do so, we draw together and make fresh connections between several bodies of literature (on policy design, policy feedback, policy instruments and policy change) that, by and large, have not been connected together before.

We attempt to provide the first systematic analysis of the determinants of policy durability in three politically salient areas: biofuel production, car transport and industrial greenhouse gas emissions. We break new analytical ground by going beyond the adoption of key European Union climate policies to study the policy feedbacks they have created over time, in order to arrive at a fuller understanding of what shaped their own durability and, crucially, their ability to trigger deep decarbonisation dynamics across society. Across nine chapters, we combine state-of-the-art policy and political theories with new empirical evidence of decarbonisation to explore how and why designers in the EU set about packaging together different elements of policy – long-term goals, instruments and specific instrument-level settings.

In some respects, our central finding is uncontroversial: the most durable and effective climate policies incorporate a subtle mix of design features that lock certain aspects into place but provide sufficient flexibility to prevent policy drift and redundancy. However, the more complex question – which we also address – is in what circumstances do such policies emerge when politicians, businesses and voters are under pressure to address near-term concerns? Climate change is, of course, only one among many societal challenges. However, we hope that by building new theoretical and conceptual linkages between the debates on policy durability, policy feedback and policy design, we can open up a rich new agenda for both academic researchers and policy practitioners.

Like many books, this one has been a long time in the writing. Andy Jordan did some of the initial thinking during a Leverhulme Trust Major Research Fellowship (2010–2014) and the COST-funded Action Innovations in Climate Governance (INOGOV). He would also like to acknowledge the financial support provided by the ESRC CAST Centre (ES5012257/1). Funding from the INOGOV Action also supported fieldwork in Brussels during Brendan Moore's PhD research. This work directly informed the sections on emissions trading. A number of other individuals played an important part in the writing and publication of this book. At an early stage, three anonymous referees provided very helpful comments on an initial book proposal and preliminary drafts of some of the chapters. As the manuscript began to take shape, Dave Huitema, Tim Rayner and Sebastian Sewerin provided more detailed comments on revised versions of the chapters in Parts I and III. Of course, the responsibility for any remaining errors or mis-interpretations rests entirely with us. Alfie Kirk kindly turned a series of pencil drawings into the three summary figures that appear in Chapter 9. Finally, at Cambridge University Press, Matt Lloyd, Emma Kiddle and Sarah Lambert were very supportive from the early stages and helped us bring the book to fruition.

Last but not least, we would like to thank our families for their continuous support (and patience!) throughout the writing process.

Abbreviations

ACEA	European Automobile Manufacturers’ Association
AEII	Alliance of Energy Intensive Industries
CARS 21	Competitive Automotive Regulatory System for the 21st Century
COP	Conference of the Parties
COPA-COGECA	Union of European Farmers and European Agri-Cooperatives
DG	Directorate-General of the European Commission
DG CLIMA	Directorate-General for Climate Action
DG Energy	Directorate-General for Energy
DG Environment	Directorate-General for the Environment
EBB	European Biodiesel Board
eBIO	European Bioethanol Fuel Association
EBTP	European Biofuels Technology Platform
ECCP	European Climate Change Programme
EEA	European Environment Agency
EEB	European Environmental Bureau
ENVI	European Parliament Committee on the Environment, Public Health and Food Safety
ePure	Renewable Ethanol Association
EU	European Union
EU ETS	European Union Emissions Trading System
Eurelectric	Union of the Electricity Industry
EUROPIA	European Petroleum Industry Association
FEDIOL	European Vegetable Oil and Proteinmeal Industry
IETA	International Emissions Trading Association
ILUC	Indirect Land Use Change
IPCC	Intergovernmental Panel on Climate Change

List of Abbreviations

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ITRE	European Parliament Committee on Industry, Research and Energy
MEP	Member of the European Parliament
MSR	Market Stability Reserve
MVEG	Motor Vehicle Emissions Group
NAP	National Allocation Plan
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
RED	Renewable Energy Directive
T&E	European Federation for Transport and Environment
UNFCCC	United Nations Framework Convention on Climate Change