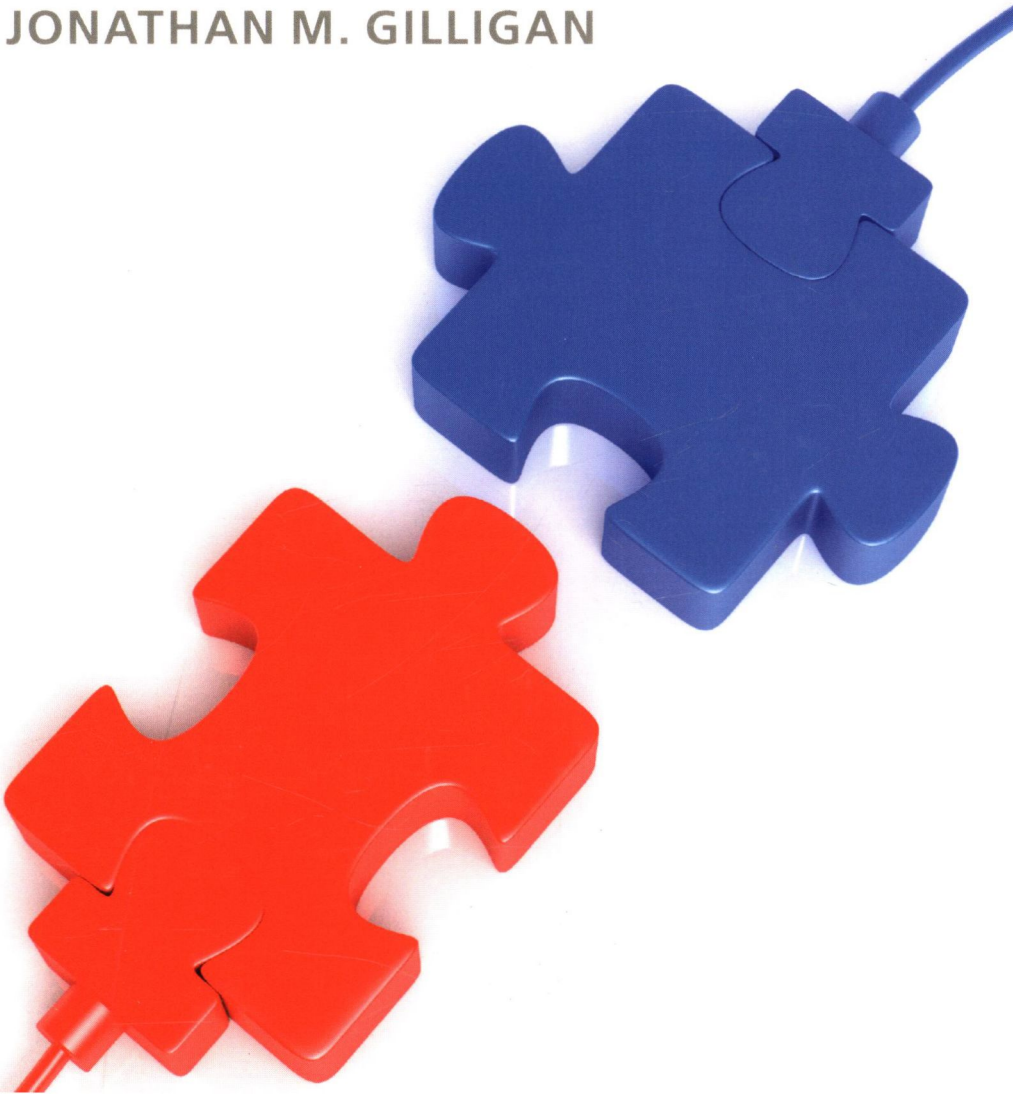


BUSINESS AND PUBLIC POLICY

Beyond Politics

The Private Governance Response
to Climate Change

MICHAEL P. VANDENBERGH
JONATHAN M. GILLIGAN



BUSINESS AND PUBLIC POLICY

Series Editor: Aseem Prakash

"The book offers a fresh, collaborative approach to the climate problem."

William D. Ruckelshaus, former Environmental Protection Agency Administrator,
Nixon and Reagan Administrations

"Industry can help lead the effort to address climate change, and this book provides an important roadmap."

Joe Kaeser, President and Chief Executive Officer, Siemens AG

"Beyond Politics offers a timely, insightful roadmap for bypassing gridlock on climate change."

Carol M. Browner, former Environmental Protection Agency Administrator,
Clinton Administration, and former Assistant to the President, Obama Administration

"Vandenbergh and Gilligan provide an optimistic view of the climate problem, showing how the private sector can bypass government gridlock over the next decade. This book will appeal to scholars, business and advocacy group managers, policymakers, and anyone interested in a new approach to climate change."

Steven Harper, Global Director, Environment and Energy Policy, Intel Corporation

"In 'Beyond Politics,' Professors Vandenbergh and Gilligan powerfully demonstrate how private sector action on climate change has moved from theory to real and promising impact in the marketplace of today. Drawing on law, policy, and social science, their book provides an optimistic roadmap showing how the private sector, leveraging customer-supplier relationships as part of the solution, can bypass government gridlock and reduce carbon emissions by a billion tons annually."

Jackie Roberts, Chief Sustainability Officer, The Carlyle Group

"Beyond Politics provides a fresh, much-needed perspective on how the private sector can bypass government gridlock on climate change."

John D. Graham, PhD, Dean, School of Public and Environmental Affairs, Indiana University,
and former Office of Information and Regulatory Affairs Administrator, George W. Bush Administration

Cover illustration: © Peter Griffin

© AMR_Photos

Cover designed by Hart McLeod Ltd

CAMBRIDGE
UNIVERSITY PRESS
www.cambridge.org

ISBN 978-1-316-63248-2



9 781316 632482 >

VANDENBERGH
AND GILLIGAN

Beyond Politics

CAMBRIDGE

Beyond Politics

*The Private Governance Response
to Climate Change*

Michael P. Vandenberg

Vanderbilt University, Tennessee

Jonathan M. Gilligan

Vanderbilt University, Tennessee



CAMBRIDGE
UNIVERSITY PRESS

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/9781107181229

DOI: 10.1017/9781316848555

© Michael P. Vandenberg and Jonathan M. Gilligan 2017

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 2017

Printed in the United Kingdom by Clays, St Ives plc

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

Library of Congress Cataloging-in-Publication Data

Names: Vandenberg, Michael P., author. | Gilligan, Jonathan M., author.

Title: Beyond politics : the private governance response to climate change / Michael P. Vandenberg, Jonathan M. Gilligan.

Description: Cambridge, United Kingdom ; New York, NY : Cambridge University Press, 2017. | Series: Business and public policy | Includes bibliographical references and index.

Identifiers: LCCN 2017026038 | ISBN 9781107181229 (hardback : alk. paper) | ISBN 9781316632482 (paperback : alk. paper)

Subjects: LCSH: Climate change mitigation. | Business enterprises – Environmental aspects. | Environmental policy – Economic aspects. | Environmental responsibility – Economic aspects. | Public-private sector cooperation. | BISAC: POLITICAL SCIENCE / Economic Conditions.

Classification: LCC TD171.75 .V36 2017 | DDC 363.738/746–dc23

LC record available at <https://lcn.loc.gov/2017026038>

ISBN 978-1-107-18122-9 Hardback

ISBN 978-1-316-63248-2 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.

Beyond Politics

Private sector action provides one of the most promising opportunities to reduce the risks of climate change, buying time while governments move slowly or even oppose climate mitigation. Starting with the insight that much of the resistance to climate mitigation is grounded in concern about the role of government, this book draws on law, policy, social science, and climate science to demonstrate how private initiatives are already bypassing government inaction in the US and around the globe. It makes a persuasive case that private governance can reduce global carbon emissions by a billion tons per year over the next decade. Combining an examination of the growth of private climate initiatives over the last decade, a theory of why private actors are motivated to reduce emissions, and a review of viable next steps, this book speaks to scholars, business and advocacy group managers, philanthropists, policymakers, and anyone interested in climate change.

Michael P. Vandenbergh is the David Daniels Allen Distinguished Chair of Law, Co-Director of the Energy, Environment and Land Use Program, and Director of the Climate Change Research Network at Vanderbilt University Law School, Tennessee.

Jonathan M. Gilligan is Associate Professor of Earth and Environmental Sciences, Associate Professor of Civil and Environmental Engineering, and Associate Director for Research, Vanderbilt Climate Change Research Network at Vanderbilt University, Tennessee.

Business and Public Policy

Series Editor:

ASEEM PRAKASH, University of Washington

Series Board:

Vinod K. Aggarwal, University of California, Berkeley

Tanja A. Börzel, Freie Universität Berlin

David Coen, University College London

Peter Gourevitch, University of California, San Diego

Neil Gunningham, The Australian National University

Witold J. Henisz, University of Pennsylvania

Adrienne Héritier, European University Institute

Chung-in Moon, Yonsei University

Sarah A. Soule, Stanford University

David Vogel, University of California, Berkeley

This series aims to play a pioneering role in shaping the emerging field of business and public policy. *Business and Public Policy* focuses on two central questions. First, how does public policy influence business strategy, operations, organization, and governance, and with what consequences for both business and society? Second, how do businesses themselves influence policy institutions, policy processes, and other policy actors and with what outcomes?

Other books in the series:

Timothy Werner, *Public Forces and Private Politics in American Big Business*

Hevina S. Dashwood, *The Rise of Global Corporate Social Responsibility: Mining and the Spread of Global Norms*

Llewelyn Hughes, *Globalizing Oil: Firms and Oil Market Governance in France, Japan, and the United States*

Edward T. Walker, *Grassroots for Hire: Public Affairs Consultants in American Democracy*

Christian R. Thauer, *The Managerial Sources of Corporate Social Responsibility: The Spread of Global Standards*

Kiyoteru Tsutsui & Alwyn Lim (Editors), *Corporate Social Responsibility in a Globalizing World*

Aseema Sinha, *Globalizing India: How Global Rules and Markets are Shaping India's Rise to Power*

Victor Menaldo, *The Institutions Curse: Natural Resources, Politics, and Development*

Jeroen Van Der Heijden, *Innovations in Urban Climate Governance: Voluntary Programs for Low Carbon Buildings and Cities*

Preface

Two-thirds of Americans believe that big government is the greatest threat facing the United States.¹ Yet over the past three decades, discussions of what to do about climate change have focused on government responses, whether comprehensive international agreements, or a tax on fossil fuel emissions, power plant regulations, renewable power mandates, or energy efficiency mandates. As the 2016 presidential election in the United States demonstrates, though, it is dangerous to put all of our policy eggs in one basket: When combined with other sources of opposition in the United States and around the world, concern about the size and intrusiveness of government can lead to gridlock or retrenchment.

We argue in this book that it is time to look beyond politics for responses to climate change. Initiatives by the private sector – businesses, advocacy groups and other non-governmental organizations (NGOs), religious organizations, philanthropists, and households – can be an important part of the response to climate change. Private actors are not just lobbyists for or against government action. They are important actors in their own right who can reduce their own emissions and motivate other private actors to do so as well. In our view, climate change is one of the great threats facing society over the coming decades and centuries. Although private initiatives cannot solve the problem, they can appeal to individuals and organizations across the political spectrum and buy time for governments to emerge from gridlock over climate change laws and policies.

We demonstrate that private environmental governance has become a remarkably common response to many types of environmental problems, suggesting that it is already functioning as a viable form of governance. We also explain why the characteristics of carbon emissions and the motivations for corporations, NGOs, and individuals make climate change a promising area for new private governance initiatives. We show how private initiatives can not only draw on self-interest to stimulate emissions reductions but also draw on social and personal

norms that support climate mitigation. We also explain how market failures and behavioral failures have created opportunities to achieve greater efficiency at low cost, making it possible for private actors to reduce emissions even absent the coercive power and resources of government.

Private Climate Governance and the Liberal-Conservative Divide

Private climate initiatives already play an important role in the response to climate change by providing new options for those who are motivated to respond to climate change but are unable to induce government to act. These private initiatives also provide options for the much larger group of citizens who favor climate action but rank it as a low- or middle-level priority for government. The initiatives also address one of the greatest challenges to government climate policy by crossing international boundaries, reducing emissions in developed and developing countries without requiring new national laws or international agreements. If carefully selected and implemented, new private initiatives also can complement, rather than compete with, domestic and international government policies.

Although these functions make private governance an attractive option, the most important attribute of private governance in the United States is its ability to bypass the partisan divide on climate change. As any casual observer of climate debates has noted, the liberal-conservative divide in the United States has a remarkably large influence on whether individuals believe that humans are causing climate change and whether they believe that substantial resources should be invested in trying to reduce climate risks. In fact, the differences in liberal-conservative worldview are so great and influence so many aspects of how individuals take in and process climate information that we contemplated asking our publisher to produce this book in a way that would allow some readers to open it and read it written from a liberal perspective (with a blue cover) and others to turn it over and read it the other way, written from a conservative perspective (with a red cover). We did not pursue this approach, but we believe the private climate governance strategy we develop here can help bridge the liberal-conservative divide, and we have settled instead for separate messages for conservatives and liberals in this preface.

Conservatives

If you are conservative, this book may be challenging because it does not deny the importance of climate change or the central role of government

regulation in addressing this problem over the long term. Instead, it argues that climate mitigation merits even greater priority and urgency than it has received so far. We understand that this is tough sledding if you are concerned about big government and believe that scientists are uncertain about climate change or the severity of its potential harms. In fact, if your views on the climate science are driven by concerns that it will lead to a big government solution, as it is for many conservatives, you can skip our discussion of the climate science in Chapter 2 and focus on the private governance strategy outlined in the rest of the book before returning to the science discussion. You may find that the market-driven, private strategy we outline in those chapters is consistent with a worldview that favors a limited role for government. Although the private initiatives we discuss cannot solve the climate problem, they can contribute major emissions reductions by identifying inefficiencies and inducing private organizations and individuals to take responsibility for their actions. And we have only scratched the surface in this book. Our analysis may inspire you to investigate new possibilities beyond those we identify here for the private sector to play a larger role in reducing the threat of climate change.

It is also important to recognize that private governance is not a radical new concept; it is the modern form of activities that predate modern notions of government and law. Ben Franklin founded a number of private organizations that performed functions that we now typically assign to government, including firefighting, library book lending, and others.² As to climate change, we do not argue that private governance initiatives can replace government requirements, but they can reduce, at least somewhat, the size and scope of those requirements – reducing emissions while the science continues to mature, new technologies develop, and the countries that have only made limited, voluntary promises to reduce emissions thus far begin to feel greater pressure to step up their commitments in the post-Paris international process. And even if liberals and conservatives cannot reach common ground on public governance measures, they may find it easier to agree on private governance. If we can agree to do something instead of nothing, that is an achievement, and it may serve as the basis for continued negotiation in good faith over policy measures about which many people disagree.

A principal concern of opponents to government climate mitigation is that mitigation efforts will undermine free markets and economic growth and ultimately a conception of society that prizes liberty, freedom, and small government over other outcomes. The availability of near-term, private governance-driven emissions reductions is not a panacea, but it should buy time without triggering these concerns. Near-term emissions

reductions can be achieved through private initiatives that shift corporate, household, and other choices to achieve efficiencies and shift the purchase and use of goods to low-carbon alternatives.

Private governance also can reduce climate mitigation costs. Mainstream economists predict that a few decades of delay could well add trillions of dollars to the economic damages the world will suffer due to climate change.³ Every ton of emissions that is avoided through private governance in the near term may reduce by a ton or more the emissions that will need to be reduced through government action in the future. The trade-off may be more than one-to-one because emissions reduced now will not have heat trapping effects over the interim period in which government mobilizes to respond. Our view is that government action through a national and international carbon tax or cap and trade system is necessary, but the longer we delay, the steeper the emissions reductions will need to be and the higher the cost will be, since it is almost always much more expensive to wait until the last minute than to start a project early.

It is possible that new technologies will make reductions easier and cheaper in the future, but it is also possible that delays will result in the need to reduce emissions far below what new technologies can reasonably be expected to deliver. We may go from being able to gradually phase out some technologies with especially high emissions and replace them with new, cleaner technologies to needing to push deeply into other forms of emissions reductions beyond what new technologies can deliver and where the knee of the cost curve may make those transitions very costly.

In addition, regardless of what happens with the 2015 Paris agreement, it is becoming widely accepted that large amounts of carbon will need to be extracted from the air in the second half of this century to meet even the modest goals of that agreement. Technologies to do this effectively are possible, but they do not exist on a large scale today and may be expensive to deploy and operate. It is possible that in the next several decades it will be feasible to reduce emissions from power plants at less cost than the steps we identify in this book, but we do not have to choose one or the other. It seems both prudent and economically sensible to go forward today with measures that can be implemented immediately to reduce emissions at low or negative cost while also pursuing the slower project of reducing the emissions from other sectors. We think of this as a good example of an advertising slogan for oil filters that was popular when we were kids: “you can pay me now or you can pay me later.” This slogan contrasts the small cost of preventive maintenance with the much greater cost of rebuilding a damaged engine, and the same principle applies to emissions reductions.

For conservatives, a particularly important point is that this payment is not just a matter of dollars and cents but also a cost in the size and intrusiveness of government. In short, delay may be costly not only in economic terms but in terms of the intrusiveness of government. At some point the general public will become more acutely aware of the evidence of climate change and demand steep additional reductions. If we delay, achieving these additional reductions will require not only investments in new technologies but also an extremely high carbon price, a large program of command and control regulations, or perhaps both of these responses. The history of environmental law and policy suggests that government action often lags behind the views of scientists and the public by several years or decades. Then, when the dam breaks on public opinion, legislators rush to enact statutes that require major new bureaucracies and requirements, and these responses are often inflexible, inefficient, and arguably too stringent. The Superfund statute, which was rushed into place in response to toxic sites like Love Canal, is one example. The Oil Pollution Act, which was rushed into place after the Exxon Valdez disaster, is another. The lack of congressional action after the BP Deepwater Horizon suggests that this is not always the pattern, but the public's appetite for climate action could shift quickly following a major heat wave, drought, or other natural disaster. The result is likely to be either a very high carbon tax, a large, comprehensive, intrusive command and control regulatory framework, or a combination of the two.

In short, the question is: Which is the small government approach – to reduce emissions through seizing efficiencies now or to delay and wrestle with the need for more stringent and intrusive reductions in the future? Delay is a risky strategy if your goal is to promote liberty and freedom and to limit the role of government.

Liberals

If you are liberal, our view that the climate problem is a large threat may be consistent with your views, but the book may be challenging because it emphasizes the role of the private sector and attempts to reform and harness private markets and global trade rather than critiquing them. It also takes a dim view of the prospects for adopting an adequate national and international response over the next decade and indeed for the prospects of preventing catastrophic warming. Following the 2016 presidential election, though, public governance is almost certainly going to be inadequate to keep global warming below the widely discussed target of 2°C above preindustrial temperatures without removing massive quantities carbon dioxide from the atmosphere, and we worry that even a 3°C target

will be difficult to achieve without carbon dioxide removal. We understand that this is not a popular message, but we believe it is better to avoid unduly rosy views about either the climate science or the likelihood of major government action in the near term.

We also encourage liberal and moderate readers not to judge our private governance proposals by comparison to some ideal government policy that could avert catastrophic climate change, but would be unlikely to be adopted and implemented within the next decade. The existence of private governance and the urgency of the climate problem suggest that when confronting the strengths and limitations of private climate initiatives, we should always ask: as compared to what viable alternative? The international process has delivered what it can, and the Paris Gap – the shortfall between what the Paris agreement will deliver if all countries meet all of their commitments and the emissions pathway necessary to meet the Paris agreement's 2°C goal – remains even if the United States does not fully abandon the international process. Instead of waiting for a complete or perfect government response, private climate governance initiatives offer the alternative of damage control measures that can at least ameliorate the consequences of sluggish public governance. This is a theme that we return to throughout the book: the need to judge climate responses not based on a comparison to a perfect but unattainable ideal but by comparing them to viable alternatives.

In our view, government action is needed, but a realistic assessment of the prospects for complete implementation of the Paris agreement, much less a new international agreement with more substantial commitments for emissions reductions before 2025, suggests that the international process will not respond in time, whether the target is 2°C or 3°C. In the United States, the use of existing statutory authority produced important emissions reductions: President Obama attempted to bypass the gridlock in Congress by using existing statutory authority to increase fuel economy standards for vehicles, reduce carbon emissions from electric power plants, and increase efficiency standards for many types of equipment. In combination with decreases in the price of natural gas and other factors, these regulatory moves made important reductions in U.S. carbon emissions. But as the results of the 2016 presidential election have demonstrated, the continued implementation of these regulatory measures is subject to the whims of future presidents, not to mention congressional and judicial challenges. Even if the regulatory steps were to be fully implemented, they would fall far short of meeting the US share of the global emissions reductions necessary to achieve the 2°C or 3°C target. And even if the president changes course on climate policy over the next several years, the statutory authorities that provide the legal

support for new regulations are largely tapped out – new legislation would likely be necessary.

Instead of waiting for major new government actions, this book looks to markets, private organizations, households, and individuals to achieve additional emissions reductions over the next decade. Concerns about climate “greenwashing” – false claims about emissions reductions designed to alleviate public pressure but not to solve the climate problem – are legitimate. Corporations and other organizations have incentives to over-sell their emissions reductions in many cases. This is a reason to discount some claims and to give more credence to claims where an advocacy group participated in or evaluated the effort or where the reductions were transparent or verified by independent auditors. It is important to remember, though, that high levels of compliance with private standards and emissions reduction goals are important for the success of private climate governance, but complete compliance is not. Again, the question is: as compared to what? Corporate compliance with government environmental regulations rarely approaches 100 percent, and a leading study by Wesley Magat and Kip Viscusi suggested that substantial compliance with a major regulatory program was roughly 75 percent.⁴ Also, as the hyperbole about the Paris agreement and its predecessors suggests, governments often engage in over-selling emissions reductions as well, although “government-washing” does not have the same cachet as “greenwashing.”

Another legitimate concern from the left is that devoting resources to private initiatives will undermine financial or public support for public initiatives. For example, if people believe that Walmart’s emissions reductions from its supply chains around the world have addressed Walmart’s climate change responsibilities, will they be less likely to reduce their own emissions or support new federal regulations or a federal carbon tax? We think of this as negative spillover, and it is another legitimate concern about private climate governance. We address this issue at length in Chapter 3, but for now it is enough to say that minimizing the likelihood of negative spillover should be a consideration in the development and implementation of private climate initiatives, but after the 2016 federal election there is little likelihood of the US government adopting new climate mitigation policies in the near term and thus little risk of displacing those policies. Although some participants in private climate governance may hope to forestall eventual government action, private initiatives often arise only after it is clear that governments will not act in the near term.⁵ In addition, given the pace of government action in the international process and in many regions of the world over the past several decades, the fear of negative spillover on climate mitigation outside the United

States should not be a major barrier. Simply put, if government is not likely to act, we should not be overly worried about private governance impeding it. The international process showed its hand in the Paris agreement, identifying the most that governments are likely to do between now and 2025, and the Paris Gap remained, even assuming full compliance by the United States. In short, carefully designed and implemented private initiatives that reduce emissions in the near term present a low risk of undermining additional government responses during this period and may complement government responses when they occur.

Finally, it is important to understand why the prompt, large emissions reductions that private governance can achieve are not in conflict with, and may even be essential to, the achievement of many liberal values. Simply put, we believe it is important to be realistic about the threat of climate change and to acknowledge that many liberal values will not be achieved in a world with temperature increases of 2°C, 3°C, or more. What will happen to human rights, worker rights, health care, refugees, and wealth disparity in a world with extensive heat waves, droughts, floods, increasing sea levels, and the dislocations and conflicts that all of these events will cause over tens or hundreds of generations? Our reflections on this question have led us to conclude that the response to climate change deserves priority and urgency. If we do not avert catastrophic climate change, many of these other outcomes will not be achievable.

On the surface this may not seem to be a challenge, but in many cases it is difficult to engage in triage decisions and easy to defer or deny the importance of costly climate actions. If we are not careful, climate change can become something to pursue because it can achieve other values, or to pursue only after other values are considered. The problem with this approach is that attempting to achieve other values can make it difficult to address the climate threat, either because the other goals in the near term require delaying or reducing the efforts to mitigate climate change or because linking climate mitigation to these other values will create political opposition that will delay or water down action. An example of the first problem is that it may be possible to certify a building as sustainable even if it emits more greenhouse gases than the prior building on the site, so long as other issues are addressed.⁶ An example of the second problem is the idea that we should pursue climate change mitigation as a way to achieve other liberal values without accounting for the political risks of linking climate mitigation to those other values.⁷ We share many of these underlying values, but we worry that a strategy linking climate change to government policies designed to achieve other values will so delay the necessary carbon emissions reductions that the resulting changes in the global environment will make it impossible to achieve these values.

The failure of a carbon tax ballot initiative in Washington state in 2016 demonstrates the point: Out of understandable concern for the effects of a carbon tax on the energy bills of low-income households, the Sierra Club did not support the initiative. With opposition from some on the right combining with social justice and environmental groups on the left, though, the carbon tax was doomed.

The Challenges of Reaching a Broad Audience

We are trying to reach a broad and eclectic audience with this book, including the general public, lawyers, social scientists, natural scientists, business managers, philanthropists, advocacy group and government managers, and managers of universities, hospitals, and other nonprofit and civic organizations. This presents a number of challenges. We have responded by not assuming substantial knowledge of the law and social and natural science associated with climate change. At the same time, we have attempted to dig into empirical studies and academic theory when necessary to explore a point.

Wherever possible, we supplement our theoretical analysis with examples of private climate initiatives that have emerged in recent years, and we explain how these initiatives can be expanded and new initiatives launched. We would prefer to rely more often on large, rigorous empirical studies, but the field is developing quickly, and in many cases rigorous empirical studies are not available. As a result, we often point to anecdotal examples, but we also identify areas where more systematic research would be valuable. Along the way we discuss the conceptual barriers that may have prevented scholars from studying private governance opportunities and advocacy groups from fully exploiting these opportunities, and we explore ways of overcoming these barriers.

The book draws on the literature in many fields, but it does not fully adopt the approach of any one field. This is not an oversight. We believe that the private climate opportunity exists in part because it is not obvious, particularly to many of us who are immersed in the literatures and mental models of our respective disciplines. Lawyers will be uncomfortable with the limited role that formal legal requirements and government regulation play in our assessment of private climate initiatives. Economists will be skeptical about the size of the efficiency opportunity and the extent to which support for climate mitigation, whether driven by personal moral norms or other motivations, can influence corporate and household behavior. Psychologists will fret that we have over-emphasized self-interest and have downplayed the influence of altruistic or pro-social motivations. Sociologists will be concerned about the lack of focus on the

role of power relationships among groups and the willingness to harness rather than reject neoliberal market responses. Political scientists will worry that we have under-valued the role of government and authority more generally. And so on.

If the charge is that the private governance strategy we identify in this book draws on the literature from many fields but does not square neatly with any one field, we plead guilty. This introduces complexity into our analysis, but we have found that the most interesting and important private climate initiatives often exist in the gaps between the mental models of academic disciplines, and interdisciplinary thinking is necessary to see the scope and connectedness of private climate initiatives. We also have found that interdisciplinary teams are often needed to assess private climate governance questions and develop new private governance initiatives, and we believe that progress in the field will require more work along these lines.

We also plead guilty to being advocates for private sector action on climate change in this book, not just the disinterested observers that we attempt to be when doing basic research.⁸ We have identified an interesting and important phenomenon, private climate governance, and we believe that it can be a significant part of the response to climate change. At the same time, we bend over backward to avoid unrealistic assessments of what is possible and to fairly characterize the existing literature. We believe that a clear-eyed look at the opportunities and limits of public and private action is essential to reducing the risk of catastrophic climate change.

Comparative Institutional Analysis

Although we focus in this book on private governance responses to climate change, we believe that the emergence of private governance across multiple fields, combined with the gridlock in national and international governmental processes on many issues, suggests a fundamental need to rethink the choices we consider when comparing different institutional responses to many types of social challenges, not just climate change. A standard approach among legal scholars is to compare the relative merits of three institutions: markets, the political branches of government, and courts.⁹ By now, however, an extensive literature has demonstrated that the political branches of government and markets do not function in isolation, and thus the comparison cannot just be among the three institutional forms. Instead, governments collaborate with private organizations to form public-private hybrids,¹⁰ delegate public standard-setting,¹¹ and outsource services to private corporations.¹² These types of public-private activities are an important form of governance. Our focus on private sector responses