The Voluntary Environmentalists

Can businesses voluntarily adopt progressive environmental policies? Most environmental regulations are based on the assumption that the pursuit of profit leads firms to pollute the environment, and therefore governments must impose mandatory regulations. However, new instruments such as voluntary programs are increasingly important. Drawing on the economic theory of club goods, this book offers a theoretical account of voluntary environmental programs by identifying the institutional features that influence conditions under which programs can be effective. By linking program efficacy to club design, it focuses attention on collective-action challenges faced by green clubs. Several analytic techniques are used to investigate the adoption and efficacy of ISO 14001, the most widely recognized voluntary environmental program in the world. These analyses show that, while the value of ISO 14001's brand reputation varies across policy and economic contexts, on average ISO 14001 members pollute less and comply better with governmental regulations.

ASEEM PRAKASH is an Associate Professor in the Department of Political Science, University of Washington, Seattle.

MATTHEW POTOSKI is an Associate Professor in the Department of Political Science, Iowa State University.

The Voluntary Environmentalists

Green Clubs, ISO 14001, and Voluntary Regulations

ASEEM PRAKASH and MATTHEW POTOSKI



Cambridge University Press 0521860415 - The Voluntary Environmentalists: Green Clubs, ISO 14001, and Voluntary Regulations Aseem Prakash and Matthew Potoski Frontmatter More information

> CAMBRIDGE UNIVERSITY PRESS Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press The Edinburgh Building, Cambridge CB2 2RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org Information on this title: www.cambridge.org/9780521677721

© Aseem Prakash and Matthew Potoski 2006

This book 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 2006

Printed in the United Kingdom at the University Press, Cambridge

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

ISBN-13 978-0-521-86041-3 hardback ISBN-10 0-521-86041-5 hardback ISBN-13 978-0-521-67772-1 paperback ISBN-10 0-521-67772-6 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.

> To Alexander and Nives – Aseem To Ben and Alicia – Matt

Contents

List of figures		<i>page</i> viii
Lis	et of tables	ix
Preface		х
Acknowledgements		xiii
1.	Introduction	1
2.	Green clubs: an institutionalist perspective	34
3.	ISO 14001 and voluntary programs	81
4.	Adopting ISO 14001	102
5.	ISO 14001 and firms' environmental and regulatory	
	performance	146
6.	Conclusions and future directions	171
References		189
Name Index		205
Subject Index		209

Figures

2.1.	Governments' and firms' choices of	
	environmental protection	page 68
2.2.	Governments', firms' and green clubs' choices of	
	environmental protection	69
3.1.	ISO 14001 accrediting and certifying authorities	96

Tables

2.1	The nature of goods and services	page 45
2.2	Club design: an institutionalist approach	63
2.3	The regulation dilemma	76
4.1	ISO 14001 certified facilities in selected countries, 2002	117
4.2	Cross-national analysis of ISO 14001 certifications:	
	descriptive statistics	128
4.3	Countrywide 14001 registrations: negative binomial	
	analyses	130
4.4	US facility ISO 14001 registrations: descriptive	
	statistics	133
4.5	ISO 14001 registrations: US facility analysis	140
5.1	Descriptive statistics for environmental performance	162
5.2	Descriptive statistics for regulatory performance	163
5.3	Treatment-effects analysis of facilities joining ISO	
	14001 and their environmental performance	164
5.4	Treatment-effects analysis of facilities joining ISO	
	14001 and their regulatory compliance	167

Preface

This book examines how voluntary regulatory programs can mitigate collective-action problems. Drawing on club theory, we present a theoretical perspective to help scholars and policy-makers to think systematically about the challenges and opportunities of voluntary regulation. While the book focuses on voluntary environmental regulation, our approach is sufficiently general to be applicable to voluntary regulatory programs in other issue areas.

The assumption underlying most environmental regulation in the world today is that the pursuit of profit leads firms to pollute the environment. The standard prescription for mitigating pollution's harms has been for governments to enact regulations that command firms to meet specific pollution targets and control how firms do it, such as by prescribing specific pollution-control technologies for firms' production processes. While command and control regulations have had undeniable successes in reducing pollution, they have been criticized for being inefficient because they do not discriminate between costly and cheap pollution control. Budgetary pressures have curtailed governments' monitoring and enforcement programs and thereby undermined their efficacy. In light of such criticisms, several new policy instruments have been offered to complement command and control regulations. We firmly believe that the command and control system should continue to serve as the backbone of environmental governance. The challenge is to find new policy tools that can preserve its virtues and yet mitigate its negatives. One such tool, voluntary environmental programs, or "green clubs" as we term them, looks to improve firms' environmental performance by having firms voluntarily adopt an environmentally progressive code of conduct.

At first glance, voluntary programs may seem hopelessly naïve, if the assumption that profit maximization inevitably leads firms to externalize costs has any merit. While many voluntary programs are in operation around the world today, research provides no clear

Cambridge University Press 0521860415 - The Voluntary Environmentalists: Green Clubs, ISO 14001, and Voluntary Regulations Aseem Prakash and Matthew Potoski Frontmatter More information

Preface

answer about the overall efficacy of these programs. Some studies suggest that one particular voluntary program improves participating firms' environmental behavior beyond what they would have done in the absence of the program, while studies of other programs have failed to find evidence of improved environmental performance among participants. We believe that the core theoretical challenge in voluntary program research is to identify what distinguishes the effective voluntary programs from the ineffective.

The book takes up the challenge of developing a theoretical account of voluntary environmental programs by identifying the core institutional features that distinguish effective programs from failures. Our theoretical framework draws on the economic theory of club goods (Buchanan, 1965; Cornes and Sandler, 1996). A club provides members with shared, group benefits from which non-members are excluded. Voluntary programs are like clubs in that they offer an excludable benefit that firms receive from their stakeholders because participation in the program signals that the firm is taking progressive environmental action. Because club membership creates benefits for firms by enhancing their standing with stakeholders, clubs can require member firms to incur the costs that stem from taking progressive environmental action. While command and control regulations seek to persuade firms to adopt such policies via the stick of mandatory enforcement, green clubs seek to do so via the carrot of enhancing firms' reputation through their membership in the club.

However, participating firms may have incentives to free-ride and enjoy the goodwill benefits of affiliating with the club's brand without paying the costs of adhering to its club requirements. That is, once they have joined the club, members may shirk their responsibilities and not perform according to the club's code of conduct. Effective clubs therefore need mechanisms to monitor and enforce their rules.

If voluntary programs function as clubs in the sense we described, two central questions emerge for studying these programs:

- Why do some firms join green clubs and not others? What enhances a club's brand reputation and how does this reputation induce firms to join the club?
- Does joining the club change participating firms' environmental and regulatory performances? After all, green clubs are useful tools to

xi

Cambridge University Press 0521860415 - The Voluntary Environmentalists: Green Clubs, ISO 14001, and Voluntary Regulations Aseem Prakash and Matthew Potoski Frontmatter <u>More information</u>

xii

Preface

the extent they can induce firms to reduce their harm to the environment and show better compliance with public law.

We empirically examine our theoretical ideas about voluntary programs by analyzing ISO 14001, the most widely recognized voluntary environmental program in the world today. Our analyses show that the value of ISO 14001's brand reputation, and therefore its attractiveness to firms, varies across the policy and economic contexts in which firms operate. Our analyses also indicate that, at least in the US, joining ISO 14001 reduces the amount of time member firms spend out of compliance with government regulations and reduces the amount of toxic pollutants they release into the atmosphere. In other words, ISO 14001 induces firms to pollute less and better comply with governmental regulations.

The book makes three key contributions:

- It outlines an accessible yet robust theoretical framework for studying voluntary programs. We present a new theory, firmly grounded in the rational behavior of firms and their stakeholders, which can help account for the different research findings on the efficacy of voluntary environmental programs. This is an important contribution because the study of voluntary programs, while still in its infancy, is growing rapidly in many disciplines, including management, public policy, economics, political science, law, and sociology. Indeed, while we focus on environmental programs, our theory is sufficiently generalizable to apply to many other policy areas in which voluntary programs have been emerging.
- This book employs sophisticated quantitative tools to examine fundamental questions about voluntary programs. We supplement our quantitative analyses with short case studies of ISO 14001 adoption in the US and UK, and evidence from interviews with government regulatory officials and industrial managers.
- Most social science disciplines have become increasingly divided between scholars studying "domestic" issues and those studying "international" issues. This is one of the few texts that bridge the domestic–international divide by examining both the international and domestic (US) dimensions of ISO 14001's diffusion and efficacy.

Acknowledgements

We began working on this project in August 2001. We initially worked on papers that helped us to think carefully about important issues in voluntary programs and focus our thoughts into a more coherent research program. In 2004, we embarked on a book project that would pull together our work, refine our theoretical approach to studying voluntary programs, and therefore present a theoretically compelling statement on voluntary program research.

This project has received valuable support, input, and feedback from several individuals. These include Werner Antweiler, Ken Bickers, Patrick Brandt, John Bolis, Trevor Brown, Chuck Corell, Michael Craft, Tom Eggert, Jeff Fiagle, Dan Fiorino, William Glasser, Reiner Grundmann, Jay Hamilton, Kathryn Harrison, Virginia Haufler, Ronnie Garcia-Johnson, Bob Kagan, Kelly Kollman, David Levy, Barbara Lither, Robert Lowry, Mark Lubell, Erik Lundsgaarde, Peter May, John Meyer, Mark McDermid, Frank Montabon, Tom Rice, David Ronald, Susan Roothan, Erika Sasser, Doug Smith, Mark Smith, Jeffrey Smoller, Theresa Squatrito, Abhishek Srivastava, Mark Stephan, Alex Tuckness, Michael Ward, and John Wilkerson. Parts of the book were presented at the annual conferences of the American Political Science Association, the Midwest Political Science Association, Association of Public Policy Analysis and Management, and the International Studies Association, and at seminars hosted by Iowa State University and Indiana University. We are grateful to Chris Harrison, the commissioning editor, for his support for this project. Sarah Edrington, Joseph Haley, Melissa Homrig, Dan Murray, and Jason Stonerook provided excellent research assistance.

This book draws on the following published papers:

1. Green Clubs and Voluntary Governance: ISO 14001 and Firms' Regulatory Compliance. *American Journal of Political Science*, 2005, 49(2): 235–248; with permission from Blackwell Publishing.

Cambridge University Press 0521860415 - The Voluntary Environmentalists: Green Clubs, ISO 14001, and Voluntary Regulations Aseem Prakash and Matthew Potoski Frontmatter More information

xiv

Acknowledgements

- 2. Covenant with Weak Swords: ISO 14001 and Firms' Environmental Performance. *Journal of Policy Analysis and Management*, 2005, 24(4); with permission from Wiley Interscience.
- 3. Regulatory Convergence in Non-Governmental Regimes? An Empirical Examination of Cross-National Adoption of ISO 14001. *Journal of Politics*, 2004, 66(3): 885–905; with permission from Blackwell Publishing.
- The Regulation Dilemma: Cooperation and Conflict in Environmental Governance. *Public Administration Review*, 2004, 64(2): 137–148; with permission from Blackwell Publishing.
- 5. Policy Modes, Business, and the Natural Environment. *Business Strategy and the Environment*, 2004, 13(2): 107–128; with permission from Wiley Interscience.
- 6. EMS-Based Environmental Regimes as Club Goods: Examining Variations in Firm-level Adoption of ISO 14001 and EMAS in UK, US, and Germany. *Policy Sciences*, 2002, 35(1): 43–67; with permission from Springer.

Our respective universities provided generous financial support. Matthew Potoski received financial support from the Iowa State University Institute of Science and Society and the Iowa State University College of Liberal Arts and Sciences. Aseem Prakash received support from University of Washington's Royalty Research Fund.

Finally, we would like to acknowledge the support and encouragement from our wives and families. While they have tolerated our devotion to this project for several years, their support during summers of 2004 and 2005 was very helpful in seeing this project to completion. We dedicate this book to them.