

PART I

The interaction of strategy and policy



1 A framework for analysis

1 INTRODUCTION

Business-led environmental initiatives have become increasingly prominent in recent years. From McDonald's voluntary replacement of paper for styrofoam sandwich packaging to the chemical industry's "Responsible Care" program, corporate environmentalism has become a familiar phenomenon. At the same time, governments have shown great interest in "voluntary" programs for environmental protection, which invite pollution abatement rather than demanding it. Neither of these developments makes sense within conventional paradigms for understanding the environment. Since pollution abatement is costly, firms are expected to avoid it whenever possible, and governments must impose penalties severe enough to compel compliance. A sudden shift to a world of cooperation and voluntary environmental protection seems strange, if not downright suspicious.

Several reasons have been suggested for the recent surge of corporate environmental activity. Perhaps pollution is symptomatic of broader production inefficiencies, and pollution reduction and cost reduction go hand-in-hand to create "win—win" opportunities in today's economy. Perhaps a new generation of "green" consumers is willing to pay higher prices for clean products, and firms are simply responding to this shift. Or perhaps business has become more savvy about the workings of the political system, taking pro-active steps to avert political conflict rather than reacting to public pressure after the fact.

Our basic message is simple: political–economic analysis is required to understand the emergence of corporate environmentalism, by which we mean environmentally friendly actions not required by law. While cost reduction and green marketing play a role, their impact appears to be modest. Furthermore, from a research perspective, no new theory of corporate behavior is needed to explain cost control and green marketing: they can be understood perfectly well in terms of traditional strategies of cost minimization and product differentiation. The political economy of corporate environmentalism, however, requires new models of the interplay between corporate strategy and public policy.



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The value of our perspective came into sharp relief at the World Resources Institute's Sixth Annual Sustainable Enterprise Summit, held on March 13-14, 2003, in Washington, DC. This event brought together leaders from business, government, academia, and non-governmental organizations (NGOs), all of whom shared a passionate interest in how business can bring about environmental improvement. Yet many participants were puzzled by the challenges facing businesses that aspire to sustainability. Linda Greer, of the Natural Resources Defence Council (NRDC), shared her experience working with Dow Chemical Company to identify opportunities for cost-effective reductions of toxic chemical emissions from Dow's plant in Midland, Michigan. Despite the success of her work with Dow – which cut toxic emissions by 37 percent and saved \$5.6 million per year – she was clearly disheartened by the fact that none of the other sixty-five firms that NRDC subsequently contacted accepted the invitation to participate in similar projects. In a session on "Building the Green Power Market Place," speakers lamented the slow growth of renewable electricity sources. For example, David Rappaport, of Northern Power Systems, admitted that, at present, tax credits are still necessary to make most wind power projects economically viable. In contrast to these sobering accounts, Katherine DiMatteo reported on the long but ultimately successful efforts of the Organic Trade Association to legislate federal standards certifying what qualifies as "organic produce." She forecast rapid growth for organic dairy and soy products carrying the US Department of Agriculture's new organic seal. Keynote speaker Randy Overbey, President of Alcoa's Energy Division, enthusiastically described his firm's decision to testify in favor of mandatory climate change legislation. It is of particular importance, he explained, for legislation allocating greenhouse gas emissions permits to take into account past progress, such as Alcoa's 22.5 percent reduction in greenhouse gas emissions relative to a 1990 benchmark. It was not hard to see the link between Alcoa's voluntary emissions reductions and its political strategy. To us, these vignettes confirmed our basic message: while cost reduction and green consumers have a role to play, most of the action in corporate environmentalism is mediated through public policy.

Governments, like many businesses, have embraced corporate environmentalism. Indeed, they have developed a variety of voluntary programs that serve as alternatives to traditional regulatory tools. In Europe and Japan, the voluntary tool of choice is the negotiated agreement, in which industry pledges to meet certain environmental goals developed in consultation with government, often against a background threat of regulation that may be imposed should the pledge not be met. In the USA, the preferred



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tool is the public voluntary agreement (PVA), in which government provides information, technical assistance, and positive publicity to firms that adopt environmentally desirable practices. Such programs are not driven by government's desire to help reduce industry's production costs or subsidize industry marketing initiatives. Rather, government voluntary programs are best seen as a response to the escalating political and resource costs of creating and enforcing traditional command-and-control regulations. Again, a political-economic analysis is needed to understand the emergence of voluntary programs, in this case as a tool for alleviating problems facing government regulators.

Our goal in this volume is to develop a set of models for understanding the links between corporate environmentalism and public policy. While there has been considerable progress in understanding corporate non-market strategy in recent years, even the leading textbooks fail to reflect the increasingly important role of industry self-regulation as a strategic tool.¹ Nor does most scholarly work on regulation adequately capture the growing government involvement in voluntary programs. We use economic tools from industrial organization and game theory to understand corporate environmentalism within an integrated framework encompassing industry structure, political institutions, and the policy life cycle.

While our analysis is rooted in economic theory, we have written this book with both business strategists and policy practitioners in mind. Thus, in the body of a typical chapter, we present the basic structure of an economic model and its key implications for corporate strategy and public policy. Details are relegated to appendices, and chapters 3-5 and 7-8 include a non-technical summary for readers who wish to glean the key strategic insights as succinctly as possible.

In the remainder of this chapter we present a framework for understanding the myriad ways in which corporate environmental improvement can serve as a strategic tool in the public arena. We focus on the notion of the public policy life cycle as a way to organize our analysis of corporate environmental strategy. We then discuss alternative theories of corporate environmentalism that are based on achieving production efficiencies or appealing to "green" consumers. Of course, neither our theory nor the others we discuss are of much interest to business strategists unless corporate environmental performance has a real influence on the bottom line. We conclude this chapter by reviewing the empirical evidence on the relationship

¹ Baron (2003) provides an excellent presentation of corporate non-market strategy, but devotes scant attention to the role of corporate environmentalism, or corporate self-regulation more generally.



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between corporate environmentalism and financial performance, which does indeed show a positive relationship between environmental and financial performance. We also survey the limited empirical evidence regarding the drivers of corporate environmental improvement, and find that stakeholder pressure and several firm-specific characteristics such as size and research and development (R&D) intensity appear to be important factors.

2 ELEMENTS OF THE ANALYTICAL FRAMEWORK

In order to understand voluntary initiatives in environmental policy, it is necessary to distinguish:

- The structure of the industry involved
- The institutional structure of the political environment
- The stage of the policy life cycle in which the issue is being addressed.

Let us consider each of these three areas in turn.

2.1 Industry structure

While there are several important dimensions of industry structure, we focus on two: the concentration of the industry, and the heterogeneity of the firms within it. *Concentration* refers to the extent to which a given industry is dominated by a relatively small number of firms. It can be measured through simple indices such as the "four-firm concentration ration" (CR-4) or more sophisticated indices such as the Herfindahl–Hirschman Index (HHI).² There has been a vast volume of research in industrial organization on the effects of industry concentration on prices, profits, and anti-competitive activity. Concentrated industries tend to have higher prices, and are more likely to successfully implement price leadership campaigns and to coordinate their activities in the political arena. *Heterogeneity* among firms makes coordinated industry action more difficult, whether this be collusive action to influence market outcomes or political action to influence legislative or

² The HHI is measured as the sum of the squares of the market shares of all the firms in the industry. It ranges from a low of zero (in a perfectly competitive industry where each firm's market share is approximately zero) to a high of 10,000 (in a monopoly where one firm has market share of 100 percent). For more details, see Baye (2003, pp. 233–234).



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regulatory outcomes. At the same time, firm heterogeneity opens up many avenues for market and non-market strategy at the level of the individual firm. Among the familiar market strategies that may be employed are product differentiation (either horizontal or vertical), attempts to raise rivals' costs, cost leadership, and quality leadership. In the environmental arena, two strategies of particular importance are product differentiation to appeal to environmentally sensitive "green" consumers and the use of the regulatory process to raise rivals' costs. There has been little work done on the relationship between concentration, firm heterogeneity, and non-market strategies such as corporate environmentalism. Our work breaks new ground in this regard.

2.2 Policy life cycle

The concept of the public policy life cycle is a very useful framework for corporate "issues management," and is commonly used in textbooks on the relationship between public policy and business strategy. Four stages are typically identified, as illustrated in figure 1.1. First is the *development* stage, in which events occur that lead various segments of the public to become aware that a problem exists. Second is the stage of *politicization*, in which the issue acquires a label, opinion leaders begin to discuss the problem in public, the news media becomes more active in covering the issue, and interest groups begin to mobilize around the issue. This stage is sometimes capped by a dramatizing event that crystallizes the nature of the problem

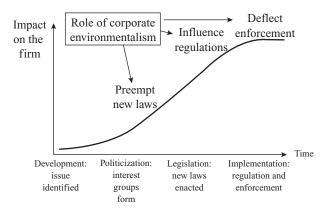


Figure 1.1 Corporate environmentalism and the policy life cycle



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in the public's mind. The incident at Three Mile Island, the Thalidomide tragedy, the tampering with Tylenol, and the terrorist destruction of the World Trade Center are examples of such dramatizing events. Third is the *legislative* stage, in which political leaders take action to create new laws responding to the issue. Fourth comes the *implementation* stage, in which administrative agencies flesh out the details of the new legislation and regulators, police and the courts enforce it. The nature of non-market strategy, and the role of corporate environmentalism in particular, differs at different points in the policy life cycle. For example, corporate environmentalism may preempt legislation if conducted early in the life cycle, while later in the cycle it may be useful as a way to influence the stringency of regulations that cannot be preempted. We discuss the policy life cycle in detail in chapter 2.

2.3 Political environment

The institutional structure of the political environment is a complex issue, and a full treatment of all its dimensions is beyond the scope of our project.³ In this volume, we will be particularly interested in the different approaches to business—government relations in the USA and in Europe and Japan. For example, US regulators tend to employ "public voluntary agreements," (PVAs) which offer information, technical assistance and publicity to firms that take environmentally friendly actions. European and Japanese policymakers are more likely to sign "negotiated agreements" with industry associations or individual firms, under which the industry agrees to meet certain negotiated environmental goals with the expectation that if the goals are met then legislative requirements will not be imposed.

Numerous factors distinguish the US from the European and Japanese political environments. From a structural perspective, American presidential democracy differs from the parliamentary democracies of Europe and Japan in important ways. Perhaps most notably, the American system allows for the legislative and executive branches to be controlled by different political parties, while parliamentary systems by design vest control of both branches in the same party. As a result, executive branch agencies in the USA generally cannot deliver credible threats to impose regulation should voluntary efforts be inadequate. As a result, their ability to sign meaningful

³ For a good introduction to the subject from the perspective of business strategy, see Baron (2003).



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negotiated agreements with industry is limited. Project XL, the most prominent program of negotiated agreements in the USA, has met with very limited success, in part because agreements with the Environmental Protection Agency (EPA) could not prevent intervenor groups from challenging aspects of the agreements they did not like.

Another way of distinguishing different political environments is in terms of the extent to which they are adversarial in nature. Robert Kagan argues that "The common ingredient in these low-adversarialism policy areas is that legal authority is centralized and difficult to challenge in court, either legally or practically; that is, governmental legal authority is exercised more hierarchically and with more finality than is the American norm" (Kagan 2000, pp. 386-387). Continental Europe and Japan tend to have more highly centralized political institutions than does the USA, and hence interest groups in Europe and Japan build long-term relationships with a small number of key government representatives. These long-term relationships lead to a sharing of social surplus, more cooperative outcomes, the potential for linkages across different specific issues, and (perhaps) a greater potential for interest group capture of government. The more decentralized American model is more formal, legalistic, adversarial, issuespecific, and (perhaps) less likely to be captured. Because the adversarial US system generates large transaction costs in passing new legislation, there is a strong incentive for firms to preempt such new laws through voluntary environmental improvement. In contrast, the consultative European approach is less costly, and firms there are less likely to engage in preemptive self-regulation. Instead, they typically negotiate a more or less formal "covenant," indicating what actions are required in order to avoid intrusive taxes or regulations.

Another way to characterize the political environment within democratic nations is to distinguish "pluralist" from "corporatist" societies. According to Cawson (1986, p. 104), corporatism differs from pluralism in that:

Whereas in a pluralist system a large number of voluntary interest associations compete with each other for members, resources and access to government in order to influence the direction of public policy, in a corporatist system there is a limited number of non-competitive organizations with compulsory or semicompulsory membership. These organizations have a privileged status with respect to government in that they co-determine public policy and are responsible for its implementation by disciplining their members to accept bargained agreements.

The privileged organizations in corporatist societies typically "take their identity from the function which they perform in the social division of



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labour" (Cawson 1986, p. 104). The two key corporatist organizations (aside from the state) are peak associations for capital and for labor, with trade unions and professional groups also quite common. Consumer representation is less frequently observed. In the end, though, "corporatism and pluralism should not be seen as exclusive alternatives, but as end points on a continuum according to the extent to which monopolistic and interdependent relationships between interest organizations and the state have become established" (Cawson 1986, p. 104).

We find both the notion of pluralism and that of "adversarial legalism" helpful in understanding the distinctive nature of the US political environment. In the rest of this book, we will use the terms "adversarial" and "pluralist" to characterize the US political environment, and the terms "cooperative" and "corporatist" to characterize the political environments of Europe and Japan.

One of the most striking differences between the two types of political environments is the greater use of negotiated voluntary agreements in corporatist societies. For example, the Netherlands has more than one hundred voluntary agreements, most of them negotiated agreements. In Germany, some seventy voluntary agreements are in use; negotiated agreements that replace regulations are prevalent. France has over twenty voluntary agreements, which typically begin as supplements to regulation but can be transformed into formal regulations as necessary. In the United States, however, the EPA's attempts to create negotiated agreements through Project XL and the Common Sense Initiative have generated disappointing results. The formal nature of the regulatory process in the USA, and the vigor of environmental interest groups in enforcing it, made it difficult for the regulatory agency to pursue flexible regulatory policies.

As an illustration of the different strategies used in corporatist and pluralist societies, consider the use of carbon taxes as a tool for reducing carbon dioxide emissions. In 1995, Germany's overarching industrial trade association, the BDI, under the threat of new carbon taxes aimed at reducing carbon emissions, negotiated voluntary CO₂ emissions reductions for different sectors of the German economy aimed at preempting the proposed tax. The voluntary agreement was successfully negotiated and the tax proposal was withdrawn. It is highly unlikely, given the heterogeneous energy usage of Germany's various industrial sectors, that preemption could have occurred without the existence of the BDI. It is also highly unlikely that such an agreement could be executed in the USA, where peak associations such

⁴ See Delmas and Terlaak (2002) for a nice overview of how voluntary programs differ with political environment.



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as the National Association of Manufacturers (NAM) lack the bargaining power accorded the BDI in Germany.

The German CO₂ agreements illustrate one of the key environmental strategies available to industry: preemption of government mandates. The US experience with carbon taxes illustrates the use of the more traditional strategies of lobbying and campaign contributions. After President Clinton was elected in November 1992, one of his early actions was to announce support for stronger measures to prevent climate change. In the early months of 1993, his administration floated a variety of proposals to tax energy, including a carbon tax and a broader-based "BTU tax" based on the energy content of fuels as measured in British Thermal Units (BTUs). The political response was rapid and powerful:

A cadre of lobbyists began to plot the death of President Clinton's energy tax in December 1992 - a month before Clinton took office and two months before he submitted the tax plan to Congress . . . Jerry Jasinowski, president of NAM [National Association of Manufacturers] ... helped organize a group of 1400 lobbies, dubbed the American Energy Alliance. The NAM, the US Chamber of Commerce, and the American Petroleum Institute footed most of the bill . . . Behind the scenes, groups lobbied successfully for exemptions...By June, what had been a fair, across-theboard tax was riddled with loopholes . . . Lacking any clear popular support for the BTU tax, and facing defeat in the Senate, the White House threw in the towel and withdrew its proposal. (See Winer 1993)

The differences between the German and the US experience are illuminating. As we pointed out earlier, corporatist organizations "co-determine public policy and are responsible for its implementation by disciplining their members to accept bargained agreements." In Germany, the BDI played this role in textbook fashion with respect to the CO₂ agreement. In the USA, the NAM – lacking the disciplinary role of the corporatist BDI – focused instead on coordinating the lobbying activities of the numerous groups that would be affected by an energy tax. By virtue of the NAM's less cozy relationship with government, it was able to take a more confrontational position and ward off the threatened energy tax without the concessions involved in the German CO₂ agreement.

2.4 Summary of the framework

We provide a tabular overview of our organizing framework in table 1.1. Its two key dimensions are the structure of the industry that is involved, and the stage of the policy life cycle in which a particular policy issue exists at