Research Articles

Oppose, Support, or Hedge? Distributional Effects, Regulatory Pressure, and Business Strategy in Environmental Politics

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Business matters in global environmental politics, as much research has demonstrated. Yet how firms engage with environmental politics varies within sectors, across sectors and institutional contexts, and over the course of the policy cycle. How can we explain the choice of corporate political strategy? To date, scholars have generated many case studies that highlight factors in the choice of political strategy in environmental politics. These explanatory factors relate in particular to material interests determined by firm-level variables and institutions at the national and international levels. These studies tend to assess the relative significance of different variables in explaining strategic choice, but they do not advance propositions. Little systematic knowledge on the interaction of economic interests and social and political institutions in shaping corporate political strategy has been accumulated.

This article takes a step toward theory-making on the strategic choice of firms in environmental politics. Building on recent theoretical advances on the formation of actor strategies in political economy, I argue that basic preferences of firms are translated into strategies in the context of institutional environments.² Based on this general model of strategy formation, I posit different sets of distributional effects and perceived regulatory pressure lead firms to adopt four ideal-type political strategies in environmental politics: *opposition*—firms trying to veto a regulatory initiative; *hedging*—firms seeking to minimize compliance costs or level them across a global industry; *support*—firms aiming

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^{1.} Clapp 2003; Levy and Kolk 2002; Skjaerseth and Skodvin 2003.

^{2.} Hall 2005; Woll 2009.

to create or expand markets for environmental products and services; and nonparticipation. The article examines the typological model of business behavior in the making of the European Union's Emission Trading Scheme (EU ETS) from 1999 through 2008.

This research makes two contributions to the study of business in environmental politics. First, it offers a probabilistic explanatory model for firms' behavior. This speaks to the general imperative for the field of global environmental politics to aggregate knowledge.³ Second, the article highlights hedging strategies (corporate efforts to shape environmental policy in favor of least-cost instruments and designs in the face of strong regulatory pressure), as an increasingly prevalent form of corporate engagement with environmental politics. It suggests an analytic focus on the role of corporate influence in instrument choice and policy design instead of a binary analytic lens of corporate support versus opposition.

Preferences, Institutions, and Strategic Choice

The debate about political preferences of firms shows that both interests and institutions matter. Regulatory policy is distributional in nature.⁴ Distributional effects exist when environmental regulation causes lower aggregate costs for some industries than for others; when it generates rents for some industries or firms while erecting barriers for other industries and firms; and when it causes different costs for firms in the same industry.⁵ As rational actors in a competitive environment, firms assess the economic effects of environmental regulation in formulating their strategies. The value of such analyses lies in their focus on conflicting material interests vis-à-vis particular institutions. However, purely interest-based approaches cannot explain the differences that arise between the basic material interests of actors and their actual strategies in the political process.⁶ This is where institutions come into play.

Actors are embedded in institutions that shape their preferences, argue scholars in the tradition of historical and sociological institutionalism.⁷ Historical institutionalists hold that "institutions act as filters that selectively favor particular interpretations either of the goals towards which political actors strive or of the best means to achieve these ends."8 The analytic focus of sociological institutionalists rests less on the historical evolution of institutions than on the nature of institutional environments, which they conceptualize as organizational fields: "a collection of contextual factors or conditions affecting organization structures or processes."9 NGOs, government actors, and other firms constitute

- Cf. O'Neill et al. 2013.
- 4. Leone 1986, 44.
- 5. Keohane et al. 1998.
- 6. Hall 2005.
- 7. DiMaggio and Powell 1991; Katznelson and Weingast 2005.
- 8. Immergut 1998, 20.
- 9. Scott 2001, 136.

the organizational field.¹⁰ The field and its prevailing norms are understood as contested by the actors constituting the field.¹¹

More recently, scholars have significantly advanced the study of actor behavior by understanding preference formation as a process through which actors interpret their interests in the light of experiences, institutional contexts, and interactions with other political actors. Woll, for example, argues that firms have basic material interests, which are translated into context-related preferences through institutions and ideas. Interests and institutions both affect corporate political strategy at different times in the process of strategy formation. Woll considers a number of variables in the process of translating basic interests into strategies, including identity, causal and normative beliefs, and the strategic institutional environment. She offers a model that accounts for the evolution of actor preferences in the political process and for the variation of firms' strategies. The distinction made by Woll is referred to by several terms in the literature. This article refers to basic interests as *preferences*, whereas context-related preferences or second-order preferences are simply referenced as *strategies*.

Distributional Effects and Regulatory Pressure

This section describes a typological model that identifies four ideal-type strategies based on distributional effects and regulatory pressure. The distributional effects of regulatory policy create costs or benefits for firms, turning them into winners or losers. Given the heterogeneity of firms due to, for instance, their market position and technology portfolio, firms have different compliance costs under the same regulation. Two firms might both be losers in the distributional game, but one firm might bear lower compliance costs than a competitor, which grants it relative gains. The analysis of the formation of firms' material interests vis-à-vis environmental regulation thus needs to be highly sensitive to how regulation affects a firm not just in absolute terms but compared to competitors. Moreover, the perceived distributional impact of a policy on a firm is crucial in defining its basic material interest vis-à-vis a regulatory initiative. ¹⁴ When firms form policy preferences in the agenda-setting and policy formulation stages, considerable uncertainty exists as to the actual design of a regulation and its future impact on firm balance sheets. Thus, interpretations and beliefs about future impacts shape the distributional assessment. In this process of interest formation, factors such as internal politics and other organization-level factors matter. 15

- 10. Prakash 2002; Schurman 2004.
- 11. Amoore 2000; Levy and Scully 2007.
- 12. Hall 2005; Martin and Swank 2012; Woll 2009.
- 13. See also Hacker and Pierson 2002.
- 14. Cf. Rugman and Verbeke 1998.
- 15. Yeung 2005.

Firms are exposed to a number of institutional effects: "Organizations often operate within multiple, overlapping institutional fields, belonging to various industry associations or national cultural and regulatory contexts, creating divergent pressures."¹⁶ Delmas and Toffel distinguish between institutional pressure from regulators, customers, competitors, and community and environmental interest groups. 17 The demands from these different organizational fields may conflict, and often do. For instance, a firm may experience pressure from industry peers to oppose a regulatory initiative, while environmental groups try to persuade the firm to support it. Here a distinct element of sense-making and interpretation at the firm level enters. 18 "Field influences are not uniformly understood by participants within the field; organization-level dynamics can filter and alter institutional demands."19 Such firm-level factors can be viewed as intervening variables between basic interests and institutional environments, on the one hand, and political strategy on the other. They include, for instance, a firm's history, size, and organizational culture. Given that firms interpret their institutional environments, I conceptualize institutional effects on firms as perceived regulatory pressure. Perceived regulatory pressure is the result of how a firm interprets its multi-layered institutional environment and its mixed signals with regard to demand for regulatory action on a given environmental issue. I consider only low and high perceived regulatory pressure, since these values are a function of various firm-level processes and characteristics.

While different mechanisms are used to explain the effect of institutions on firm preferences, I stress the role of reputation. The literature on business and politics has stressed the importance of reputation as a variable for corporate behavior.²⁰ Reputational rankings are a "form of normative control that channels firms' actions by conferring relative competitive advantage and disadvantage upon conforming organizations within an organizational field."²¹ If firms ignore public demands for environmental action, they tend to incur reputational costs.

I posit that combinations of different distributional effects (costs versus benefits) and levels of regulatory pressure (low versus high) lead to four ideal-type strategies shown in Table 1: (1) opposition: costs and low regulatory pressure; (2) hedging: costs and high regulatory pressure; and (4) non-participation: benefits and low regulatory pressure.

Opposition: Costs and Low Regulatory Pressure

The strategic default choice of those bearing significant compliance cost is opposition to the regulation. They are likely to adopt the strategy if regulatory pressure

- 16. Levy and Rothenburg 2002, 176.
- 17. Delmas and Toffel 2004.
- 18. Sharma 2000.
- 19. Hoffman and Ventresca 2002, 11-12.
- 20. Vogel 2008; see also Axelrod 1986.
- 21. Fombrun and Shanley 1990, 234.

| Regulatory Pressure | Distributional Effect | | |
|---------------------|-----------------------|------------------|--|
| | Costs > Benefits | Costs < Benefits | |
| Low | Oppose | Abstain | |
| High | Hedge | Support | |

Table 1Business Strategies in Environmental Politics

is low to moderate. In the absence of strong pressure for regulatory action from other political actors—notably governments and green groups, the reputational costs of rejecting a regulatory initiative are likely to be low. This is especially likely at the agenda-setting stage, when the political process on a particular issue has not yet become path-dependent. Once political actors have invested significant political and financial capital in a regulatory project, it is increasingly unlikely that the policy project will be abandoned completely. Classic cases include the regulation of genetically modified organisms and early climate politics.²²

Hedging: Costs and High Regulatory Pressure

As public pressure from government, NGOs, or other firms for environmental action increases, an anti-regulatory strategy can bring considerable reputational costs. This leads firms to propose regulatory measures themselves. They hedge against the regulatory risk of a more costly policy option, while accommodating public demand for regulatory action. They essentially follow the logic of, "If you are not at the table, you will become the menu," as Jim Rogers, CEO of Cinergy at the time, said to explain his company's more pro-active climate strategy.²³ Hedging strategies are often adopted in the wake of NGO campaigns or regulatory initiatives of home governments.²⁴ Typically, hedging strategies have the goal of minimizing or leveling compliance costs.

Minimizing compliance costs: Depending on the stage of the political process, firms generally have two options in pursing a hedging strategy that minimizes compliance costs: advocating an alternative policy instrument, or lobbying for a low-cost design of an existing policy instrument, particularly at the agendasetting stage of the policy cycle. Generally speaking, market-based forms of environmental governance—especially self-regulation and permit trading schemes—are perceived to be low-cost regulatory options, while pollution taxes and command-and-control regulation are typically not.²⁵ Also, competing

- 22. Falkner 2008; Levy and Egan 1998; Raustiala 1997.
- 23. Businessweek, December 12, 2005. Available at http://www.businessweek.com/stories/2005-12-11/online-extra-cinergy-answers-burning-questions, last accessed on January 26, 2014.
- 24. Wright and Rwabizambuga 2006.
- 25. Haufler 2001; Newell 2008; Prakash and Potoski 2006.

technological options for the implementation of environmental policy goals come with different costs, which may incentivize firms to lobby for the least costly option.²⁶ When the political process has matured to the stage of policy formulation, political actors have usually locked into a policy instrument. Opportunities to advocate an alternative policy instrument are limited at this stage. In such situations, a pro-regulatory hedging strategy would advocate for a low-cost design of the chosen policy instrument. In fact, the distributional effects of a policy instrument are often strongly determined by the details of policy design.

Leveling compliance costs: Once a domestic regulatory policy has been enacted, firms have limited opportunities to minimize compliance costs. However, if firms compete internationally with competitors not subject to regulation, they have a strong incentive to promote the leveling of compliance costs across the industry to maintain international competitiveness. Regulated firms anticipating high compliance costs might lobby their home governments to internationalize the environmental policy to include competitor countries under the same policy.²⁷ These domestic dynamics are a source of a potential international race to the top in environmental standard-setting.²⁸ Mattli and Woods refer to such private regulatory entrepreneurs as "corporate levers of the playing field."²⁹ A classic case of leveling compliance costs across a global industry is found in the internationalization of US regulations on endangered species in fishing.³⁰

Hedging strategies are a double-headed animal. On the one hand, they are a form of "strategic accommodation" of political demand for environmental action.³¹ In this sense, they are defensive towards government and social interests. On the other hand, hedging strategies can also be seen as a self-interested contribution to a "problem-solving approach," as they provide support to some form of environmental policy.

Support: Benefits and High Regulatory Pressure

If regulatory pressure or political demand for environmental policy is perceived to be high, firms that stand to benefit from environmental regulation are likely to advocate for the policy. Without sufficient demand for regulation from other actors, firms run the risk of spending political capital and funding with no return on investment. Historically, firms started to emerge as market-making regulatory entrepreneurs in global environmental politics in the 1980s. The discourses of sustainable development and ecological modernization propagated a win-win logic for environmental and economic goals. ³² Firms may lobby for policy instruments that create environmental financial markets such as permit-trading

- 26. Vormedal 2009.
- 27. Kelemen and Vogel 2009.
- 28. Vogel 1995.
- 29. Mattli and Woods 2009, 36.
- 30. DeSombre 2000.
- 31. Hacker and Pierson 2002; see also Levy and Egan 2003.
- 32. Haier 1995.

schemes or that increase demand for their products and services. These firms' goal is to expand existing markets or create new markets through environmental regulation. Market expansion and creation can occur in three ways: by creating competitive advantages for products with lower or no compliance costs (e.g., a carbon tax may increase the demand for gas vis-à-vis coal); by creating demand for products and services necessary for compliance (e.g., pollution controls create markets for environmental technologies); or by banning products (e.g., the ban of chlorofluorocarbons created a market for substitutes).³³ Importantly, firms may support policies not only if they have absolute benefits from a regulation compared to business-as-usual, but also if they receive relative gains vis-à-vis competitors.

Non-Participation: Benefits and Low Regulatory Pressure

Finally, firms might not participate in the political process despite being potential regulatory winners. Firms are likely to choose non-participation when political demand for environmental action is low. If there is relatively little interest in a regulatory project by other parties, corporate winners from the regulatory game have difficulties organizing a strong enough coalition to tip the power balance. Hence, the return on investment of any pro-regulatory advocacy in such a situation is highly uncertain. The costs of advocacy should not be underestimated.³⁴ Effective lobbying depends on long-standing relations and networks between lobbyists and policy makers. 35 Such networks are a function of a number of factors, including the availability of financial resources for maintaining a permanent office with skilled lobbyists. Especially at the international level, policy processes move slowly and have multiple intervention points, making engagement particularly costly. Given the significant costs of advocacy, lack of demand for regulatory action from other actors is a significant deterrent to pro-regulatory advocacy. Beyond cost, psychological barriers such as loss aversion may also play a role—potential losses are valued more highly than potential wins.³⁶ It is important to acknowledge that nonparticipation is a strategic option for firms in environmental politics. Analysts have too often portrayed corporate winners from regulation as potential regulatory entrepreneurs.³⁷

These are highly aggregated categories of strategies, containing many substrategies that firms may pursue depending on more specific manifestations of their interests and institutional environments. Also, the hypotheses should be understood in a probabilistic sense. As I will show later, they explain a great deal of corporate behavior, but not all.

- 33. Oye and Maxwell 1994.
- 34. Fuchs 2008.
- 35. Levy and Egan 1998.
- 36. Kahneman and Tversky 1984.
- 37. Leggett 2001.

The following case study on business and the EU ETS offers variation in both the dependent variable—firms adopted all four types of strategy, and the dependent variables—firms were facing positive and negative distributional effects and had different institutional environments given different member state settings.

Business Strategies in the Making of the EU ETS, 1999-2008

After the Kyoto Protocol was agreed in 1997, the EU and its member states started to implement their emission reduction targets. This led to a very active phase of EU climate policy-making, eventually resulting in a 2003 agreement for the EU ETS, its implementation in 2005, and the inclusion of the aviation sector in 2012. Throughout the policy cycle—including agenda-setting, policy formulation, and implementation—the EU ETS exhibited a high level of variation in corporate political strategy. Three sets of firms were the key economic interests in the process. Grouped by the positions they took, these were (1) energy firms—including the oil and gas sector and electric utilities—and the aviation industry, (2) energy-intensive manufacturing industries, and (3) the financial services sector (Table 2).

Table 2Business Strategies in the Making of the EU ETS, 1999–2008

| Industry | Associations | Strategy | Distributional Effect | Regulatory Pressure |
|-----------------------------------|--|----------|--|------------------------|
| Oil and gas | UK Emissions Trading Group | Hedge | Negative overall, limited positive effects | High |
| Electric utilities | Eurelectric | Hedge | Long-term negative, short-term positive | High |
| Aviation | Association of European Airlines, European Low Fares Airlines Association | Hedge | Negative | High |
| Energy-intensive manufacturing | Federation of German Industry, Alliance for Energy Intensive Industries | Oppose | Negative | Low |
| Financial services | European Carbon Investors and Services | Support | Positive | High |

Energy Firms and the Aviation Industry: Hedging Against Cost

Oil and gas firms, power companies, and the aviation sector took an accommodative approach to the policy process, trying to shape it by championing what they perceived to be the least-cost policy option. They attempted to both minimize and level compliance costs across competitors.

Minimizing compliance cost: The oil and gas sector and utility firms were the most active groups in climate politics leading up to the EU ETS. In the early phase, the UK Emission Trading Group and then later Eurelectric, the umbrella association of the European power sector, were their main voices. The associations adopted a pro-regulatory hedging strategy in that they supported emissions trading as a lower-cost alternative to carbon taxes.³⁸

The pro-regulatory strategy first emerged in the UK.³⁹ Following Kyoto, the UK government started to formulate policy to implement its international emission reduction commitment. In March 1999, it announced the climate change levy, a tax on downstream energy use. The announcement of the levy catalyzed a shift in the political strategy of UK energy firms that had begun before the Kyoto conference, when BP and Shell defected from the Global Climate Coalition, the industrial alliance opposing emission reduction mandates.⁴⁰ With the climate change levy now emerging as a tangible regulatory threat, British oil companies shifted gears in their support of emissions trading as a long-term regulatory strategy, because a carbon tax was considered too costly. 41 In June 1999, the thirty-organization UK Emissions Trading Group was set up. 42 Founding members were predominantly oil and gas producers, as well as electricity utilities, including BP, British Gas, National Power, and industry associations such as the Association of Electricity Producers. 43 The group set out to develop—in close collaboration with government officials—recommendations for a domestic trading scheme. The government endorsed the recommendations, and the UK Emissions Trading Scheme was launched in 2002. While not a liquid and effective scheme in itself, it had significant symbolic value in agenda setting for European climate policy.⁴⁴

BP and other UK firms helped mobilize business demand for emissions trading at the European level. BP representatives occupied key positions in, for instance, BusinessEurope, the umbrella association of European industry. Next to the oil companies, UK power firms were promoting emissions trading in Eurelectric, the association of European electric utilities. In particular BP and Shell had good access to the European Commission. The two companies had set up internal GHG trading schemes, which offered the first real-world test of

^{38.} Meckling 2011b.

^{39.} Meckling 2011a.

^{40.} Levy and Kolk 2002.

^{41.} Victor and House 2006.

^{42.} Nye and Owens 2008.

^{43.} Rees and Evers 2000.

^{44.} Zapfel 2005.

emissions trading in the case of climate change. The expertise the firms gained through the exercise was valuable to European policymakers exploring possibilities for a Europe-wide climate policy. Once emissions trading had been accepted as a policy instrument, the politics shifted to questions of policy design. At that stage, energy firms focused on minimizing compliance costs by lobbying for a specific design, calling in particular for free allocation of emission permits.⁴⁵

Why did UK-based energy firms adopt a hedging strategy? Both oil and gas firms and electric utilities bear higher costs than benefits as a result of climate policy, at least over the long term. Oil and gas firms would have born compliance costs of as much as 1 percent of their annual net income during 2005-2012, assuming a carbon price of US\$20/ton. 46 For electric utilities, compliance costs could have been more than 3 percent of annual net income under that scenario. In addition to the direct compliance cost, energy firms are affected by the potential change in market demand induced by climate policy. While the fossil fuel industry bears long-term costs as a result of carbon regulation, the costs may be distributed unevenly across the industry, particularly for electric utilities, whose portfolios vary regarding the extent to which they include high- versus low-carbon-content fuels. The portfolios of oil and gas firms differed less in 2005-2012, resulting in similar compliance costs overall.⁴⁷ Some energy firms also stood to benefit from an emissions trading scheme, especially in the short term. The trading businesses of oil and gas firms could have benefitted from a liquid carbon market. Shell, for instance, had a larger trading business than ExxonMobil in the mid-2000s. Electric utilities could reap windfall profits from grandfathered emission permits and from passing on compliance costs to customers. European utilities were aware of those distributional effects before the EU ETS was agreed.⁴⁸ However, it seems these marginal short-term benefits were largely offset by long-term cost of compliance.

As several studies found, higher societal demand for climate action in Europe and different scientific networks go a long way toward explaining why European oil majors adopted pro-regulatory hedging strategies. ⁴⁹ Also, UK energy firms faced a real regulatory threat in the form of the climate change levy. They were formulating their political strategy in the "shadow of hierarchy." This was a striking difference between the UK and German institutional settings. In addition to the higher regulatory pressure for climate regulation, firm-specific variables such as leadership played a role in the choice of political strategy. In the case of BP, Lord Browne's leadership role was key for adopting a pro-regulatory hedging strategy; he and other executives found opposition

^{45.} Brunner 2008; Markussen and Svendsen 2005.

^{46.} Carbon Disclosure Project 2005.

^{47.} Skjaerseth and Skodvin 2003.

^{48.} Meckling 2011b.

^{49.} Pulver 2007; Rowlands 2000.

to climate regulation increasingly unjustifiable.⁵⁰ This reflects that internal processing of regulatory pressures mediates strategy formulation. Interestingly, US firms also adopted pro-regulatory hedging strategies, though at a later stage. In 2007, the US Climate Action Partnership, a business NGO calling for a national cap-and-trade scheme, was set up.⁵¹

Leveling compliance costs: Initially, the EU ETS only covered 45 percent of EU emissions. Between 2005 and 2008, the EU developed the EU ETS Aviation Directive to expand the scheme to the aviation industry. The European airlines industry pursued a pro-regulatory hedging strategy similar to that of the oil companies and parts of the European power industry. While influencing the choice of policy instrument and design is one way to hedge against compliance cost, another is to advocate for the internationalization of domestic regulation. This second strategy is more likely to be adopted once domestic policy is formulated or implemented. In the EU case, considerable institutional momentum built behind emissions trading as the policy instrument of choice when the European Commission started to consider how to regulate emissions from aviation.

In that context, the Association of European Airlines (AEA), representing thirty-three mostly national airlines, lobbied for and is credited with the decision to include all flights to and from the EU in the trading scheme.⁵² Interestingly, as Foster points out, the European Low Fares Airlines Association (ELFAA) was more supportive of the regulation than AEA, because ELFAA member companies have more fuel-efficient fleets than AEA members. This demonstrates that not only do absolute compliance costs matter, but also relative compliance costs matter compared to competitors. In 2005-2006, the European Commission facilitated a consultation process through a working group, in a similar fashion as in the case of the original EU ETS directive. The EC handpicked the members of the working group. The more collaborative approach of AEA and ELFAA gave them access to the group, whereas the International Air Transport Association, which pursued a more confrontational strategy, was denied access. Foster concludes, "Not only was the final legislation significantly less costly than the initial Commission proposal but it afforded airlines more special provisions than any of the proposed regulations considered in Canada, the United States, or Australia."53

The EU ETS meant long-term compliance costs for the airline industry, and higher costs for AEA members than for ELFAA members, given the differences in fleet efficiency. Similar to the electricity sector, the aviation industry could possibly reap windfall profits in the short term by passing through costs to customers, as a study sponsored by the US government estimated.⁵⁴ It remains

^{50.} Reinhardt 2001.

^{51.} Vormedal 2011.

^{52.} Foster 2012.

^{53.} Cf. Andlovic and Lehmann 2014; Foster 2012, 21.

^{54.} Neslen 2012.

unclear if this was part of firms' strategic rationale in the policy formulation phase. The two industry organizations were compelled to adopt an accommodative approach to the process, given the high level of political demand for climate action on aviation emissions. The strategy bought the organizations a place at the table and the opportunity to shape regulations and hedge against competitiveness implications by internationalizing the regulation. In this case, policy was internationalized not through an international agreement but through unilateral regulation with extraterritorial effects.

Energy-Intensive Manufacturing: Opposing Regulation

Energy-intensive manufacturing industries such as the chemicals sector, and in particular German firms, were strongly opposed to a European emissions trading scheme.⁵⁵ They voiced opposition mostly through the German Federation of Industries (BDI). Other groups opposing the policy were the European Chemical Industry Council (CEFIC), the European Lime Association (EuLA), Eurofer (the European steel industry association), and the Alliance for Energy Intensive Industries.

German industry had—in classic neo-corporatist style—negotiated favorable agreements on carbon reductions, which it did not want to trade for mandatory emission controls.⁵⁶ The most ardent opposition came from the German chemical industry, one of the most powerful members of the BDI. While energyrelated firms in the UK and Germany faced compliance costs, they operated in very different environments of governmental pressure: regulatory threat of a tax versus a negotiated agreement with the government. At the European level, CEFIC, Eula and Eurofer voiced opposition based on competitiveness concerns.⁵⁷ However, the opposition to mandatory climate policy only came together in the Alliance of Energy Intensive Industries after the directive was agreed. That timing reflects energy-intensive industries' strategic error in underestimating the political demand for climate action.⁵⁸ They assumed that the cap-and-trade proposal would be defeated as easily as the carbon tax proposal had been a decade earlier.

Why did energy-intensive industries, in particular the German chemical industry, oppose emissions trading? A report by the Carbon Disclosure Project estimates that the chemical industry would have faced carbon costs of up to 1.6 percent of annual net income in 2005–2012 with a carbon price of US\$20/ ton.⁵⁹ The negative distributional effects might weigh heavier for energy-intensive manufacturing industries in global competition than for sectors, such as power, that compete nationally or regionally. The fact that energy-intensive

- 55. Christiansen and Wettestad 2003.
- 56. Reuters, German Industry Slams EU Emissions Trading Plan, August 28, 2001.
- 57. See also Asselt and Biermann 2007.
- 58. Author's interview with think tank representative, Washington, DC, January 2008. Author's phone interview with European Commission official, August 2008.
- 59. Carbon Disclosure Project 2005.

manufacturing industries chose to oppose regulation instead of pursuing a hedging strategy, however, relates to their institutional environment and how they interpreted it.

The German chemical sector faced only limited regulatory pressure at home, given the existing negotiated agreement. However, German electric utilities also opposed regulation. Both BusinessEurope and Eurelectric faced an internal "German problem" of opposition to some form of accommodation to the political demand for climate regulation. ⁶⁰ This strengthens the conclusion that the German institutional setting, not a hedging strategy, was crucial in leading firms to adopt opposition strategies.

Financial Services Firms: From Non-Participation to Support for Stringent Regulation

Financial services firms emerged as an interest group in climate politics because of the market-creating effect of permit-trading schemes. These markets offer a number of business opportunities to financial intermediaries, advisory firms, and lawyers. 61

Financial services firms largely pursued a strategy of non-participation in the agenda-setting phase. Reasons included the lack of political demand for emission trading markets, especially in Europe. This made pro-regulatory activity a highly uncertain political investment. In addition, many financial institutions that could benefit from trading markets, such as banks, had clients from the energy and manufacturing industries with highly energy-intensive operations. They feared alienating their clients by pushing for regulation. This demonstrates how firms operate in multiple organizational fields. Any assessment of the regulatory pressure for environmental action takes into account countervailing pressures from, for instance, industry peers or clients.

However, when momentum for mandatory, market-based, climate policy began to grow, the regulatory beneficiaries stepped in with pro-regulatory marketmaking strategies. 62 In 2003, after the EU ETS had been agreed, UK financial services firms formed the association London Climate Change Services (later known as the Carbon Markets Association). In October 2006, eighteen market intermediaries set up European Carbon Investors and Services. The group had a strong interest in a liquid European carbon market. For instance, it was asking the European Commission to tighten the allocation of emission rights for the second phase of the EU ETS. 63 Only the emergence of market opportunities rather than the prospect thereof-mobilized the financial services industry as a serious lobbying force.⁶⁴

^{60.} Financial Times, Greenhouse Gas Trading Looks Set to Balloon, p. 14, December 6, 2002; Author's phone interview with manager, June 2007.

^{61.} Newell and Paterson 2010.

^{62.} Meckling 2011b.

^{63.} ECIS 2006.

^{64.} Vormedal 2010.

The emergence of the financial services industry as a business constituency in European climate politics made the difference between a pro-regulatory strategy and a hedging strategy very clear. Prior to the implementation of the EU ETS, a few financial services firms had been members of the International Emissions Trading Association (IETA), the major international business association on carbon markets. The organization was a "broad church," bringing together all three affected sets of firms: energy companies, energy-intensive manufacturing industries and financial intermediaries. While they all agreed on the choice of policy instrument, a split emerged over policy design. Energy firms and energy-intensive manufacturing industries preferred a less stringent policy regime, while financial services firms were interested in a highly liquid carbon market.

Conclusions

I have put forward a typological model for how the distributional effects of environmental policy and perceived regulatory pressure interact in shaping corporate strategies in global environmental politics. I build on recent work in international political economy on the formation of actor preferences as a political process, in which basic material interests are translated into context-related preferences through the interaction with institutions and ideas. The model is sensitive to the role of firm-specific variables, which play into how firms interpret their interests and make sense of their institutional environments. In developing this model, I put forward new propositions on how different sets of distributional effects and stylized institutional effects lead to four ideal-type political strategies of firms in environmental politics: opposition, hedging, support, and non-participation.

The model contributes in two ways to the study of corporate political behavior in environmental politics. First, it offers a parsimonious model for the explanation of firms' strategy in environmental politics. While having produced a number of excellent case studies on firms' preferences and strategies, the field largely lacks systematic propositions. To be able to offer larger lessons on the sources of firms' behavior in environmental politics, research must aggregate knowledge. Second, the article sheds light on hedging strategies as an increasingly prevalent form of corporate engagement with environmental politics. As environmental policy has become embedded in modern political economies, firms seek to shape regulation to minimize or internationalize cost exposure. This suggests an analytical focus on questions of policy instrument choice and policy design in understanding business influence in environmental politics. While the model presented here has been illustrated by a number of cases, it requires further testing across space and time, to explore the scope of the model and refine hypotheses.

65. Paterson 2012; Author's interview with European Commission official, Brussels, July 2007.

As regards space, institutional environments vary significantly across political systems. It is an intriguing question whether different types of political systems in both the OECD and the non-OECD world lead to the favoring of certain political strategies. For instance, Woll suggests that the federal system of the US leads to more adversarial relations, while the complex intergovernmental system of the EU invites more consensual business-government relations.⁶⁶ This would imply that European firms are faster at adopting hedging strategies, whereas their US counterparts are likely to resist higher levels of regulatory pressure before shifting to an accommodative strategy. In a similar vein, the model argues that the number of institutional veto points and the invitational powers of governments affect the level of industry opposition or accommodation.⁶⁷ Thus, the political system may shape what is understood as "high regulatory pressure" and the point at which firms shift from opposing to shaping regulation by accommodating public demand.⁶⁸ Furthermore, the role of salient firm-level factors in interpreting institutional environments should be investigated further. Sociological institutionalism in organization studies has developed a research agenda on how actors interpret and make sense of their institutional environments, which should prove fruitful for advancing actor models in international political economy.⁶⁹ This suggests that specifying the high-level independent variable of high versus low regulatory pressure and/or intervening variables at the firm level offers opportunities for specifying the model.

Regarding the time dimension, I posit that some strategies are more likely to be employed at certain stages of the policy cycle than others.⁷⁰ For example, anti-regulatory strategies are prevalent in the agenda-setting phase. Further research could explore how political opportunities/strategic institutional environments change over the course of the policy cycle, thus affecting a firm's choice of strategy. This should allow for a dynamic perspective on the institutional environment. In particular, the policy process literature offers valuable ways to specify shifting opportunity structures.⁷¹

References

Amoore, Louise. 2000. International Political Economy and the "Contested" Firm. *New Political Economy* 5 (2): 183–204.

Andlovic, Maja, and Wilhelm Lehmann. 2014. Interest Group Influence and Interinstitutional Power Allocation in Early Second-Reading Agreements: A Re-Examination of Aviation Emissions Trading. *Journal of European Public Policy* 21: 802–821.

- 66. Woll 2012.
- 67. Foster 2012.
- 68. See also Vormedal 2011.
- 69. Hoffman and Ventresca 2002.
- 70. Newell 2006.
- 71. Nowlin 2011.

- Asselt, Harro van, and Frank Biermann. 2007. European Emissions Trading and the International Competitiveness of Energy-Intensive Industries. A Legal and Political Evaluation of Possible Supporting Measures. Energy Policy 35: 497–506.
- Axelrod, Robert. 1986. An Evolutionary Approach to Norms. The American Political Science Review 80: 1095-1111.
- Brunner, S. 2008. Understanding Policy Change: Multiple Streams and Emissions Trading in Germany. Global Environmental Change 18: 501-507.
- Carbon Disclosure Project. 2005. Carbon Disclosure Project 2005, Report. Available at http://www.cdp.net, accessed October 20, 2014.
- Christiansen, Atle C., and Jorgen Wettestad. 2003. The EU as a Frontrunner on Greenhouse Gas Emissions Trading. How Did It Happen and Will the EU Succeed? Climate Policy 3: 3-18.
- Clapp, Jennifer. 2003. Transnational Corporate Interests and Global Environmental Governance: Negotiating Rules for Agricultural Biotechnology and Chemicals. Environmental Politics 12: 1-23.
- Delmas, Magali, and Michael W. Toffel. 2004. Stakeholders and Environmental Management Practices: An Institutional Framework. Business Strategy and the Environment
- DeSombre, Elizabeth R. 2000. Domestic Sources of International Environmental Policy. Industry, Environmentalists, and U.S. Power. Cambridge, MA: MIT Press.
- DiMaggio, Paul J., and Walter D. Powell. 1991. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. In The New Institutionalism in Organizational Analysis, eds. Walter D. Powell and Paul J. DiMaggio. Chicago: The University of Chicago Press. 41-62.
- ECIS. 2006. Announcement of Second Phase Allocation Plans. Press release, November 24. Available at http://www.climatechangecapital.com/news-and-events/press-releases/ announcement-of-second-phase-national-allocation-plans, accessed October 20, 2014.
- Falkner, Robert. 2008. Business Power and Conflict in International Environmental Politics. Basingstoke: Palgrave Macmillan.
- Fombrun, Charles, and Mark Shanley. 1990. What's in a Name? Reputation Building and Corporate Strategy. The Academy of Management Journal 33: 233-258.
- Foster, Chase. 2012. Slicing up the Carbon Footprint Pie: Airline Preferences for Emissions Regulation in the EU, Canada, Australia, and the US. Unpublished manuscript, Harvard University, Cambridge, MA.
- Fuchs, Doris. 2008. Business Power in Global Governance. Boulder, CO: Lynne Rienner Publishers.
- Hacker, Jacob, and Paul Pierson. 2002. Business Power and Social Policy: Employers and the Formation of the American Welfare State. Politics & Society 30: 277-325.
- Hajer, Maarten A. 1995. The Politics of Environmental Discourse. Ecological Modernization and the Policy Process. Oxford: Clarendon Press.
- Hall, Peter A. 2005. Preference Formation as a Political Process: The Case of Monetary Union in Europe. In Preferences and Situations: Points of Intersection between Historical and Rational Choice Institutionalism, edited by Ira Katznelson and Barry R. Weingast. New York: Russell Sage Foundation. 129–160.
- Haufler, Virginia. 2001. A Public Role for the Private Sector. Industry Self-Regulation in a Global Economy. Washington, DC: Carnegie Endowment for International Peace.

- Hoffman, Andrew J., and Marc J. Ventresca, eds. 2002. *Organizations, Policy, and the Natural Environment*. Stanford, CA: Stanford University Press.
- Immergut, Ellen M. 1998. The Theoretical Core of the New Institutionalism. *Politics and Society* 26: 5–34.
- Kahneman, D., and A. Tversky. 1984. Choices, Values, and Frames. *American Psychologist* 39: 341–350.
- Katznelson, Ira, and Barry R. Weingast. 2005. Intersections between Historical and Rational Choice Institutionalism. In *Preferences and Situations: Points of Intersection between Historical and Rational Choice Institutionalism*, edited by Ira Katznelson and Barry R. Weingast. New York: Russell Sage Foundation. 1–24.
- Kelemen, R. D., and D. Vogel. 2009. Trading Places: The Role of the United States and the European Union in International Environmental Politics. Comparative Political Studies 43: 427–456.
- Keohane, Nathaniel O., Richard L. Revesz, and Robert N. Stavins. 1998. The Choice of Regulatory Instruments in Environmental Policy. *Harvard Environmental Law Review* 22: 313–368.
- Leggett, Jeremy. 2001. The Carbon War. Global Warming and the End of the Oil Era. New York: Routledge.
- Leone, Robert A. 1986. Who Profits? Winners, Losers, and Government Regulation. New York: Basic Books.
- Levy, David L., and Daniel Egan. 1998. Capital Contests. National and Transnational Channels of Corporate Influence on the Climate Change Negotiations. *Politics & Society* 26: 337–361.
- Levy, David L., and Daniel Egan. 2003. A Neo-Gramscian Approach to Corporate Political Strategy: Conflict and Accommodation in the Climate Change Negotiations. *Journal of Management Studies* 40: 803–29.
- Levy, David L., and Ans Kolk. 2002. Strategic Responses to Global Climate Change. Conflicting Pressures on Multinationals in the Oil Industry. *Business and Politics* 4: 275–300.
- Levy, David L., and Sandra Rothenburg. 2002. Heterogeneity and Change in Environmental Strategy: Technological and Political Responses to Climate Change in the Global Automobile Industry. In *Organizations, Policy, and the Natural Environment*, eds. Andrew J. Hoffman and Marc J. Ventresca. Stanford: Stanford University Press. 173–193.
- Levy, David, and Maureen Scully. 2007. The Institutional Entrepreneur as Modern Prince. The Strategic Face of Power in Contested Fields. *Organiziation Studies* 28: 1–21.
- Markussen, Peter, and Gert T. Svendsen. 2005. Industry Lobbying and the Political Economy of GHG Trade in the European Union. *Energy Policy* 33: 245–255.
- Martin, Cathie Jo, and Duane Swank. 2012. The Political Construction of Business Interests: Coordination, Growth, and Equality. New York: Cambridge University Press.
- Mattli, Walter, and Ngaire Woods. 2009. *The Politics of Global Regulation*. Princeton, NJ: Princeton University Press.
- Meckling, Jonas. 2011a. The Globalization of Carbon Trading: Transnational Business Coalitions in Climate Politics. *Global Environmental Politics* 11 (2): 26–50.
- Meckling, Jonas. 2011b. Carbon Coalitions: Business, Climate Politics, and the Rise of Emissions Trading. Cambridge, MA: MIT Press.
- Neslen, Arthur. 2012. Airlines Could Net GBP .6 Billion Windfall from EU Carbon Trading Scheme, Report Says. *The Guardian*.

- Newell, Peter. 2006. Climate for Change: Non-State Actors and the Global Politics of the Greenhouse. Cambridge: Cambridge University Press.
- Newell, Peter. 2008. The Political Economy of Global Environmental Governance. Review of International Studies 34 (3): 507-529.
- Newell, Peter, and Matthew Paterson. 2010. Climate Capitalism: Global Warming and the Transformation of the Global Economy. Cambridge: Cambridge University Press.
- Nowlin, Matthew C. 2011. Theories of the Policy Process: State of the Research and Emerging Trends. Policy Studies Journal 39: 41-60.
- Nye, Michael, and Susan Owens. 2008. Creating the UK Emission Trading Scheme. Motives and Symbolic Politics. European Environment 18: 1–15.
- O'Neill, Kate, Erika Weinthal, Kimberly R. Marion Suiseeya, Steven Bernstein, Avery Cohn, Michael W. Stone, and Benjamin Cashore. 2013. Methods and Global Environmental Governance. Annual Review of Environment and Resources 38: 441-471.
- Oye, Kenneth A., and James H. Maxwell. 1994. Self-Interest and Environmental Management. Journal of Theoretical Politics 6: 593-624.
- Paterson, Matthew. 2012. Who and What Are Carbon Markets For? Climate Policy 21: 82-97.
- Prakash, Aseem. 2002. Beyond Seattle: Globalization, the Nonmarket Environment and Corporate Strategy. Review of International Political Economy 9: 513-537.
- Prakash, Aseem, and Matthew Potoski. 2006. The Voluntary Environmentalists: Green Clubs, ISO 14001 and Voluntary Environmental Regulations. Cambridge: Cambridge University Press.
- Pulver, S. 2007. Making Sense of Corporate Environmentalism: An Environmental Contestation Approach to Analyzing the Causes and Consequences of the Climate Change Policy Split in the Oil Industry. Organization & Environment 20: 44-83.
- Raustiala, Kal. 1997. The Domestic Politics of Global Biodiversity Protection in the United Kingdom and the United States. In The Internationalization of Environment Protection, eds. Miranda A. Schreurs and Elizabeth C. Economy. New York: Cambridge University Press. 42-73.
- Rees, Matthew, and Rainer Evers. 2000. Proposals for Emissions Trading in the United Kingdom. Review of European Community & International Environmental Law 9: 232–238.
- Reinhardt, Forest. 2001. Global Climate Change and BP Amoco. Harvard Business School case No. 9-700-106. Cambridge, MA: Harvard Business School.
- Rowlands, Ian H. 2000. Beauty and the Beast? BP's and Exxon's Positions on Global Climate Change. Environment and Planning C: Government and Policy 18: 339–354.
- Rugman, Alan, and Alain Verbeke. 1998. Corporate Strategy and International Environmental Policy. Journal of International Business Studies 29: 819-834.
- Schurman, Rachel. 2004. Fighting 'Frankenfoods'. Industry Opportunity Structures and the Efficacy of the Anti-Biotech Movement in Western Europe. Social Problems 51: 243-268.
- Scott, W. Richard. 2001. Institutions and Organizations. Thousand Oaks, CA: Sage.
- Sharma, Sanjay. 2000. Managerial Interpretations and Organizational Context as Predictors of Corporate Choice of Environmental Strategy. Academy of Management Journal 43: 681-6x97.
- Skjaerseth, Jon Birger, and Tora Skodvin. 2003. Climate Change and the Oil Industry. Common Problems, Varying Strategies. Manchester: Manchester University Press.

- Victor, David G., and Joshua C. House. 2006. BP's Emissions Trading Scheme. *Energy Policy* 34: 2100–2112.
- Vogel, David. 2008. Private Global Business Regulation. Annual Review of Political Science 11: 261–282.
- Vogel, David. 1995. Trading Up. Consumer and Environmental Regulation in a Global Economy. Cambridge, MA: Harvard University Press.
- Vormedal, I. 2010. States and Markets in Global Environmental Governance: The Role of Tipping Points in International Regime Formation. European Journal of International Relations 18: 251–275.
- Vormedal, Irja. 2011. From Foe to Friend? Business, the Tipping Point and U.S. Climate Politics. *Business and Politics* 13: 1–31.
- Vormedal, Irja. 2009. The Influence of Business and Industry NGOs in the Negotiation of the Kyoto Mechanisms: The Case of Carbon Capture and Storage in the CDM. *Global Environmental Politics* 8: 36–65.
- Woll, Cornelia. 2012. The Brash and the Soft-Spoken: Lobbying Styles in a Transatlantic Comparison. *Interest Groups & Advocacy* 1: 193–214.
- Woll, Cornelia. 2009. Firm Interests: How Governments Shape Business Lobbying on Global Trade. Ithaca: Cornell University Press.
- Wright, Christopher, and A. Rwabizambuga. 2006. Institutional Pressures, Corporate Reputation and Voluntary Codes of Conduct. An Explanation of the Equator Principles. *Business and Society Review* 111: 89–117.
- Yeung, Henry Wai-Chung. 2005. The Firm as Social Network: An Organisational Perspective. *Growth and Change* 36: 307–328.
- Zapfel, Peter. 2005. Greenhouse Gas Emissions Trading in the EU. Building the World's Largest Cap-and-Trade Scheme. In *Emissions Trading for Climate Policy. US and European Perspectives*, ed. Bernd Hansjürgens. Cambridge: Cambridge University Press. 162–176.