

PRIVATE ENVIRONMENTAL GOVERNANCE

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Environmental law has quietly transformed from a positive law field deeply rooted in administrative law to one that is also heavily rooted in private law and private governance. After two decades (1970–1990) of remarkable activity, more than two decades have now passed without a major federal environmental statute (1991–2012). Whether the appropriate next step is expansion or contraction, reforms to the federal statutory framework have stalled. Federal regulatory activity and state and local measures have filled some of the gap, but private governance efforts—the pursuit of public ends through private standards, monitoring, enforcement, and dispute resolution—now play an important role. Corporations report that their toxics use is regulated more by private supply chain contract requirements than the federal toxics statute. The fate of fourteen percent of the temperate forests and seven percent of the fisheries around the world is in the hands of private certification systems. More money is spent on private environmental inspections than on the entire federal Environmental Protection Agency enforcement office. The emergence of private governance is hiding in plain view because the conceptual model by which environmental law is viewed and the metrics by which legal activity is measured do not square easily with private governance. Environmental preferences are expressed in private market decisions, not through voting or lobbying. Standard-setting, enforcement, and dispute resolution occur through private actions and institutions, not legislatures, agencies, or courts. This Article demonstrates the value of conceptualizing seemingly disparate private activities as a discrete new model of environmental governance. Viewing private environmental governance in this way provides new insights about collective action problems, reframes the standards used for environmental instrument choice, and suggests new actors and actions to address environmental problems.

INTRODUCTION	130
I. THE GROWTH OF PRIVATE ENVIRONMENTAL GOVERNANCE .	140
A. What Is Private Environmental Governance?	141
B. Examples of Private Environmental Governance	147

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1. <i>Collective Standard-Setting</i>	148
2. <i>Bilateral Standard-Setting</i>	156
C. Summary	161
II. TOWARD A THEORY OF PRIVATE ENVIRONMENTAL GOVERNANCE	162
A. The Private Environmental Governance Model	163
1. <i>Small-Scale Private Ordering</i>	164
2. <i>Large-Scale Private Ordering</i>	165
B. Private Environmental Governance and New Governance	170
III. OBJECTIONS	175
A. Is Private Environmental Governance a Coherent Concept?	175
B. Has Market Failure Occurred?	181
C. Is Private Environmental Governance of Concern to Lawyers?	182
D. Does Private Environmental Governance Matter? ...	184
1. <i>Standards</i>	185
2. <i>Effects on Environmental Behavior</i>	188
3. <i>Effects on Environmental Quality</i>	192
E. Why Is the Scope of Private Governance Hard to See?	195
F. Will Private Environmental Governance Lead to New Instruments?	197
CONCLUSION	198

INTRODUCTION

Environmental law is not what it once was. It is no longer just a subfield of positive law, namely administrative law, starting with mandates in the form of statutes, translated into regulations and enforced by agencies, and reviewed by trial and appellate courts, generating occasional iconic Supreme Court decisions such as *Vermont Yankee*,¹ *Chevron*,² and *Massachusetts v. EPA*.³ It is understandable if this is your view of environmental law. If you took an introductory environmental law class at almost any law school, read almost any environmental law casebook or undergraduate policy textbook, read the 300 or more environmental law articles published every year, or followed environmental policy debates in the mass media, you would be fully justified in believing that this positive, public governance model is environ-

¹ *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519 (1978).

² *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837 (1984).

³ 549 U.S. 497 (2007).

mental law.⁴ This is also the model that fits many of the metrics used to monitor environmental law: the number of major statutes and regulations, the costs and benefits of major regulations, the number of pages devoted to environmental issues in the Federal Register, the size of agency budgets and staff, and the number of enforcement actions and reported decisions.⁵

The standard model of environmental law still describes important aspects of what many environmental lawyers do and still has important effects on environmental behavior and environmental quality. Government officials at the federal and state levels are still engaged in developing, implementing, and enforcing important public environmental regulations. Industry and environmental groups lobby and litigate to affect the scope and implementation of public environmental laws and regulations. Corporations change behavior in response to regulations and enforcement actions affecting the handling of hazardous materials and discharges to the air and water. Household emissions are affected by new motor vehicle tailpipe standards, appliance efficiency standards, and pesticide regulations. In some regions, states have adopted new statutes and local governments have adopted new ordinances to address climate change, toxics, and other issues.⁶

Yet no major federal environmental statute has been enacted since the Clean Air Act Amendments of 1990. The period of statutory inaction (1991–2012) now exceeds the period of statutory growth (1970–1990).⁷ Despite substantial scholarship and advocacy directed toward the development of new public governance schemes, no major federal statute on climate change is likely in the near term,⁸ even though climate issues are arguably a more fundamental threat to the domestic and global environment than the problems addressed by the framework erected between 1970 and 1990.⁹ Reasonable arguments

⁴ See Michael P. Vandenbergh, *The Private Life of Public Law*, 105 COLUM. L. REV. 2029, 2030–32 (2005); Dan Tarlock, *Is a Substantive, Non-Positivist United States Environmental Law Possible?*, 1 MICH. J. ENVTL. & ADMIN. L. 159, 162 n.9 (2012); Linda K. Breggin, Jacob P. Byl, Lynsey R. Gaudioso, Seamus T. Kelly & Michael P. Vandenbergh, Comment, *Trends in Environmental Law Scholarship 2008–2012*, 43 ENVTL. L. REP. 10643, 10644–45 (2013).

⁵ See *infra* notes 274–76 and accompanying text.

⁶ See Katherine A. Trisolini, *All Hands on Deck: Local Governments and the Potential for Bidirectional Climate Change Regulation*, 62 STAN. L. REV. 669, 669 (2010).

⁷ See *infra* notes 44–47 and accompanying text. Many environmental analyses discuss the turbulent policy process of the last two decades but often overlook the absence of major new statutes. An exception is Richard J. Lazarus, *Congressional Descent: The Demise of Deliberative Democracy in Environmental Law*, 94 GEO. L.J. 619, 628–29 (2006).

⁸ See Elinor Ostrom, *Polycentric Systems for Coping with Collective Action and Global Environmental Change*, 20 GLOBAL ENVTL. CHANGE 550, 550 (2010).

⁹ See Jody Freeman & Andrew Guzman, *Climate Change and U.S. Interests*, 109 COLUM. L. REV. 1531, 1554 (2009); Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1155–56 (2009); Jonathan S. Masur & Eric A. Posner, *Climate Regulation and the Limits of Cost-Benefit Analysis*, 99 CALIF. L. REV. 1557, 1558 (2011).

can be made that other emerging issues such as fracking, environmental estrogens, nanotechnology, non-point source pollution, and deep-water oil drilling would be better addressed with a major federal statute, but none has emerged.¹⁰ Although notable exceptions exist at the state and local levels (e.g., California's climate law, AB 32), it is hard to argue that there has been a profusion of environmental legislative activity at these levels.

The absence of major statutory action is relevant whether the preferred outcome is to expand or shrink the scope of the statutory framework. Efforts to streamline or scale back federal environmental statutes have had as little success as efforts to expand the framework.¹¹ Major legislative initiatives designed to reform the Superfund statute, to reduce the reach of the Clean Water Act, and to insert cost-benefit analysis requirements into the federal environmental statutes have all failed. The emissions trading innovations of the 1990 Clean Air Act Amendments have not led to new emissions trading provisions in the Clean Water Act or other statutes. In short, what looked like a pause in the development of the federal environmental statutory scheme in the early 2000s now should be viewed as a more fundamental shift in the social response to environmental threats.

Although the shift away from public governance is not as stark in some other countries, comparable developments have occurred at the international level. Despite a remarkable number of conferences, pronouncements, and treaties, few significant binding environmental requirements have emerged at the international level.¹² International efforts to prevent depletion of major fisheries and tropical deforestation have failed.¹³ On climate change, the sweeping rhetoric of the 1992 United Nations Framework Convention on Climate Change (UNFCCC) has given way to the disappointments of Kyoto and Copen-

¹⁰ See, e.g., David B. Spence, *Federalism, Regulatory Lags, and the Political Economy of Energy Production*, 161 U. PA. L. REV. 431, 432 (2013) (concluding that it is premature for a federal fracking statute given current information).

¹¹ See RICHARD J. LAZARUS, *THE MAKING OF ENVIRONMENTAL LAW* 125, 149–50 (2004) (noting the absence of “statutory overhauls” in the 1990s and describing the period as “maintaining the road”); ROBERT V. PERCIVAL ET AL., *ENVIRONMENTAL REGULATION: LAW, SCIENCE, AND POLICY* 96–98 (5th ed. 2006) (describing the 1990s as a period of “[r]ecoil and [r]e invention”).

¹² Richard Lazarus has noted that the 1990s was a period of dynamism and growth in environmental treaties but also noted that the impacts have been limited. LAZARUS, *supra* note 11, at 145, 210 (concluding that as of 2000, seventy percent of the most important fish species were in decline).

¹³ See, e.g., Allison Winter, *Fisheries: WTO Searches for Path Forward to Deal with ‘Alarming’ Status of Fish Stocks*, E&ENews PM, Apr. 21, 2011, available at http://oceana.org/sites/default/files/oceana_in_the_news/EE_WTO_searches_for_path_forward_to_deal_with_alarming_status_of_fish_stalks_04.21.2011.pdf (reporting that “[d]espite ‘strong consensus’ among World Trade Organization delegates that they should respond to a ‘crisis’ in global fisheries, trade talks on international fisheries subsidies largely remain stalemated”).

hagen, and finally after Durban, to an agreement to try to reach an agreement with binding targets by 2020.¹⁴ More than 45,000 people flew to the 2012 Rio+20 Conference only to leave with a sense that public governance will not yield a timely international response.¹⁵ The notion that a comprehensive international agreement will not be possible in time to achieve widely acknowledged temperature targets is gaining momentum among scholars and policymakers.¹⁶

The lack of major federal statutes in the last two decades can be ascribed to many causes, but not to a simple decline in general public support for environmental protection. Assessing public support for environmental protection is difficult, and in some cases the relative priority given to environmental issues has shifted, but general public support for environmental protection has remained surprisingly strong.¹⁷ This Article argues that environmental preferences have been expressed not just through the political process, whether at the federal, state, or local levels, but also through private interactions in social settings and the marketplace. The product is private environmental governance—a new model of legal and extralegal influences on the environmentally significant behavior of corporations and households. Private–private interactions now generate many of the environmental requirements that affect corporate and household behavior, and ultimately environmental quality. These new private environmental governance activities play the standard-setting, implementation, monitoring, enforcement, and adjudication roles traditionally played by public regulatory regimes.¹⁸ They also interact in complex ways with public regulatory regimes, in some cases providing independent standards and enforcement, in others providing private enforcement of public standards, and in others undermining support for public standards.

Understanding private environmental governance requires a synthetic approach and an analytic approach: a synthetic approach to

¹⁴ See Dean Scott, *Pledge Toward 2020 Global Deal Ensures Decade of Inaction*, *World Bank Official Says*, ENV'T. REP. (BNA) Jan. 13, 2012, at 17; John M. Broder, *Climate Talks Yield Limited Agreement to Work Toward Replacing Kyoto Protocol*, N.Y. TIMES, Dec. 12, 2011, at A9.

¹⁵ See Colin Sullivan, *Are U.N. Environmental Mega-Conferences a Dying Breed?*, E&E PUBLISHING, LLC (June 25, 2012), <http://www.eenews.net/stories/1059966396>.

¹⁶ See DAVID G. VICTOR, *GLOBAL WARMING GRIDLOCK: CREATING MORE EFFECTIVE STRATEGIES FOR PROTECTING THE PLANET 1* (2011).

¹⁷ See, e.g., David P. Daniels et al., *Public Opinion on Environmental Policy in the United States*, in THE OXFORD HANDBOOK OF U.S. ENVIRONMENTAL POLICY 461, 467–70 (Sheldon Kamieniecki & Michael E. Kraft eds., 2013) (noting the difficulties of assessing public support for environmental protection and presenting data showing variations in public support for environmental protection from the early 1970s until 2010 but no substantial downward shift).

¹⁸ See Kenneth W. Abbott & Duncan Snidal, *The Governance Triangle: Regulatory Standards Institutions and the Shadow of the State*, in THE POLITICS OF GLOBAL REGULATION 44, 46 (Walter Mattli & Ngaire Woods eds., 2009).

identify the common features of seemingly disparate activities that fall outside the standard model; and an analytic approach to examine the incentives of the participants, the potential areas of influence, and the strengths and weaknesses of these activities as a form of governance. This Article does not suggest that private governance is a complete or optimal response to existing environmental problems. It does suggest that private governance is an increasingly important and growing component of modern environmental governance.

A check on the value of conceptualizing private environmental governance as a discrete new model is to read almost any leading text on environmental law and policy and ask whether the unspoken assumption is that the actor is the government and the action is some form of positive law (statute, regulation, or court decision interpreting the development and enforcement of statutes and regulations). This conceptual model is nearly ubiquitous, and it limits our understanding of environmental governance today and of the options available to address new challenges. For example, a leading history of environmental law describes the topic as “the effort to fashion pollution control laws” and the challenge as arising from “our nation’s varied processes for lawmaking and the ways those processes relate to important cultural norms.”¹⁹ The adoption of environmental laws is difficult in this view not only because of the features of ecological problems, but also because of “the structure and character of lawmaking institutions in the United States.”²⁰ Similarly, an influential recent essay on optimal responses to climate change suggests that “[d]omestic policy design faces one central question: Where should government intervene?”²¹ A leading undergraduate text on environmental policy begins with the proposition that “[h]uman uses of the environment are matters of governance, not merely of individual choice or economic markets[,]” and then responds to the argument that free markets will provide environmental amenities with an answer that assumes that governance means government: “For at least seven reasons, however, government involvement in environmental issues is both necessary and inevitable.”²² The analysis then flows naturally to ask “[w]hat kinds of government actions are the best tools for achieving public policy goals?”²³

¹⁹ LAZARUS, *supra* note 11, at xv.

²⁰ *Id.* at 2. Lazarus does note the emergence of private certification systems, but he was writing in the early 2000s when many types of private governance were only beginning to emerge. *See id.* at 188.

²¹ Michael Levi, *The Hidden Risks of Energy Innovation*, ISSUES IN SCI. & TECH. Winter 2013, at 73.

²² RICHARD N. L. ANDREWS, *MANAGING THE ENVIRONMENT, MANAGING OURSELVES: A HISTORY OF AMERICAN ENVIRONMENTAL POLICY* 1–2 (1999).

²³ *Id.* at 7.

The standard model accurately described environmental law during much of its history. Government was the dominant if not exclusive creator of environmental standards, and environmental scholarship focused on the instrument choices faced by government. The scholarship based on that model has examined the merits of competing regulatory instruments: government technology- or performance-based standards on the one hand, and government-created market mechanisms, such as cap-and-trade or tax programs, on the other.²⁴ More recently, New Governance scholars have noted that government has privatized some functions²⁵ and that public governance often includes public-private hybrids and collaborative governance.²⁶ Scholars also have expanded the instrument choice literature by focusing on how governments can create incentives for environmental information disclosure and adoption of corporate management systems.²⁷

The standard model remains vital to the resolution of environmental problems, but private environmental governance has emerged to complement and compete with it. At the domestic level, private governance is pervasive. Lawyers in private firms spend much of their time advising clients on compliance with private standards and on private transactions driven by environmental investigations, risk reduction, and risk-shifting, with public environmental laws being only one concern on the list.²⁸ Corporations spend over \$500 million on private environmental investigations in connection with commercial transactions annually, greater than the \$400 million annual budget of the entire Environmental Protection Agency (EPA) enforcement of-

²⁴ See, e.g., STEPHEN BREYER, *REGULATION AND ITS REFORM* 96–98 (1982) (discussing technology-based regulatory instruments); Bruce A. Ackerman & Richard B. Stewart, Comment, *Reforming Environmental Law*, 37 STAN. L. REV. 1333, 1341–42 (1985) (noting the advantages of emissions trading).

²⁵ See Jody Freeman & Martha Minow, *Introduction: Reframing the Outsourcing Debates*, in GOVERNMENT BY CONTRACT: OUTSOURCING AND AMERICAN DEMOCRACY 1, 20 (Jody Freeman & Martha Minow eds., 2009); Jody Freeman, *Extending Public Law Norms Through Privatization*, 116 HARV. L. REV. 1285, 1285 (2003).

²⁶ See Jody Freeman, *Collaborative Governance in the Administrative State*, 45 UCLA L. REV. 1, 2 (1997).

²⁷ See Richard B. Stewart, *Instrument Choice*, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 147, 152–54 (Daniel Bodansky et al. eds., 2007). For further discussion on environmental information disclosure, see Daniel C. Esty, *Environmental Protection in the Information Age*, 79 N.Y.U. L. REV. 115, 115 (2004) (arguing that emerging technologies will expand the range of environmental information disclosures and protection strategies); Cass R. Sunstein, *Informational Regulation and Informational Standing: Akins and Beyond*, 147 U. PA. L. REV. 613, 614 (1999) (detailing environmental statutes requiring private or public disclosure); see also Cary Coglianese, *Policies to Promote Systematic Environmental Management*, in REGULATING FROM THE INSIDE: CAN ENVIRONMENTAL MANAGEMENT SYSTEMS ACHIEVE POLICY GOALS? 181, 181–95 (Cary Coglianese & Jennifer Nash eds., 2001) (discussing government policies that promote adoption of corporate environmental management systems).

²⁸ See Vandenbergh, *supra* note 4, at 2048–49.

fice.²⁹ One study of roughly eighty firms in eight sectors concluded that more than half of the firms impose private environmental requirements on their suppliers,³⁰ and another study of over 1,000 firms reported that roughly forty percent impose such requirements.³¹ In some sectors, private corporate supply chain requirements are becoming the de facto constraints on the presence of toxics in consumer products.³² Many corporations have adopted environmental management systems not because of government requirements but because their supply contracts require them to comply with a private standard.³³

At the international level, private governance plays an even larger role. The most important development at the recent Rio+20 international conference was not an international agreement but a coordinated announcement of private commitments to reduce carbon emissions.³⁴ Roughly fourteen percent of the temperate forests around the world (nine percent of all productive forests) and seven percent of all fish caught for human consumption are subject to private certification systems that establish and enforce private management standards or increase the enforcement of government standards.³⁵ In some cases, private standards and enforcement oper-

²⁹ See Michael B. Gerrard, *A Proposal to Use Transactions to Leverage Environmental Disclosure and Compliance*, in *MOVING TO MARKETS IN ENVIRONMENTAL REGULATION: LESSONS FROM TWENTY YEARS OF EXPERIENCE* 420, 422 (Jody Freeman & Charles D. Kolstad eds., 2007) (noting the amount spent on Phase I environmental assessments); Vandenbergh, *supra* note 4, at 2049 (noting the size of the EPA's enforcement budget).

³⁰ See Michael P. Vandenbergh, *The New Wal-Mart Effect: The Role of Private Contracting in Global Governance*, 54 *UCLA L. REV.* 913, 916–17 (2007).

³¹ See THOMAS SINGER & MATTEO TONELLO, CONFERENCE BD., *SUSTAINABILITY PRACTICES*: 2012 EDITION 101 (2012).

³² See, e.g., *Upcoming Lautenberg Bill Could Be Key Test for TSCA Reform this Congress*, *INSIDE E.P.A. WEEKLY REPORT*, Apr. 1, 2011, at 6 [hereinafter *INSIDE E.P.A.*] (quoting Ernie Rosenberg of the American Cleaning Institute for the proposition that “[t]he loss of public confidence [in the public regulatory system means] we’re going to increasingly have retailers that are regulators, like Wal-Mart and Target”).

³³ See Cary Coglianese & Jennifer Nash, *Management-Based Strategies: An Emerging Approach to Environmental Protection*, in *LEVERAGING THE PRIVATE SECTOR: MANAGEMENT-BASED STRATEGIES FOR IMPROVING ENVIRONMENTAL PERFORMANCE* 3, 7, 10–11 (Cary Coglianese & Jennifer Nash eds., 2006).

³⁴ See JUAN COSTA CLIMENT & STEPHEN STARBUCK, ERNST & YOUNG LLP, *WHAT DID RIO+20 DELIVER FOR BUSINESS?* 2 (2012), available at [http://www.ey.com/Publication/vwLUAssets/Rio_20_Summit_leaves_lasting_legacy/\\$FILE/Rio_20_Summit_leaves_lasting_legacy.pdf](http://www.ey.com/Publication/vwLUAssets/Rio_20_Summit_leaves_lasting_legacy/$FILE/Rio_20_Summit_leaves_lasting_legacy.pdf); Richard Matthews, *Rio+20 Announcement: US Partners with CEOs to Reduce Deforestation Through Sustainable Agriculture*, *GREEN MARKET ORACLE* (June 22, 2012), <http://www.thegreenmarketoracle.com/2012/06/rio20-announcement-us-partners-with.html>; *Commitments*, *CLOUD OF COMMITMENTS*, <http://www.cloudofcommitments.org/commitments/> (last visited Sept. 11, 2013).

³⁵ See STEERING COMM. OF STATE-OF-KNOWLEDGE ASSESSMENT OF STANDARDS & CERTIFICATION, *TOWARD SUSTAINABILITY: THE ROLES AND LIMITATIONS OF CERTIFICATION* 9 (2012) [hereinafter *TOWARD SUSTAINABILITY*] (noting certification of nine percent of productive forests and seven percent of global landings of wild fish caught for human consumption);

ate with little or no government involvement, but in others, government requirements stimulate or provide the floor for private market responses. Much of the enforcement of public and private environmental standards in some countries arises through private inspectors enforcing private certification standards or supply chain contract requirements.

All of this private activity might be meaningless or even harmful if it is just green-washing—private activity designed to give the appearance of environmental benefits without delivering actual benefits. Corporations have incentives to use private governance to mollify stakeholder concerns and to displace more stringent government regulation, and it would be surprising if some private efforts do not have these effects. A recent comprehensive review of empirical research on private environmental certification systems, however, finds evidence of substantial positive impacts on corporate environmental behavior at the global and local levels.³⁶ This conclusion is consistent with a number of studies of other forms of private environmental governance.³⁷ The effects on corporate behavior are better established than the effects on environmental quality, but early indications suggest that some private governance programs have important effects on environmental quality as well.³⁸ A balanced, sophisticated understanding of private and public environmental governance is necessary to sift out the wheat from the chaff.

Despite the proliferation of private environmental governance activities and evidence of impacts, it is easy to miss the significance of these developments if we assume government is the relevant actor for resolving collective action problems and positive law is the action. Environmental preferences are expressed in purchasing, lending, investing, and supply chain contracting decisions, not just at the ballot box or through lobbying public officials. In fact, lobbying now often occurs when a firm or trade association lobbies a private organization, not the government, regarding its environmental standards.³⁹ Standard-setting occurs in private stakeholder groups or supply chain contract negotiations, not just through notice-and-comment rulemaking. Enforcement occurs through shaming, boycotts, private inspections, contract terminations or non-renewals, and preferential purchasing, not just through government inspections and sanctions. Disputes are often resolved in private conferences or arbitration proceedings, not

Introduction to Certification, PAPER LIFE CYCLE, <http://thepaperlifecycle.org/forests/in-depth/introduction-to-certification/> (last visited Aug. 26, 2013) (noting certification of fourteen percent of temperate forests).

³⁶ See TOWARD SUSTAINABILITY, *supra* note 35, at A-194.

³⁷ See discussion *infra* Parts III.D.2–3.

³⁸ See discussion *infra* Part III.D.3.

³⁹ See *infra* note 226 and accompanying text.

federal, state, or international courts. This private activity generates pressure on environmental behavior without resulting in a statute, regulation, agency enforcement action, or court decision for review by scholars and policymakers.

Adding an understanding of private governance to the standard model is valuable for several reasons. First, the emergence of private environmental governance suggests new ways to think about the collective action problems that impede environmental protection at the domestic and global levels. Analysts often move from identifying a collective action problem to evaluating which types of government action can address the problem, but this move misses important steps. The private model identifies sources of pressure on firm behavior other than government regulation. It also identifies reasons why private governance may be easier to achieve than public governance. Private market behavior may be less costly to individuals than political behavior and may require little or no collective action. Information collection and distribution may be less costly than government lobbying, firms may be more responsive to small shifts in consumer and other market behavior than the government is to shifts in public opinion, and small-group, iterative settings may arise among advocacy group and corporate leaders even though the sources of the problem and harms occur half way around the globe. In addition, national sovereignty concerns and the international trade regime may be less of a barrier to private environmental governance than they are to public regulation.

Second, the existence of the private governance option suggests the need to shift the decision heuristic applied to the evaluation of environmental laws and programs.⁴⁰ The existence of private governance options places a premium on understanding the counterfactual: What would have occurred in the absence of this activity? The question is not what will happen as compared to a hypothetical optimal government intervention, but what will happen as compared to the viable alternatives. If government is unable to act, an imperfect private governance measure may be preferable to the hypothetical public measure so long as the private measure is efficient and effective, and does not decrease the chance of a better public or private action. For example, a private fisheries program may not “solve” the problem of

⁴⁰ See generally Jonathan M. Gilligan & Michael P. Vandenbergh, *Accounting for Political Feasibility in Climate Instrument Choice*, 32 VA. ENVTL. L.J. (forthcoming 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2220788 (proposing explicit consideration of political opportunity costs in evaluating climate policy instruments); NEIL K. KOMESAR, IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY (1994) (emphasizing the importance of institutional choice analysis); Edward L. Rubin, *The New Legal Process, the Synthesis of Discourse, and the Microanalysis of Institutions*, 109 HARV. L. REV. 1393 (1996) (arguing for synthesis of discourse in institutional analysis).

overharvesting, but it may improve the condition of the fishery by filling a gap that the government is unable to fill or by complementing or buying time for government action.

Third and most important, an understanding of the private governance model can induce scholars to identify new solutions to environmental and other collective action problems. When private instruments are included among the governance options, it is not sufficient to identify optimal public regulatory instruments or public-private hybrids. Both the actor and the action are in play; government may not always be the best actor, and public regulation may not always be the best type of intervention. The optimal response may be private governance or a mix of public and private governance.⁴¹ Understanding private environmental governance can lead to new options for tackling climate change, fracking, environmental estrogens, and other important new challenges, as well as for addressing concerns about the cost and intrusiveness of environmental protection.⁴² It also can lead private advocacy organizations and foundations to shift from a focus on government lobbying and oversight of regulators to a focus on creating private incentives and institutions to facilitate individual and corporate behavior change.

A common formula in legal scholarship is to argue that an important development has been ignored and to claim to be the first to have identified or named the development. Too often the new development is not as important or as novel as the article claims, and claims of paradigm creation are overstated.⁴³ This Article does not claim that many of the private-private activities discussed here have been overlooked. As the footnotes suggest, an enormous amount of scholarship has been published on private governance activities, although much of that scholarship has appeared in the social science literature or areas of the legal literature outside of environmental law. The Article does claim that these activities, when viewed in the aggregate, represent a development in environmental law and governance that is not apparent from viewing any one activity in isolation or from existing scholarship. It also draws on recent empirical research to demonstrate that these activities are having important effects on environmental behavior and environmental quality. Perhaps most importantly, it offers the first steps toward a coherent theory of private

⁴¹ For articles that compare public governance approaches, see generally Robert N. Stavins, *Policy Instruments for Climate Change: How Can National Governments Address a Global Problem?*, 1997 U. CHI. LEGAL F. 293 (discussing various frameworks and instruments that nations and groups of nations can adopt to combat climate change); Jonathan Baert Wiener, *Global Environmental Regulation: Instrument Choice in Legal Context*, 108 YALE L.J. 677 (1999) (analyzing various environmental regulatory instruments).

⁴² See discussion *infra* Part III.F.

⁴³ I thank Richard Lazarus for this observation.

environmental governance that can facilitate critical analysis of existing public and private governance activities and identify opportunities for new applications. In short, although public governance still plays a large role, this Article offers an understanding of private governance that challenges the near-monopoly that public governance has exerted over environmental law scholarship, policymaking, organizations, and teaching for the last four decades.

I

THE GROWTH OF PRIVATE ENVIRONMENTAL GOVERNANCE

Roughly two dozen major federal environmental statutes were enacted from 1970 to 1990,⁴⁴ but none has emerged since.⁴⁵ The EPA and other agencies have continued to engage in substantial amounts of rulemaking, monitoring, and enforcement of statutory requirements. In addition, some state and local governments have also been active, whether in expanding or shrinking the environmental regulatory regime.⁴⁶ These public activities fit squarely within traditional conceptions of environmental law, and in areas such as greenhouse gas requirements for mobile and stationary sources, the federal regulatory activity has been extensive.⁴⁷

⁴⁴ For example, the statutes enacted during the 1970–1990 period that fit comfortably in almost any definition of “major” include the National Environmental Policy Act (signed into law on January 1, 1970), 42 U.S.C. §§ 4321–4347 (2006 & Supp. V 2011); the Clean Air Act (1970, later amended by the Clean Air Act Amendments in 1977 and 1990), 42 U.S.C. §§ 7401–7626 (2006); the Federal Water Pollution Control Act Amendments (1972, later amended by the Clean Water Act in 1977 and the Water Quality Act in 1987), 33 U.S.C. §§ 1251–1376 (2006 & Supp. V 2011); the Coastal Zone Management Act (1972), 16 U.S.C. §§ 1451–1464 (2012); the Safe Drinking Water Act (1974), 42 U.S.C. § 300f–300j (2006); the Resource Conservation and Recovery Act (1976, followed by the Hazardous and Solid Waste Amendments in 1984), 42 U.S.C. §§ 6901–6992k (2006); the Toxic Substances Control Act (1976), 15 U.S.C. §§ 2601–2671 (2012); the Comprehensive Environmental Response Compensation and Liability Act (CERCLA, or “Superfund”) (1980, followed by the Superfund Amendments and Reauthorization Act in 1986), 42 U.S.C. §§ 9601–9628 (2006); the Emergency Planning and Community Right to Know Act (1986), 42 U.S.C. §§ 11004–11049 (2006); and the Oil Pollution Act (1990), 33 U.S.C. §§ 2701–2761 (2006 & Supp. V 2011).

⁴⁵ It is possible to argue that the 1996 Food Quality Protection Act (FQPA), 7 U.S.C. § 136a, d, q, w (2012), and the Safe Drinking Water Act (SDWA) Amendments qualify as “major.” See, e.g., LAZARUS, *supra* note 11, at 125 (identifying the SDWA Amendments and the FQPA as the only major statutes during the 1990s); *Reference/Links: Environmental Laws & Treaties*, NATURAL RES. DEF. COUNCIL, <http://www.nrdc.org/reference/laws.asp> (last visited Sept. 2, 2013) (including the FPQA as the only major statute from the 1990–2012 period).

⁴⁶ See, e.g., John R. Nolon, *The Land Use Stabilization Wedge Strategy: Shifting Ground to Mitigate Climate Change*, 34 WM. & MARY ENVTL. L. & POL’Y REV. 1, 1 (2009) (describing how local governments are regulating land use to combat climate change); Trisolini, *supra* note 6, at 734–35 (discussing local climate change initiatives).

⁴⁷ See Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,324, 25,329–30 (May 7, 2010) (to be codified at 40 C.F.R. pts. 85, 86, 600; 49 C.F.R. pts. 531, 533, 536, 537, 538); Proposed

In the face of this activity, it is easy to overlook the large number of private environmental governance initiatives that have emerged during this period. This private governance activity suggests that public preferences for environmental protection often have been expressed through the marketplace and other private activities rather than through the political system. Part I develops a working definition of private environmental governance and demonstrates the range and extent of these private governance activities.

A. What Is Private Environmental Governance?

A barrier to defining private environmental governance is that two different legal fields with distinct vocabularies and conceptual frameworks have legitimate claims to the territory. I begin with a private law analysis and then turn to public law. I start with fundamentals because the role of private environmental governance only becomes clear if we begin with underlying assumptions and analytical approaches. Many questions remain about the origins and function of private environmental governance, but this uncertainty is true for environmental governance more generally. A substantial literature notes the lack of a dominant, coherent framework for understanding environmental law and policy.⁴⁸

The standard law and economics approach to analyzing the need for environmental governance proceeds along two levels. At the outset, environmental problems occur because some forms of environmental quality are common pool resources (CPR) that are subject to overuse.⁴⁹ Individuals and firms gain all of the advantages of using a CPR but share the costs and thus have incentives to overexploit the resource. These activities can take the form of harvesting commons resources (e.g., open-ocean fisheries) or emitting pollution (e.g., air

Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 74 Fed. Reg. 49,454, 49,483 (proposed Sept. 28, 2009) (to be codified at 40 C.F.R. pts. 86, 600; 49 C.F.R. pts. 531, 533, 537, 538) (describing “Temporary Lead-Time Allowance Alternative Standards”).

⁴⁸ See, e.g., Tarlock, *supra* note 4, at 160–61 n.1 (noting the absence of a “there there” in environmental law).

⁴⁹ A vast collection of literature exists on common pool resources, public goods, externalities, and the implications for environmental law. See ROBERT COOTER & THOMAS ULEN, *LAW & ECONOMICS* 45–46 (5th ed. 2008). For my purposes, it is sufficient to note that common pool resources are nonexcludable but rivalrous (e.g., fisheries). As a result, people have incentives to use as much as possible, leading to overuse. Public goods are nonexcludable and nonrivalrous. Public goods are undersupplied because people contribute less than their private valuation of the good given the possibility of free riding. In addition, private goods may have externalities that are both excludable and rivalrous, but the consumer does not pay the full price for the product because costs that are not valued in the market exist. I do not seek to contribute to the literature on these points here but seek to note that responses to common pool resources, public goods, and externalities are occurring in ways not contemplated by an exclusive focus on public governance.

and water emissions, in which case the commons is being used as a sink or dump).

A similar problem exists with the creation of some public goods (e.g., information or basic research). Individuals and firms may bear all of the costs but share the benefits and have incentives to undersupply the goods. In these cases, public goods may be underproduced because those who create them cannot capture a sufficient share of the benefits. Information about the environmental provenance and performance of goods and the environmental effects of corporate behavior are examples.

CPRs tend to be overused and public goods tend to be undersupplied without collective action, but collective action is difficult because of the transaction costs of organizing and incentives to free ride.⁵⁰ Individuals have an incentive to free ride in the exploitation of a CPR and in the provision of a public good (the first-order collective action problem). They also have incentives to free ride in the formation of and support for groups that seek to address these problems (the second-order collective action problem).⁵¹

In 1968, Garret Hardin identified the first-order collective action problem regarding global common pool resources and suggested that the options were ruin or the use of external, coercive authority to protect the resources.⁵² Government could exercise this coercive authority by regulating or creating private property rights.⁵³ Hardin did not explain how this government coercive authority would arise, and a few years earlier Mancur Olson had noted the second-order collective action problem that discourages the formation of the advocacy groups that drive government action.⁵⁴ At this point, the choice seemed to be between overcoming the substantial hurdles to national and international government regulation on the one hand and depletion of natural resources and environmental degradation on the other.

For some types of commons problems, a more optimistic outlook emerged in the following decades. Elinor Ostrom demonstrated that small groups can act collectively to manage resources without external coercive authority in some situations.⁵⁵ The work by Ostrom and

⁵⁰ See, e.g., BREYER, *supra* note 24, at 15–34.

⁵¹ See MANCUR OLSON JR., *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* 11–12 (1965).

⁵² See Garrett Hardin, *The Tragedy of the Commons*, 162 *SCI.* 1243, 1244–46 (1968).

⁵³ See *id.* For a discussion of Hardin's options, see Thomas Dietz, Elinor Ostrom & Paul C. Stern, *The Struggle to Govern the Commons*, 302 *SCI.* 1907, 1907 (2003).

⁵⁴ See OLSON, *supra* note 51, at 11–12.

⁵⁵ ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* 90 (1990) [hereinafter OSTROM, *GOVERNING THE COMMONS*]; ELINOR OSTROM, *UNDERSTANDING INSTITUTIONAL DIVERSITY* 259 (2005); Dietz, Ostrom & Stern, *supra* note 53, at 1907 (concluding that “[l]ocally evolved institutional arrangements governed by stable communities and buffered from outside forces have sustained resources

others suggested that in some small, closed commons situations, resources are often not overexploited or undersupplied. Ostrom developed criteria for the development of successful collective action, such as small, stable communities and limited outside pressure on the resource.⁵⁶ A parallel literature developed by Ellickson and others in law and economics focused less on common pool resources but identified comparable conditions for private ordering. This work identified important characteristics for norm-based private ordering such as iterative relationships, adequate information, and opportunities for social sanctioning.⁵⁷ The private ordering research by Ostrom, Ellickson, and others holds promise for management of some closed commons situations, including those faced by lobster fishermen in Maine and perhaps even the situation Hardin alluded to in his 1968 article: medieval English herders using a commons for cattle grazing.⁵⁸

Many of the most pressing environmental protection problems occur at large scales (e.g., pollutants in watersheds that encompass multiple jurisdictional boundaries), however, and do not involve the types of commons problems that are likely to be resolved through small group action (e.g., fisheries with open access and strong pressure on the resource). For environmental protection problems such as climate change, open ocean fisheries, and stratospheric ozone depletion, the response must occur despite the existence of large groups, few opportunities for iterative relationships, limited information, and substantial pressure on the resource. In addition, a third-order collective action problem exists for many of these problems, since not only must collective action occur within any one nation, but it also must occur among many of the 192 nations in the international community.⁵⁹ The need for coercive authority for many environmental problems remains, and it exists at the local, national, regional, and global levels.

A natural next step, seemingly confirmed by the developments of the first era of environmental law, is that the source of coercive au-

successfully for centuries"); see also Oran R. Young, *Building Regimes for Socioecological Systems: Institutional Diagnostics*, in INSTITUTIONS AND ENVIRONMENTAL CHANGE: PRINCIPAL FINDINGS, APPLICATIONS, AND RESEARCH FRONTIERS 115, 123 (Oran R. Young, Leslie A. King & Heike Schroeder eds., 2008) (discussing effective "self-contained" institutional arrangements).

⁵⁶ See Ostrom, *GOVERNING THE COMMONS*, *supra* note 55, at 90. For a discussion of the implications of Ostrom's work for global commons problems, see Dietz, Ostrom & Stern, *supra* note 53, at 1907–09.

⁵⁷ See Robert C. Ellickson, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* 124 (1991); Eric A. Posner, *LAW AND SOCIAL NORMS* 34–35 (2000).

⁵⁸ See Dietz, Ostrom & Stern, *supra* note 53, at 1907 (noting the evolution of "self-governing institutions").

⁵⁹ For a discussion of collective action problems that arise among nations on a global scale, see Jonathan Baert Wiener, *On the Political Economy of Global Environmental Regulation*, 87 GEO. L.J. 749, 750 (1999).

thority to address collective action problems is the government, and public governance is thus necessary for environmental protection.⁶⁰ The classic environmental analysis in the social science literature thus moves from an examination of collective action problems to an assumption that the actor that can resolve the collective action problem in large-group, open commons situations is the government.⁶¹ The assumed form of the intervention is public laws and policies. Hardin makes this move unequivocally, arguing that a global government is necessary to address global environmental problems.⁶²

Although economists prefer market solutions, a largely unspoken assumption is that government is the actor that can provide the coercive authority necessary to resolve environmental collective action problems. Economists see environmental problems as market failures and try to identify the response that most directly corrects the market failure at least cost to society. Government action can be judged based on whether the response is efficient: the beneficiaries can compensate the losers and have something left over.⁶³ Public governance can occur through a wide range of public legal measures by international, national, and subnational governments, such as command and control regulations, liability schemes, taxes, subsidies, entitlements to pollute, or mandated information disclosure. In each of these scenarios, the government acts to manage a CPR, ensure the provision of a public good, or reduce a negative externality, and the core questions are how governments can be induced to act and what the design of the public governance measures should be.

This analysis assumes that government plays a strong role in the protection or creation of property rights to correct the market failure. For example, the Coasian solution that has been most widely noted in environmental law, the trading of acid rain precursors, was made possible by the creation of property rights or entitlements to pollute in Title IV of the Clean Air Act Amendments of 1990. Similarly, although cap-and-trade has been a favored response to climate change, it requires government action such as the Waxman-Markey climate legislation, which would have created a similar entitlement system for greenhouse gas emissions. Pollution taxes, the other favorite of economists, also require a strong government role to impose, collect, and

⁶⁰ See, e.g., ANDREWS, *supra* note 22, at 1–2. This is also consistent with the Westphalian structure. See Errol E. Meidinger, *The New Environmental Law: Forest Certification*, 10 BUFF. ENVTL. L.J. 211, 257 (2002).

⁶¹ See ANDREWS, *supra* note 22, at 1–2.

⁶² See Dietz, Ostrom & Stern, *supra* note 53, at 1907; Hardin, *supra* note 52, at 1243.

⁶³ See COOTER & ULEN, *supra* note 49, at 45–46.

distribute the proceeds of the taxes.⁶⁴ Similarly, when information provision is the response to overcoming market failures, economists typically assume that the government either collects and discloses the information directly or requires regulated entities to disclose.⁶⁵ Even strong free market advocates assume that the government will create property rights, the courts in which parties bring common law tort claims, and the enforcement mechanisms to ensure compliance with court orders.⁶⁶ In short, private law treatments of environmental law offer a rigorous analysis of the origins of environmental problems and a preferred type of solution, but the solution typically requires public action to correct the private market failure.

In contrast, public law treatments of environmental law do not present the analytically tidy view of environmental problems and solutions offered by private law scholars.⁶⁷ The leading environmental law casebooks by public law scholars offer a mix of readings about game theory and collective action problems, economics, and environmental ethics, and then move to an analysis of the process and products of positive law.⁶⁸ This is a reflection of the state of the field, not a short-coming of the texts. A traditional public law analysis might start with the assertion that environmental or human health harms arising from pollution or resource depletion undermine public welfare or social justice, and that the appropriate response of the state is to adopt statutes and regulations through democratic processes. These statutes enable government to regulate sources of pollution and resource extraction and in some cases create rights in individuals or institutions to be free from pollution or resource depletion. The role of the government is to reduce environmental harms and secure those rights in the face of collective action problems. Various aspects of constitutional and administrative law determine the extent to which these statutory ends or rights will be protected, what level of government

⁶⁴ See Gilbert E. Metcalf & David Weisbach, *The Design of a Carbon Tax*, 33 HARV. ENVTL. L. REV. 499, 502 n.11 (2009); Robert N. Stavins, *A Meaningful U.S. Cap-and-Trade System to Address Climate Change*, 32 HARV. ENVTL. L. REV. 293, 348–53 (2008).

⁶⁵ An exception is Tom Lyon. See Thomas P. Lyon, *Environmental Governance: An Economic Perspective*, in GOVERNANCE FOR THE ENVIRONMENT: NEW PERSPECTIVES 43, 43 (Magali A. Delmas & Oran R. Young eds., 2009) (discussing environmental governance through “private politics” and “the workings of the marketplace”).

⁶⁶ See TERRY L. ANDERSON & DONALD R. LEAL, *FREE MARKET ENVIRONMENTALISM* 3 (1991).

⁶⁷ See, e.g., DOUGLAS A. KYSAR, *REGULATING FROM NOWHERE: ENVIRONMENTAL LAW AND THE SEARCH FOR OBJECTIVITY* 9–10 (2010). For a general treatment of regulatory justifications in administrative law, see LISA SCHULTZ BRESSMAN, EDWARD L. RUBIN & KEVIN M. STACK, *THE REGULATORY STATE* 61–75 (2010) (presenting the economic justifications for regulation, including environmental regulation, developed by Stephen Breyer).

⁶⁸ See, e.g., DANIEL A. FARBER ET AL., *CASES & MATERIALS ON ENVIRONMENTAL LAW* (7th ed. 2006); PERCIVAL ET AL., *supra* note 11.

should act, how government actors will be held accountable, and who will bear the costs.

The common feature of both the public and private law views is that the source of coercive authority needed to address environmental problems is the government. With the limited exception of the closed commons problems identified by Ostrom and others, the government either intervenes to enable the market to operate more efficiently, to protect rights, or to achieve particular environmental outcomes. In recent years, the New Governance literature has noted that government not only acts unilaterally, but also in the form of a wide range of public-private hybrids in which the government remains an important, if not essential, actor.⁶⁹ In short, although deep differences exist between public and private law scholars who address environmental problems, the government is the source of the coercive authority and positive law is the core instrument.

Regardless of which framework is used, however, the emergence of private environmental governance in the last two decades suggests that a different response to collective action problems is possible. By private environmental governance, I mean actions taken by non-governmental entities that are designed to achieve traditionally governmental ends such as managing the exploitation of common pool resources, increasing the provision of public goods, reducing environmental externalities, or more justly distributing environmental amenities. The actions taken by these non-governmental entities often include the traditional standard-setting, implementation, monitoring, enforcement, and adjudication functions of governments.⁷⁰

Many treatments of private environmental governance in political science, international relations, and sociology focus on collective private standard-setting activities, such as global private certification systems for consumer products.⁷¹ In addition to these collective

⁶⁹ See discussion *infra* Part II.B.

⁷⁰ See Abbott & Snidal, *supra* note 18, at 46; Steven Bernstein & Benjamin Cashore, *Can Non-State Global Governance Be Legitimate?: An Analytical Framework*, 1 REG. & GOVERNANCE 347, 349–50 (2007) (identifying five key features of non-state market driven governance systems); see also Rodney Bruce Hall & Thomas J. Biersteker, *The Emergence of Private Authority in the International System*, in THE EMERGENCE OF PRIVATE AUTHORITY IN GLOBAL GOVERNANCE 3, 4 (Rodney Bruce Hall & Thomas J. Biersteker eds., 2002) (noting that the functions undertaken by non-state actors include that “[t]hey set agendas, they establish boundaries or limits for action, . . . they provide order and security[,] . . . [and] [t]hey act simultaneously both in the domestic and in the international arenas”).

⁷¹ For example, certification systems have been described in the sociology literature as “private regulation,” Tim Bartley, *Certifying Forests and Factories: States, Social Movements, and the Rise of Private Regulation in the Apparel and Forest Products Fields*, 31 POL. & SOC’Y 433, 433–34 (2003), in the political science literature as “‘non-state market-driven’ governance,” BENJAMIN CASHORE ET AL., GOVERNING THROUGH MARKETS: FOREST CERTIFICATION AND THE EMERGENCE OF NON-STATE AUTHORITY 4 (2004), or “private regulation,” David Vogel, *The Private Regulation of Global Corporate Conduct*, 49 BUS. & SOC’Y 68, 68 (2010), and

standard-setting activities, I also include bilateral standard-setting in the definition of private environmental governance, such as when private supply chain contracts include provisions that are designed to reduce the environmental harms arising from the suppliers' operations, when a borrower agrees in a loan agreement to adopt an environmental management system, or when a community group enters into an agreement with a local firm requiring toxics disclosures that exceed federal, state, or local government standards.⁷² Collective or bilateral standard-setting need not be motivated by altruism to be characterized as private environmental governance so long as it induces a private entity to achieve a traditionally governmental objective (e.g., protection of a common pool resource or creation of a public good) or to serve a traditionally governmental function (e.g., monitoring and enforcement).

The common feature of the activities that I characterize as private environmental governance is the development and enforcement by private parties of requirements designed to achieve traditionally governmental ends.⁷³ Governmental bodies may encourage or discourage the formation and enforcement of these private requirements but they do not participate in or control the outcome of these private requirements to a substantial extent.⁷⁴ Instead, private parties overcome collective action barriers or bypass the need for collective action altogether to achieve environmental protection. Starting with this admittedly rough definition, I next provide examples that I argue qualify as private environmental governance.

B. Examples of Private Environmental Governance

As with earlier developments in environmental governance, private environmental governance activities are not the product of theory preceding action. Instead, they have emerged in many locales and at scales ranging from local to global, leaving scholars to explain what happened even though they do not fit neatly into analytical categories.

in the legal literature as "competitive supragovernmental regulation," Errol Meidinger, *Competitive Supragovernmental Regulation: How Could It Be Democratic?*, 8 CHI. J. INT'L L. 513, 513 (2008), and "private sustainability governance," Kenneth W. Abbott, *Engaging the Public and the Private in Global Sustainability Governance*, 88 INT'L AFF. 543, 543 (2012).

⁷² See Vandenbergh, *supra* note 30, at 970.

⁷³ Private governance has been defined elsewhere as the "rules and structures by which individuals, communities, firms, civic organizations, and other entities govern their interests without the direct involvement of the state or its subsidiaries." Tracey M. Roberts, *Innovations in Governance: A Functional Typology of Private Governance Institutions*, 22 DUKE ENVTL. L. & POL'Y F. 67, 69 (2011).

⁷⁴ Of course, some level of governmental involvement will induce legal institutions to treat a private governance entity as a public entity. See Mark A. Cohen & Michael P. Vandenbergh, *The Potential Role of Carbon Labeling in a Green Economy*, 34 ENERGY ECON. S53, S60 (2012) (discussing the treatment of private systems by the international trade regime).

ries. Although some types fit easily into the types of local, closed commons private ordering responses that Ostrom and others have explained quite well, other types exist at global scales with resources under great pressure and are hard to explain through the private ordering literature. The discussion below does not attempt to include all private governance activities, but it provides a brief overview of the wide range of activities that can be characterized as private environmental governance, and it demonstrates that a substantial number of private actors are at least ostensibly participating.⁷⁵ I begin with private governance that involves collective standard-setting and then turn to bilateral standard-setting.

1. *Collective Standard-Setting*

Certification and Labeling Systems. Ecolabeling systems have grown dramatically in the last two decades, and more than 400 are now in existence around the world.⁷⁶ Many of these labels are awarded to products or services by non-governmental organizations that set standards, certify compliance, and allow certified products or services to display a label. Some of these certification and labeling systems are designed, implemented, and funded by governments (e.g., the Nordic Swan label), but many have little or no governmental involvement.

Much of the modern certification activity began soon after the development of the Forest Stewardship Council (FSC), the leading forest certification program.⁷⁷ The FSC is an example of private governance emerging to fill a gap after a period of government inaction. Following the failure of efforts to negotiate a binding international agreement on forest protection in the 1980s, environmental and human rights groups turned their attention to creating standards for well-managed forests.⁷⁸ They induced a number of leading wood

⁷⁵ Examples of private environmental governance activities that are not included in the discussion are conservation easements and homeowner association environmental covenants.

⁷⁶ See TOWARD SUSTAINABILITY, *supra* note 35, at 1 (citing ECOLABEL INDEX, www.ecolabelindex.com (last visited Aug. 31, 2013)).

⁷⁷ See *id.* at 7. Organic certification and labeling systems are widespread, but these systems have been studied at length, and I focus here on other areas that may be less familiar to legal audiences.

⁷⁸ See Benjamin Cashore & Michael W. Stone, *Can Legality Verification Rescue Global Forest Governance?: Analyzing the Potential of Public and Private Policy Intersection to Ameliorate Forest Challenges in Southeast Asia*, 18 FOREST POL'Y & ECON. 13, 14 (2012) (noting that advocacy groups promoted the FSC after "efforts to develop a binding global forest convention at the 1992 Rio Earth Summit" failed); *History: An Innovative Idea Takes Root*, FOREST STEWARDSHIP COUNCIL, <https://ic.fsc.org/our-history.17.htm> (last visited Aug. 26, 2013); see also Magali A. Delmas & Oran R. Young, *Introduction: New Perspectives on Governance for Sustainable Development*, in GOVERNANCE FOR THE ENVIRONMENT: NEW PERSPECTIVES 3, 8 (Magali A. Delmas & Oran R. Young eds., 2009) (mapping private environmental governance systems like the FSC); Errol Meidinger, *Multi-Interest Self-Governance Through Global Product Certifica-*

products companies and traders to participate and established the FSC in 1994.⁷⁹ The FSC governing body consists of a wide range of private stakeholders, sets standards for well-managed forests, and provides a certification based on private third-party verification.⁸⁰ Forest products harvested from certified forests are permitted to display the FSC label.⁸¹ In response to concerns about some aspects of the FSC system, the Sustainable Forestry Initiative (SFI), a competing group with a stronger corporate focus, later emerged.⁸² In addition, the Programme for the Endorsement of Forest Certification (PEFC) was formed in 1999 to provide a forest certification program for small forest owners.⁸³

Forestry sustainability systems have been widely adopted around the world. Today, more than 14% of all temperate forests (9% of all productive forests) around the world are certified to FSC and PEFC standards.⁸⁴ The PEFC certifies 244 million hectares of forest owned by over 750,000 forest owners, and it includes over 9,700 firms in its chain-of-custody program.⁸⁵ The U.S. has over 8 million acres (roughly 40% of private U.S. forest land) managed to FSC or PEFC standards.⁸⁶

The Marine Stewardship Council (MSC) is another example of a certification system that emerged as a result of a perceived gap in government action.⁸⁷ The World Wildlife Fund and Unilever formed the MSC in response to concerns about the sustainability of fisheries supplying fish to consumer markets in Europe, but it is now a global organization.⁸⁸ The MSC administers standards for sustainable fisheries, updates the standards periodically with input from a stakeholder advisory group, evaluates fisheries, and allows those fisheries that meet certain criteria to label their fish as MSC-certified.⁸⁹ As with the FSC,

tion Programmes, in RESPONSIBLE BUSINESS: SELF-GOVERNANCE AND LAW IN TRANSNATIONAL ECONOMIC TRANSACTIONS 259, 260–70 (Olaf Dilling et al. eds., 2008) (explaining the trend of having products certified through private inspections by using forestry as an example).

⁷⁹ See *History: An Innovative Idea Takes Root*, *supra* note 78.

⁸⁰ See *Governance: Built Upon the Principles of Participation, Democracy, and Equity*, FOREST STEWARDSHIP COUNCIL, <https://ic.fsc.org/governance.14.htm> (last visited Aug. 26, 2013).

⁸¹ See *FSC Certification: Ensuring Environmental, Social, and Economic Benefits*, FOREST STEWARDSHIP COUNCIL, <https://ic.fsc.org/certification.4.htm> (last visited Aug. 26, 2013).

⁸² See SUSTAINABLE FORESTRY INITIATIVE, <http://www.sfiprogram.org/> (last visited Aug. 27, 2013).

⁸³ See PROGRAMME FOR ENDORSEMENT FOREST CERTIFICATION, <http://pefc.org/> (last visited Aug. 27, 2013).

⁸⁴ See sources cited *supra* note 35.

⁸⁵ See PROGRAMME FOR ENDORSEMENT FOREST CERTIFICATION, *supra* note 83.

⁸⁶ See TOWARD SUSTAINABILITY, *supra* note 35, at A-114.

⁸⁷ See *id.* at 21.

⁸⁸ See MARINE STEWARDSHIP COUNCIL, <http://www.msc.org/> (last visited Aug. 27, 2013).

⁸⁹ See *About Us*, MARINE STEWARDSHIP COUNCIL, <http://www.msc.org/about-us> (last visited Aug. 27, 2013).

private auditors assess compliance with the MSC standards. The MSC not only enforces its private standards, but it explicitly builds on and adds a private enforcement mechanism to applicable government standards. The MSC is a good example of the complex relationship of public and private environmental governance. The MSC was formed by private organizations and does not operate under government control or with government funding, but one of its requirements for sustainable fisheries is compliance with the nonbinding Code of Conduct produced by the United Nations Food and Agriculture Organization.⁹⁰

Today the MSC certifies roughly seven percent of the seafood caught for human consumption in the world, and roughly sixty percent of the seafood caught for human consumption from U.S. fisheries is certified or is from fisheries that are under assessment for certification.⁹¹ Firms such as Wal-Mart sell only wild-caught fish from MSC-certified fisheries,⁹² and in 2013, McDonald's announced that it would sell MSC-certified fish at all U.S. locations.⁹³ A mini-industry has developed in the fisheries area, with for-profit and not-for-profit firms providing technical assistance to fisheries attempting to make improvements to satisfy the demands of large buyers for certified fish.

Private standards and labeling also have been developed in areas of emerging importance. For example, certification systems have emerged for aquaculture in recent years with procedures, private standards, and implementation that follow roughly along the lines of the FSC and MSC. Aquaculture accounts for much of the increased seafood consumption that is accompanying global population growth.⁹⁴ In 2011, total inland and marine aquaculture production was 63.6 million tons,⁹⁵ and in 2009, aquaculture accounted for 38% of all global fisheries products.⁹⁶ A significant portion of the wild catch is used for fishmeal, however, so aquaculture provides nearly 50% of the global catch intended for direct human consumption.⁹⁷ At the global level, approximately 2.6% of aquaculture production (1,339,000 metric tons) is certified through third-party inspection each year.⁹⁸

⁹⁰ See *id.*

⁹¹ See TOWARD SUSTAINABILITY, *supra* note 35, at A-75

⁹² See *id.* at A-74.

⁹³ See McDonald's USA First National Restaurant Chain to Serve MSC Certified Sustainable Fish at All U.S. Locations, MARINE STEWARDSHIP COUNCIL (Jan. 24, 2013), <http://www.msc.org/newsroom/news/mcdonalds-usa-first-restaurant-chain-to-serve-msc-certified-sustainable-fish-nationwide>. McDonalds took the same action in Europe in 2011. See *id.*

⁹⁴ See TOWARD SUSTAINABILITY, *supra* note 35, at A-36.

⁹⁵ See FOOD & AGRIC. ORG. OF THE UNITED NATIONS, THE STATE OF WORLD FISHERIES AND AQUACULTURE 3 (2012).

⁹⁶ See TOWARD SUSTAINABILITY, *supra* note 35, at A-37.

⁹⁷ See *id.* at A-37.

⁹⁸ See *id.* at A-35.

In addition, many other foods sold in international commerce are subject to private certification and standards systems. For example, in 2010, approximately 20% of all bananas were sold under a certification scheme,⁹⁹ and 8% of global coffee sales were sold as certified while 17% of global coffee was produced as compliant with these standards.¹⁰⁰ Between 2005 and 2010, global coffee certification grew by 433%.¹⁰¹ Similarly in 2010, 7.7% of global tea was sold as certified, and between 2005 and 2010, global tea certification grew by 2000%.¹⁰²

Lending Standards. The Equator Principles are a set of environmental assessment and disclosure requirements that major banks agree to impose on project finance borrowers for projects around the world.¹⁰³ In project finance lending, the loaned funds are used for a specific project and the project is expected to generate the revenues that will enable repayment of the loan. The project also serves as the security for the loan. Some of these projects (e.g., power plants and pipelines) have raised environmental concerns, particularly in the developing world. The Equator Principles emerged after protests by environmental groups and encouragement by the International Finance Corporation (IFC) and World Bank induced several major banks to agree on a common set of standards for environmental impact disclosure and for managing the environmental risks arising from project finance lending.¹⁰⁴ The standards apply to global project finance lending for loans of over ten million dollars.¹⁰⁵

The Equator Principles require disclosure that is roughly analogous to the information included in an environmental assessment or environmental impact statement under the National Environmental Policy Act (NEPA).¹⁰⁶ Like NEPA, the implementation of the Equator Principles often does not require any particular environmental outcome, but the system relies on information development and disclosure as a means of influencing which projects receive funding and the design of those projects. Unlike NEPA, however, the Equator Princi-

⁹⁹ See *id.* at A-126.

¹⁰⁰ See *id.* at 9 (“sold as certified” here refers to certification by UTZ Certified, Rainforest Alliance, 4C, Fairtrade, organic, CAFE Practices, or Nespresso).

¹⁰¹ See *id.*

¹⁰² See *id.* For a recent analysis of kosher certification as a form of private regulation of food production, see TIMOTHY D. LYTTON, *KOSHER: PRIVATE REGULATION IN THE AGE OF INDUSTRIAL FOOD* (2013).

¹⁰³ See *About the Equator Principles*, EQUATOR PRINCIPLES, <http://www.equator-principles.com/index.php/about-ep/about-ep> (last visited Aug. 31, 2013).

¹⁰⁴ John M. Conley & Cynthia A. Williams, *Global Banks as Global Sustainability Regulators?: The Equator Principles*, 33 *LAW & POL’Y* 542, 543–44, 558–59 (2011).

¹⁰⁵ See EQUATOR PRINCIPLES, <http://www.equator-principles.com> (last visited Aug. 27, 2013); see also Conley & Williams, *supra* note 104, at 547–548; Andrian Lozinski, *The Equator Principles: Evaluating the Exposure of Commercial Lenders to Socio-Environmental Risk*, 13 *GER. L.J.* 1490 (2012).

¹⁰⁶ See 42 U.S.C. §§ 4321–4347 (2006 & Supp. V 2011).

ples also direct lenders to require borrowers to develop and implement plans to reduce environmental impacts.¹⁰⁷ The Equator Principles were initially adopted by a group of private banks, not government agencies, although the initial meeting of project finance lenders was convened by the IFC. The Equator Principles also draw on and reference the IFC Performance Standards and the World Bank Group Environmental, Health, and Safety Guidelines. The Equator Principles are administered by an unincorporated association of member institutions (the EP Association), and they have been updated twice through a remarkably elaborate public disclosure and comment process that resembles informal notice-and-comment rulemaking.¹⁰⁸

The Equator Principles have been widely adopted. Roughly eighty of the largest global financial institutions have now agreed to comply.¹⁰⁹ Project finance lending by member banks accounts for more than seventy percent of global project finance lending in developing countries.¹¹⁰

Commodities Roundtables. Many goods are sold in commodity markets (e.g., corn, wheat, and other grains), and the supply chains are difficult to identify. Consumer or interest group pressure on consumer-facing businesses of the type that contributed to the development of the FSC and MSC certification systems is unlikely to result in changes in production methods for commodities, since food retailers typically do not buy directly from the producers and the goods do not have a clear consumer brand identity. Despite the barriers to development of private governance systems for commodities, environmental groups, retailers, producers, and others have responded by forming commodity roundtables for palm oil, cotton, and other commodities in the last decade. An example is the Roundtable on Sustainable Palm Oil, which seeks to create an adequate chain of custody and to certify suppliers of palm oil.¹¹¹ As with many international private governance initiatives, the private activities in this area include governmental involvement in some cases and in others exist alongside similar government initiatives.¹¹²

¹⁰⁷ See Lozinski, *supra* note 105, at 1492.

¹⁰⁸ See *The Equator Principles Association: Governance & Management*, EQUATOR PRINCIPLES, <http://www.equator-principles.com/index.php/governance-and-management> (last visited Aug. 27, 2013); see also *The Equator Principles III: 2013*, EQUATOR PRINCIPLES, <http://www.equator-principles.com/index.php/ep3> (last visited Aug. 27, 2013) (discussing the new version of the Equator Principles (EP III)).

¹⁰⁹ See *About the Equator Principles*, *supra* note 103.

¹¹⁰ See *id.*

¹¹¹ See *Vision and Mission*, ROUNDTABLE ON SUSTAINABLE PALM OIL, http://www.rspo.org/en/vision_and_mission (last visited Aug. 27, 2013).

¹¹² For example, the United Nations Conference on Trade and Development and the International Institute for Sustainable Development have formed the Sustainable Commodities Initiative (SCI), which is promoting the development of voluntary sustainability

Commodity programs have developed a remarkable degree of flexibility to account for the challenges arising from these goods. For example, GreenPalm is a program started by the World Wildlife Fund that addresses palm oil and has combined environmental certification with a trading system.¹¹³ Palm oil is an ingredient in nearly half of all supermarket products, and these products often have blends of many different types of palm oil.¹¹⁴ As a result, certifying only a subset of palm oil producers will not result in large quantities of palm oil that are totally from certified sources, and switching the entire supply chain to sustainable palm oil would be difficult. The GreenPalm plan allows a business to obtain a certificate for every ton of palm oil it can certify as sustainable.¹¹⁵ Businesses can then trade these certificates to offset unsustainable production. Although this approach results in products that have some noncertified palm oil being labeled as certified, it led to the production of one million tons of certified palm oil in the first two years.¹¹⁶ This resulted in nine million dollars paid to producers to stimulate the development of sustainable palm oil production.¹¹⁷

Green Building Standards. The private standards established by the U.S. Green Building Council (USGBC), Leadership in Energy and Environmental Design (LEED), influence the design and construction of buildings in the United States.¹¹⁸ The LEED standards allow builders to certify compliance with efficiency and environmental requirements at several levels of stringency (Platinum, Gold, Silver, and Bronze). The USGBC, a non-governmental organization, establishes, modifies, and administers the LEED standards with input from stakeholder groups. The LEED process also involves private verification that is financed in part by certification charges.¹¹⁹

As of 2012, LEED-certified buildings accounted for two billion square feet of occupied space in the U.S.¹²⁰ Additionally, the total value of LEED-certified, non-residential construction projects in 2010

initiatives focused on commodity production with improved environmental, economic, and social effects. See SUSTAINABLE COMMODITY INITIATIVE, <http://sustainablecommodities.org> (last visited Aug. 27, 2013). The SCI focuses not only on fungible commodities but also on the other areas involving global supply chains that have been the subject of private governance activity such as forests, fisheries, and carbon emissions. See *id.*

¹¹³ See GREENPALM, <http://www.greenpalm.org> (last visited Aug. 27, 2013).

¹¹⁴ See *id.*

¹¹⁵ See *id.*

¹¹⁶ See TOWARD SUSTAINABILITY, *supra* note 35, at 55.

¹¹⁷ See *id.*

¹¹⁸ See LEED, U.S. GREEN BUILDING COUNCIL, <https://www.usgbc.org/leed> (last visited Aug. 27, 2013) (LEED stands for Leadership in Energy and Environmental Design).

¹¹⁹ See *id.*

¹²⁰ See U.S. GREEN BUILDING COUNCIL, GREEN BUILDING FACTS 1 (2012), available at <http://www.usgbc.org/sites/default/files/Docs18693.pdf>.

was fifty-four billion dollars—thirty-five percent of the total market.¹²¹ Estimates project that LEED-certified projects will make up forty-eight percent of the non-residential construction market by 2015.¹²² Advising clients on the LEED standards is now an important aspect of the practice of law for many environmental and land use lawyers.¹²³ Industry groups now lobby the USGBC regarding the content of the LEED standards in ways that might have been directed at Congress or the Environmental Protection Agency two decades ago.¹²⁴

The existence of the LEED standards provides an example of the type of strategic shift that can occur when private governance is an option. A recent study demonstrated that most people mistakenly believe that using hot water when washing hands makes hands cleaner.¹²⁵ The study concluded that several million tons of greenhouse gas emissions could be reduced by only supplying comfortable, not warm or hot, water in building sinks.¹²⁶ In past years, environmental advocates might have drawn on this type of study to lobby federal, state, or local agencies, but today the lobbying may be more appropriately directed at the USGBC for inclusion in the LEED standards for green buildings.

Environmental Management Standards. Public and private organizations have developed standards for corporate environmental management systems, and there are some indications from empirical studies that these standards improve firm environmental compliance with environmental laws and overall environmental performance.¹²⁷ Perhaps the best-known environmental management standard is the Interna-

¹²¹ See HARVEY M. BERNSTEIN, MCGRAW HILL CONSTRUCTION, *THE GREEN OUTLOOK 2011: GREEN TRENDS DRIVING GROWTH THROUGH 2015*, at 6 (2010).

¹²² See *id.* at 7.

¹²³ See, e.g., Jonathan C. Kinney & Timothy R. Hughes, *Practice as a LEED-Accredited Professional*, VA. LAW. WKLY. (May 31, 2010), <http://valawyersweekly.com/2010/05/31/practice-as-a-leed-accredited-professional/> (discussing the logistics of LEED legal practice); *Climate Change*, NORTON ROSE FULBRIGHT, http://www.fulbright.com/index.cfm?fuseaction=Description.subdescription&site_id=2046&id=1370 (last visited Aug. 28, 2013) (touting the firm's LEED practice).

¹²⁴ See, e.g., Gabriel Nelson, *Green Building: Major Overhaul of LEED Rating System Won't Happen in 2012*, GREENWIRE (June 5, 2012), <http://www.eenews.net/stories/1059965405> (noting that the American Chemistry Council lobbied USGBC to reduce chemical disclosure requirements in the LEED standard).

¹²⁵ See generally Amanda R. Carrico, Micajah Spoden, Kenneth A. Wallston & Michael P. Vandenbergh, *The Environmental Cost of Misinformation: Why the Recommendation to Use Elevated Temperatures for Handwashing is Problematic*, 37 INT'L J. CONSUMER STUD. 433 (2013) (discussing a study concerning the perception of hot water in hygiene).

¹²⁶ See *id.* at 436–37.

¹²⁷ See Cary Coglianese, *The Managerial Turn in Environmental Policy*, 17 N.Y.U. ENVTL. L.J. 54, 71 (2008) (stating that “empirical research indicates that ISO-certified EMSs are associated with at least modest compliance improvements”); Coglianese & Nash, *supra* note 33, at 9–12.

tional Organization for Standardization (ISO) 14001 standard.¹²⁸ ISO is principally a private standard-setting organization, although it does include some governmental involvement.¹²⁹ Firms use third-party auditors to certify ISO 14001 compliance. Although few nations require firms to have environmental management systems in place, more than 267,000 firms around the world certified compliance with ISO 14001 as of 2011.¹³⁰

Clean Development Mechanism (CDM) Gold Standard. In 2003, the World Wildlife Fund established the Gold Standard in response to concerns that the CDM process established by the Kyoto Protocol was allowing questionable practices to qualify as certified emissions reductions.¹³¹ The Gold Standard is an example of a private governance initiative that is designed to complement or bolster a government program.¹³² Government officials participated in various aspects of the development of the Gold Standard, but non-governmental organizations adopted and administer the initiative. These groups also started a comparable program, the Voluntary Gold Standard, several years later to address the voluntary carbon offset market.¹³³ Although the limitations of the Kyoto Protocol have adversely affected global carbon markets in recent years, more than half a billion dollars in carbon offsets have been sold under these standards.¹³⁴

Environmental Disclosure Standards. Several private organizations have emerged in the last two decades to gather and disseminate environmental information. Two leading examples are the Global Reporting Initiative (GRI) and the Carbon Disclosure Project (CDP).¹³⁵ Both organizations set standards for voluntary corporate disclosure of

¹²⁸ See ISO 14000—*Environmental Management*, INT'L STANDARDS ORG., <http://www.iso.org/iso/home/standards/management-standards/iso14000.htm> (last visited Aug. 28, 2013).

¹²⁹ See David A. Wirth, *The International Organization for Standardization: Private Voluntary Standards as Swords and Shields*, 36 B.C. ENVTL. AFF. L. REV. 79, 95 (2009).

¹³⁰ See INT'L STANDARDS ORG., *THE ISO SURVEY OF MANAGEMENT SYSTEM STANDARD CERTIFICATIONS—2011*, at 1 (2012), available at http://www.iso.org/iso/iso_survey2011_executive-summary.pdf.

¹³¹ See *Who We Are*, GOLD STANDARD, <http://www.cdmgoldstandard.org/about-us/who-we-are> (last visited May 11, 2013).

¹³² For a discussion of how the Gold Standard and CDM work together, see generally Kelly Levin et al., *Can Non-State Certification Systems Bolster State-Centered Efforts to Promote Sustainable Development Through the Clean Development Mechanism?*, 44 WAKE FOREST L. REV. 777 (2009).

¹³³ See *Who We Are*, *supra* note 131.

¹³⁴ See ECOSYSTEM MARKETPLACE & BLOOMBERG NEW ENERGY FIN., *DEVELOPING DIMENSION: STATE OF THE VOLUNTARY CARBON MARKETS 2012*, at iii, available at http://www.forest-trends.org/documents/files/doc_3164.pdf.

¹³⁵ See *About GRI*, GLOBAL REPORTING INITIATIVE, <https://www.globalreporting.org/information/about-gri/Pages/default.aspx> (last visited Aug. 28, 2013); CARBON DISCLOSURE PROJECT, <https://www.cdproject.net/en-US/Pages/HomePage.aspx> (last visited Aug. 28, 2013).

pollutant emissions and maintain databases to make the information publicly available.¹³⁶ In both cases, large corporate firms and environmental advocacy groups developed the standards and non-governmental organizations administer the disclosure process.¹³⁷

Corporate participation in these environmental disclosure programs is widespread. More than 3,000 corporations reported environmental performance data to GRI in 2010, and the reporting involved many of the largest firms in industries with substantial environmental impacts.¹³⁸ Similarly, more than 1,000 corporations, including more than eighty percent of the 500 largest firms on a global level, reported their carbon emissions to the CDP in 2012.¹³⁹

2. *Bilateral Standard-Setting*

Supply Chain Contracting. Not all private governance mechanisms involve collective standard setting. Even though they are not required to do so by any public or private standard, a growing number of corporate buyers impose environmental requirements on their global suppliers.¹⁴⁰ In some cases, these requirements simply obligate the buyer to comply with domestic environmental laws, but in many cases the contract terms require the suppliers to exceed public regulatory requirements.¹⁴¹ The parties to the contract may create the private standard, or they may incorporate collective private standards such as ISO 14001 or GRI reporting.

Contracts of this type may require suppliers to adopt an environmental management system, to not use certain toxic chemicals, or to reduce energy use or carbon emissions. For instance, Hewlett-Packard imposes toxics use reduction requirements on all of its suppliers.¹⁴² In a recent initiative, several leading footwear and apparel companies have committed to eliminate toxic discharges from their

¹³⁶ See sources cited *supra* note 135.

¹³⁷ See sources cited *supra* note 135.

¹³⁸ See *Sustainability Disclosure Database*, GLOBAL REPORTING INITIATIVE, <http://database.globalreporting.org/search> (last visited Aug. 28, 2013) (search for 2010 publications).

¹³⁹ See CARBON DISCLOSURE PROJECT, CDP GLOBAL 500 CLIMATE CHANGE REPORT 2012: BUSINESS RESILIENCE IN AN UNCERTAIN, RESOURCE-CONSTRAINED WORLD 4, *available at* <https://www.cdproject.net/CDPResults/CDP-Global-500-Climate-Change-Report-2012.pdf>.

¹⁴⁰ See, e.g., Gap Inc. Code of Vendor Conduct, at 5 (requiring all factories to “comply with all applicable environmental laws and regulations,” among other things).

¹⁴¹ See, e.g., Starbucks Supplier Responsibility Standards: Manufactured Goods and Services, at 3 (requiring vendors to have, among other things, “[w]ritten waste prevention, waste reduction, recycling, energy conservation and greenhouse gas mitigation policies” as well as “demonstrable evidence of implementation”).

¹⁴² See *Supply Chain Responsibility*, HEWLETT-PACKARD, <http://www.hp.com/hpinfo/globalcitizenship/society/supplychain.html> (last visited Aug. 28, 2013).

supply chains by 2020.¹⁴³ Wal-Mart, meanwhile, imposes energy efficiency requirements on its suppliers.¹⁴⁴ Note that Wal-Mart does not just demand lower prices from suppliers, which any firm can be expected to do in a private market transaction. Instead, it demands less energy use, which typically correlates with lower emissions of greenhouse gases and other air pollutants. The motivations are complex, but the important aspect of the supply chain contracting in this case is that it serves an environmental protection function (e.g., reducing air pollution) that Wal-Mart has no public law obligation to address in its supply chain contracts.

Supply chain contracts that impose environmental requirements on suppliers are surprisingly common. A study published in 2007 concluded that more than half of the firms in eight industrial sectors impose private environmental requirements on their suppliers.¹⁴⁵ A larger recent study of firms in many sectors concluded that roughly forty percent of the firms surveyed reported that they impose such requirements.¹⁴⁶ Anecdotal reports suggest that private corporate supply chain requirements imposed by major retailers on product manufacturers are becoming the de facto constraints on the presence of toxics in consumer products.¹⁴⁷

In addition, the potential influence of supply-chain contracting requirements is huge. At least 65,000 multinational corporations (MNCs) operate roughly 850,000 affiliates around the world, and supply-chain contracting occurs among these affiliates as well as with millions of third-party firms.¹⁴⁸ Wal-Mart alone does eighteen billion dollars per year in business with China, has over 10,000 Chinese suppliers, and would be China's eighth largest trading partner if it were a country.¹⁴⁹ Regardless of one's views of Wal-Mart or its motivations for imposing environmental requirements on suppliers, the potential effects of Wal-Mart's insistence on environmental performance over

¹⁴³ See *Roadmap to Zero Discharge of Hazardous Chemicals*, ZDHC, <http://www.roadmaptozero.com> (last visited Sept. 2, 2013).

¹⁴⁴ See Michael P. Vandenbergh, *Climate Change: The China Problem*, 81 S. CAL. L. REV. 905, 939–40 (2008).

¹⁴⁵ See Vandenbergh, *supra* note 30, at 916–17. For a discussion of supply-chain contracts across several fields, see Li-Wen Lin, *Legal Transplants Through Private Contracting: Codes of Vendor Conduct in Global Supply Chains as an Example*, 57 AM. J. COMP. L. 711, 714–16 (2009).

¹⁴⁶ See SINGER & TONELLO, *supra* note 31, at 101.

¹⁴⁷ See, e.g., INSIDE E.P.A., *supra* note 32, at 6 (noting that in the absence of government toxics regulation, retailers are becoming the principal regulators).

¹⁴⁸ See Vandenbergh, *supra* note 30, at 920.

¹⁴⁹ See Vandenbergh, *supra* note 144, at 939–40; *A Welcome to Wal-Mart*, DAILY BEAST (Dec. 19, 2004, 7:00 PM), <http://www.thedailybeast.com/newsweek/2004/12/19/a-welcome-to-wal-mart.html>.

and above its public legal requirements may be larger than many current international or national regulatory measures.¹⁵⁰

Other Commercial Agreements. Environmental provisions are also common in many commercial agreements other than supply chain contracts. The types of agreements that commonly include environmental provisions include merger and acquisition agreements, real estate sales contracts and leases, commercial loans, and environmental insurance policies.¹⁵¹ The environmental activities conducted as a part of commercial transactions and the legal obligations imposed in the contracts entered into are at the outer periphery of common conceptions of governance, but many of them involve a private party whose actions achieve traditionally governmental objectives such as CPR management, public good creation, or the reduction of environmental externalities. In some cases, contract provisions require one or both parties to engage in environmental protection activities that are beyond legal requirements. For example, a 2005 study of loan agreements filed with the Securities and Exchange Commission (SEC) concluded that more than seventy percent of the agreements included environmental terms, and in many cases the lender required the borrower to exceed compliance with public environmental laws such as by not using particular chemicals, not using underground storage tanks, or adopting environmental management systems.¹⁵² Similarly, the study concluded that eighty percent of commercial leases filed with the SEC included environmental provisions, often requiring over-compliance.¹⁵³

Even where commercial agreements simply require disclosure or compliance with environmental laws, these provisions often are accompanied by and affect the scope of private environmental investigations. For example, the 2005 study concluded that more than seventy percent of the merger and acquisition agreements filed with the SEC included environmental provisions.¹⁵⁴ The investigations conducted by private parties in connection with these agreements are often de-

¹⁵⁰ See, e.g., Wan Xu & David Stanway, *Wal-Mart, in China, Pushes Suppliers Down Green Path*, REUTERS (Oct. 25, 2012, 4:57 AM), <http://www.reuters.com/article/2012/10/25/us-walmart-china-idUSBRE89O0CE20121025>. An example of the relative size of Wal-Mart's potential emissions reductions is that its recent commitment to reduce supply-chain greenhouse gas emissions by twenty million metric tons, *WalMart Announces Goal to Eliminate 20 Million Metric Tons of Greenhouse Gas Emissions from Global Supply Chain*, WAL-MART (Feb. 25, 2010), <http://news.walmart.com/news-archive/2010/02/25/walmart-announces-goal-to-eliminate-20-million-metric-tons-of-greenhouse-gas-emissions-from-global-supply-chain>, is equivalent to almost a fifty percent reduction in the total emissions from the U.S. iron and steel industry (forty-nine million tons). See U.S. EPA, *INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990–2006*, at ES-9 (2008).

¹⁵¹ See Vandenberg, *supra* note 4, at 2045–64.

¹⁵² See *id.* at 2051–52.

¹⁵³ See *id.* at 2056.

¹⁵⁴ See *id.* at 2045–46.

signed to identify and limit liabilities to the buyer or seller, but they resemble government enforcement inspections in many ways. As a result, they have the effect of identifying existing or potential environmental risks, and they often create private incentives to reduce those risks.

Provisions in many types of commercial agreements also create indemnities or require environmental insurance.¹⁵⁵ These indemnities often commit one party to take actions (e.g., prompt responses to spills) or not take actions that would cause environmental harms (e.g., a commitment not to disturb areas with hazardous substances). Indemnities also induce one party to have an ongoing interest in, and the legal right to monitor, the other party's environmental behavior for an extended period. Insurance contracts regarding environmental risks also create incentives for the insurer to conduct environmental investigations before and during the term of the contract and to demand changes in emissions or waste-handling practices. Of course, once the policy is in place, the insured may have less incentive to reduce the environmental harms of its behavior depending on the extent of credible threats of contractual sanctions or other enforcement ranging from cancelling the policy to increasing rates at the time of renewal.

The potential impact of private environmental governance associated with commercial transactions is hard to assess. These agreements not only create complex incentives, but also are often not publicly disclosed, and the standard-setting, monitoring, enforcement, and adjudication related to environmental provisions only rarely are the subject of reported decisions or media accounts.¹⁵⁶ As discussed at the outset, however, one indication of the widespread nature of private environmental governance associated with commercial transactions is that the amount of money spent on private due diligence investigations (roughly \$500 million per year) exceeds the total amount spent on enforcement by the federal EPA (roughly \$400 million per year).¹⁵⁷ The federal Superfund statute and other public laws served as the initial stimulus for much of this due diligence activity, but the activity now extends well beyond statutory compliance. A second indication is the clear signaling in the Carbon Principles adopted by many banks (discussed in Part III below) that participating lenders will be evaluating the risks of lending to utilities during due diligence activities based on an assumption that there will be a substantial carbon

¹⁵⁵ See *id.* at 2049–50, 2063. The agreements studied for this analysis predate the formation of the Carbon Principles and many are not project finance loans subject to the Equator Principles.

¹⁵⁶ See *id.* at 2069–73.

¹⁵⁷ See *supra* note 29 and accompanying text.

price at some point.¹⁵⁸ Another anecdotal indication is that almost all of the top fifty law firms in the United States report that their environmental lawyers are engaged in the investigations and drafting of contracts for this type of private transactional environmental work.¹⁵⁹

In addition, the widespread commercial activity in areas that typically involve environmental contract provisions is an indication of the potential reach of private governance. For example, mergers and acquisition agreements commonly include environmental provisions, and these types of transactions involved \$795 billion in U.S. corporate assets in a recent year.¹⁶⁰ In years when the economy is expanding, more than six percent of all manufacturing plants are involved in asset sales or mergers and acquisitions.¹⁶¹ Commercial real estate sales in any one year exceed tens of billions of dollars, and the value of commercial space sold or leased in a recent year was \$65 billion.¹⁶²

Resource Agreements. In some cases, multiple forms of private governance emerge in response to a resource problem. These responses often involve supply-chain contracting, but they have distinctive features because there is some collective activity among the buyers and because the agreements are directed at a small number of large suppliers who in turn are expected to regulate the conduct of a large number of small enterprises. For example, deforestation associated with beef production is the largest source of carbon emissions in Brazil and a substantial contributor to global emissions totals.¹⁶³ The Brazilian national and subnational governments have been unable to combine the standards and enforcement necessary to address deforestation associated with cattle grazing. After a campaign by an environmental advocacy group in Europe, however, McDonald's, Burger King, Adidas, Nike, and other major global buyers of Brazilian beef and leather entered into agreements with many of the major Brazilian slaughterhouses in which the slaughterhouses agreed to phase out purchases of beef from recently-deforested areas.¹⁶⁴ A group of buyer companies, suppliers, and environmental NGOs negotiated the agreements, but they yielded a series of bilateral agreements between the

158 See CARBON PRINCIPLES, <http://carbonprinciples.org> (last visited Aug. 29, 2013).

159 See Vandenbergh, *supra* note 4, at 2066.

160 See *id.* at 2045.

161 See *id.*

162 See *id.* at 2056.

163 See AMAZON INST. FOR ENVTL RESEARCH, TROPICAL DEFORESTATION AND CLIMATE CHANGE 15 (Paulo Moutinho & Stephan Schwartzman eds., 2005).

164 See GREENPEACE, MINIMUM CRITERIA FOR INDUSTRIAL SCALE CATTLE OPERATIONS IN THE BRAZILIAN AMAZON BIOME 1 (2009), available at <http://www.greenpeace.org/usa/Global/usa/report/2010/1/minimum-criteria-for-i.pdf> (noting which slaughterhouses made commitments); Alexei Barrionuevo, *Giants in Cattle Industry Agree to Help Fight Deforestation*, N.Y. TIMES (Oct. 6, 2009), http://www.nytimes.com/2009/10/07/world/americas/07deforest.html?_r=0.

companies and the suppliers rather than a common standard among the companies. The enforcement of these agreements remains to be seen, and other buyers with less concern about deforestation may undermine the agreements in the long run. The agreements include a large share of the Brazilian beef market, however, so even imperfect implementation may yield substantial emissions reductions.¹⁶⁵

Good Neighbor Agreements. A less common but interesting form of private environmental governance is memorialized in good neighbor agreements.¹⁶⁶ These agreements are often entered into when a corporation operates an industrial facility that requires a high degree of cooperation with the local community, whether for ongoing operations or to secure approvals for expansion.¹⁶⁷ In a number of communities, local citizens have organized and negotiated with the local management, agreeing to cooperate with the corporation in return for extralegal concessions such as additional monitoring and disclosure of toxic emissions, provision of parks and health care services, and similar matters.

C. Summary

As the examples above suggest, the standard move from identifying a collective action problem to evaluating public or public-private sources of coercive authority misses a large number of private institutional arrangements. Private governance has emerged for a variety of reasons and has a complex relationship with public governance. In some cases it may be a response to the failure of government to act adequately or at all at the national and global levels (e.g., FSC and MSC certification systems for forestry and fisheries). The government may have failed to act because of jurisdictional gaps (e.g., lack of international law regarding a global commons resource), the inability to promulgate a sufficient law despite the existence of the authority to do so (e.g., capture of a government by resource extraction interests), or the lack of enforcement capacity (e.g., inadequately funded government enforcement agencies). In other cases the government may not act because a resource is an open commons or the regulatory

¹⁶⁵ See *Brazilian Beef Giants Agree to Moratorium on Amazon Deforestation*, MONGABAY.COM (Oct. 7, 2009), http://news.mongabay.com/2009/1007-greenpeace_cattle.html.

¹⁶⁶ See DOUGLAS S. KENNEY ET AL., UNIV. OF COLO. SCH. OF LAW, *EVALUATING THE USE OF GOOD NEIGHBOR AGREEMENTS FOR ENVIRONMENTAL AND COMMUNITY PROTECTION* 5 (2004) (identifying roughly fifty good neighbor agreements in the US), available at http://reviewboard.ca/upload/project_document/EA0809-001_Good_Neighbor_Agreements_Evaluation_Report.PDF; see also Vandenberg, *supra* note 4, at 2064–66 (discussing the prevalence and terms of good neighbor agreements).

¹⁶⁷ See, e.g., *Good Neighbor Agreement Between Shoreline Environmental Alliance et al. and Unocal Refinery of Rodeo* §§ 1.1, 1.2, 1.4 (Apr. 7, 1995), available at <http://www.co.contra-coste.ca.us/DocumentCenter/Home/View/7487> (providing for corporate facility disclosure and other overcompliance activities).

space is so crowded that a regulatory anti-commons problem exists.¹⁶⁸ Private governance measures also may fill gaps in timing that arise when a problem is identified but governmental processes require time to generate and enforce public measures (e.g., private labeling responses to tuna-dolphin concerns and ozone depleters).

Private governance measures also may complement public governance measures, offering incentives for higher performance (e.g., the CDM Gold program), or supplementing existing enforcement (e.g., legality verification in supply chain contracting). Corporate participation in private governance may be an effort to undermine support for more stringent public governance in other situations.¹⁶⁹ Not surprisingly, governments have stimulated the development of private governance in some cases (e.g., the role of the IFC in creating the Equator Principles and the use of federal procurement standards to buy certified goods) and have resisted it in others (e.g., some agency and congressional responses to MSC certification of fisheries).

II

TOWARD A THEORY OF PRIVATE ENVIRONMENTAL GOVERNANCE

Private environmental governance is undertheorized. In the absence of a theory of private environmental governance to demonstrate the coherence of the field, it is not surprising that private environmental governance has received little attention in environmental policy debates, the environmental legal literature,¹⁷⁰ and text-

¹⁶⁸ See, e.g., William W. Buzbee, *Recognizing the Regulatory Commons: A Theory of Regulatory Gaps*, 89 IOWA L. REV. 1, 24–25 (2003) (noting the regulatory commons and anti-commons issues).

¹⁶⁹ See Graeme Auld et al., *The New Corporate Social Responsibility*, 33 ANN. REV. ENV'T & RESOURCES 413, 423 (2008) (arguing that Responsible Care was designed to deflect government regulation after the Bhopal, India chemical release); Roberts, *supra* note 73, at 89–93.

¹⁷⁰ For exceptions, see Errol Meidinger, *Private Import Safety Regulation and Transnational New Governance*, in IMPORT SAFETY: REGULATORY GOVERNANCE IN THE GLOBAL ECONOMY 233 (Cary Coglianese, Adam M. Finkel & David Zaring eds., 2009); Gerrard, *supra* note 29 at 421; Dennis D. Hirsch, *A Holistic Policy Agenda to Promote Green Business: Reflexive Law Fills the Gap*, 42 ENVTL. L. REP. 10228, 10231–32 (2012) (examining whether the market and common law can successfully encourage firms to pursue more environmentally friendly strategies); Dennis D. Hirsch, *Green Business and the Importance of Reflexive Law: What Michael Porter Didn't Say*, 62 ADMIN. L. REV. 1063 (2010) (discussing the rise of “green businesses” in the United States); Heather Hughes, *Enabling Investment in Environmental Sustainability*, 85 IND. L.J. 597 (2010) (discussing how commercial finance law can create incentives for commercial actors to be more environmentally responsible); Eric W. Orts, *Climate Contracts*, 29 VA. ENVTL. L.J. 197, 228–31 (2011) (discussing how NGOs and private companies have contributed to climate change regulation); Tracey M. Roberts, *The Rise of Rule Four Institutions: Voluntary Standards, Certification and Labeling Systems*, 40 ECOLOGY L.Q. 107 (2013) (examining voluntary standards, certification and labeling systems and their impact on the environment); Judd F. Sneirson, *The Sustainable Corporation and Shareholder*

books.¹⁷¹ I argue that private environmental governance is a discrete, coherent field that is worthy of being treated as a distinct area for research, teaching, and practice. Public environmental law remains the principal cudgel to steer the behavior of firms, and private environmental governance is not a panacea; however, private environmental governance is widespread and has a substantial effect on environmental behavior and environmental quality. Viewing it as a discrete phenomenon can yield new perspectives on governance and new options for some of the most intractable remaining problems.

My intent here is to generalize to the extent necessary to demonstrate the common aspects of private environmental governance without overclaiming about the common linkages among private governance activities or the novelty and importance of this area.¹⁷² I begin with a model of how private environmental governance responds to collective action problems and then discuss the relationship between private environmental governance and the New Governance scholarship.

A. The Private Environmental Governance Model

A simple model of the origins and functions of private environmental governance can be developed from the examples presented above. This model describes the sources of incentives to achieve environmental protection and why they may address collective action problems even in the absence of government action. The model suggests that private environmental governance is not a substitute for public governance but that it can fill temporal or other gaps in the public governance response to environmental issues.

Many individuals have preferences for environmental protection and resource stewardship, but first-order collective action problems are a barrier. The obstacles to achieving those preferences through government action are substantial. Voting and other forms of participation in the political process require significant effort to undertake, and there are incentives to free ride. Individuals report that engaging in civic behavior regarding the environment is more difficult than en-

Profits, 46 WAKE FOREST L. REV. 541 (2011) (defining “sustainable businesses” and outlaying ways to increase their numbers); Vandenberg, *supra* note 4, at 2041–66 (examining private regulatory agreements focusing on environmental agreements); Annecoos Wiersema, *A Train Without Tracks: Rethinking the Place of Law and Goals in Environmental and Natural Resources Law*, 38 ENVTL. L. 1239, 1253–55 (2008) (noting a trend in recent literature that places a “strong emphasis on collaboration and a mix of private and public actors”).

¹⁷¹ See Vandenberg, *supra* note 4, at 2067. Exceptions are DAVID HUNTER ET AL., *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* (4th ed. 2011), and J.B. RUHL ET AL., *THE PRACTICE AND POLICY OF ENVIRONMENTAL LAW* (2nd ed. 2010).

¹⁷² See Mark A. Tushnet, *A New Constitutionalism for Liberals?*, 28 N.Y.U. REV. L. & SOC. CHANGE 357, 359 (2003) (noting concern about overclaiming).

gaging in related market behavior.¹⁷³ Perhaps because of preferences for both environmental protection and small government, individuals are more supportive of corporate action than government action to respond to environmental threats on some topics.¹⁷⁴ Even if an individual engages in direct political participation, the checks and balances of government, lobbying by concentrated interests, race-to-the-bottom issues, the limits of jurisdictional boundaries, and ideology (e.g., a preference for small government), among others, all make it difficult to induce government to act quickly to address an environmental problem. The dim prospects for success may induce an individual to have a low sense of efficacy—the belief that an action will achieve its intended effects—which in turn may reduce the likelihood that the individual will participate in the political process.¹⁷⁵

1. *Small-Scale Private Ordering*

Ostrom and others have demonstrated that individuals can use private ordering to protect common pool resources and produce public goods when they have adequate information, iterative relationships, opportunities for social sanctions, and rewards, and when there is limited pressure on the resource. This often occurs in small groups where these characteristics are easier to achieve than they are in large groups.¹⁷⁶ Several of the private environmental governance activities discussed above fit reasonably easily into this category of small-group responses to collective action problems. For example, the situations in which good neighbor agreements arise involve small groups, iterative relationships, opportunities for informal sanctions, and adequate information. Small groups of individuals (often neighbors) act directly or form local advocacy groups based on concerns about the near-term health and environmental threats of an industrial facility. Those groups negotiate with a local factory on the terms of a good neighbor agreement. They have the ability to affect the reputation of

¹⁷³ See Edward W. Maibach, Connie Roser-Renouf & Anthony Leiserowitz, *Communication and Marketing as Climate Change-Intervention Assets: A Public Health Perspective*, 35 AM. J. PREVENTIVE MED. 488, 491–92, 498 (2008); see also Roberts, *supra* note 73, at 80 (discussing the role of civic organizations in environmental protection).

¹⁷⁴ See YALE PROJECT ON CLIMATE CHANGE COMM'C'N & GEORGE MASON UNIV. CTR. FOR CLIMATE CHANGE COMM'C'N, PUBLIC SUPPORT FOR CLIMATE AND ENERGY POLICIES IN SEPTEMBER 2012, at 7, 12 (2012).

¹⁷⁵ See Kenneth A. Wallston et al., *Development of the Multidimensional Health Locus of Control (MHLC) Scales*, 6 HEALTH EDUC. MONOGRAPHS 160, 167–69 (1978) (distinguishing between efficacy and locus of control).

¹⁷⁶ See Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 382–83 (1997) (noting that small groups are not necessary for norm influence if adequate information and opportunities for social sanctions exist); Lior Jacob Strahilevitz, *Social Norms from Close-Knit Groups to Loose-Knit Groups*, 70 U. CHI. L. REV. 359, 359–60, 365 n.31 (2003) (distinguishing group size and relationship among group members).

the factory in the community and could also influence local government land-use approvals or increase the risk of regulatory enforcement by government agencies.

A feature that distinguishes private environmental governance from the private ordering analyzed by Ostrom, Ellickson, and others is the extent of the institutionalization or formalization of the response to the collective action problem. The small group private ordering that has been the focus of extensive research to date tends to occur through informal interactions among individuals (e.g., fishers), whereas much of the private ordering that occurs in some of the private environmental governance areas discussed above involves commercial agreements between firms or agreements between a firm and an advocacy group. Although influential, the norms that drive the behavior of lobstermen in Maine or farmers and cattle ranchers in Shasta County, California are not typically committed to writing or otherwise memorialized in ways that communicate the boundaries of property rights or appropriate behavior to nonparticipants. Private organizations typically do not exist to develop, monitor, and enforce the norms, and legal remedies are generally not available for norm enforcement. In contrast, good neighbor agreements and supply chain contract provisions contain standards of conduct that are memorialized in writing (suggesting they are more stable and communicated to a wider audience than is typical for informal norms) and may be subject to enforcement in a private setting (e.g., a private dispute resolution proceeding) or a public court. Thus, some types of private environmental governance involve an institutionalization or formalization of the norms between two or more parties that distinguishes these activities from other forms of small-scale private ordering.

2. *Large-Scale Private Ordering*

Many of the environmental preferences an individual may have cannot be satisfied through small group interactions. At least on the surface, iterative relationships, opportunities for social sanctions and rewards, and adequate information are all lacking. The preference may be to stop tropical deforestation activities by an unknown logger 3,000 miles away or to reduce greenhouse gas emissions from millions of sources located in dozens of countries. The problems are global in scope, resulting in millions or billions of people who have incentives to free ride on any mitigation measure (e.g., forests, fisheries, and climate). The actors causing the harm are numerous and operate far from those who might be harmed. The individuals harmed often do not directly interact with the actors causing the harm, much less have iterative relationships, opportunities for social sanctioning, or access to adequate information. The resources are often under intense pres-

sure (e.g., forests, fisheries and the atmosphere), and the problems often cross international boundaries (regional or global air pollution) or exist outside of any national boundaries (open-ocean fisheries).

Many of the private environmental governance responses identified above address these types of problems without coercive government authority and are harder to explain based on the criteria for private ordering outlined by Ostrom and others. The private ordering literature has not developed solutions to these global problems, and leading scholars often point instead to collections of local efforts, often by governments. For example, even if comprehensive international climate agreements do not emerge, recent scholarship has noted that government regime complexes or polycentric governance may address the problem.¹⁷⁷ Whatever form these noncomprehensive responses take, however, the public response may not be sufficient to satisfy public preferences for environmental protection, leaving room for private environmental governance to address global and other large scale problems.

Private certification and labeling systems directed at consumers are a form of large-scale private ordering that may be able to overcome the first-order and second-order collective action problems in these situations for several reasons. As to the first-order problem of inducing an individual to act when the individual gains all of the benefits but does not bear all of the costs of an action, labeling systems begin by drawing on a reservoir of preferences or norms about environmental harms among the individuals who buy the goods whose production or use causes environmental harm.¹⁷⁸ In some cases information about the provenance or performance of goods will change buying behavior. Empirical studies of consumer preferences and behavior demonstrate that these preferences exist among a substantial portion of the population, and they affect behavior in a variety of circumstances.¹⁷⁹ Similar effects are likely among shareholders, employees, lenders, and others who influence firm behavior. In addition, in some cases shifts in purchasing behavior are perceived to be less costly

¹⁷⁷ See VICTOR, *supra* note 16, at 1–2; Robert O. Keohane & David G. Victor, *The Regime Complex for Climate Change*, 9 PERSP. ON POL. 7, 7 (2011); Ostrom, *supra* note 8, at 550. An exception is Richard B. Stewart, Michael Oppenheimer & Bruce Rudyk, *Building a More Effective Global Climate Regime Through a Bottom-Up Approach*, 14 THEORETICAL INQUIRIES L. 273, 281–82 (2013), which includes private governance options among a group of “bottom-up” strategies.

¹⁷⁸ See Cohen & Vandenbergh, *supra* note 74, at S56–S60 (reviewing literature on consumer preferences for green goods). This may occur directly through shifts in consumer demand (by changing the goods bought in the near term) or indirectly through consumer influence (by changing the reputation of a brand or company and thus the goods bought over the long term). See TOWARD SUSTAINABILITY, *supra* note 35, at ES-18, 6.

¹⁷⁹ See Michael P. Vandenbergh & Mark A. Cohen, *Climate Change Governance: Boundaries and Leakage*, 18 N.Y.U. ENVTL. L.J. 221, 221–92 (2010) (citing studies).

(in terms of time, effort, and money) than participation in the political process.¹⁸⁰

To the extent environmental protection is in a consumer's preference set, labeling systems provide the information about the provenance and performance of the good necessary to enable the consumer to act on the preference.¹⁸¹ If these systems are large enough to take advantage of economies of scale or if the reduction of environmental harms also produces efficiencies, the additional cost to the consumer of the substitute good or of not purchasing a good may be small. Even though consumer demand, as measured by willingness to pay for green goods, is often limited, firms also respond to more generalized concerns about firm or brand reputation. Consumer influence thus may shift firm behavior even if consumer demand is limited.¹⁸² The limited cost of acting and responsiveness of firms provides individuals with a sense that other individuals are also likely to act based on the label, thus increasing the individual's sense of efficacy—the individual is more likely to believe that the behavior, when combined with the likely behavior of others, will have some effect on the intended outcome. In turn, this sense of efficacy may increase the likelihood that the individual will act.

The important point is that no further collective action is necessary by the individual to overcome the first-order problem. Simply opting for a labeled good in purchasing decisions will have some effect on the intended outcome. Although the effect may be small, it may be the only way an individual can act on his or her preferences if the government is unable or unwilling to act. It also may enable individuals to avoid the cognitive dissonance that may arise if there is a conflict between their preferences for environmental protection and their behavior.¹⁸³ If even just a fraction of all individuals gain normative rewards by purchasing goods with a positive environmental provenance or performance, and if firms respond to marginal consumer behavior, private governance efforts may have important effects on firm behavior.

Even if the first-order problem is easier to resolve than it appears on the surface, the second-order collective action problem identified

¹⁸⁰ See Maibach, Roser-Renouf & Leiserowitz, *supra* note 173, at 498.

¹⁸¹ See Mario F. Teisl et al., *Can Eco-Labels Tune a Market? Evidence from Dolphin-Safe Labeling*, 43 J. ENVTL. ECON. & MGMT. 339, 339 (2002).

¹⁸² See TOWARD SUSTAINABILITY, *supra* note 35, at A-194.

¹⁸³ Interestingly, perhaps because of his focus on the role of individuals in affecting government as opposed to their participation in markets in ways that have governance implications, Mancur Olson considered but dismissed one aspect of individual behavior that may be a key to understanding the emergence of global private governance: the preferences of individuals for environmental outcomes and their ability to act on those preferences even if little or no collective action has occurred. See OLSON, *supra* note 51, at 160 n.91.

by Mancur Olson is still a concern: How will individuals organize into groups to develop the standards, certification verification, and labeling necessary for many of these systems to function if individuals have incentives to free ride? Several attributes of certification and labeling systems may explain why the second-order collective action problem has been overcome in many situations. The amount of collective action necessary may be surprisingly low, and it may be easier for advocacy groups to address second-order collective action problems using these types of private governance rather than public governance. Perhaps most important, so long as some level of preference for environmental protection is held by a nontrivial portion of the population, the production and dissemination of information may be all that is necessary to create a threat that consumer behavior will shift, and public information campaigns may be cheaper than lobbying government to regulate. Advocacy groups can supply that information indirectly, by inducing the media to investigate and publicize environmental issues, or directly, by conducting and publicizing their own investigations or by forming various types of standards and labeling systems. A large share of the market may be shifted by directing campaigns at a visible industry leader rather than at many firms, inducing the initial target to push for others to join to raise rivals' costs and improve the reputation of the sector. Participation by the most resistant industry participants may not be necessary for some improvement to be made in the underlying conditions. The effort also may leave the more expensive behavior change efforts (e.g., shifting the behavior of the lowest-performing firms) to government, if any action is taken against them at all.

Perhaps most important, although the global nature of some problems may vastly increase the number of parties at both ends (the supplying firms and the consumers) as well as the physical distance between the parties, small groups with iterative relationships and opportunities for social sanctioning among the participants may be surprisingly common. For some goods, a small group of large global corporate producers exists, as does a small group of global advocacy groups.¹⁸⁴ The corporations typically have an executive responsible for environmental matters, and that executive functions in an iterative way with the leaders of advocacy groups. Reputation matters so long as the advocacy groups have the ability to mobilize private or public

¹⁸⁴ On a related note, certification systems and some other voluntary systems can be thought of as converting collective goods into club goods. See Matthew Potoski & Aseem Prakash, *Green Clubs and Voluntary Governance: ISO 14001 and Firms' Regulatory Compliance*, 49 AM. J. POL. SCI. 235, 235 (2005); Roberts, *supra* note 73, at 86; see also VICTOR, *supra* note 16, at 23–24 (noting the importance of clubs at nation-state level).

threats to the firm and firms have the ability to affect the likelihood that advocacy groups will target them.

The funding of advocacy efforts is a substantial problem, but to avoid reputational harm, disruptions in activities, or unwanted regulatory attention, the corporate environmental executive may interact frequently with some advocacy group leaders.¹⁸⁵ To the extent advocacy groups lack financial resources, they need not obtain contributions from large numbers of individuals; instead they can obtain funding from foundations and from their proposed targets. Obvious conflicts may arise from funding by regulated firms, but the effects of these conflicts are constrained somewhat by the professional, personal, and social norms of participating experts and advocacy group members, and by the transparency of the process.¹⁸⁶ The certification and labeling programs that have arisen in these situations include the FSC, MSC, and others. Foundations have incentives to provide the initial funding necessary to induce cooperation among the parties, although the sources of long-term funding remain unclear in many cases and the long-term financial viability of these organizations is an important issue.¹⁸⁷

For environmental problems caused by the production of goods sold in international commerce, private governance may have particular advantages. Private governance systems address global CPR issues by shifting the target of collective action efforts. Instead of seeking to induce collective action from multiple, small harvesters who are unknown to retail consumers and thus largely immune to direct market pressure, a non-profit can focus on a smaller number of large, visible firms that buy from the harvesters. Government may not be able to act because the problem occurs outside of any national boundary (e.g., open oceans) or occurs inside the boundary of another nation. National governments have little ability to regulate environmental behavior in other countries, and the international trade regime makes it difficult to impose requirements on goods based on the characteristics of the process by which they are produced, as opposed to the charac-

¹⁸⁵ To some extent, the surprisingly iterative firm-advocacy group interactions that occur despite large geographic distances may resemble the interactions among traders. See Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115, 115 (1992) (discussing the system of private governance among diamond merchants); Robert Cooter & Janet T. Landa, *Personal Versus Impersonal Trade: The Size of Trading Groups and Contract Law*, 4 INT'L REV. L. & ECON. 15, 15-16 (1984) (discussing the relationship between trading group size and contracts).

¹⁸⁶ Reliance on private funding and assurance services raises many of the same conflict issues as relying on professional accountants. The private accounting system is certainly imperfect, but it functions reasonably well when compared to the viable alternatives.

¹⁸⁷ See TOWARD SUSTAINABILITY, *supra* note 35, at 13.

teristics of the finished good.¹⁸⁸ Even government disclosure requirements receive skeptical treatment from trade dispute resolution bodies, which are often more concerned about avoiding trade barriers than environmental harms.¹⁸⁹ The demand for environmentally preferable goods is an incentive for corporate buyers to impose standards on producers across national boundaries, however, and private efforts to shift demand to meet environmental concerns may be able to cross national boundaries without triggering the jurisdiction of the international trade regime.¹⁹⁰

B. Private Environmental Governance and New Governance

Although a robust literature has developed in political science, international relations, and sociology,¹⁹¹ few legal scholars in the United States focus on private environmental governance. Perhaps a reason for the limited legal work is that legal scholarship in the United States draws more from economics than other social sciences. With the exception of the private ordering work discussed above, the role of private environmental governance has not attracted much attention among law and economics scholars.¹⁹² Private environmental governance arises through interactions between corporate firms and their customers or between corporate firms and nongovernmental organizations regarding market behavior, and these private-private interactions may be viewed as just another form of market behavior. Yet private governance activities are distinct from typical market behavior in the way they reflect private preferences for the management of common pool resources, the creation of public goods, and the reduction of negative externalities. They also are distinct from other forms of norm-driven private ordering in the extent to which the standards of conduct are institutionalized or formalized and the extent to which

¹⁸⁸ See Douglas A. Kysar, *Preferences for Processes: The Process/Product Distinction and the Regulation of Consumer Choice*, 118 HARV. L. REV. 526, 529 (2004). For a discussion of the consumer role in sustainable consumption, see James Salzman, *Sustainable Consumption and the Law*, 27 ENVTL. L. 1243 (1997).

¹⁸⁹ See Marcy Nicks Moody, Note, *WARNING: MAY CAUSE WARMING: Potential Trade Challenges to Private Environmental Labels*, 65 VAND. L. REV. 1401, 1403 (2012).

¹⁹⁰ See *id.*; see also Cohen & Vandenberg, *supra* note 74, at S59 (discussing trade issues in carbon labeling).

¹⁹¹ See, e.g., Auld et al., *supra* note 169, at 413; Delmas & Young, *supra* note 78, at 3.

¹⁹² The work of Tom Lyon is a notable exception. See Thomas P. Lyon, & John W. Maxwell, *Corporate Social Responsibility and the Environment: A Theoretical Perspective*, 1 REV. ENVTL. ECON. & POL'Y 1 (2008); see also Jason S. Johnston, *Signaling Social Responsibility: On the Law and Economics of Market Incentives for Corporate Environmental Performance* (May 11, 2005), available at http://lsr.nellco.org/cgi/viewcontent.cgi?article=1070&context=upenn_wps. For a recent review of the economics of corporate social responsibility, see Markus Kitzmüller & Jay Shimshack, *Economic Perspectives on Corporate Social Responsibility*, 50 J. ECON. LIT. 51 (2012).

the activity influences the behavior of large, geographically distant groups.

At the same time, public law scholars may not view private-private actions as sufficiently government-like to be worthy of attention, even if the actions achieve governmental ends or perform governmental functions. Administrative law and other public law scholars typically focus on the effectiveness, accountability, and legitimacy of positive law regimes, not on private contracting or ordering.¹⁹³ Private environmental governance addresses environmental quality and other public goods, a core function of public law, but it does not use the coercive power of the state or draw on democratic institutions for its legitimacy. It is unclear whether private governance institutions should be held accountable in the traditional public law sense if they are not exercising the coercive power of government.¹⁹⁴ Administrative law and environmental law are closely intertwined,¹⁹⁵ and environmental law emerged as a positive law field dominated by administrative law issues. Starting with this conception of environmental law, the actor responding to an environmental problem is government, and the options face the constraints inherent in government.¹⁹⁶ Private environmental governance thus may fall between the cracks of most private and public law scholarship.

One strand of scholarship has focused on the importance of public-private interactions and on the importance of the kind of adaptive, reflective institutions that often appear as a part of private environmental governance. This work, which is sometimes lumped under the term New Governance, has many variants but several features of the scholarship are important for understanding what is new—and not new—about private environmental governance.¹⁹⁷ In addition, the

¹⁹³ See Vandenbergh, *supra* note 4, at 2031–32. More recently, Eric Orts has examined some forms of private governance as private contracting. See Orts, *supra* note 170, at 197.

¹⁹⁴ For a discussion, see Benjamin Cashore, *Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven (NSMD) Governance Systems Gain Rule-Making Authority*, 15 GOVERNANCE: INT'L J. POL'Y ADMIN. & INSTITUTIONS 503, 503–04 (2002); Vandenbergh, *supra* note 30, at 959–60.

¹⁹⁵ As Richard Lazarus has noted, “[i]t is fair to say that the reformation of modern administrative law occurred primarily on an environmental law slate.” LAZARUS, *supra* note 11, at 114.

¹⁹⁶ See, e.g., *id.* at 29 (“Environmental protection law, like any area of law, must work within the constraints and exploit the opportunities provided by this constitutional design for lawmaking, as well as by related political processes.”). Also, “[t]he core regulatory premise of much environmental protection law today is the sovereign’s police power to regulate private activities that adversely affect public health and welfare.” *Id.* at 50.

¹⁹⁷ For an overview, see generally Bradley C. Karkkainen, “New Governance” in *Legal Thought and in the World: Some Splitting as Antidote to Overzealous Lumping*, 89 MINN. L. REV. 471, 496 (2004); Jason M. Solomon, *New Governance, Preemptive Self-Regulation, and the Blurring of Boundaries in Regulatory Theory and Practice*, 2010 WIS. L. REV. 591; David M. Trubek & Louise G. Trubek, *New Governance & Legal Regulation: Complementarity, Rivalry, and Transformation*, 13 COLUM. J. EUR. L. 539 (2007); Neil Walker & Gráinne de Búrca, *Reconceiving Law*

emergence of private environmental governance may help answer some of the unanswered questions regarding New Governance and may suggest new ways to make its solutions more attractive to public and private policymakers.

Brad Karkkainen has noted that New Governance can be distinguished from standard regulatory approaches because it “aspires instead to be more open-textured, participatory, bottom-up, consensus-oriented, contextual, flexible, integrative, and pragmatic.”¹⁹⁸ In some variants it also aspires to develop responses to public problems that are more adaptive than traditional public government regulation and administration.¹⁹⁹ For example, democratic experimentalists suggest that agencies form “the continuing organized link between the national and the local, helping to create through national action the local conditions for experimentation.”²⁰⁰ The New Governance literature has focused attention on areas where standard regulatory instruments and agencies are failing and has proposed reforms designed to produce greater collaboration and openness.²⁰¹ This form of New Governance scholarship suggests a more flexible approach than the one that emerged from the New Deal-era laws and agencies, and from the explosion of new environmental regulatory activity during the 1970–1990 period. But it stops short of viewing purely private organizations as the initiators of governance activities or the source of coercive authority to solve collective action problems, as is common with private environmental governance. In addition, it assumes that government is able to muster the laws and programs necessary to create incentives for public-regarding behavior by polluters, whether corporate firms or individuals.²⁰² Private governance may provide new op-

© *New Governance*, 13 COLUM. J. EUR. L. 519 (2007). The study of governmental delegation of regulatory functions to private parties is not new. See, e.g., Louis L. Jaffe, *Law Making by Private Groups*, 51 HARV. L. REV. 201, 212 (1937) (noting that “public administrations . . . should not be the exclusive method of regulation”).

¹⁹⁸ Karkkainen, *supra* note 197, at 474; see also John J. Kirton & Michael J. Trebilcock, *Introduction: Hard Choices and Soft Law in Sustainable Global Governance*, in *HARD CHOICES, SOFT LAW: VOLUNTARY STANDARDS IN GLOBAL TRADE, ENVIRONMENT AND SOCIAL GOVERNANCE* 3, 6–7 (John J. Kirton & Michael J. Trebilcock eds., 2004) (discussing the role of soft law in global environmental governance).

¹⁹⁹ See Charles Sabel et al., *Beyond Backyard Environmentalism*, in *BEYOND BACKYARD ENVIRONMENTALISM* 3, 13–16 (Joshua Cohen and Joel Rogers eds., 2000); Daniel J. Fiorino, *Rethinking Environmental Regulation: Perspectives on Law and Governance*, 23 HARV. ENVTL. L. REV. 441, 443 (1999).

²⁰⁰ Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 345 (1998); see also *id.* at 287, 346 (proposing processes to expand information and learning in a new “public sector model of problem solving”).

²⁰¹ See *id.* Karkkainen notes that “transparency, accountability and discipline” are maintained through “benchmarking comparisons and regulation through benchmarking.” Karkkainen, *supra* note 197, at 485 n.49 (internal quotations and citations omitted).

²⁰² The Renew Deal concept reflects this view. It notes the importance of coercion but provides limited explanation of the source of the incentives to engage in prosocial behav-

tions for achieving traditionally governmental ends when government is unable to act.

In a second variant, reflexive law advocates focus on the importance of dynamic, reflexive self-regulation.²⁰³ This work adds value by noting the importance of flexibility and of self-regulatory activity to increase regulatory efficiency. At the same time, reflexive law theories often give limited attention to the source of the incentive for self-regulation.²⁰⁴ To the extent reflexive approaches assume that the underlying pressure to reduce environmental harms arises from government regulation or liability schemes, reflexive regulation may miss an important additional source of coercion: the role of private preferences and private institutions as sources of incentives to self-regulate or to submit to private regulatory systems.²⁰⁵

In the last decade, many federal and state agencies have focused more on challenges to the authority and legitimacy of government regulation than on fine-tuning post-New Deal regulatory instruments. An environmental agency is unlikely to seize on available flexibility to modify a rule to adapt to changing conditions if opening up an old rule will subject the agency to pressure not to achieve the underlying environmental outcome. For regulators, this is the central challenge to the concept of adaptive management.²⁰⁶ Adaptation is essential, but how can it occur in ways that achieve more effective or efficient environmental protection, not just less environmental protection? Ostrom noted that strong pressure on a resource can undermine private ordering, and strong pressure exists in the extreme for climate change, fracking, and a number of other environmental issues. Identifying the source of sufficient coercive authority to shift corporate behavior may be as important for many environmental problems as identifying avenues for flexibility and adaptation, and private govern-

ior. See Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 342 (2004).

²⁰³ See Eric W. Orts, *Reflexive Environmental Law*, 89 NW. U. L. REV. 1227, 1231–32 (1995).

²⁰⁴ This is the basis for criticisms of reflexive and other New Governance approaches from scholars such as Rena Steinzor, and it may be the reason why some of the more innovative New Governance reforms have stalled in recent years. See Sidney A. Shapiro & Rena Steinzor, *Capture, Accountability, and Regulatory Metrics*, 86 TEX. L. REV. 1741, 1741–42 (2008). For example, many habitat conservation plans have not incorporated the adaptive management, monitoring, and reporting requirements that made them attractive options to standard application of the ESA. See Karkkainen, *supra* note 197, at 495.

²⁰⁵ See Orts, *supra* note 203, at 1231–32.

²⁰⁶ For a discussion of adaptive management, see J.B. Ruhl & Robert L. Fischman, *Adaptive Management in the Courts*, 95 MINN. L. REV. 424 (2010). Overcoming the concern about one-way ratchets also may be necessary to wider uptake of proposals such as Dorf and Sabel's democratic experimentalist idea of mandatory minimum performance standards that are periodically revised. See Dorf & Sabel, *supra* note 200, at 350–56.

ance may provide additional options that are both coercive and flexible.

A third type of New Governance focuses on the importance of contracts and cooperative governance. When New Governance scholars refer to contracting, however, the contracting parties typically are the government and a regulated party. Examples include Habitat Conservation Plans (HCP) under the Endangered Species Act and the understandings reached in a variety of regulatory flexibility initiatives.²⁰⁷ The contracting out of governmental functions and the cooperative governance that arises out of public-private contracts are of interest to public law scholars and particularly those writing in the area of New Governance,²⁰⁸ but the private-private interactions that characterize private environmental governance thus far have remained largely off the radar screen. To the extent these private activities are simply knock-on effects of public laws, public law scholars can account for them by using more expansive analyses of the effects of public laws.²⁰⁹ For example, many of the incentives for private environmental governance in commercial transactions arise from public environmental laws and tort law. Yet missing from the standard public law account of environmental law, even as updated by the New Governance scholarship, is the independent regulatory role often played by private actors, not just public agencies or public-private hybrids. When private parties manage common pool resources, supply environmental public goods, or reduce negative externalities by playing the standard-setting, implementing, monitoring, and enforcing functions traditionally reserved for the government, these private activities are worthy of attention by public law scholars.²¹⁰

Private environmental governance can be viewed as a distinct new field or as a new subfield of New Governance that explains the origin and functioning of private-private responses to environmental problems. For the most part, the New Governance enterprise is still about fixing government, not about building parallel institutions that can pursue governmental objectives or serve governmental functions

²⁰⁷ See Jody Freeman, *The Contracting State*, 28 FLA. ST. U. L. REV. 155, 194-95 (2000) (viewing private contracting via HCPs as a form of cooperative governance); Sabel et al., *supra* note 199, at 30-36 (viewing contracting via HCPs as a form of democratic experimentalism).

²⁰⁸ See, e.g., Freeman & Minow, *supra* note 25 (discussing the contracting out of government functions); Freeman, *supra* note 207; Richard B. Stewart, *A New Generation of Environmental Regulation?*, 29 CAP. U. L. REV. 21, 73-75 (2001) (discussing government-private sector contracting as a form of environmental law reform).

²⁰⁹ See Vandenberg, *supra* note 4, at 2090-91.

²¹⁰ See *id.* at 2043; see also Abbott & Snidal, *supra* note 18, at 46 (identifying governmental roles).

without government.²¹¹ The emphasis on flexibility and participation in New Governance scholarship is attractive so long as it is coupled with a sufficient ability to act quickly and to coerce recalcitrant parties when problems require swift responses and the parties resist softer forms of pressure. New Governance offers important reforms in areas where the regulated community is numerous, the issues are complex and rapidly changing, and the government has the political power to coerce. Well-designed private environmental governance options may be able to provide additional sources of coercive authority to shift corporate behavior without undermining the flexibility central to many New Governance measures.

III

OBJECTIONS

A number of reasonable objections can be raised to the claim that private environmental governance represents a discrete, important new field. In addition, some private environmental governance activities seem to touch a nerve at both ends of the political spectrum, provoking surprisingly sharp reactions from pro-environmental and pro-business advocates. Some environmental advocates assert that private governance is greenwashing that will have negative spillover effects on public governance.²¹² At the same time, some business advocates assert that private governance will reduce corporate efficiency or consumer choice, or will generate too much environmental protection or unintended negative consequences.²¹³ I examine several leading objections below.

A. Is Private Environmental Governance a Coherent Concept?

As with many fields, a number of activities easily qualify as private environmental governance, while others are less clear at the margins. I first examine the boundaries of private environmental governance and then discuss why lumping the various types of private environmental governance under one umbrella is coherent and adds value to legal scholarship and teaching.

²¹¹ See, e.g., Daniel A. Farber, *Triangulating the Future of Reinvention: Three Emerging Models of Environmental Protection*, 2000 U. ILL. L. REV. 61, 61–62 (noting the use of New Governance ideas for government regulatory flexibility initiatives).

²¹² See Jennifer Jacquet et al., *Seafood Stewardship in Crisis*, 467 NATURE 28, 29 (2010); Daniel Zwerdling & Margot Williams, *Conditions Allow for More Sustainable-Labeled Seafood*, NAT'L PUB. RADIO (Feb. 12, 2013, 12:01 AM), <http://www.npr.org/2013/02/12/171376617/conditions-allow-for-more-sustainable-labeled-seafood>.

²¹³ See Bob Lurie, *Wal-Mart's Green Strategy Raises Serious Issues*, HARVARD BUS. REVIEW BLOG NETWORK (June 30, 2010, 1:20 PM), http://blogs.hbr.org/cs/2010/06/why_you_should_worry_about_wal.html.

Boundaries. To constitute private environmental governance, an activity must be “private” and must involve “governance.” A vast literature has explored whether the public–private distinction is meaningful for legal scholarship, and I do not intend to add to that literature, but it is important to clarify what distinguishes private governance from the public governance that dominates the thinking of environmental policymakers and scholars. I first examine the private versus public distinction and then turn to which activities qualify as governance versus simple market activity.

For many environmental activities, the boundary between public and private is reasonably clear. For my purposes, the important point is that public governance typically claims legitimacy based on the consent of the governed.²¹⁴ The actual or imputed consent then enables the government to claim and exercise powers such as the development and enforcement of civil and criminal public laws and the adjudication of disputes. At the nation-state level, the claim of governmental authority enables the nation-state to claim a monopoly on the ability to engage in activities such as conducting foreign policy and declaring war, but it also limits the extent to which other nation-states can interfere with the activities within other states.

Private institutions perform many of the same functions as governments, but they typically do not claim to have been expressly or implicitly granted the authority to govern others without their personal consent. Substantial repercussions may arise from not complying with a private standard, but in theory firms and individuals must only comply if they have agreed to do so. As a general rule, private organizations have limited ability to coerce those who have not agreed to be coerced, and the remedies of private organizations generally do not include civil or criminal sanctions enforced by a governmental body.²¹⁵ This lack of coercive authority imposes a ceiling on the influence of private environmental governance activities. At the same time, because they lack the imprimatur of a national entity, private governance activities may take less time to develop, raise fewer sovereignty concerns, and be subject to fewer constraints when their activities cross national boundaries.

Most of the activities I have identified as forms of private environmental governance fit quite easily into the private end of the spectrum. Many environmental certification systems such as the FSC and MSC were organized and are operated and funded with little or no governmental involvement. Similarly, few would claim that supply chain contracts or other commercial transactions entered into by two

²¹⁴ See, e.g., Peter Newell et al., *Multiactor Governance and the Environment*, 37 ANN. REV. ENV'T & RESOURCES 365, 365 (2012) (reviewing literature on “multiactor governance”).

²¹⁵ See Roberts, *supra* note 73, at 125.

corporations are a form of public activity, even if they address environmental protection.

In the middle of the public–private spectrum, however, a question arises about the level of government involvement that can cause an activity conducted largely by private parties to be treated as public. If government is involved in funding the formation of a standard, convening the private participants for standard-setting, implementation, the use of the standard in procurement, and other activities, at some point the activity begins to function more like a public–private hybrid or quasi-public regulatory program. Thus, on the margin, some organizations and activities challenge the notion of purely public laws and institutions. An example is the Equator Principles, which private banks formed following pressure from both environmental advocacy groups and quasi-public institutions such as the International Finance Corporation (IFC) and the World Bank.²¹⁶ The limited government role in the implementation of the Equator Principles makes it difficult to argue that the Equator Principles are a form of public governance, or even a public–private hybrid, but quasi-governmental organizations played a role in their formation.

A closer call is the ISO 14001 environmental management standard, which was developed by an international decision-making body that has public and private members. Standards issued by ISO do not have the force of law, but many supply chain contracts require compliance with ISO 14001 management standards, and some governments may require compliance with the ISO 14001 standard in compliance agreements. The international trade regime addresses this ambiguity by treating private standard-setting and enforcement as government action in some situations.²¹⁷ As discussed above, the New Governance scholarship has noted the importance of public–private hybrids for understanding public governance. Although standards such as ISO 14001 and organizations such as ISO can fairly be characterized as public, private, or public–private hybrids, important insights arise from viewing them as a form of private governance (e.g., they enable public and private advocates to ask not “what can government do?” but “what can some organization do?”).

The question of when a private organization can be fairly said to be engaging in governance is more difficult. The easiest case involves any one of the growing number of organizations such as FSC and MSC that are formed to improve the management of a resource such as forests or fisheries and that develop collective standards and certify compliance with the standards. If several companies and advocacy groups agree on an environmental standard, secure funding from pri-

²¹⁶ See *supra* notes 105–10 and accompanying text.

²¹⁷ See Cohen & Vandenberg, *supra* note 74, at S59.

vate foundations, set up an organization to manage implementation of the standard, provide for private compliance auditing, certify compliance, and adjudicate disputes, then the organization is pursuing traditionally governmental objectives and performing governmental functions, and it fits squarely within the definition of private governance. Organizations such as FSC and MSC follow this basic pattern of collective standard-setting and implementation.²¹⁸

Not surprisingly, the processes for revising private standards used by these organizations quite closely track the core procedural elements mandated for informal rulemaking by federal agencies under the Administrative Procedure Act. A lawyer trained in administrative law would be far more comfortable advising a private certification organization in its standard-setting operations than would a lawyer trained in corporate transactions. For example, the secretariat managing the second set of revisions to the Equator Principles (called "EPIII") published a draft with proposed changes, included an explanation of those changes, and solicited comments. The final version will be published along with an explanation of changes and responses to comments.²¹⁹ The principal difference from an EPA rulemaking imposing environmental assessment requirements on banks is that the underlying authority was not developed by Congress and the specific regulatory language was not developed by an executive branch agency overseen by the President. Instead, the congressional equivalent is a group of banks, responding to pressure from environmental groups and quasi-public institutions such as the IFC and World Bank, and the agency equivalent is a secretariat working at the direction of the group of banks. Figure 1 arrays activities that constitute private and public ordering or governance from least to most formal.

²¹⁸ Governments may convene a meeting to stimulate the formation of the standards and certification system, influence the content of the standards, or enhance (e.g., by adopting the private standard as a criterion for procurement) or undermine enforcement of the standards, but they do not control the standard-setting or implementation. *See* NAT'L RESEARCH COUNCIL, SUSTAINABILITY CONSIDERATIONS FOR PROCUREMENT TOOLS AND CAPABILITIES: SUMMARY OF A WORKSHOP 5 (2012) (noting that the General Services Administration has substantial leverage to achieve sustainability because of the \$95 billion it spends each year on goods and services).

²¹⁹ Legal scholars have begun to examine the implications for administrative law of quasi-governmental organizations at the international level. *See, e.g.*, Benedict Kingsbury, Nico Krisch & Richard B. Stewart, *The Emergence of Global Administrative Law*, 68 LAW & CONTEMP. PROBS. 15 (2005).

macy, and efficacy for private governance activities also may become more apparent.

Although the parties to a commercial transaction may have a profit maximization goal and they may only be improving environmental behavior or environmental quality as a by-product of pursuing that goal, the end result of the activity and the functions performed by the private entities, not the intent of the parties, should control. As to public governance, we do not determine whether an agency is a governmental entity based on whether it or its managers intend to achieve the public ends they are charged with pursuing, and it is not clear what value would be added here by requiring prosocial intent by one or both corporate parties. Some private governance activities (e.g., FSC and MSC) are clearly intended to protect environmental quality or resources, but the individual actors may have very different motives. In addition, many private commercial transactions that I argue are a form of private environmental governance (e.g., Hewlett-Packard's or Wal-Mart's supply chain contracting requirements) likely involve parties that have a mixture of efficiency, resource supply, competition, and reputational goals that can all be squared neatly with profit maximization, along with altruistic preferences or norms by managers, shareholders and customers. In short, the motivations of the participants are less likely to be a valuable criterion than the function or outcome of the activity.

Coherence. I argue that the various types of activities and organizations within the boundaries of private environmental governance not only meet the definition of private environmental governance, but they also cohere: they all involve private-private interactions that perform traditionally governmental functions and pursue governmental ends, and treating them as a common phenomenon yields insights into environmental governance.

Standards and certification systems and other forms of private governance with collective standard-setting are sufficiently similar to supply chain contracting and other activities with bilateral standard-setting to lump them both into private environmental governance. The important common attribute is that they both can facilitate environmental protection without government initiating, funding, or otherwise facilitating the activity. The result is that policymakers, when confronting an environmental problem, cannot simply ask what government can do to resolve the problem. The action may involve a private foundation funding an effort by NGOs and corporations to establish a standards and certification system, or an NGO pressuring corporate firms to impose supply chain contract standards on suppliers, or a community group pressuring a local industrial facility to dis-

close and reduce toxic releases in return for stopping a reputation campaign or supporting local government land-use approvals.

Whether or not any one private governance activity is desirable in any given situation, they all share the attribute of offering a private response to an environmental protection problem. All of these private activities affect environmental behavior if not environmental quality, and all affect the core questions examined by environmental law scholars: the type of instruments and level of resources necessary to achieve a desired level of environmental protection. In addition, a well-educated environmental lawyer serving a public or private client will know of the private options when confronting an environmental problem, and when representing a private client, will be prepared to engage in the negotiating, drafting, and private dispute resolution processes common to many of these private governance activities.

B. Has Market Failure Occurred?

Even if private governance has important effects on environmental behavior, environmental quality, and the instruments available for environmental governance, economists might respond by arguing that a market failure has not occurred in the first place. If the types of collective and bilateral standard-setting discussed above are simply market activity, then this is a fair response. In this approach, individuals have preferences for environmental protection, and what I describe as private environmental governance is simply the reflection of these preferences in consumer, investor, lender, manager, and other behavior in the marketplace.²²⁰ Although private environmental governance activities can be viewed in this way, doing so takes economics a long way from standard applications of models involving rational actors seeking to maximize utility.

In theory, utility can be maximized by achieving something other than personal pecuniary gain. Prosocial preferences can exist among individuals' preferences, but as many law and economics scholars have argued it is difficult to develop falsifiable hypotheses if these preferences are included since altruism (maximizing preferences for prosocial outcomes) becomes indistinguishable from self-interest.²²¹ If pursuing selfish interests includes pursuing prosocial interests, the

²²⁰ See, e.g., David P. Baron, *Private Politics, Corporate Social Responsibility, and Integrated Strategy*, 10 J. ECON. & MGMT. STRATEGY 7, 9 (2001) (concluding that "both motivation and performance are required for actions to receive the [corporate social responsibility] label"). Opposition to use of private environmental governance as a way to improve environmental quality is also grounded in views about the appropriate goals of firms. See, e.g., Lurie, *supra* note 213 (raising concern about a corporation imposing environmental requirements on suppliers and customers).

²²¹ Mancur Olson recognized that a person may gain utility, such as a feeling of moral worth, from individual, noncollective rewards for either acting in particular ways or partici-

notion of rational action, as operationalized by economists, becomes a tautology. In addition, if these private governance activities are viewed as simply a form of market activity arising from the pursuit of prosocial preferences, the implications of noneconomic preferences or norms (distributional justice, accountability) for market activity and the development of new applications to governance problems can be easily overlooked. In short, although much of private environmental governance involves market activity, it involves private behavior that often has the effect of or is motivated by the desire to manage a common pool resource, provide a public good, or reduce a negative externality, topics that are arguably distinct from the typical market behavior studied by private law scholars.

C. Is Private Environmental Governance of Concern to Lawyers?

Another objection is that the private-private interactions discussed in Part II are widespread activities that affect environmental behavior and environmental quality, but they are not important for understanding or practicing law. In other words, perhaps environmental consultants, accountants, engineers, and business managers should take note, but these activities do not require or benefit from involvement by lawyers. In some cases private environmental governance fits neatly into common conceptions of law, but in others it exerts influence but does not look like law. Perhaps as a result, private-private interactions are treated in more detail in other literatures than in the legal literature.²²²

Legal scholars who have examined private-private interactions have tended to focus on the area of private environmental governance that most closely resembles public governance: private certification systems that set and enforce collective standards regarding everything from environmental management standards to forests, fisheries, and shade-grown coffee.²²³ This private collective standard-setting is increasingly important on a global scale, but it is only one of many forms of private environmental governance. Understanding the wide range of private environmental governance activities can induce scholars to rethink the actors and actions available for environmental protection, as well as the standards of review for evaluating the performance of legal instruments.

pating in groups, but he concluded that this approach is not "especially useful" because it is not subject to empirical refutation. See OLSON, *supra* note 51, at 160 n.91.

²²² See discussion *supra* Part II.

²²³ See Meidinger, *supra* note 78, at 259; Richard L. Barnes, *The U.C.C.'s Insidious Preference for Agronomy over Ecology in Farm Lending Decisions*, 64 U. COLO. L. REV. 457 (1993); Errol E. Meidinger, *Environmental Certification Programs and U.S. Environmental Law: Closer Than You May Think*, 31 ENVTL. L. REP. 10162 (2001) [hereinafter Meidinger, *Environmental Certification Programs*]; Roberts, *supra* note 73; Roberts, *supra* note 170.

Even if a set of institutions and activities can be characterized as private governance, private environmental governance might not matter to legal scholars or lawyers if it is not a matter of law. I do not seek to add to the literature on the nature and boundaries of law, but I argue that the examples of private environmental governance I have discussed are sufficiently close to law or have sufficient effects on law to be of interest to legal scholars and lawyers. Several reasons support this conclusion.²²⁴

At the outset, private environmental governance is an important part of what environmental lawyers do. I discuss this issue in more detail below, but almost all major law firms report that their lawyers practice some form of private environmental governance activity.²²⁵ Private governance leads to litigation in public and private tribunals. When environmental lawyers lobby today, they lobby private governance organizations as well government entities.²²⁶ Private governance activities often generate collective private standards that are enforceable in actions between private parties over issues regarding compliance with the standards,²²⁷ the performance of the standards if complied with (e.g., does a LEED building yield the anticipated energy savings?), and other issues.²²⁸

Private governance also involves contract provisions between private parties that are enforceable in public or private tribunals. It often includes enforceable contractual terms that are as much “hard law” as many forms of regulation, although administrative orders and criminal enforcement are not a threat. Similarly, environmental lawyers working in the private governance area do not draft public regulations, but they draft private standards that look essentially the same (e.g., FSC or MSC standards), even though they lack the ability to bind or coerce in the same way. Lawyers provide advice on the application of and compliance with private standards, not just public stan-

²²⁴ See Newell et al., *supra* note 214, at 370. Many aspects of private environmental governance meet frequently used criteria for treatment as “law.” For example, many private governance activities include the development of standards that communicate expectations in advance and the enforcement of standards on others. One party is monitoring and coercing the behavior of another, even if the coercing party does not claim the ability to use the types of sanctions typically reserved to states (e.g., imprisonment). Disputes are adjudicated in private and public tribunals. See *id.* at 369.

²²⁵ See Vandenbergh, *supra* note 4, at 2066–67.

²²⁶ For a recent example, see Nelson, *supra* note 124 (noting that the American Chemistry Council lobbied the USGBC to drop chemical disclosure from the LEED standard).

²²⁷ See Margaret M. Blair et al., *The New Role for Assurance Services in Global Commerce*, 33 J. CORP. L. 325, 325 (2008); Lesley K. McAllister, *Regulation by Third-Party Verification*, 53 B.C. L. REV. 1, 1 (2012).

²²⁸ See, e.g., Anthony J. Campanelli & Christopher Rizzo, DELOITTE, RISKS AND REWARDS FOR BUILDING SUSTAINABLE HOTELS 7, available at http://www.deloitte.com/assets/Dcom-Greece/Local%20Assets/Documents/Attachments/Real%20Estate/RiskandRewards_Hotels.pdf.

dards.²²⁹ They do not just file comments on and advocate before public agencies on public regulations, but they also file comments with private organizations regarding proposed standards.²³⁰ They do not just challenge agency actions in courts, but they also challenge private standards in courts and other forums.²³¹

Finally, one cannot fully predict the effects of public laws without accounting for private governance. Private environmental governance affects legislative and agency lawyers because government action can harness private governance (e.g., by requiring information disclosure that will drive supply chain contracting or by creating incentives for environmental diligence activities), promote it (e.g., through the federal General Services Administration's ninety-five billion dollar procurement budget),²³² undermine it (e.g., by adoption of weak public standards that displace stronger private standards), or prevent it (e.g., through legislation or agency antitrust or anti-deception enforcement actions). An understanding of private governance thus is often necessary to design optimal public statutes, regulations, and policies.

D. Does Private Environmental Governance Matter?

The discussion above suggests that a wide range of private governance activities are occurring and that a large number of corporate firms and landowners have publicly committed to comply with private environmental governance programs (e.g., certification systems) or have legal or economic incentives to change behavior that are influenced by private environmental governance activities (e.g., supply chain contracts). But does this activity affect firm behavior or environmental quality? To what extent are corporate private environmental governance activities just greenwashing? The widespread adoption of these programs does not demonstrate that these programs have substantial impacts, and the absence of government coercion raises concerns about whether these programs are simply providing a public relations cover for participating firms and advocacy groups. The discussion below examines the effects of private environmental governance activities in three areas: (1) the effects on the standards used for environmental instrument choice and for judging the performance of

²²⁹ See Kinney & Hughes, *supra* note 123.

²³⁰ See Nelson, *supra* note 124.

²³¹ Private environmental governance also raises legal issues when it affects international trade. See Cohen & Vandenbergh, *supra* note 74, at S59–S60.

²³² For a discussion of the relationship between private governance and public procurement, see NAT'L RESEARCH COUNCIL, *supra* note 218, at 5.

those instruments; (2) the effects on the environmental behavior of corporate firms; and (3) the effects on environmental quality.²³³

1. *Standards*

At the outset, it is important to identify a proper heuristic for evaluating the effects of private governance programs. Doing so confronts two related challenges: (1) accounting for public and private options in the standard of review; and (2) uncertain spillover effects.

Standard of Review. In a world with only public governance measures, it may be appropriate to ask whether a particular measure will solve a problem, and that is the question that is often asked in theoretical work²³⁴ and policy debates.²³⁵ The question is appropriately framed in this way because the government has coercive power, so in many cases government policymakers have the ability to select and enforce a measure that will solve the problem. Public governance measures can certainly be interim measures, but presumably the choice of an interim measure was made because it was thought to be the optimal action in that situation. Once selected, it is appropriate for assessors (whether scholars, executive branch entities such as an agency Inspector General or the Office of Management and Budget, or congressional entities such as the General Accountability Office and oversight committees) to evaluate the measure based on whether it solved the problem. Did air pollution achieve ambient standards? Did pesticide makers comply with labeling requirements? Is the harvest from a forest or fishery sustainable? Of course, political viability may limit the ability of government to adopt adequate measures, but in theory the ability to achieve outcomes, either via domestic or international action, exists, and political viability is often not a subject of scholarly interest.²³⁶

If we take private governance seriously, however, a different standard is appropriate for judging which measures should be pursued and for evaluating their performance. Since private governance often will be gap-filling or complementary to public governance, it may succeed without solving the problem or being the optimal solution. In fact, in many cases private governance measures may be second- or third-best options. For large-scale global problems, a growing body of

²³³ Many private certification and labeling systems also have economic and social goals, but the environmental goals are typically at the core of these systems, and I focus on them here. See TOWARD SUSTAINABILITY, *supra* note 35, at 57.

²³⁴ See Jonathan B. Wiener, *Think Globally, Act Globally: The Limits of Local Climate Policies*, 155 U. PA. L. REV. 1961, 1962 (2007).

²³⁵ See Levi, *supra* note 21, at 78.

²³⁶ See Gilligan & Vandenbergh, *supra* note 40, at 2 (noting the importance of political opportunity costs in climate instrument choice).

scholarship argues that comprehensive solutions are not necessary.²³⁷ For example, Elinor Ostrom noted that the actions of governments and other organizations at many levels could produce large-scale effects in the aggregate.²³⁸ A private governance measure often will not provide a complete response, but it may be part of an optimal mix of public and private measures.

When evaluating whether private governance measures have succeeded, the question is not whether a particular fishery or forest or airshed is now sustainable, well-managed, or has achieved a desired level of ambient air quality, but rather whether the change from what would have happened in the absence of the private governance measure is worth the cost. This is a difficult standard to apply, but not framing the question this way can lead to a systemic bias against private governance measures. If a fishery would have become depleted in ten years, but with a private governance measure it will not become sustainable but will not be depleted for fifty years, has it succeeded? Under the approach that prevails in the current policy debate, the answer is no: The fishery is not sustainable.²³⁹ As a result, public and private support for private governance measures is discouraged because the critique that resonates is that the system is failing. If a public governance measure was not viable, however, is adding forty years to the life of a fishery that ultimately becomes depleted a success or failure? Private governance measures often are under consideration because ideal options are not viable.

Spillover Effects. Another important factor in assessing the success of private governance actions is the effect of a private governance option on existing governance measures and on the likelihood of adopting other public or private governance options.²⁴⁰ Private governance could fill gaps where public governance cannot reach because of political, territorial, or expertise gaps. It also could undermine, enhance, delay, accelerate, or complement government action in situations where government can act. If taking a private governance step today

²³⁷ See Thomas Dietz, Gerald T. Gardner, Jonathan Gilligan, Paul C. Stern & Michael P. Vandenbergh, *Household Actions Can Provide a Behavioral Wedge to Rapidly Reduce US Carbon Emissions*, 106 PROC. NAT'L ACAD. SCI. 18452, 18452 (2009); Keohane & Victor, *supra* note 177, at 7; Elinor Ostrom, *Nested Externalities and Polycentric Institutions: Must We Wait for Global Solutions to Climate Change Before Taking Actions at Other Scales?*, 49 ECON. THEORY 353, 353 (2012); S. Pacala & R. Socolow, *Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies*, 305 SCIENCE 968, 968 (2004).

²³⁸ See Ostrom, *supra* note 237, at 356.

²³⁹ See Jacquet et al., *supra* note 212, at 29; see also Allen Blackman & Jorge Rivera, *The Evidence Base for Environmental and Socioeconomic Impacts of "Sustainable" Certification* 3–5 (Env't for Dev. Discussion Paper Series), available at <http://www.rff.org/documents/RFF-DP-10-17.pdf> (discussing the counterfactual analysis problem).

²⁴⁰ See, e.g., BREYER, *supra* note 24, at 23–26 (discussing spillover effects as externalities).

will undermine support for a more effective measure, it may do more harm than good. Negative spillover effects could occur at the institutional and individual levels. At the institutional level (e.g., corporations, foundations, universities, and other non-profit organizations), if there is a fixed pool of management time and money in an organization, spending it on advocating for or developing and implementing private governance measures could reduce the amount available for public governance. At the individual level (e.g., whether the individual is acting as a voter, civic group participant or leader, or is engaging in household behavior), time and money spent on advocating for or engaging in private governance could drain resources from public governance.²⁴¹

For example, economists point to the single action bias as a reason to avoid pursuing remedies other than a carbon tax or cap and trade.²⁴² The single action bias suggests that by taking a small measure, individuals will be induced to believe that they have reduced the risk from the underlying problem and will become less supportive of other steps to address the problem—a form of negative spillover.²⁴³ Spillover effects are complicated, however, and positive spillover effects also could occur. The adoption of a private governance program could increase the prospects for a public program by demonstrating the feasibility of a type of action, creating a constituency to support government action, or reducing the cost to private firms of government action. At the institutional level, public actions often will be less expensive if private actions have induced action. For example, Wal-Mart's imposition of efficiency requirements on suppliers will make a domestic and international carbon tax less burdensome on those suppliers and presumably will reduce their resistance to a policy that reduces carbon from the energy supply. In addition, private governance may induce corporations to become advocates for public or private programs.²⁴⁴

Similarly, at the individual level, a host of social psychological studies suggest that negative spillover may not occur in many situations or may be overwhelmed by other phenomena that cause positive

²⁴¹ See, e.g., GERNOT WAGNER, BUT WILL THE PLANET NOTICE?: HOW SMART ECONOMICS CAN SAVE THE WORLD 7 (2011) (arguing that single action bias research is a basis for not pursuing policies that target household behavior). Gernot Wagner and colleagues recently examined the literature on the energy rebound effect, a related phenomenon, and concluded that “rebound effects are small and are therefore no excuse for inaction.” See Kenneth Gillingham, Matthew J. Kotchen, David S. Rapson & Gernot Wagner, *The Rebound Effect is Overplayed*, 493 NATURE 475, 476 (2013).

²⁴² See BREYER, *supra* note 24, at 23–26.

²⁴³ See Elke U. Weber, *Experience-Based and Description-Based Perceptions of Long-Term Risk: Why Global Warming Does Not Scare Us (Yet)*, 77 CLIMATIC CHANGE 103, 115–16 (2006).

²⁴⁴ See Eric Biber, *Cultivating a Green Political Landscape: Lessons for Climate Change Policy from the Defeat of California's Proposition 23*, 66 VAND. L. REV. 399, 424 n.99 (2013).

spillover effects. Examples of these psychological phenomena include gateway effects, cognitive dissonance, availability, active learning, and others.²⁴⁵ Whether the individual is acting as a consumer, voter, civic group participant, or leader, or is engaging in household behavior, these psychological phenomena suggest that engaging in private governance activities might increase support for public governance.

In addition, private governance can strengthen public measures, making it more likely that they will withstand challenges. For example, the CDM Gold Standard is a private governance program that was formed to enhance a government program (the CDM offset program of the Kyoto Protocol).²⁴⁶ Private governance programs can serve as a means of experimenting with policy options (e.g., offsets) at low risk to policymakers, enhancing the prospects for later government action.²⁴⁷ Private governance programs also can enhance legality verification, suggesting that these efforts may be particularly valuable in countries with adequate public laws but weak public enforcement.²⁴⁸ At this point in the development of private environmental governance, it is not possible to quantify spillover effects, and the effects likely vary. The important point for now is to avoid asymmetric credulity—the tendency to give credence to those theories or studies that fit a mental model while being incredulous toward those that do not.²⁴⁹ The potential role of private governance is too large and the range of studies and applications is too great not to examine negative and positive spillover effects, rather than making assumptions that only one or the other will occur.

2. *Effects on Environmental Behavior*

The desirability of private governance activities hinges in large part on the effects of these systems on corporate environmental behavior. Plausible scenarios can be advanced in which these programs have substantial impacts or are little more than window dressing. Although the effects of private environmental governance on the environmentally significant behavior of firms (e.g., reductions in toxics use by a corporation) and on environmental quality (e.g., changes in concentrations of toxics in a stream) have not been thoroughly stud-

²⁴⁵ See A. AUSTIN ET AL., DEP'T FOR ENV'T, FOOD AND RURAL AFFAIRS, EXPLORING CATALYST BEHAVIOURS: EXECUTIVE SUMMARY 5 (2011).

²⁴⁶ For a discussion, see Levin et al., *supra* note 132.

²⁴⁷ See Robert J. Brulle et al., *Shifting Public Opinion on Climate Change: An Empirical Assessment of Factors Influencing Concern over Climate Change in the U.S., 2002–2010*, CLIMATIC CHANGE 1 (2012), available at <http://www.pages.drexel.edu/~brullerj/02-12ClimateChangeOpinion.Fulltext.pdf>.

²⁴⁸ See Cashore & Stone, *supra* note 78, at 13.

²⁴⁹ See Gilligan & Vandenberg, *supra* note 40, at 2.

ied, some initial conclusions emerge from the literature.²⁵⁰ I distinguish the corporate participation in private governance discussed in Part I (e.g., an agreement to comply with the Equator Principles) from corporate environmental behavior, by which I mean the activities that a firm engages in that directly affect its impact on environmental quality or resource use such as emissions of pollutants, levels of energy use, and the practices the firm uses for extracting natural resources. The former is an indication of participation in private environmental governance activities, but the latter is an indication that behavior change is occurring that might affect environmental quality. A deeper research base is available on older private governance activities (e.g., certification systems for forestry) than on newer systems (e.g., commodities roundtables). In addition, more research is available on the impacts of private governance on the behavior of large corporate firms and local business or individual actors (e.g., forest owners and foresters) than on any resulting changes in environmental quality. As the discussion below demonstrates, rigorous empirical studies and a large amount of anecdotal information suggest that some private governance activities are associated with substantial changes in corporate environmental behavior.

For instance, empirical studies of private certification systems suggest that many of these systems have changed the environmental behavior of participants. A recent study of private sustainability certification systems for agriculture, forestry, fisheries, and aquaculture identified hundreds of case studies, several dozen large-sample-size quantitative and qualitative studies, and a few peer-reviewed, large-scale evaluations of these systems.²⁵¹ The study concluded that the effects of certification systems on the behavior of the corporate firms and farms that produce certified goods are better understood than the effects on environmental quality. In many cases, certification systems were designed to advance adoption of practices rather than environmental conditions or outcomes, and although some certification systems seek to ensure that the certified activities are environmentally appropriate, many certify only that management processes have been followed.²⁵²

The study concluded that standards, practices, and performance expectations established in the context of voluntary systems have become the norm for many producers and consumers in some markets, and in some cases were later institutionalized in public regulations

²⁵⁰ See TOWARD SUSTAINABILITY, *supra* note 35, at 45–56.

²⁵¹ See *id.* at ES-1.

²⁵² See Meidinger, *Environmental Certification Programs*, *supra* note 223, at 10163–64.

(e.g., green building codes).²⁵³ In addition, despite the data limitations and difficulties of establishing causation, research suggests that certification standards have had extensive influence on the adoption of sustainability practices by firms and farms. For example, a number of studies have found that foresters working in forests managed under the FSC program engage in different practices from those in noncertified forests.²⁵⁴ Similarly, a 2006 study concluded that MSC-certified fisheries demonstrated improved management practices and information disclosures.²⁵⁵

A variety of sources also suggest that information of the type often conveyed through certification systems has had substantial effects on individual behavior. When consumers became concerned that ozone-depleting chemicals from aerosol cans were causing the hole in the stratospheric ozone layer, the market for aerosol cans declined dramatically, and the decline continued even after the suspect chemicals were removed.²⁵⁶ When consumers became concerned about the killing of dolphin to catch tuna, sales of canned tuna in the United States declined, and retailers responded to advocacy group pressure by selling only tuna with dolphin-safe labels.²⁵⁷ Today, even though there is no legal requirement to sell dolphin-safe tuna, there is essentially no market for unlabeled tuna.

Many firms have been induced to adopt environmental management systems despite the absence of a public regulatory requirement to do so, and many have required their suppliers to adopt these systems.²⁵⁸ The most widespread collectively set environmental management standard, ISO 14001, requires the adoption of a number of environmental practices by firms. Hundreds of thousands of firms have announced that they comply with ISO 14001, and studies suggest that firms that are in compliance change some environmental practices.²⁵⁹

In addition, although information about firm environmental behavior is rarely a matter of public record in the absence of government enforcement actions or litigation, the environmental activities associated with commercial transactions affect corporate behavior in

²⁵³ The study did not find evidence of private standards locking in suboptimal standards. See TOWARD SUSTAINABILITY, *supra* note 35, at ES-12.

²⁵⁴ See *id.* at 62.

²⁵⁵ See *id.* at 61 & Appendix E.

²⁵⁶ See Peter M. Morrisette, *The Evolution of Policy Responses to Stratospheric Ozone Depletion*, 29 NAT. RESOURCES J. 793, 800 (1989).

²⁵⁷ See Teisl et al., *supra* note 181, at 339.

²⁵⁸ See *supra* notes 127–30 and accompanying text.

²⁵⁹ See Richard N. L. Andrews et al., *Environmental Management Under Pressure: How Do Mandates Affect Performance?*, in LEVERAGING THE PRIVATE SECTOR: MANAGEMENT-BASED STRATEGIES FOR IMPROVING ENVIRONMENTAL PERFORMANCE 111, 117–18 (Cary Coglianese & Jennifer Nash eds., 2006).

ways that are likely to influence the environmental performance of firms and environmental quality.²⁶⁰ For example, as stated at the outset, more money is spent on private environmental inspections than the entire budget of the federal environmental enforcement office.²⁶¹ A 2005 study revealed that almost all of the top fifty private law firms in the U.S. by profits per partner have lawyers engaged in the types of environmental transactional practice that involves the supervision of these environmental investigations and the negotiating, drafting, and enforcing of the provisions in these agreements.²⁶² Although much of the \$500 million spent on private environmental investigations each year is driven by efforts to reduce liability under or increase compliance with public environmental laws, the private activity adds a layer of private monitoring and enforcement.

In other cases, environmental investigations may be driven by concerns about reducing reputational or other risks that have little or no connection to public law requirements. For instance, the \$500 million annual figure does not include the environmental assessment activities required by banks to comply with the Equator Principles or the Carbon Principles. Some of these costs involve assessments of project compliance with public environmental laws, but much of the costs arise from assessments of project impacts not addressed by public laws. If the project is a windmill in Texas that is not on federal land, many of the applicable requirements may arise from compliance with the Equator Principles' requirements for disclosure of environmental assessments and environmental performance rather than from concerns about compliance with federal, state, or local environmental laws. Environmental assessments may evaluate this private compliance as much as compliance with public regulations.

The \$500 million private environmental investigation figure also does not include the costs of private audits conducted on behalf of firms seeking to achieve or maintain a certification under the various environmental private certification systems. The total expended on this type of private environmental enforcement is unclear, but there are indications that the amount is large. For example, corporate firms

²⁶⁰ One area of promising research is the connection between private transactions and the disclosure of information about toxics releases required by the Toxic Release Inventory program. See Shameek Konar & Mark A. Cohen, *Information as Regulation: The Effect of Community Right to Know Laws on Toxic Emissions*, 32 J. ENVTL. ECON. & MGMT. 109, 109 (1997). For a proposal involving stimulation of private environmental governance by government disclosure of corporate sustainability data, see Wendy E. Wagner, *Imagining Corporate Sustainability as a Public Good Rather than a Corporate Bad*, 46 WAKE FOREST L. REV. 561, 562 (2011).

²⁶¹ See *supra* note 29 and accompanying text.

²⁶² See Vandenbergh, *supra* note 4, at 2067–68.

spend tens of millions of dollars each year on the market for private assurance services.²⁶³

3. *Effects on Environmental Quality*

The impacts of private governance activities on environmental quality are less clear. It is difficult to connect many private governance activities with specific changes in environmental quality at the local or regional levels. As with the overall standard of review applied to private governance systems, however, it is important to apply the appropriate standard to an evaluation of environmental impacts. The relevant comparison for private governance activities is the state of knowledge of the environmental impacts of viable alternative public governance activities.

In short, we understand a great deal about the relationship between government enforcement activities and the compliance rates and emissions of regulated firms, but we understand less about the relationship between public environmental governance and environmental quality. On the whole, the adoption of the environmental regulatory program required by the major statutes of the 1970–1990 period corresponds to an improvement in many indicators of environmental quality regarding air, water, and waste, although even that proposition has been challenged in recent years.²⁶⁴ Government programs in some specific areas have been tied to environmental quality improvements (e.g., changes in ambient concentrations of hazardous air pollutant emissions in response to the maximum achievable technology requirements, and sulfur dioxide emissions in response to the emissions trading system imposed by the 1990 Clean Air Act Amendments). For many government programs, however, it is remarkably difficult to tie a particular program to a measured change in local or regional environmental conditions even if some impact is very plausible. Perhaps the best evidence of the challenge of establishing the nexus between government environmental programs and environmental conditions is the difficulty that federal environmental agencies have had complying with the requirements to set and track progress toward the achievement of goals in the Government Performance and Results Act.²⁶⁵ The limited ability to connect governance activities to

²⁶³ See Blair et al., *supra* note 227, at 329.

²⁶⁴ See, e.g., Jonathan H. Adler, *The Fable of Federal Regulation: No, States Didn't Ignore Environmental Problems*, PROP. & ENV'T RES. CENTER REP., Winter 2004, available at <http://perc.org/articles/fable-federal-regulation> (concluding that “[t]he oft-told explanation for federal environmental legislation—that ever-deteriorating environmental quality made federal regulation necessary—does not fit the historical record”).

²⁶⁵ See Government Performance and Results Act of 1993, Pub. L. No. 103-62, 107 Stat. 285 (requiring the development of goal and annual performance reports); see also EPA OFFICE OF INSPECTOR GEN., *THE EFFECTIVENESS AND EFFICIENCY OF EPA'S AIR PROGRAM* iv, 34

changes in environmental conditions thus exists for public and private governance systems, and it is important not to hold them to different standards.

Nevertheless, it is fair to conclude that our understanding of the environmental quality effects of private governance is very shallow. The recent comprehensive review of the literature on sustainability certification systems discussed above observed that localized impacts have been identified more often than impacts at a larger scale (e.g., watersheds). The study identified few rigorous, experimentally designed and controlled studies of the long-term, large-scale impacts of certification systems, and it concluded that there are insufficient data to determine the cumulative effects on ecosystems.²⁶⁶

Unpacking the available research on two certification systems provides a sense of the state of knowledge and the impacts that might be detected if additional studies were conducted. As to forests, the study concluded that nine percent of all productive forests are subject to FSC standards. Studies comparing forests managed under the FSC program to other forests have found changes in forest practices but have not detected changes in the ecosystem health of the certified forests.²⁶⁷ As to fisheries, seven percent of all fish caught for human consumption are from fisheries subject to the MSC standards, and a recent study commissioned by the MSC of more than twenty MSC-certified fisheries found substantial positive effects on stock status (the number of fish).²⁶⁸ The MSC certification system has been less successful in reducing bycatch and maintaining overall biodiversity conservation.²⁶⁹

The literature on the environmental quality effects of other forms of private environmental governance is even less robust. Collective environmental management systems such as ISO 14001 do not require the achievement of specific environmental standards or compliance rates, and it is difficult to determine the effects of these systems on the environmental behavior of the firms that adopt them. Several empirical studies have found a correlation, however, between environmental management standards and environmental performance.²⁷⁰ Similarly, collective information disclosure standards such as GRI and CDP

(1998), available at <http://www.epa.gov/oig/reports/1998/8100057.pdf> (noting lack of reliable emission factors for air pollutants and difficulty of establishing programmatic impacts on air pollution).

²⁶⁶ See TOWARD SUSTAINABILITY, *supra* note 35, at 72. The report also concluded that the indirect impacts of private certification systems are substantial and may be greater than the direct impacts. See *id.* at ES-8.

²⁶⁷ See *id.* at 62.

²⁶⁸ See *id.* at 61.

²⁶⁹ See *id.* at 64–65; Jacquet et al., *supra* note 212, at 28–29.

²⁷⁰ See Coglianesi, *supra* note 127, at 71; Petra Christmann & Glen Taylor, *Globalization and the Environment: Determinants of Firm Self-Regulation in China*, 32 J. INT'L BUS. STUD. 439,

require disclosure by participants but do not require improvements in environmental performance, and the effects of these programs on environmental questions remains unclear. A robust literature exists on the effects of public information disclosure requirements on pollutant emissions by corporate firms, however, and this literature suggests that firms that are higher emitters in their sectors tend to suffer adverse stock prices after the public disclosure of their emissions data and tend to reduce emission more than peer firms following the disclosure.²⁷¹ Private disclosure programs may differ since low-emitting firms may participate in these programs and high-emitting firms may not. At the same time, firms appear to be responding to a variety of incentives to participate, which may expand the group of participants beyond the lowest-emitting firms.²⁷²

The environmental effects of private governance arising from bilateral standard-setting are perhaps the least understood. Anecdotal information suggests that activity involving supply chain contracts and other commercial transactions is very widespread, and there are indications that large numbers of private parties are performing the types of standard-setting, monitoring, enforcement, and adjudication functions that governments often play. These private activities could lead to effects on environmental quality, but there is almost no literature on the topic. The direction of these effects may vary as well. In many cases, the private governance activity is conducted by a party that has an incentive to produce improved environmental quality or reduced resource use (e.g., a prospective buyer, tenant, or lender conducting environmental diligence to assess environmental risks). In some others, the private party may have incentives to act in ways that increase environmental harms or resource use (e.g., corporate transactions designed to place environmental liabilities in separate corporate entities to avoid the costs of public environmental laws).

A remarkable development in the last two decades, however, is the growth in the number of firms that are engaging in environmental supply-chain contracting activities that are likely to have the effect of improving environmental quality. For example, it is possible that there will be no net carbon emissions reductions from Wal-Mart's recent insistence that its top suppliers in China increase energy efficiency by twenty percent, despite Wal-Mart's estimate of a twenty million metric ton reduction. Increased efficiency could occur without the contract requirement, or the lower price of imported goods or

449–52 (2001); Aseem Prakash & Matthew Potoski, *Investing Up: FDI and the Cross-Country Diffusion of ISO 14001 Management Systems*, 51 INT'L STUD. Q. 723, 723 (2007).

²⁷¹ See Konar & Cohen, *supra* note 260, at 109.

²⁷² See David Vogel, *Private Global Business Regulation*, 11 ANN. REV. POL. SCI. 261, 268–69 (2007) (concluding that “win-win” situations for businesses are not common).

the improved reputation of Wal-Mart from the requirement could increase carbon emissions on net by increasing the volume of goods sold, overwhelming the emissions reductions from efficiency gains. It is also possible that the \$500 million spent each year on environmental investigations in commercial transactions in the U.S. is not reducing the environmental harms caused by the facilities subject to these investigations over and above the requirements of public laws. On the surface, however, the more plausible inference seems to be that a substantial, if poorly understood, effect is occurring on environmental quality and that the effect is in the direction of reduced emissions and improved environmental quality.

E. Why Is the Scope of Private Governance Hard to See?

If private environmental governance is widespread, and if empirical studies demonstrate that it affects corporate behavior and possibly environmental conditions, why do scholars and policymakers typically look for public law remedies to environmental problems? The answer discussed above is conceptual framing: the standard public law model does not view a private certification system as a type of environmental law, and private law scholars typically are not focused on the public implications of private market behavior. Private governance also may not be apparent because it lacks a common nomenclature, and many of the terms used to describe positive law subtly steer us away from thinking about the private role in environmental governance.²⁷³ No single name has emerged for private governance, and the terminological profusion reduces the extent to which the common aspects of the underlying activities and organizations are understood, refined, and extended.

In addition, the assumption that environmental governance is a matter of public law is incorporated into the language of governance. Scholars often ask whether government will act to address a problem when the better question is whether some institution, whether public or private, will act. Instead of asking whether politicians or government can respond to a problem, the better question may be whether policymakers or institutions can respond to a problem, so long as the term “policymakers” includes not only government officials but also includes the leaders of advocacy groups, foundations, think tanks, and corporations.²⁷⁴ If not, we may need to substitute a different term for policymaker since the “policy” may be a private lending standard, a

²⁷³ See, e.g., Levi, *supra* note 21, at 73 (noting the “central question” in climate policy is where government should intervene).

²⁷⁴ A successful, recent example is Kai N. Lee et al., HUMANS IN THE LANDSCAPE: AN INTRODUCTION TO ENVIRONMENTAL STUDIES 47, 310 (2013) (referring to the response of “societal institutions” to collective action problems).

product certification and labeling standard, or a contract term rather than a statute. Instead of statute or regulation, the better term may be standard or requirement. Instead of regulation, the better term may be governance. Instead of environmental compliance, the better term may be environmental performance, since formal environmental law compliance (e.g., the absence of permit violations) is quite different from environmental performance (e.g., the total amount of emissions or resource use).

Perhaps the most important reason that private governance may not be fully accounted for is that the metrics by which we measure the importance of environmental law do not include many private governance activities.²⁷⁵ The standard metrics used to monitor environmental law include the number of major statutes and regulations, the costs and benefits of major regulations, the number of pages devoted to environmental issues in the Federal Register, the size of agency budgets and staff, and the number of enforcement actions and reported decisions. In private environmental governance activities, environmental preferences are expressed not through voting or other forms of participation in the political process but through purchasing, lending, investing, and supply-chain contracting decisions.²⁷⁶ Standard-setting does not occur through Congress and agencies but through private stakeholder groups or supply-chain contract negotiations. Enforcement occurs not through administrative inspections and sanctions but through shaming, boycotts, and contract disputes. Dispute resolution often occurs not in federal or state courts but in private negotiations and mediation or arbitration proceedings. As a result, private governance creates incentives for shifts in corporate and individual environmental behavior without generating new statutes, regulations, government enforcement actions, or court decisions.²⁷⁷

²⁷⁵ A number of public law scholars have noted aspects of the development of private environmental governance, but the broad scope of the private governance activities that have emerged and the relationship of private governance to the absence of statutory activity remain unexplored. See, e.g., LAZARUS, *supra* note 11, at 187–88 (noting the emergence of private certification and labeling); David Rejeski, *Any Big Ideas Left?*, 28 ENVTL. F. 36, 38 (2011) (suggesting that private governance was an area of activity during the last two decades); see also Orts, *supra* note 170, at 198 (suggesting a contracting approach to address carbon emissions).

²⁷⁶ The influence of purchasing, lending, investing, and supply-chain contracting decisions is difficult to assess, but the potential influence is apparent from a number of sources. See, e.g., USSIF FOUNDATION, REPORT ON SUSTAINABLE AND RESPONSIBLE INVESTING TRENDS IN THE UNITED STATES 11 (2012) (concluding that “assets engaged in sustainable and responsible investing practice currently represent 11.3 percent of the \$33.3 trillion in total assets under management tracked by Thomson Reuters Nelson”).

²⁷⁷ See Andrew A. King & Michael J. Lenox, *Industry Self-Regulation Without Sanctions: The Chemical Industry’s Responsible Care Program*, 43 ACAD. MGMT. J. 698, 713 (2000) (con-

F. Will Private Environmental Governance Lead to New Instruments?

Much of the environmental scholarly literature and policy debate continues to assume that government is the relevant actor and to examine the relative merits of government-created and enforced instruments.²⁷⁸ The emergence of private governance often occurs in areas where public preferences for environmental protection are widespread but government has not acted at all or a gap remains. This suggests that new approaches may be possible for some of the most intractable environmental problems.

Private governance responses have been launched or proposed recently for many of these types of problems. For example, although national and international action on climate change is proceeding very slowly, private supply-chain contracting requirements regarding carbon emissions and energy use have grown dramatically, and Wal-Mart's recent commitment to reduce its supply-chain emissions by twenty million metric tons of carbon dioxide is only the most prominent example.²⁷⁹ In 2008, a number of leading U.S. lenders, working with three environmental groups and several power producers, agreed to abide by the Carbon Principles, which require the assessment and disclosure of carbon risks in loans to the electric power industry.²⁸⁰ In addition, private carbon labeling of consumer goods and private corporate emissions disclosure standards are all proposed or existing interim options that could buy time for more comprehensive government measures.²⁸¹ These options also could build support for the other measures and could complement them after they are adopted.

A second area of opportunity is hydro-fracking, which promises to generate large quantities of natural gas but also presents substantial environmental risks.²⁸² Federal, state, and local government actions

cluding that without adequate sanction mechanisms in place, the worst polluters were drawn to participate in voluntary regulation schemes).

²⁷⁸ See, e.g., Metcalf & Weisbach, *supra* note 64, at 502 n.11; Reuven S. Avi-Yonah & David M. Uhlmann, *Combating Global Climate Change: Why a Carbon Tax Is a Better Response to Global Warming than Cap and Trade*, 28 STAN. ENVTL. L.J. 3, 6–8 (2009).

²⁷⁹ See WAL-MART, *supra* note 150. For analysis of characteristics that contribute to successful private governance programs, see Karen Bradshaw Schulz, *New Governance and Industry Culture*, 88 NOTRE DAME L. REV. 2515 (2013).

²⁸⁰ See CARBON PRINCIPLES, *supra* note 158.

²⁸¹ See Kenneth W. Abbott, *Strengthening the Transnational Regime Complex for Climate Change*, TRANSNAT'L ENVTL. L. (forthcoming), available at <http://ssrn.com/abstract=2219554>; Orts, *supra* note 170, at 198; Vandenberg & Cohen, *supra* note 179, at 221–92; Vandenberg, *supra* note 144, at 939–40; Michael P. Vandenberg, Thomas Dietz & Paul C. Stern, *Time to Try Carbon Labelling*, 1 NATURE CLIMATE CHANGE 4, 4 (2011).

²⁸² See generally NAT'L PETROLEUM COUNCIL, PRUDENT DEVELOPMENT: REALIZING THE POTENTIAL OF NORTH AMERICA'S ABUNDANT NATURAL GAS AND OIL RESOURCES (2011), available at <http://www.npc.org/reports/NARD-ExecSummVol.pdf> (providing overview of natural

have varied from a statutory ban on certain federal agency actions, to a state moratorium on drilling, to a wide range of regulations. A database of fracking fluids has emerged, and recent proposals include not only public governance proposals but also proposals for public-private hybrids and private governance options.²⁸³ Similarly, although the federal government has not banned environmental estrogens from consumer products and state actions have been inconsistent, private governance options have filled the gap, with private firms announcing corporate policy changes or agreements to remove estrogenic substances from their supply chains.²⁸⁴ These are just initial examples of the opportunities presented by private environmental governance.²⁸⁵

CONCLUSION

This Article examines the emerging importance of private environmental governance. For many issues, public governance remains the dominant or sole influence on environmental behavior and environmental conditions, and theoretical and applied approaches to environmental law have proceeded as if environmental law is a positive field waiting for another period of government activity. Proposals have focused on new or modified public law remedies and the avenues for governments to adopt them.

Although the standard model of environmental law as a positive law field accurately described the first two decades of environmental law, it is no longer sufficient to assume that government is the only or even the best actor for many environmental problems. The available environmental instruments are not limited to those that governments have the legal authority, expertise, and political will to implement.

gas fracking benefits and risks); Jeff Tollefson, *Methane Leaks Erode Green Credentials of Natural Gas*, 493 NATURE 12 (2013).

²⁸³ A database has been formed to collect and disclose fracking data. See FRACFOCUS, <http://www.fracfocusdata.org> (last visited Aug. 29, 2013). Recent scholarship in this area reflects the growing awareness of private governance options. See David B. Spence, *Corporate Social Responsibility in the Oil and Gas Industry: The Importance of Reputational Risk*, 86 CHI-KENT L. REV. 59, 60 (2011); Hannah J. Wiseman, *The Private Role in Public Fracturing Disclosure and Regulation*, 3 HARV. BUS. L. REV. ONLINE 49, 49 (2013); Hari M. Osofsky & Hannah J. Wiseman, *Hybrid Energy Governance* 1 (Minn. Legal Studies Research Paper No. 12-49, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2147860.

²⁸⁴ See, e.g., Liz Szabo, *Companies Graded on Getting Chemical BPA Out of Cans*, USA TODAY (Oct. 22, 2010, 11:09 AM), http://usatoday30.usatoday.com/yourlife/food/safety/2010-10-21-bpa-cans_N.htm (noting that the Food and Drug Administration has not regulated BPA but that in the face of advocacy group pressure, thirty-two percent of food companies had announced timelines or agreements to remove the chemical from can linings).

²⁸⁵ An emerging body of scholarship is beginning to identify other potential applications of private governance. See, e.g., LYTTON, *supra* note 102 (food); Kyle W. Robisch, Note, *Getting to the (Non)Point: Private Governance as a Solution to Nonpoint Source Pollution*, 67 VAND. L. REV. (forthcoming 2014) (non-point source water pollution).

Positive law and government action are still very important, but private environmental governance is surprisingly important for many of the most pressing environmental problems.

The key conceptual step offered by private governance is that public action is not the only way to achieve public ends. This is a deceptively simple proposition, but it is remarkable how often the question asked in public debates is “what can government do?” The existence of private governance suggests that the question should be whether a public or a private actor can be mobilized and whether a public or private governance option, or some mix of the two, will produce the desired outcome.

