

**States and Markets in  
Global Environmental Governance:  
Dynamics and Change in the Regulation of  
Global Warming**

By Irja H. Vormedal

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Article 2: Vormedal, Irja (2011). States and markets in global environmental governance: The role of tipping points in international regime formation. Forthcoming in *European Journal of International Relations*

Article 3: Vormedal, Irja (2011). From Foe to Friend? Business, the Tipping Point and U.S. Climate Politics. Forthcoming in *Business and Politics*

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## 1. Introduction

In 1992, a group of visionary business leaders came to the White House with a different agenda than most industry lobbyists. They wanted to let the President know that a growing share of the corporate world was taking environmental problems such as climate change very seriously, and that they were ready to work with governments to design appropriate regulatory frameworks. President George H.W. Bush was astonished by this message: “*Young man,*” he asked the leader of the newly established Business Council for Sustainable Development (BCSD), “*why is it that so many industry people come to lobby me with all kinds of requests for protection, subsidies or favors...and you’re ... taking initiatives [sic] for something that the others all seem to try and fend off?*” (Timberlake, 2006:18). Indeed, at the time, the Council’s approach was unique. Business support and advocacy for regulations to limit greenhouse gas (GHG) emissions was almost unheard of, and in Europe and the U.S., dominant industry lobbies were organizing in stark opposition to the establishment of mandatory emissions limitations.

In retrospect, however, the constructive approach of the BCSD marked the beginning of a more profound process of strategic change among dominant business lobbies. By the turn of the decade, many of the previously antagonistic business lobbies had begun to abandon a strategy of opposition, and by 2008, a whole new landscape of more constructive and regulation friendly business associations had materialized. Indeed, some of these lobbies had also begun to push for the establishment of regulatory frameworks to limit GHG emissions. No one existing approach to studying business and environmental governance can satisfactorily account for or explain this apparent strategic shift.

This dissertation unpacks this strategic shift and assesses its impact on political and regulatory change. To this end, it develops an integrated conceptual framework centered on how the interplay between business-strategy formation and embryonic environmental governance can generate dynamics and mechanisms that trigger political momentum and regulatory change. The framework is employed to analyze the development of the international climate change regime and climate change politics in the United States.

In short, the framework posits the following: When proposals for new environmental regulations first emerge on the policy agenda, liable and affected industries are likely to

organize in opposition due to potentially high adjustment and compliance costs. However, under certain conditions that may emerge as an issue area of environmental governance matures—including the increase of regulatory threats and uncertainties, uneven playing fields and new market opportunities—the preferences and strategies of dominant business lobbies are likely to shift from opposition towards regulatory entrepreneurship. The model defines this threshold, at which a critical mass of business lobbies begins to support or push for the adoption of new regulation, as a ‘tipping point’ in business strategies. The framework also argues that the materialization of a tipping point may generate more enabling conditions for bargaining and, under favorable conditions, generate significant progress in the political and/or regulatory process. Through detailed case studies of business lobbying with respect to climate change policy, this dissertation concludes that the tipping point framework provides a plausible account of the dynamics of political and regulatory change in both the contexts of the United States and the international climate regime.

While most previous literature has conceptualized strategic, political and regulatory change in static terms, this framework elucidates the importance of understanding *dynamics*. Most importantly, the framework (1) reveals how mechanisms for change in environmental governance are constructed through complex interplays between the interests of participating agents and nascent governance structures, and (2) demonstrates the significance of dynamic thresholds such as tipping points in triggering cascades of progress.

This chapter introduces and discusses this dissertation research as it is presented in three scholarly journal articles. The chapter proceeds as follows: First, the research domains of business and environmental governance are introduced and terms defined. Second, the research agenda and design are explained and justified. Three core research questions are formulated, which correspond to the research articles. Third, the methodological approach is defined and assessed with respect to the theory and practice of developing conceptual knowledge and theory, and to concrete strategies and methods for data-collection, evaluation and analysis. The next section reviews existing theoretical approaches relevant to the research agenda, first with respect to analyzing business power, strategy formation and environmental governance, and second with respect to the politics, dynamics, and conditions of regulatory formation. This review critically discusses the merits and limits of these literatures, and evaluates their contribution vis-à-vis the tipping point framework. Then follows a summary of the three academic journal articles. Principal findings are outlined to render conclusions

regarding the contribution and implications of this research to the field. This chapter lastly considers some limitations and new questions that arise from this study, as well as possible directions for future research.

## **2. Focus, Demarcation and Research Questions**

Since the 1970s, when transboundary environmental problems first emerged on the international policy agenda, there has been a steady proliferation of inter-state, transnational and multi-level institutions, rules, mechanisms and processes intended to regulate or steer actors' behavior towards better environmental management. The totality of these structures and processes comprise what is widely referred to as *global environmental governance*. In the 1980s and 90s, the term was mostly applied by scholars studying international institutions and regimes established and operated by interdependent states (see Haas, Keohane and Levy, 1993; Young, 1994; 1999). More recently, however, reflecting the vast increase in non-state actor participation in world politics over the past two decades, global environmental governance has come to be understood more broadly to include an array of different actors: states, inter-governmental organizations, non-governmental organizations (NGOs), corporations and industry associations and public-private partnerships, among others (Biermann, 2004; Lemos and Agrawal, 2006; Ruggie, 2004; UNEP, 2010). Moreover, defining environmental governance as *global*, as opposed to using the term *international*, appreciates the shortcomings of traditional state-centric analyses and separation between domestic and international politics in international relations theory. Indeed, as an empirical concept, environmental governance has evolved into a transnational<sup>1</sup> and multi-level complex, which ties together different state and non-state actors, processes and structures at multiple levels ranging from the local, though the national and regional to the international.

The overall aim of this dissertation is to further develop our understanding of the pre-conditions and dynamics of change and progress in terms of one aspect of environmental governance: the negotiation and creation of environmental rules and regulations. Regulation

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<sup>1</sup> *Transnational relations* is defined as regulator interactions across national boundaries when at least one actor is a non-state agent or does not operate on behalf of a national government or intergovernmental organization (Risse-Kappen, 1995)



may be defined as the organization and control of economic, political and social activities by means of making, implementing, monitoring and enforcing of rules (Mattli and Woods, 2010). In multi-level environmental governance, the complex panoply of rules governing a particular issue area derive from international, rule-based agreements and institutions and their translation into national law, regional agreements establishing overarching regulatory structures or linked systems of national policy, and linked or co-evolved national or sub-national policies.

Previous literatures have established that business plays an important role in environmental rule making. Corporations and industry associations lobby decision-makers in order to influence the negotiation of institutions and regulations, and are also featured prominently in their implementation (Fuchs, 2007; Levy and Newell, 2005; Falkner, 2003; 2008; Rowlands, 2001). Business organizations perform governance functions through private institutional arrangements that seek to mitigate the negative environmental impacts of business activities (Cashore, 2002; Clapp, 2005; Gulbrandsen, 2004; Wright and Rwabizambuga, 2006). Furthermore, governments depend on markets to implement regulations and provide technological solutions to environmental problems. Markets depends on governments to maintain and create framework conditions that enable productivity, profitability and competitiveness. However, our understanding of the nature and effects of the interplay between states and markets remains underdeveloped.

The agenda of this dissertation is to answer the following question:

*What mechanisms and dynamics emerge from the interplay between state and market actors and structures in multi-level environmental governance, and how may these mechanisms and dynamics generate conditions for political and regulatory change?*

This overarching research objective relates to a number of inquiries fundamental to the disciplines of political science and international relations: How do we conceptualize and understand policy and regulatory processes? What are the relationships and relative power of actors involved? How can the dynamics between different actors and processes help explain particular failures and successes in efforts to regulate solutions to environmental problems?

Moreover, this study focuses on one particularly salient, complex and crosscutting environmental governance problem: *global climate change*. Climate change is taken as an appropriate representation of wider environmental problems due to its all-encompassing

nature: effective mitigation requires a broad range of regulatory, technological and management strategies both upstream and downstream in such diverse sectors as agriculture, forestry, energy production, transportation, mining and industrial manufacturing. Climate change constitutes the main empirical focus of this dissertation, but the research also draws on the literature of regulatory formation in the case of ozone layer depletion. The example of ozone layer protection is discussed due to its similarities with climate change regarding the centrality of business in the international, regime-building process.

To operationalize this broader research agenda, the study is organized around the following specific research questions:

- 1. How and in what capacity do market actors influence the negotiation of rules and regulations designed to mitigate climate change?*
- 2. How are market-actor strategies vis-à-vis climate regulation constructed in response to the dynamics of nascent climate governance?*
- 3. How can the intersections between business strategies and climate governance affect development and change in business lobbying, political responses and regulatory formation?*

Moreover, the research addresses these questions by studying two different but interlinked political and rule-making processes that are essential to successful and effective mitigation of climate change:

- i) The United Nations Framework Convention on Climate Change (UNFCCC)
- ii) U.S. climate politics, including in particular the development of regulation and legislation in the U.S. House of Representatives, Senate and White House.

The UNFCCC embodies what is commonly referred to as the international climate regime. The Convention, which was signed and ratified by nearly all the world's states 1992, set up the basic institutions and processes allowing Parties to further negotiate international GHG regulations, which later resulted in the adoption of the 1997 Kyoto Protocol and the 2009

Copenhagen Accord. In the U.S, climate change has been on the political and legislative agenda since the 1980s. While the U.S ratified the UNFCCC, it is not a party to the Kyoto Protocol, and it is widely acknowledged that U.S opposition to Kyoto and legally binding international commitments has severely hampered the effectiveness of the regime. Studying the dynamics of regulatory formation in the U.S can thus ultimately also help explain the failures and potential for success in regulatory formation at the international level. Previous studies have demonstrated that business lobbies have exercised considerable influence both in the international regime and US climate politics since the early 1990s, which renders both these cases particularly relevant for empirically studying change in business strategies and regulatory formation over time.

This two-level approach departs from the notion that international regimes and domestic politics are intimately linked or entangled. Government preferences, positions and negotiating leverage in international negotiations are often determined by domestic politics; that is, they are determined by the extent to which domestic constituencies and institutions support or oppose regulatory change (Drezner, 2007; DeSombre, 2000; Moravcsik, 1997; Putnam, 1988).

The next section outlines the study's methodological approach to developing conceptual knowledge and theory from these case studies, and presents its concrete strategy for collecting and analyzing empirical data.

### **3. Theory Development, Data Analysis and Data Collection**

This study employs an inductive approach to theory development in line with Glaser and Strauss' (1967) doctrine for developing *substantive grounded theory* in qualitative research. In contrast to deductive research methodologies, which seek to obtain new facts to test, verify or falsify existing theories and concepts, substantive grounded theory<sup>2</sup> is generated inductively *from* empirical data. A grounded theory approach recognizes that the researcher's

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<sup>2</sup> Theory is defined by Glaser and Strauss as a strategy for handling data in research, which provides modes of conceptualization for describing and explaining (1967:3). Theory, furthermore, has the following purposes: 1) To enable prediction and explanation of behavior, 2) to be useful in theoretical advances, 3) to be useful to practitioners seeking to control situations, 4) to provide a perspective on behavior, and 5) to guide and provide style for research on particular areas of behavior.

*a priori* knowledge of the most pertinent hypotheses, concepts and theoretical postulations may be limited. Indeed, the belief that existing, formal theories can be applied directly to a substantive area, “often lead[s] to a forcing of data as well as the neglect of relevant concepts and hypotheses that may emerge” (Glaser and Strauss, 1967:34). Thus, instead of letting existing theories guide the research, the researcher should seek to develop, extend and refine emerging analytical themes, categories and hypotheses throughout the data collection process (Charmaz, 2001; 2006; Glaser and Strauss, 1967).

The development of hypotheses, concepts and a theoretical framework in this dissertation is consistent with a grounded theory approach. The processes of data collection and data analysis are not conducted separately but simultaneously from early phases and throughout the research process. This rolling analysis is reflected in the organization and publication order of the journal articles. The empirical research conducted in first case study<sup>3</sup> to a large extent provided the basis for developing an understanding of the most significant and interesting processes and puzzles for study: namely, the nature and causes of the apparent strategic shift in the strategies of a critical mass of dominant business lobbies, and the impact of the strategic shift on political and regulatory formation over time. This finding spurred further empirical research and the development of an analytical framework in the second article.<sup>4</sup> While some existing analytical approaches were helpful in guiding this research agenda, indeed, no one approach could have provided an appropriate analytical model *a priori*.

In order to gather the necessary empirical data for conducting case studies and developing conceptual and theoretical knowledge—i.e. data collection—this study adopts a strategy of methodological *triangulation* (Denzin, 1978; Miles and Huberman, 1994). Triangulation is a strategy that seeks to ensure data reliability by combining different qualitative methodologies, including interviewing, participant observation and documentary analysis. Methodological triangulation seeks to capitalize on each method’s relative strengths while hedging their weaknesses and limitations.

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<sup>3</sup> The Influence of Business and Industry NGOs in the Negotiation of the Kyoto Mechanisms: the Case of Carbon Capture and Storage in the CDM

<sup>4</sup> States and markets in global environmental governance: The role of tipping points in international regime formation.

A substantial share of the empirical material gathered for this research has been generated through *qualitative interviewing*. Qualitative interviewing is a method that can be particularly useful for providing ‘thick descriptions’ of social phenomena, and for explaining how social processes transpire and why things change (Rubin and Rubin, 2005). Furthermore, interviewing can provide rigorous information about relevant actors and processes, the relationships between them, and the underlying motivations causing behaviors in particular social contexts (Bauer, 2000:39).

There are many different approaches to interviewing. One of the main distinctions can be drawn between a ‘structured’ interview, where a series of predetermined and standardized questions are posed to the informant, and an ‘unstructured’ interview, where the researcher assumes a rather passive role by letting the informant guide the direction of the conversation (Andersen, 2006:279; Bauer, 2000:38; Pawson, 1996:297). A structured approach is often used in quantitative survey research, and aims to generate objective and unbiased facts through the application of specific interview techniques.<sup>5</sup> The informant is understood as a data-carrying entity, that is, a ‘passive vessel of answers’ or a repository containing relevant information (Gubrium and Holstein, 2001:13). Structures interviews are appropriate when a researcher knows all the relevant questions *ex ante* to interviews. In the present case, which is riddled with ever-changing business and governance variables, no researcher could know all the appropriate interviews questions, concepts or analytical approaches *a priori*, so more flexibility is required. From a grounded theory perspective, the need to explore different analytical opportunities during the data-collection process thus renders the structured approach to interviewing both unfeasible and unproductive in this case.

This study adopts a less rigid approach to interviewing; that is, the semi-structured model. This approach has the researcher prepare a set of themes, issues or questions to be covered during the interview, but leaves space and time open to adjust the sequence and nature of the questions throughout (Kvale, 1997; Rubin and Rubin, 2005:4). Semi-structured interviews also enable the researcher to pursue unanticipated issues and information raised by the informant (Bauer, 2000; Kvale, 1997:72). Such interviews might be described as

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<sup>5</sup> Each informant is presented with exactly the same questions and in the same order to enable aggregation and comparison between sample subgroups and/or different survey periods.

conversational, because data is constructed through the dynamic interplay and exchange of knowledge, information and ideas between the interviewee and the interviewer (Holstein and Gubrium, 2002:113; Kvale, 1997:29; Pawson, 1996:298).

More specifically, the method adopted here also draw on a style of interviewing particularly useful for developing substantial grounded theory: the *'theory-driven' conversational interview*. Using this strategy, the researcher selects key informants presumed to be particularly knowledgeable on issues being researched (Kumar et al., 1993:1634), and uses the informant's knowledge to help confirm, falsify and refine the researcher's own theory (Pawson, 1996:299). The researcher actively invites the informant to share information relevant to understanding the case, to deliberate on the role of specific factors and variables in creating particular behavioral, social and/or political outcomes, and to comment upon the researchers conceptual framework, hypotheses and proposed explanations (Pawson, 1996:305-306). As such, the interview may help the researcher explore, critically examine or test the validity of his/her own research questions, hypotheses and theoretical postulations (Andersen, 2006:280-282). Therefore, the theory-driven conversational model can—in line with the grounded theory approach—allow for ideas, issues, concepts and hypotheses to emerge from interviewing. This approach arguably also enhances analytical control and validity, as the relevance of the information and the conceptual framework is constantly assessed throughout the data-collection process (Andersen, 2006).

Studies of complex empirical fields such as business lobbying and regulatory formation involve an immensurable number of actors with whom it may be difficult to secure interviews and with whom much relevant information may be regarded as sensitive. In these situations, carrying-out a statistically representative survey of key informants is not a prudent plan. For this reason, but also in line with the prescribed methodology of theory-driven interviewing, the strategy adopted here selects informants not based on statistical representativeness, but because they are deemed particularly resourceful, knowledgeable and experienced in the field (see Kumar et al. 1993:1634). Here, such key-informants were identified among heads and staff of business associations and NGOs, corporate lobbyists, CEOs of large corporations and government decision-makers. In the early phases of the research process, interviewing these key informants proved essential to developing a contextual understanding and formulating interesting and rigorous research questions and hypotheses, as well as getting relevant and publicly unattainable information. As the process

evolved and a conceptual framework emerged, these could be tested, discussed and refined through continued interviewing.

Ensuring that the information provided through interviewing is reliable represents a challenge. When using key informants, who are generally intelligent, articulate and accustomed to liaising with political and social elites, there is a danger that the researcher may lose control over the interview situation (Andersen, 2006:282). Furthermore, informants may consciously retain information, evoke incomplete and biased recollections of actions and/or events, overstate their own role and importance, and/or favor certain memories over others (Andersen, 2006:292-293). Therefore, it is imperative that the researcher critically scrutinizes the extent to which the data can be deemed a reliable account of reality (Andersen, 2006:283).

As mentioned initially, a good strategy for dealing with these problems is to use multiple data-sources and methods in combination. This study also draws on years of participant observation in the international climate negotiations<sup>6</sup> to compliment the information gathered through interviewing. Some argue that participant observation can yield a more objective account of reality, enabling the researcher to document exactly what happens (Becker and Greer, 1957). However, this postulation rests on a rather naïve assumption that while the accounts of informants may be subject to ‘distortion’ through subjectivity and bias, the researcher’s observation is somehow immune to distortion. Data collected through participant observation too represents an interpretation of social reality (Atkinson and Coffey 2001). Nevertheless, the inherent element of subjectivity in qualitative reporting of social events, be it through interviewing or observation, does not necessarily mean that such methods cannot provide factual information. For example, if information is institutionally entrenched, such as position and rank within an organization or the sequence of events, they can be deemed as factual (see Andersen 2006:284). Furthermore, some descriptions and observations of the social world may be regarded as true because they are shared by a significant number of actors within a given context. Clearly, collective descriptions and views

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<sup>6</sup> By receiving formal accreditation to the UNFCCC through the International Chamber of Commerce, I was able to participate not only in the formal, rule-making processes, but also to attend and observe many closed, strategy meetings within and between business lobbies. This proved extremely helpful for developing an understanding of the field, schedule interviews and formulate research hypotheses and questions to be posed in interviews.

represent shared meaning and interpretation of social phenomena, but can still assume a type and degree of veracity precisely when they are shared across time and space.

When the researcher is able to observe some of the social or political processes as well as interview key informants about them, observation can also be used as a reference point against which statements by informants can be judged. The researcher must recognize that his/her own observation—to the same extent as for informants—constitutes an interpretation. Nevertheless, it can serve as a valuable complement to interview data. In some cases, when informants' statements deviate from the researcher's observations and interpretation, the researcher must critically question and analyze whether his/her own understanding, as well as the accounts of informants, represent a reliable description of the social processes studied.

Finally, as a complement to interviewing and participant observation, this study also draws on the extensive documentary analysis of both primary and secondary sources. These include mainly draft texts from political, regulatory and legislative negotiations, actor position statements, lobbying materials, strategy documents, finalized political and regulatory agreements, newsletters, press releases and media reports. Some of these documents are publicly available, while some are not. All documents used are appropriately referenced in the articles.

#### **4. Literature Review**

This section reviews and discusses selections of existing literature that are analytically relevant to this dissertation's research agenda. The literature is grouped according to two broad analytical aims: i) To assess and analyze the influences and drivers of business activities and strategies in environmental governance, and ii) to analyze and explain processes of political change and regulatory formation in the environmental policy domain. The conceptual framework and theory developed in this dissertation builds on and lends insights to the literature, but may also be distinguished from existing scholarship. These existing analytical approaches are next discussed in terms of their relevance and ability to help answer the questions guiding this dissertation research.



#### **4.1 Business Power, Strategies and Global Environmental Governance**

Over the past decades there has been a proliferation of academic research on the role of business in global environmental governance. These studies build on a substantial foundation of studies within the discipline of international political economy (IPE), an increasingly recognized sub-stream of international relations. IPE first developed in the 1990s and was closely linked to debates on globalization and the alleged rise of market actors as powerful players in global politics (Dicken, 1998; Eden, 1993; Stopford and Strange, 1991; Strange, 1996; 1988; 1996; Held et al, 1999). While the central focus of IPE scholarship remains on the interrelationship between public and private power, it has evolved into a rich and diverse discipline including an array of different theoretical and methodological approaches (Ravenhill, 2005; Stubbs and Underhill; 2000). What unites the IPE scholarship, however, and much of the literature on business and environmental governance within the IPE approach, is its analytical focus on structural power. The structural power of the market and market actors is derived from their position as the primary source of economic growth, employment and innovation in the modern capitalist societies. Because government legitimacy, authority and indeed re-election hinges on the functioning of markets to create jobs and taxable profits, states often seek to design policies and regulation that do not unduly harm economic interests. As such, the structural power of business may have a disciplining effect on politics, and limit the range and availability of feasible policy and regulatory options (see Bachrach, 1967; Bachrach and Baratz, 1970; Lukes, 1974). In environmental governance, this implies that the leverage of regulators is constrained by the need to impose rules that are “market friendly.”

One particularly notable approach to analyzing business strategies and environmental governance within the IPE discipline is the so-called *Neo-Grainscan Framework*. Building on almost a decade of research (e.g. Levy and Egan, 1998; 2003; Levy and Kolk, 2002; Levy and Prakesh, 2003; Newell, 2000; 2001; 2003, Newell and Paterson, 1998), David L. Levy and Peter J. Newell present an interdisciplinary and multi-level framework that draws on international relations and business management and organization literatures, while combining political macro-level analysis and company-level studies (Levy and Newell, 2005; see also Newell and Levy, 2006).

The framework builds on two central concepts borrowed from the Marxist philosopher Gramsci; the notions of hegemony and historical blocks. Hegemony is defined as the unison of economic, political, ideological aims and beliefs amongst members of a dominant class or group who exercise leadership in society. An alliance of political, economic and social forces as such is defined as an historical block. An historic block forms the basis of consent to certain social orders, which produce and re-produce hegemony through the coercive and bureaucratic authority of state institutions, dominance in the economic realm, and the consensual legitimacy of civil society (See Levy and Newell, 2005:50). The authors use the concept of hegemony and historical blocks to conceptualize how environmental problems are governed, and the role of markets and market actors in this process. Environmental governance structures such as regimes and institutions are viewed as the result of processes of bargaining, compromise and alliance formation over ideas, goals and regulatory designs between a variety of actors, including states, transnational organizations, business and industry associations and civil society groups. This bargaining process is embedded within broader power relations and structures, and is not a pluralistic contest among equals. As such, regimes and other governance complexes reflect the relative power, resources, preferences and strategies of the actors involved, while at the same time being shaped and constrained by broader macro-structures such as production relations and ideological formations. It is the structural power of markets and market actors in the construction of hegemonic fields—that is, the materialization dominant ideas, aims and beliefs regarding how to deal with environmental problems—that enable business to keep issues off the agenda, limit the range of policy options, and ‘capture’ regulatory development by recognizing only market-friendly responses.

The Neo-Gramscian framework recognizes that both structure and agency influence the formation of environmental governance systems. Yet, agency itself appears to be conceptualized as structurally determined. The interests of actors reflect those of historical blocks and abide the confines of hegemonic fields. While Levy and Newell acknowledge the role of firm-level drivers in strategy construction, including factors such as the costs and benefits of collective political action or the need to manage compliance costs and opportunities (see Getz, 1997; Mahon, 1983; Leone, 1986; Boddewyn and Brewer, 1994; Schaffer 1992), they criticize the business-management literature for its failure to capture how interests and strategies are embedded in hegemonic fields and thus determined by the norms, goals and preferences of which it is constituted. As such, hegemonic fields and historical

blocks establish the limits and possibilities for strategy construction. Based on this notion, Levy and Newell argue that the trend towards greener business management represent a more fundamental change than a simple attempt at corporate greenwashing. Rather, it should be seen as an effort to accommodate new structural conditions derived from the growing consensus and pressure regarding the need to mitigate environmental problems (Levy and Newell, 2005:58-59). In Gramscian terms, it represents an accommodationist strategy of ‘passive revolution,’ an attempt by dominant actors to absorb social pressures and protect their positions (Levy and Newell, 2005:64).

Levy and Newell’s account of how business strategies are structurally determined by the emerging field of environmental governance provides a timely correction to more simplistic firm-level conceptualizations. Yet, Levy and Newell’s framework suffers from at least three shortcomings: i) it lacks a precise notion of exactly how strategies are constructed in response to evolving environmental governance structures; ii) it makes little room for agency beyond or outside the margins of hegemonic fields; and, iii) by its *a priori* assumption of business power, it posits a rather deterministic account of regulatory outcomes. By conceptualizing regime formation as a path-dependent process embedded in structural conditions and relations of power, the neo-Gramscian framework fails to account for the drivers and conditions of trajectory change in regulatory formation.

Another notable approach to analyzing business strategies and global environmental governance is the *neo-pluralist perspective*. In contrast to the IPE scholarship’s focus on structural power, it views global politics as a pluralistic field where power is dispersed more equally among a range of different agents. The relative power of actors to shape policy outcomes is determined by the particular range of constraints and opportunities pertaining to the given issue-area (Cerny, 2010:4). Since business groups compete with other actors for influence, their power to determine outcomes cannot be established *a priori* and must be treated as an empirical and issue-specific question (Falkner, 2008). However, neo-pluralism incorporates critiques against traditional pluralism’s failure to account for structural power by treating business as ‘privileged’ interest groups (Falkner, 2008; Lindblom, 1977; McFarland, 2004).

While recognizing that power exists and works in various forms (Barnett and Duvall, 2005), neo-pluralists invoke a more empirical and pragmatic approach, which conceptualizes power and influence as something *relational*. Relational power may be defined as: A having

the power to get B to do something that B would not otherwise do (Dahl, 1957). In other words, relational power means the capability to realize intended outcomes through exercising influence. Influence occurs when the activities of actor A bring about intended effects in the behavior of actor B (Vormedal, 2008:44). This capability is often determined by resources such as money and knowledge. Thus, a relational approach conceives of power and influence as observable concepts traceable to an actor's behavior. In the study of business power, it directs researchers towards tracing causal links between business strategies and activities, and political and regulatory outcomes (Falkner, 2008).

This section reviews the neo-pluralist approach to analyzing business strategies and environmental governance developed by Robert Falkner (2008). Falkner questions the structuralist assumption that globalization has led to an increase in business power vis-à-vis states and other non-state actors. Firstly, there is little evidence of globalization having caused a regulatory race to the bottom in the field of environmental governance. Second, economic integration has also led to the increasing pluralization of world politics and generated new forms of transnational political agency, involving an array different actors and groups seeking to influence political outcomes (Cerny, 2010). It has been widely demonstrated that transnational civil society groups and networks successfully influence international policy-making and challenge corporate power through new forms of civil regulation and private governance mechanisms (see e.g. Keck and Sikkink 1998; Khagram et al 2000; Bendell, 2004; McComeric 1999). As Cerny (2003:156) argues, this pattern of transnational interaction, competition and alliance formation has created a more open and fluid process of global politics.

Falkner argues that business may be in a powerful, even privileged, position vis-à-vis other actors in global environmental governance; however business does not have a dominant influence over outcomes. Countervailing forces limit its influence, such as civil-society activism and the resilience of state power. But most importantly, business power is constrained by divisions and conflict within the business sector itself (Falkner, 2008:17). Business is often divided on policy issues, and cannot be treated as a monolithic bloc. *Business conflict* emerges in global environmental politics due to the differential effects of international regulations on disparate corporations, sectors and industries. Environmental regulations usually target specific industries or sectors, limit existing markets, or generate new markets. This may create uneven effects on business overall, leading to diverging interests and likely conflict.

Falkner identifies three main forms of business conflict over international regulation and regime building (2008:33-34). First, conflicts may arise between national and international firms. Global corporations are more likely than national firms to support the creation of international rules. Global corporations stand to benefit because international regulation can reduce the transaction costs of operating in multiple regulatory environments, and can also level the playing field for companies operating in countries with fewer and laxer environmental standards (Vogel, 1995). Second, conflicts arise between technological leaders and laggards. Within the same industrial sector, companies' ability to comply with new environmental standards is likely to be uneven. While market leaders in environmentally-friendly technologies may support regulation due to their competitive advantage, laggards are more likely to oppose them. Third, business conflict can also emerge between companies linked together in supply or production chains. Regulation is likely to have differential effects on companies operating along the production chain, or companies with varied levels of vertical integration, which may lead to divisions and conflict between them. For example, corporations at the consumer end of the chain may support regulation as part of a strategy to enhance their reputation amongst consumers. In contrast, those companies producing raw materials or other intermediary products used by the retailers may face higher compliance costs without gaining reputational benefits, and are therefore likely to resist regulation. In sum, while business conflict cannot be assumed *a priori* and must be treated as an empirical, issue-specific question, it constitutes a latent threat to business unity and thus to the corporate lobby's ability to influence regulatory developments.

Falkner argues that there are mainly two strands of thinking important to understanding how corporate preferences are constructed. First, the competitive position of a given company or industry in global markets, and the effect that new regulation may have on this position, provides a major indicator of interests and regulatory preferences. As such, preferences are determined by economic interests, which translate into lobbying strategies vis-à-vis regulatory processes. In the environmental domain, we may expect firms to evaluate the impact regulatory proposals would have on their competitive position and their ability to adapt through technological innovation and change. Second, the institutional environments that surround corporations also influence preference formation. The values of corporate leaders, the firm's the organizational culture and the shared ideas, norms and understandings of business associations and networks, often provide a filter through which economic interests are perceived. Thus, a firm's social and institutional environments influence interpretations of

economic interests. Falkner therefore argues that analyses of interest must be sensitive to both economic and institutional dimensions (2008:37).

Falkner's neo-pluralist account offers a less deterministic, more nuanced and precise account of how corporate strategies are constructed, as well as the conditions for business influence in environmental governance. The focus on conflicts that may emerge within and between business sectors, groups and individual corporations is useful not only in terms of emphasizing that business interests and power should not be assumed *a priori*, but is also useful for developing our understanding of the dynamics behind strategy construction. Falkner's approach shows that business groups may oppose or support regulation, depending on current competition and conflict within the business community and depending on the extent to which regulations might limit or advance competitive positioning and economic interests. While this approach provides valuable input to this dissertation's attempt to conceptualize processes of corporate strategy construction, it cannot explain how and why strategies change over time, and furthermore how the dynamics between strategic engagement and political and regulatory processes can generate conditions for change.

The next section reviews a selection of existing analytical approaches that focuses more directly on conceptualizing regulatory formation and change.

#### **4.2. Conceptualizing and Explaining the Formation of Global Regulation**

The literature on international regimes includes the first selection of relevant analytical models. *Regime theory*, which first developed during the 1980s and 90s, gives an essentially state-centric account of failures and successes in international rule-based cooperation. A consensus definition of "regimes" first appeared in a special issue of *International Organization* in 1982; as sets of "implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations" (Krasner, 1983: 2). However, some argue for a more precise definition of regimes as formal, regulatory agreements (Breitmeier et al., 2006) "with explicit rules, agreed upon by governments, that pertain to particular sets of issues in international relations" (Keohane, 1989: 4). The regime school has developed into a comprehensive research program which, for decades, has provided the major locus of theorizing on international regulation.

More recently, the regime scholarship has rightly received extensive criticism for its state-centricity and failure to account for the role played by non-state actors in the bargaining and formation of regulatory institutions (Arts, 2000; Newell, 2000; Josselin and Wallace, 2001). While the applicability of regime theory to the research agenda of this dissertation is therefore limited, there are nevertheless some insights to be drawn from the scholarship's notion of factors that may inhibit or enable successful regime formation.

Central to this research program are attempts to explain why states sometimes succeed and sometimes fail to establish effective institutions for dealing with environmental problems. According to a neo-liberal, interest-based model, which view states as utility-maximizing agents, regimes are most likely to come into existence when advantages exceed anticipated costs. That is, regimes form when they are "expected to increase the welfare of the creators" (Keohane, 1984: 80; see also Hasenclever et al., 1997: 37).

One particularly notable and influential neo-liberal account is Oran Young's framework for analyzing institutional bargaining (Young, 1989; 1994; and Young and Osherenko, 1993). In contrast to other neo-liberal models, Young's approach seeks more explicitly to account for the factors that enable or deter efforts of utility-maximizing agents to realize feasible mutual gains through regimes. According to Young, regimes are firstly most likely to materialize when the issues at hand "lend themselves to treatment in a contractarian mode" (Young, 1994: 107). A contractarian environment implies that actors bargain under a "veil of uncertainty." Because the distribution of negative impacts are unknown, states will seek to realize an agreement that is fair to all, "in a sense that patterns of outcomes generated under such arrangements will be broadly acceptable, regardless of where the participant might be located in such outcomes" (Young, 1994: 102). A veil of "good" uncertainty is therefore thought to facilitate institutional formation. Secondly, regimes are most likely to form when the primary concerns of all participating states are treated fairly, and the resulting design of the regulatory agreement is widely perceived as equitable. Thirdly, the existence of certain change-events — such as exogenous shocks, salient solutions to the problem, or clear-cut, reliable and effective compliance mechanisms—may increase the probability of successful regime formation. Finally, the absence of effective leadership, provided by states, international organizations or individuals, may severely hamper prospects of achieving an agreement (Young, 1994: 109-114).

Neo-realist and cognitivist regime scholars provide alternative conceptualizations of regime formation. Neo-realists view the leadership of a hegemon as a necessary condition for regime establishment, and believe that institutional arrangements are most likely to emerge when powerful states make the effort to create them (Hasenclever, 1997: 86; Gilpin, 1987; Grieco, 1988). Cognitivists, on the other hand, suggest a more knowledge-based model, which underscore the centrality of belief systems, decision cultures, and social learning in determining the success or failure of regime formation. Learning about the problems at hand and their appropriate responses may contribute to the development of consensual knowledge and thus agreement on suitable institutional arrangements to deal with them (See E. Haas, 1990; P. Haas, 1992).

As previously noted, because these models fail to account for functions played by non-state actors such as business, they also fail to address potential conditions for change that may origin from markets and/or the intersection between state and business preferences. While Young's notions of equity, fairness and feasibility as central premises for successful regime formation provides an important insight helpful to developing our understanding of regime formation, it fails to consider the extent to which successful institutional agreements must also be perceived by market actors as equitable, fair and feasible.

Another notable and more recent contribution to the literature on global regulatory formation is Daniel Drezner's (2007) *theory of regulatory outcomes*. Drezner argues that while globalization has empowered non-state actors, governments remain the primary agents who write the rules that regulate the global economy. Drezner, building on a "two-step" or "two-level games" approach to international relations theory (Legro, 1996; Legro and Moravcsik, 1999; Moravcsik, 1997; Putnam, 1988), argues that the key variable affecting regulatory outcomes is the distribution of interests among great powers. By positing great power cooperation of mutual interest as both a necessary and sufficient condition for regulatory formation (2007:5), Drezner reaffirms the main tenants of the realist scholarship.

But the framework also differs significantly from the realist model. Drezner argues that a state's regulatory preferences can be derived from domestic conditions, in particular political economy. The preferences of domestic actors and institutions can be used to explain state interests, positions and bargaining outcomes in international negotiations (Drezner, 2007:6). Drezner identifies the regulatory preferences of domestic business and industry as



the most important *fons et origo* of state positions. If the compliance and adjustment costs associated with a regulatory proposal are high, business and industry groups are likely to organize and exercise political voice to protect the regulatory status quo. It should be noted that some businesses are also likely to benefit from and therefore support global regulation. For example, multinational companies may prefer uniform international standards over varied national policies, because regulatory consistency permits standardized production processes, fewer compliance risks and costs, and capital planning around predictable regulatory environments (2007: 43-45). Yet, Drezner argues that, in most instances, the costs of implementing global regulations are greater than the benefits. If the proposed regulation affects immobile factors of production such as land and labor, or asset specific investments such as mature and non-tradable sectors, then compliance and adjustment costs may be comparatively high. Furthermore, older sectors and regulatory problems tend toward more use of political voice by affected industries, and more adjustment costs for governments, as compared to newer sectors with newly understood environmental risks (2007:59). When governments face domestic actors that strongly oppose regulatory change, the perceived adjustment costs of global regulation are very likely to outweigh the perceived benefits (2007:46-51).

In sum, while Drezner argues that preferences of the most powerful states determine regulatory outcomes at the international level, his model also acknowledges—at least implicitly—how the preferences of business groups and governments intersect and create conditions that may inhibit or enable regulatory change at the global level.

Another notable approach to analyzing global regulatory formation has also recently been developed by Walter Mattli and Ngaire Woods (2010). This framework, *the politics of global regulation*, accounts more explicitly for the plurality of actors engaged in international regulatory processes, and captures a broader set of variables for explaining regulatory formation than do state-centric models. The framework specifies under what conditions global regulatory change is likely to occur, and distinguishes between two types of likely regulatory outcomes.

First, regulatory change may result in “capture,” that is, when the regulatory status quo benefits only narrow and vested interest. Capture is more precisely defined as the control of the regulatory process by those—or a narrow subset of those—affected by regulation (2010:12). The result of capture can either be i) the absence of regulation which would

impose costs on regulated groups, or ii) regulation that does not safeguard social preferences, or iii) non-enforceable regulation, or, finally, iv) regulation that eliminates competition for regulated groups. Second, regulatory change may result in common-interest regulation, that is, regulation that benefits society and achieves a wider public purpose. Due-process principles such as inclusiveness, openness, transparency, fairness and accessibility for all affected parties in the negotiation process makes outcomes less prone to capture, but cannot alone ensure a common-interest outcome (2010:12-15).

Regulatory change and the type of regulatory outcomes may also be understood as the result of a combination of institutional supply- and demand-side conditions. *Institutional supply* refers to the institutional context of regulation: how and where rules are drafted, implemented, monitored and enforced. The institutional context may be limited, which indicates that negotiating forums are club-like, exclusive, closed and secretive. Such forums would be at risk of capture. Extensive institutional context, as mentioned above, suggests that proper due process, open forums, multiple access points and oversight mechanisms will increase the likelihood of common interest regulation. But even with the supply of an extensive institutional context, *demand-side conditions* must be satisfied to ensure common-interest regulation. Demand signifies the extent to which societal groups are likely to be willing to push for regulatory change through participation in the different stages<sup>7</sup> of the regulatory process. First, actors may be motivated by the diffusion of *information* about the social cost of regulatory capture or lack of regulation. Public outcry can trigger regulatory change; a demonstration effect most apparent when the media reports major crises, disasters or scandals in the context of inadequate regulation. However, while demonstration effects may initiate and create momentum for change, they may not be enough to sustain it. The public attention on any one story or cause is not immune to the transitory and sound-bite-oriented news cycle, which can forget a crisis as quickly as it can construct one. Therefore, effective change is dependent on demand from resourceful, expert, well-organized and committed pressure groups to ensure that defenders of the status quo do not undermine efforts to negotiate and implement new regulation. As such, another key demand-side condition is the existence of *interests*, that is, actors and alliances willing and able to push for regulatory change.

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<sup>7</sup> The stages of regulatory processes are agenda setting, negotiation, implementation, monitoring and enforcement

Mattli and Woods list three main categories of regulatory entrepreneurs. The first category that plays a prominent role in rule-making and implementation is non-governmental entrepreneurs, including watchdog or public-interest lobbies, international NGOs and other civil society networks and coalitions. Yet, many NGOs are not nearly as well-funded as industry lobbies, and lack the formal authority of public officials. Therefore, it might be argued that pressure from non-governmental agents is most effective in the agenda-setting phase, and that they lack sufficient resources, expertise and authority to importantly influence implementation and enforcement (2010:29).<sup>8</sup> The second category of entrepreneurs that have been successful in influencing regulatory outcomes is public officials, including judges, legislators and bureaucrats. Indeed, public officials have the resources, expertise and authority to affect regulation beyond the agenda-setting phase. While public officials can be subject to capture, they can also use their authority to ensure that regulations meet the social interest. The final often-overlooked category, according to Mattli and Woods, is the private sector. Corporations and business associations are often the most influential entrepreneurs because they possess the necessary resources to monitor and participate in regulatory negotiation processes over time, and because their level of relevant knowledge and expertise of regulatory design is often higher than that of NGOs and government officials.

Mattli and Woods propose four categories of corporate entrepreneurs with an incentive to organize and lobby in support for new regulation: I) Corporate consumers: Firms that are negatively affected by regulations and seek to protect the producers of goods and services that they depend on. II) Corporate newcomers: Firms who enter the market after capture regulation has been negotiated, which seek to abolish regulation that allows established firms to control entry and retard growth of new firms. III) Corporations at risk: Actors whose economic viability or survival depend on new regulatory models. With a significant increase in risks related to the regulatory status quo, affected corporate actors are likely to support regulatory change. Insurers, who have an incentive to reduce claims risk, or firms who have suffered accidents resulting from lack of safety standards, are examples of corporations at risk. IV) Corporate levelers of the playing field: Firms who face more stringent or costly regulation to which their competitors in other countries or regions are exempt. These firms are likely to lobby decision-makers for more wide-reaching regulation.

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<sup>8</sup> Note that there is a vast literature on NGO influence which argues otherwise REFS

The final category of demand-side conditions is *ideas*, which Mattli and Woods argue may have a more lasting impact on regulatory change. Crises, failures and public outrage may bring together alliances of entrepreneurs who pressure for regulatory change. This unified front may constrain interests and agents of capture, but it does not guarantee that their preferences change. Even if there are influential entrepreneurs working for change, the regulatory process is vulnerable to back-sliding if the pro-change-group pressure diminishes. On the other hand, a more fundamental shift in ideas or the emergence of new ideas can have a more powerful effect on change if those ideas reshape the preferences of capture actors. New ideas often emerge as a result of decreasing legitimacy and failure of the old set of ideas—usually invoked by a crisis or disaster—which underpin status-quo regulation. Ideas also provide a basis for the formation of coalitions among entrepreneurs pressing for regulatory change.

The framework presented by Mattli and Woods provides a useful reminder of how different actors and conditions influence regulatory formation. In the context of this dissertation's research agenda, the focus on market actors as regulatory entrepreneurs is particularly constructive. Drezner also acknowledges the role of business preferences in defining state interests, but his assertion that governments are mostly responsive to and captured by industry that stand to lose from regulation renders his argument somewhat limited. Indeed, the *a priori* assumption that market actors are most likely to resist new regulation and defend the status quo represents an oversimplification and overlooks the potentially powerful role played by businesses with an incentive to support regulatory change. While Mattli and Woods' recognition of business groups as potential pro-change coalitions is known to the global governance literature, the notion and implications of business lobbies as regulatory entrepreneurs has been less recognized and explored.

It should be noted that the debate on the role of business lobbies in global regulatory change also builds on a wealth of political science research on interest groups and domestic regulation and from the 1960s, 70s and 80s (see for example Olson, 1965; Stigler, 1971; Becker, 1983; Posner, 1974; Wilson, 1974; 1980). Most of these literatures depart from a public-choice-theory perspective, which argues that politicians are motivated mainly by self-interest, and that collective decision-making processes should be understood as a constant-sum bargaining process between actors seeking to maximize their own utility (Buchanan and Tullock, 1965). Special-interest theories of regulation focus on how interests groups such as business lobbies influence the regulatory process. Already in 1965, Mancur Olson

demonstrated how—due to the absence of incentives for collective organization—the activities of lobbies rarely represent or seek to advance some public good, but instead work to promote special and narrow interests that stand to excessively gain or lose from proposed regulatory change (Olson, 1965). Drawing on Olson’s work, James Wilson analyzes the conditions under which rent-seeking interest groups are likely to influence regulation to their favor. Wilson demonstrates that when costs and benefits are narrowly concentrated, the regulatory process is likely to be captured by small but politically powerful groups that engage in competitive lobbying. This debate on domestic interest groups constitutes an important backdrop for developing theory on business groups and the conditions for regulatory change at the global level.

The next section presents a summary of this Ph.D. research, focusing on the main findings, conceptual framework and conclusions. Subsequently, the chapter draws on the above literature review to discuss and establish the main contributions of this dissertation to the field.

## **5. Summary of Dissertation Research**

The research of this PhD dissertation consists of three articles published or due for publication in peer-reviewed academic journals:

- 1) The Influence of Business and Industry NGOs in the Negotiation of the Kyoto Mechanisms: the Case of Carbon Capture and Storage in the CDM
- 2) States and Markets in Global Environmental Governance: The Role of Tipping Points in International Regime Formation
- 3) From Foe to Friend? Business, the Tipping Point and U.S. Climate Politics

Recalling the research agenda (pg. 6-7) the first article addresses research question 1) *how and in what capacity do market actors influence the negotiation of rules and regulations*

*designed to mitigate climate change?* Consistent with a grounded theory approach, it provides the initial empirical mapping and examination of the field of business lobbying vis-à-vis international climate regulation, and constitutes an important foundation for the subsequent articles in which the conceptual framework and approach is developed. In short, this article examines how business groups organize and lobby negotiations of new rules and regulations in the international climate regime (UNFCCC). It then conducts an assessment of business influence in a particular negotiation process, and evaluates the nature and source of business influence as such.

More specifically, the article illustrates how the business and industry NGO (BINGO) constituency has, over time, evolved from constituting a united anti-regulation lobby representing mainly fossil-fuel intensive industries, to representing a larger and more diverse group of companies and business associations with different interests, strategies and views on GHG regulation. It places firms along a continuum from “gray” to “green”, with gray representing the most reactionary, anti-regulation groups and green the regulatory entrepreneurs. The categorization of lobbies as such illustrates that since the turn of the century, business political strategies have moved increasingly towards the greener end of the spectrum (Vormedal, 2008:37-44). It is argued that this trend reflects a more general shift in corporate strategies from opposition towards more accommodative and supportive approaches to climate change mitigation and regulation.

To assess business influence in the UNFCCC, the article develops a methodology that combines the assessment of BINGOs attempts to exercise influence (by looking at access, resources and activities) with the goal of revealing determinants both in relation to process and outcome (see Vormedal, 2008:44-49). The methodology is applied to a case study of BINGO influence in a particular negotiation between Parties to the Kyoto Protocol, in which governments consider the inclusion of Carbon Capture and Storage (CCS) as an eligible project activity under the Clean Development Mechanism (CDM). The case demonstrates that BINGOs exercised considerable influence in the process of negotiating regulatory design, and indicates that BINGO lobbying also caused a change in the position of the group of African delegations, from being opposed to supporting the inclusion of CCS in the CDM (Vormedal, 2008: 51-60)

Based on the empirical assessment of BINGO activities, strategies and influences in the CCS negotiation process, the article concludes that the international dimension of business lobbying is increasingly relevant and important to the study of business power in environmental rule-making. In contrast to previous research—which has argued that business lobbies prefer working at the national level where they enjoy more predictable and well-chartered channels of influence—this article illustrates how BINGOs strategically utilize transnational networks and informal relationships with a multitude of developed- and developing-country delegations, as well as prominent staff in international institutions. Thus, it demonstrates that international channels are frequently invoked to disseminate information about business preferences and put pressure on decision-makers, so as to influence regulatory processes and outcomes (Vormedal, 2008:49-60). It is also argued that business influence in international rule-making may be conceptualized as a form of corporate-technological power. Technological power is derived from business' control and ownership of energy technologies, and its ability to draw on technological expertise and know-how in regulatory negotiations. Technological power as such provides business lobbies with particular capabilities and leverage vis-à-vis other non-state actors, and enables them to play a central role in the shaping of regulatory frameworks for climate-change mitigation (see Vormedal, 2008:61).

The second article departs from one central finding of the first article, namely, the cumulative shift towards accommodation, support and entrepreneurship vis-a-vis GHG regulation amongst dominant business lobbies at the international level. This observation raised the question of what factors and dynamics were causing the apparent strategic shift. Building on previous literature and data collection, the objective of the research process became developing a model that could explain this change and assess its effect on regulatory formation. The crystallization of the two guiding research questions—1) *how are market-actor strategies vis-à-vis climate regulation constructed in response to the dynamics of embryonic climate governance?* and 2) *how can the intersections between business strategies and climate governance affect development and change in business lobbying, political responses and regulatory formation?*—led to the materialization of a model for understanding and analyzing how the *interplay between state and market actors and structures in environmental governance generates conditions for political and regulatory change.*

In short, the so-called *Tipping Point Model* (see Vormedal, 2011:5-12; and Vormedal, forthcoming) posits the following: In the initial phase of regime and regulatory formation,

government efforts to establish rules and regulations are prone to meet considerable resistance from business lobbies, especially from liable sectors facing large compliance and adjustment costs. However, under certain conditions that may emerge as a particular issue area of environmental governance matures, business opposition is likely to decrease, become more fragmented and ultimately shift towards regulatory support. The model identifies three particularly important conditions that, if emerging or present, may instigate corporations and business lobbies to abandon a strategy of opposition and begin to support the implementation of new environmental regulation.

First, regulatory formation raises perceptions of risk and uncertainty among liable industries. When faced with a high probability or perceived inevitability of regulation in the short to medium term, many corporations are likely to begin to support the regulatory process and start pushing to shape rules that enhance their strategic positioning. Perceived benefits of early support for new regulation include having a seat at the table to promote predictability, regulatory certainty and their organization's and/or sector's economic interests. Second, when established regulations and/or regimes are not uniform or harmonized across countries they create uneven playing fields for globally or regionally competitive industries. Those companies disproportionately disadvantaged by compliance costs unknown to competitors are under this scenario likely to abandon a strategy of opposition and begin to push for regulation that would level the playing field. Third, regulatory uncertainties also create market opportunities. Early movers in the development of technological solutions may find their strategic positioning vis-à-vis competitors improved under a new regulatory scenario, which makes such regulation more acceptable and sometimes beneficial to them. Therefore, to reap benefits of new regulation, technological frontrunners may begin to pursue a strategy of regulatory entrepreneurship. In sum, under one or a combination of the above conditions—including the growth of regulatory threats and uncertainties, emerging or de-facto uneven playing fields and the proliferation of market opportunities—the strategies of liable corporations and industries may shift from opposition to regulatory support and entrepreneurship.

The model identifies the threshold at which a *critical mass* of leading industries and business lobbies have changed their political strategy and begun to push for regulatory change as the manifestation of a “*tipping point*”. Tipping points mark the disruption of a previous trajectory or path and the beginning of a cumulative process of change. A tipping point in business strategies does not imply that all liable industries and business lobbies have become



regulatory entrepreneurs or favor regulation, but that a clearly identifiable and prevailing group of business lobbies—large enough to make a political difference—has begun to exercise support and push for regulatory change.

The rate of change may depend on the nature of existing triggers and conditions, such as the velocity and form of the embryonic environmental-governance structures, the endurance and sternness of current political and regulatory momentum, available exit strategies, or the cost and realistic timeframes for implementing technological mitigation options. One might also identify a certain psychological dynamic behind, and inherent to, the tipping-point process. As argued above, business strategies may shift in response to changing structural conditions, but such strategic change can also happen partly in response to the actions of others. While some corporations and lobbies are frontrunners, acting out of perceived self-interest vis-à-vis anticipated future regulatory scenarios, other more reluctant corporations are likely to gradually follow-suit due to the increasing sway of new interpretations of future regulatory scenarios and their associated costs and benefits, or due to an expected increase in the number of other business actors also changing strategies in response to changing structural conditions. As such, actors change in response to the de-facto or expected actions of others in order to secure their position within the anticipated competitive landscape.

Furthermore, the framework notes that a tipping point in business strategies is also likely to spur the creation of ‘Baptists and bootleggers’ coalitions of civil society and business organizations, respectively. These groups will join forces to lobby more effectively for new regulation. Civil society is motivated by intrinsic and moral reasons, business by the chance to influence regulatory design, secure competitiveness, and profit.

Moreover, it is posited that a tipping point in business strategies can generate new political momentum and spur the emergence of a second tipping point in the regulatory process. When the preferences of dominant business lobbies ‘tip’ and these groups begin to push for the adoption of new regulation and/or legislation, it improves conditions for political bargaining and places constructive pressure on the rule-making process. In the case of global regulation, tipping points in business strategies may cause key states to strengthen their pro-regulation position. Or, if a dominant share of their domestic industries has come out in support for global regulation, it may also cause a change in the position of laggard states. This can in-turn facilitate inter-state negotiations and prompt more successful regime formation over time. At the national level, tipping points in business strategies are likely to place new

pro-change pressure on the regulatory process, which can create political momentum, change key legislators' positions, and generate progress in attempts to adopt new legislation.

The tipping point framework is presented and applied in articles 2 and 3. In the second article, it is utilized in a study of business strategies in the international climate regime between 1992 and 2009. Through a detailed case analysis, it demonstrates how the model provides a valid account of change in business strategies and regime formation over time. While organized business opposition to GHG regulation through the regime persisted for over a decade, by 2002 prominent anti-regulation lobbies had dispersed and became increasingly replaced by more accommodative and supportive lobbies. Indeed, by 2008, major business groups had begun to push for the adoption of mandatory regulation under a global regime. The case also illustrates how the emergence of a tipping point in business strategies is related to increasing regulatory uncertainties, uneven playing fields and the steady growth of market opportunities. It also discusses the extent to which the 2009 Copenhagen outcome represents the initiation of a second tipping point in regulatory formation caused by changing business preferences (Vormedal, 2011:12-19).

In article 3, the tipping point framework is presented and utilized to analyze the development of US climate politics between 1990 and 2010. Through a detailed case study, it is demonstrated that the model provides a plausible account of the failures and successes of federal climate action between 1990 and 2010. While business opposition blocked efforts to impose federal restrictions on greenhouse gas emissions for over 15 years, by 2007 a major lobby representing leading and previously antagonistic liable industries had begun to support and push for the adoption of federal legislation. It is demonstrated how growing regulatory threats and uncertainties, uneven playing fields and market opportunities constitute important conditions behind the emergence of a tipping point in business strategies. It is further argued that this shift has been a central driver behind recent efforts to negotiate federal climate legislation in the Capitol (Vormedal, forthcoming).

## **6. Main Contributions, Limitations and Ensuing Research Agenda**

This section positions this research in the literature. The aim is to establish the overall contribution of the dissertation, consider some of its main limitations and discuss some possible ways forward that build on the research conducted.

The first and central aim of this dissertation has been to develop a framework for analyzing business preference and strategy formation in environmental governance. As the literature review illustrates, the neo-Gramscian and neo-pluralist models together offers a rich description of how corporate strategies are constructed, but provide a rather static account of preferences formation. The tipping-point model, which focuses on the dynamics behind change and shifts in preferences and strategies over time, adds to our understanding of how business strategies are constructed and re-constructed in environmental governance.

More specifically, examining the differences and similarities between previous literature on business and environmental governance and the tipping-point framework renders a number of important insights. First, the tipping-point framework's analysis of the interplay between strategy formation and environmental-governance structures lends support to the neo-Gramscian stipulation of how corporate preferences reflect, and are constructed in response to, broader structures of environmental governance. Yet, it does not support notion of agency being structurally determined by hegemonic fields and historical blocks, nor the implicit assumption that business' structural power to resist unwelcomed new regulation can be established *a priori*. Conversely, this work demonstrates that in many instances, environmental regulations are successfully negotiated and adopted *despite* business opposition to them. This dissertation, therefore, does not adhere to the view that environmental-governance structures constitute hegemonic fields in which the interests of actors coalesce. Rather, it verifies Falkner's neo-pluralist characterization of them as contested arenas in which actors and interests cooperate and compete to define outcomes.

Second, it is notable that while the tipping point framework identifies regulatory threats and uncertainties as a key driver of preference formation, this dynamic is not explicitly recognized by previous literatures. Falkner identifies uneven regulatory playing fields and the effect of regulation on technological innovation as drivers of business conflict, but does not discuss the effects of regulatory pressure overall. Levy and Newell, on the other hand,

recognize that businesses accommodate pressures resulting from the growth of environmental governance, but this account remains vague and lacks some notion of how existing or anticipated regulation creates threats and uncertainties that shape perceptions of interests. An important insight that can be drawn from the tipping-point model is thus the impact of regulatory pressures, which generate new risks and uncertainties, on the dynamics of corporate preference formation.

Third, the neo-Grainscan and neo-pluralist models argue that a complete account of strategy formation must also account for the role of constructivist variables such as ideas and knowledge in shaping corporate preferences. While the tipping-point framework to a large extent constitutes a rationalist and interest-based theory that stresses the centrality of (shifting perceptions of) economic interests in corporate-preference formation, it also recognizes the role that constructivist factors may play in this process, albeit indirectly or secondarily. On the one hand, the values, ideas and beliefs of corporate leaders, and their organizational cultures, act as a filter through which economic interests are interpreted. Ideas and beliefs therefore play an indirect role in regulatory preference formation by shaping *perceptions* of economic interests and the conditions which underpin individual and collective *expectations* of future regulatory risks and opportunities. On the other hand, strategic change is not simply instigated by de-facto objective assessments of current regulatory costs and benefits, but may also be the result of following competitors who begin to predict the coming of new regulation and change their strategies accordingly. As such, the calculation of future costs and benefits is also influenced by the strategic choices and predictions of other business actors. An increase in the number of pro-change businesses can build momentum and induce further strategic change amongst more actors, including those previously reluctant, and over time lead to the emergence of a tipping point.

The second major aim this dissertation has been to give an account of the dynamics behind, and conditions for, regulatory formation in environmental and climate-change governance. The literature review demonstrates that while established models provide helpful tools for analyzing regulatory formation, they too offer a rather static account of the conditions for change. On the one hand, regime theories provide an extensive list of conditions that may inhibit or enable successful institutional bargaining, but fail to examine the processes and factors that produce or eliminate these conditions. Drezner's model goes further by examining the domestic origins of state preferences, such as economic interest and the adjustment capacity of liable business groups. But Drezner does not discuss the

construction of business interests and strategies in the first place, and therefore does not provide a complete picture of the dynamics that determine global regulatory outcomes. Mattli and Woods, for their part, rightly emphasize how new regulation is more likely to come about when resourceful, expert and well-organized interests groups such as business and industry lobbies use their political clout to push for regulatory change. They identify various categories of so-called corporate regulatory entrepreneurs, but the discussion lacks a notion of the drivers behind the emergence of such entrepreneurship. It is thus clear that neither of the models reviewed provide a satisfactory account of the dynamics of regulatory formation and change. The tipping-point model, which demonstrates how the interplay between strategy construction and embryonic environmental governance generates conditions for change over time, therefore, represents a novel contribution that enhances our understanding of dynamics behind regulatory formation in the environmental domain. Once again, this insight underscores the need to account for the role played by markets and market actors to obtain a complete understanding of the drivers behind regulatory formation.

However, comparing the tipping-point framework to other models of regulatory formation also highlights its limitations. To be sure, the attempt of this dissertation has not been to present a model that paints a complete picture for all the different factors and processes that play a role and influence outcomes in regulatory formation, but to analyze one important dimension: the dynamics for change created by the interplay between state and market actors and structures. Placing this contribution within Mattli and Woods's framework, it can be argued that the tipping-point model enhances our understanding of demand-side conditions for regulatory change by conceptualizing the conditions under which influential corporate entrepreneurs and pro-change groups are likely to arise.

More specifically, it is essential to situate the tipping-point model within the literature in order to identify other important enabling or inhibiting factors and conditions for regulatory formation that may intersect with the tipping-point dynamic. The emergence of business support for new environmental regulation may be an important and sometimes imperative condition for successful adoption. But if other important conditions are not satisfied, or if particularly inhibiting conditions emerge in parallel, it may not be enough to instigate enduring regulatory change. Indeed, the impetus for progress created by tipping points in business strategies may be undermined by other inhibiting factors.

As state-centric theories rightly point out, the lack of hegemonic leadership or the opposition from states that do not regard the regulatory agreement as fair or equitable can

hamper efforts of pro-change coalitions of state and non-state actors to implement global regulation. Following Drezner's argument, some states may remain opposed to global regulation if the compliance and adjustment costs for industry are relatively higher than in other countries. Thus, even after the strategies of dominant, international business lobbies have tipped and a coalition of powerful governments support and push for the establishment of global regulation, some states may continue to oppose regulatory coordination if it places their domestic industries at a competitive disadvantage, or removes a current competitive advantage. The case of international climate regulation, as discussed in the second article of this dissertation, illustrates this point. While the emergence of pro-regulation, international business lobbies representing European, Japanese and some US industries has provided an impetus for Western governments to push for the adoption a global post-Kyoto Protocol, emerging economies such as China and Brazil are reluctant to take on legal commitments due to competitiveness concerns and high adjustment costs for domestic industries.

Furthermore, the effects of a tipping point in business strategies may also be inhibited by political backlashes, such as the rallying of anti-regulation forces, ambiguous public support for the proposed regulatory change and lack of consensus regarding the science and impact of the environmental problem at the national level. Following Falkner's argument, conflict emerging between and within business lobbies can limit the power of corporate entrepreneurs to effectively push for regulatory change, which may counteract the positive momentum caused by the materialization of a tipping point. On the one hand, even after the strategies of a critical mass of businesses have tipped, a minority of corporations particularly resistant to change—for example due to their low technological adjustment capacity or competitive positioning—may block regulatory negotiations from moving forward. On the other hand, conflict within the same pro-change coalition may emerge over regulatory design and the distribution of regulatory burdens between different sectors and businesses, and in-so-doing, limit the lobby's ability to commit to concrete legislative proposals. The case of US climate politics, as presented in the third article of this dissertation, provides a clear illustration of these dynamics. During the process to get a cap-and-trade bill through the House and the Senate between 2008 and 2010, pro-change coalitions continuously fought against countervailing pressures from conservative and Republican grass-root movements and Congressmen who challenged the climate regulation agenda based on small-government, anti-regulation values and/or as part of a strategic game for debunking the Democratic policy agenda. Moreover, conflict within the pro-change business group USCAP—which lobbied

for the adoption of a federal cap-and-trade program—and between the USCAP and corporations reluctant to embrace GHG regulation, may also have limited the overall impact of the tipping point. It took over 2 years for USCAP members to reach agreement on specifics and thus to advocate a detailed legislative proposal, and even after that, during negotiations for the Kerry-Lieberman-Graham Bill in the Senate, conflict emerged between coal-based utilities and the oil and gas sector over regulatory design, in particular the distribution of free allowances.

This political disaster highlights the fact that tipping points are vulnerable to setbacks, or what might be defined as negative feedback mechanisms. While this dissertation has focused on *positive* feedbacks that instigate progress in the regulatory process, more systematic research is needed to examine countervailing mechanisms and forces that may intersect negatively with the tipping point dynamic.

To illustrate this point about vulnerability to setbacks, it is fruitful to distinguish between what might be defined as political and technological tipping points. The model developed here focuses on tipping points that are of a political nature. First, business strategies epitomize the change in perceptions of interests that translates into political strategies and action. Second, regulatory formation signifies increased momentum and action amongst actors with the powers to adopt and implement regulation. Because perceptions, interests and strategies for action are subject to a broad spectrum of influences, change cannot be conceptualized as permanent unless it is possible to establish a point of no return. While a political tipping point represents a necessary first step towards enduring regulatory change, the potential for the emergence or presence of a range of countervailing forces and dynamics in the regulatory process renders a political tipping point vulnerable to obstacles and setbacks. A technological tipping point, on the other hand, signifies the passing of a threshold at which old polluting technologies and production methods have become economically inefficient and replaced with new, commercially viable and environmentally friendly alternatives. Conversely, this shift in production and the structure of the economy may be conceptualized as the materialization of a point of no return.

A fruitful way forward would thus be to systematically explore and conceptualize the intersections between positive and negative dynamics for political and regulatory change in the field of climate-change governance, and to consider conditions for moving from one tipping point to the next. If a tipping point in business strategies has materialized, what are the necessary and sufficient conditions for the emergence of a tipping point in the political

process, and in the next phase, for the materialization of enduring regulatory change? Finally, what is necessary to move from a regulatory to a technological tipping point?

Another possible direction for future research would be to further develop the model for understanding the tipping point dynamic in the case of business strategies. Rather than focusing on the role of structural conditions, it would be interesting to explore to what extent strategic change in one actor is influenced by de-facto and anticipated change among other actors, and to model more precisely where thresholds are empirically situated. This task could be accomplished by using the methodology of so-called agent-based modeling (ABM), which seeks to model the how interactions among adaptive agents influence one another in response to the influence they receive (e.g. Macy and Willer, 2002; Axelrod and Tesfatsion, 2006; Axelrod, 2006). While it is common to use computer-based simulation to build the models and produce results (e.g. Gilber and Terna, 1999), one of the earliest and most elegant applications of ABM—Thomas Schelling’s (1969) modeling of neighborhood tipping—illustrates for this purpose how it is also possible to use more simple, logical conceptualizations and mathematical models to establish conditions and thresholds numerically. Using this logic, we might approach the modeling of say tipping-point dynamics in the energy sector. A first step would be to construct categories that distinguish between, for example, energy producers of varied type, energy distributors, manufacturers, and several industries of varied type. In addition, one might also distinguish between corporations that are leaders, early adopters, and laggards. In turn, it would be necessary to identify empirically the corporations and lobbies representing each category, within a given geographical unit. The next step would be to build models that calculate and define numerically, under explicit sets of given structural conditions, the thresholds at which tipping is likely to occur as a result of inter-agent influences. The models could be based on conceptual questions seeking to establish tolerance levels to change within and between sectors and sub-sectors. For example; how many frontrunners amongst coal-based energy producers does it take for other i) constructive and ii) reluctant coal-based energy producers to change strategy? How many oil producers, with what attributes, would have to change strategy to make the most resistant laggards follow suit? How many leaders are needed amongst utilities to instigate the most resistant firms? Empirically revealing thresholds, critical limits, other behavioral dynamics with respect to business preference and regulatory formation, broken down for trends and nuance across sectors and issues, would no-doubt further elucidate the fundamental purpose of this dissertation: the unique and powerful role of business in the regulatory process.



This introductory chapter has provided a discussion, overview and analysis of this PhD dissertation research as it is presented in three scholarly journal articles. A major contribution of this dissertation has been the development of a conceptual framework centered on how the interplay between business-strategy formation and embryonic environmental governance can generate mechanisms that may trigger political momentum and regulatory change. It has been argued that while more systematic research is needed to examine countervailing mechanisms and forces that may intersect negatively with the tipping point dynamic, the demonstration of the significance of thresholds such as tipping points in triggering cascades of progress, provides a novel contribution to the field of climate-change and environmental governance. In the following these articles are presented in their complete form.

## References

Andersen, Svein S. (2006) Aktiv informantintervjuing. *Norsk statsvitenskapelig tidsskrift* 22:278-98.

Arts, Bas (2000). Regimes, non-state actors and the state system: A 'structuralist' regime model. *European Journal of International Relations*, 6:513-542

Atkinson, Paul, and Amanda Coffey (2001). Revisiting the relationship between participant observation and interviewing. In *Handbook of Interview Research. Context and Method*. Thousand Oaks: Sage Publications.

Axelrod, Robert (2006). Agent-Based Modeling as a Bridge Between Disciplines. In Testfatsion, Leigh and Judd, Kenneth (2006). *Handbook of Computational Economics*, Vol 2. Elsevier

Axelrod, Robert and Tesfatsion, Leigh (2006). A guide for newcomers to agent-based modeling in the social sciences. In In Testfatsion, Leigh and Judd, Kenneth (2006). *Handbook of Computational Economics*, Vol 2. Elsevier

Bachrach, Peter (1967). *The Theory of Democratic Elitism: A Critique*. Boston, MA: Little Brown

Bachrach, Peter and Baratz, Morton S. (1970). *Power and Poverty: Theory and Practice*. New York: Oxford University Press

Macy, Michael W. and Willer, Robert (2002). From Factors to Actors: Computational Sociology and Agent-Based Modeling. *Annual Review of Sociology*, 28:143-66

Barnett, Michael and Duvall, Raymond (2005). *Power in Global Governance*. Cambridge: Cambridge University Press

Bauer, Martin W. (2000). Individual and Group Interviewing. In *Qualitative Researching with Text, Image and Sound*, edited by Martin W Bauer, and George Gaskell. London: Sage Publications.

Becker, Gary (1983). A Theory of Competition among Pressure Groups for Political Influence. *Quarterly Journal of Economics* 98, 371-400

Becker, H.S, and B Greer (1957). Participant observation and interviewing: A comparison. *Human Organization* 12 (4):28-32.

Bendell, Jem (2004) '*Barricades and Boardrooms: A Contemporary History of the Corporate Accountability Movement*' Geneva: United Nations Research Institute for Social Development

Biermann, Frank (2004) *Global Environmental Governance. Conceptualization and Examples*. Global Governance Working Paper. No 12 – November 2004, [www.GloGov.org](http://www.GloGov.org)

Breitmeier, Helmut, Young, Oran and Zürn, Michael (2006). *Analyzing International Environmental Regimes: From Case Study to Database*. Cambridge, MA: MIT Press

Buchanan, James B. and Tullock, Gordon (1962). *The Calculus of Consent. Logical Foundations for Constitutional Democracy*. Indianapolis, IN: Liberty Fund Inc.

Cashore, Benjamin (2002) Legitimacy and the Privatization of Environmental Governance: How Non-State Market-Driven Governance Systems Gain Rule-Making Authority. *Governance* 15 (4): 503-529

Cerny, Philip G. 2010. *Rethinking World Politics. A Theory of Transnational Neo-Pluralism*. New York: Oxford University Press

Charmaz, Kathy (2001). Qualitative Interviewing and Grounded Theory Analysis. In *Handbook of Interview Research. Context and Method*, edited by Jaber F Gubrium, and James A Holstein. Thousand Oaks: Sage Publications.

Charmaz, Kathy (2006). *Constructing Grounded Theory*. London: Sage Publications

Clapp, Jennifer (2005) The Privatization of Global Environmental Governance: ISO 14000 and the Developing World. In Levy, David, and Peter Newell (2005) '*The Business of Global Environmental Governance*', Cambridge, Massachusetts: The MIT Press.

DeSombre, Elizabeth R. (2000). *Domestic Sources of International Environmental Policy. Industry, Environmentalists and U.S. Power*. Cambridge, MA: The MIT Press

Denzin, N.K. (1978f). *The Research Act*. Chicago: Aldine.

Dicken, Peter (1998). *Global Shift: Transforming the World Economy*. Paul Chapman: London, 3<sup>rd</sup> Edition

Drezner, Daniel W. (2007). *All Politics is Global. Explaining Regulatory Regimes*. Princeton: Princeton University Press

Eden, Lorraine (1991). Bringing the Firm Back In: Multinationals in IPE. *Millennium*, 20 (2), 197-224

Falkner, Robert (2008). *Business Power and Conflict in International Environmental Politics*. New York: Palgrave MacMillan

Gilbert, Nigel and Terna, Pietro (2000). How to Build and Use Agent-Based Models in Social Science. *Mind & Society*, Vol. 1, pp- 57-72

Gilpin, Robert (1987). *The Political Economy of International Relations*. Princeton, NJ: Princeton University Press

Grieco, Joseph M (1988). Anarchy and the limits of cooperation: A realist critique of the newest liberal institutionalism. *International Organization* 42: 485-507

Gubrium, Jaber F, and Holstein, James A (2001). From the Individual interview to the interview society In *Handbook of Interview Research. Context and Method*, edited by Jaber F Gubrium, and James A Holstein. Thousand Oaks: Sage Publications.

Gulbrandsen, Lars H. (2004) Overlapping Public and Private Governance: Can Forest Certification Fill the Gaps in the Global Forest Regime? *Global Environmental Politics* 4 (2): 75-99

Haas, Ernst B (1990). *When Knowledge is Power*. Berkely, CA: University of California Press

Haas, Peter (1992). Epistemic communities and international policy coordination. *International Organization* 46 (1): 1-35

Haas, Peter M., Keohane, Robert O., and Levy, Marc A. (1993) '*Institutions of the Earth. Sources of Effective International Environmental Protection*', Cambridge, Massachusetts: The MIT Press.

Hasenclever, Andreas, Mayer, Peter and Rittberger, Volker (1997). *Theories of International Regimes*. Cambridge: Cambridge University Press

Held, David; McGrew, Anthony; Golblatt, David and Perraton, Jonathan (1999). *Global Transformations: Politics, Economics and Culture*. Cambridge: Polity Press

Holstein, James A, and Gubrium, Jaber F. 2002. Active Interviewing In *Qualitative Research Methods*, edited by Darin Wienberg. Malden, Massachusetts: Blackwell Publishers.

IPCC (Intergovernmental Panel on Climate Change) (2007a). *Climate Change 2007: The Physical Science Basis. Contribution to the Working Group I on the Fourth Assessment Report*. Cambridge: Cambridge University Press

IPCC (2007b). *Climate Change 2007: Synthesis Report. Summary for Policymakers*. Cambridge: Cambridge University Press

IPCC (2007c). Summary for policymakers. In *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Groups II to the Fourth Assessment Report*. Cambridge: Cambridge University Press

Josselin, Daphne and Wallace, William (2001). *Non-state Actors in World Politics*. Basingstoke: Palgrave Publishing

Keck, M. E. and K. Sikkink (1998). *Activists Beyond Borders: Advocacy Networks in International Politics*. Ithaca, New York Cornell University Press.

Keohane, Robert (1984). *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton, NJ: Princeton University Press

Keohane, Robert (1989). Neoliberal institutionalism: A perspective on world politics. In Keohane, Robert *International Institutions and State Power: Essays in International Relations Theory*. Boulder, CO: Westview Press, 1-20

Human Development Report (HDR) (2008). *Fighting Climate Change: Human Solidarity in a Divided World*. UNDP. Basingstroke: Palgrave Macmillan

Khagram, S., J. V. Riker, et al. (2002). *Restructuring World Politics. Transnational Social Movements, Networks and Norms*. Minneapolis University of Minnesota Press.

Krasner, Steven D (1983). Regimes and the limits of realism: Regimes as autonomous variables. In Krasner, Steven D (ed.) *International Regimes*. Ithaca, NY: Cornell University Press, 355-368

Kumar, Nirmalaya, Stern, Lous W, and Anderson, James C. (1993). Conducting Interorganizational Research Using Key Informants. *Academy of Management Journal* 36 (6):1633-51.

Kvale, Steinar. 1997. *Det kvalitative forskningsintervju*. Oslo: Gyldendal Norsk Forlag.

Lemos, Maria C. and Agrawal, Arun (2006) Environmental Governance. *Annual Review of Environment and Resources*. Vol. 31:297-325

Levy, David, and Newell, Peter (2005) '*The Business of Global Environmental Governance*', Cambridge, Massachusetts: The MIT Press.

Levy, David (2005) 'Business and the Evolution of the Climate Regime: The Dynamics of Corporate Strategies' In *The Business of Global Environmental Governance*. Cambridge, Massachusetts: MIT Press.

Levy, David, and Egan, Daniel (1998) 'Capital Contests: National and Transnational Channels of Corporate Influence in the Climate Negotiations', *Politics and Society* 26 (3).

Levy, David and Egan, Daniel (2003). A Neo-Gramscian approach to corporate political strategy: Conflict and accommodation in the climate change negotiations. *Journal of Management Studies*, 40 (4), 803-830

Levy, David and Kolk, Ans (2002). Strategic responses to global climate change: conflicting pressures on multinationals in the oil industry. *Business and Politics*, 4 (3), 275-300

Levy, David and Prakesh, A (2003). Bargains old and new: Multinationals in international governance. *Business and Politics*, 5 (2), 131-151

Legro, Jeffery (1996). Culture and Preferences in the International Cooperation Two-Step. *American Political Science Review*, 90 (March)

Legro, Jeffery and Moravcsik, Andrew (1999). Is Anybody Still a Realist? *International Security* 24: 55-106



Lindblom, Charles (1977). *Politics and Markets: The World's Political-Economic Systems*. New York: Basic Books

Lukes, Steven (1974). *Power: A Radical Approach*. London: Macmillan

Mattli, Walter and Woods, Ngaire (2010). In Whose Benefit? Explaining Regulatory Change in Global Politics. Mattli, Walter and Woods, Ngaire. eds (2010). In *The Politics of Global Regulation*. Princeton, NJ: Princeton University Press

McComeric, J. (1999). The Role of Environmental NGOs in International Regimes. *The Global Environment*. N. J. Vig and R. S. Axelrod, Earthscan.

McFarland, Andrew S. (2004). *Neopluralism*. Lawrence, Kansas: University Press of Kansas

Miles, M.B, and Huberman, A.M. (1994). *Qualitative Data Analysis*. London: Sage Publications.

Moravcsik, Andrew (1997). Taking Preferences Seriously: A Liberal Theory of International Politics. *International Organization* 51: 513-53

Newell, Peter (2000) '*Climate for Change: Non-state Actors and the Global Politics of the Greenhouse*', Cambridge: Cambridge University Press.

Newell, Peter (2001). Managing multinationals: The governance of investment for the environment. *Journal of International Development*. 13, 907-919

Newell, Peter (2003). Globalisation and the governance of biotechnology. *Global Environmental Politics*, 3 (2), 56-72

Newell, Peter and Levy, David (2006) 'The Political Economy of the Firm in Global Environmental Governance' In *Global Corporate Power*, edited by Christopher May. Colorado: Lynne Reinner Publishers, Ic.

Newell, Peter and Paterson, Matthew (1998) 'A Climate for Business: Global Warming, the State and Capital', *Review of International Political Economy* 5 (4):679-703.

Olson, Mancur (1965). *The Logic of Collective Action. Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press

Pawson, Ray. 1996. Theorizing the Interview. *The British Journal of Sociology* 47 (2):295-314.

Posner, Richard (1974). Theories of Economic Regulation. *The Bell Journal of Economics and Management Science* 5, no. 2, 335-358

United Nations Environment Programme (UNEP) (2010) *Environmental Governance*. UNEP Year Book 2010.

Ravenhill, John. ed (2005). *Global Political Economy*. Oxford: Oxford University Press

Risse-Kappen, Thomas. ed (1995). *Bringing Transnational Relations Back In: Non-State Actors, Domestic Structures and International Institutions*. Cambridge: Cambridge University Press

Rubin, Herbert J, and Rubin, Irene S. (2005). *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks: Sage Publications, Inc.

Ruggie, John G. (2004) Reconstituting the Global Public Domain – Issues, Actors, and Practices. *European Journal of International Relations* 10:499

Stigler, George (1971). The Theory of Economic Regulation. *Bell Journal of Economics and Management Science*, 137-146

Schelling, Thomas (1969). Models of Segregation. *The American Economic Review*, Vol. 59, No. 2

Stopford, John and Strange, Susan (1991). *Rival states, rival firms: Competition for world market shares*. Cambridge: Cambridge University Press

Strange, Susan (1996). *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge: Cambridge University Press

Strange, Susan (1988). *States and Markets*. (2<sup>nd</sup> ed). London: Pinter

Stubbs, Richard and Underhill, Geoffrey R.D.eds (2000). *Political Economy and the Changing Global Order*. Ontario: Oxford University Press

Vogel, David (1995). *Trading Up: Consumer and Environmental Regulation in a Global Economy*. Cambridge, MA: Harvard University Press

Wapner, Paul (1996). *Politics Beyond the State. Environmental Activism and World Civic Politics*. Albany, State University of New York

Wilson, James (1974). *Political Organizations*. Princeton, NJ: Princeton University Press.

Wilson, James (1980). *The Politics of Regulation*. New York: Basic Books

Wright, Christopher and Rwabizambaga, Alexis (2006) Institutional Pressures, Corporate Reputation, and Voluntary Codes of Conduct: An Examination of the Equator Principles. *Business and Society Review*, 1, 89-117

Young, Oran (1989). *International Cooperation: Building Regimes for Natural Resources and the Environment*. Ithaca, NY: Cornell University Press

Young, Oran (1994) '*International Governance. Protecting the Environment in a Stateless Society*', New York: Cornell University Press.

Young, Oran (1999) *Governance in World Affairs*. Ithaca: Cornell University Press

Young, Oran and Oschenko, Gail (eds) (1993). *Polar Politics: Creating International Environmental Regimes*. Ithaca, NY: Cornell University Press









# The Influence of Business and Industry NGOs in the Negotiation of the Kyoto Mechanisms: the Case of Carbon Capture and Storage in the CDM

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*Ija Vormedal\**

## Introduction

This article examines the role and influence of business and industry NGOs (BINGOs) in the UN Framework Convention on Climate Change (UNFCCC). The important role played by business in the climate negotiations is increasingly recognized and well documented. However, previous research on corporate engagement in the regime has concluded that business efforts to influence negotiations have been more prevalent and effective at the state level than at the international level. Allegedly, business is “likely to prefer acting at the national level where it enjoys well-charted and predictable channels of influence,”<sup>1</sup> and has enjoyed less success in lobbying delegates from other states, in particular from developing countries. It is also assumed that international institutions are relatively insulated from business pressures.<sup>2</sup> This paper differs in emphasizing the increasing importance of the international level to the analysis of business activities and business’s efforts to influence regime developments. While some global business groups such as the International Chamber of Commerce have been around for decades, and the growing importance of transnational business coordination has been noted elsewhere,<sup>3</sup> the nature and impact of these activities in the context of the climate negotiations has been insufficiently explored. This article gives an account of the landscape in which business and industry NGOs are currently operating in the climate regime, and provides an illustration of how they organize and conduct their lobbying at the international level. In contrast to previous studies, the article demonstrates how BINGOs target and

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1. Levy and Egan 1998, 1.
2. Levy and Egan 1998, 15.
3. Levy and Egan 1998, 9,16; and Levy 2005, 96–97.

collaborate with a multitude of state delegations and international institutions in the attempt to achieve their objectives. It will be argued that emergent international networks and corporate technological power facilitate transnational business lobbying.<sup>4</sup>

Despite the fact that business and industry NGOs employ comparable if not similar strategies and tactics to those of environmental NGOs, there has been scarce communication between NGO and business scholars.<sup>5</sup> This paper seeks to help bridge this divide by applying a methodology developed for analyzing NGO influence in international environmental negotiations<sup>6</sup> to a study of business influence in the climate negotiations. Various aspects of this methodology are further developed and advanced, to enable its application to studies of business influence in international negotiations.

The paper begins by giving an account of the main characteristics of the BINGOs active in the regime, including their views on climate change mitigation, strategies and lobbying tactics. For comparison, the various business groups are placed along a continuum from “gray” to “green,” measuring the degree of environmental profile and mandate. The framework for assessing and analyzing BINGO influence is subsequently developed, discussed and applied to a case study tracing BINGO efforts to influence the negotiation of carbon capture and storage (CCS) technologies as a mitigation option under the Kyoto Protocol and the Clean Development Mechanism (CDM). The case highlights the various access channels and resources BINGOs may invoke during the negotiation processes, and illustrates how their lobbying and advocacy activities are played out. Furthermore, the paper seeks to establish the relative success of BINGO efforts to influence the process and outcome of negotiations, and the factors that enable them to play an influential role within the international climate regime.

## **Business and Industry NGOs in the Climate Regime**

Together with scientists and environmental NGOs (ENGOs), business and industry NGOs (BINGOs) are considered to be among the most long-standing and active observer constituencies participating in the climate regime.<sup>7</sup> From the early 1990s—when negotiations for an international convention were launched—to the signing and ratification of the Kyoto Protocol at the end of the decade, business engagement and participation was dominated by the fossil-fuel lobby, organized mainly through the Global Climate Coalition, an anti-mitigation and regulation group representing US and some European oil, coal, automobile and chemical companies. However, by the turn of the century, the

4. Falkner 2005, 106.

5. One notable exception is Depledge’s examination of access channels for observer organizations into the UNFCCC process. Depledge 2005.

6. Betsill and Corell 2001.

7. Depledge 2005, 214.

BINGO constituency had grown and diversified, including a much wider range of organizations with highly diverging interests, mandates and strategies in the regime.<sup>8</sup> The International Chamber of Commerce (ICC), which represents companies of all sizes and sectors in over 130 countries worldwide, serves as the chair of the constituency, in charge of coordinating business's activities and input to the negotiation processes. While BINGOs are by definition non-profit organizations, their members are for-profit companies. Many of the active companies are members of several BINGOs, each catering to different needs and objectives. While nearly all companies attain their accreditation through a BINGO, some participate as integral parts of state delegations.

The emergence and growth of BINGOs in the climate negotiations may be seen as a result of the UNFCCC Secretariat's demand that all nonstate actor participants be nonprofit organizations, and its desire to organize the participation of observer organizations into different NGO constituencies. However, the expansion of the BINGO as a particular form of business organization also reflects the attempt by corporations to increase their legitimacy as political actors in the international arena.<sup>9</sup> Through the collective action of BINGOs, companies can communicate more effectively with policy-makers and advocate their views with greater legitimacy and authority. BINGOs also open doors to political arenas that are closed to companies operating individually. In this way, BINGOs serve the function of establishing and maintaining access channels to forums and negotiations to which individual companies would not otherwise have been invited, providing them directly or indirectly a "voice at the table."<sup>10</sup> For the companies, collective organization also brings with it the advantages of cost sharing and knowledge pooling, as well as the support of a qualified secretariat responsible for monitoring and providing continuous input to political negotiation processes.<sup>11</sup>

While nationally-based BINGOs also seek to protect their members' domestic interests, most of the BINGOs active in the regime are transnational organizations targeting political processes at the regional and international levels. It is common for BINGO secretariats to liaise and cooperate with a range of national governments around the world. Such networks enable them to lobby a multitude of delegations from both developed and developing countries on particular issues under negotiation in the climate regime. BINGOs also maintain good working relations with key staff from the UNFCCC Secretariat and its subsidiary working bodies, to enable input to negotiation processes.<sup>12</sup>

8. For example, at the COP/MOP 2 the total number of registered BINGOs was 23, and the total number of individual businesses, 400.

9. Interview with Luke Warren, IPIECA, London, 31 October 2006; interview with Lorenz Koch, WBCSD, Geneva, 17 January 2007; interview with Edwin Alders, IETA, Geneva, 18 January 2007; and interview with Robert Stastny, ICC, Paris, 22 January 2007.

10. Interview with Koch 2007.

11. Interview with Koch 2007; and interview with Alders 2007. See also Hillman and Hitt 1999, 830–831.

12. Interview with Alders 2007; interview with Koch 2007; interview with Stastny 2007; and interview with Warren 2006.

While most BINGOs are transnational organizations, participation and membership is unevenly distributed geographically. Businesses from developed countries and regions such as North America, Western Europe, Australia, Japan and Korea dominate most BINGOs and the constituency at large, while businesses from developing and least developed countries (LDCs) are almost completely absent from the scene. According to a Kenyan member of the ICC, many developing-country businesses still lack the enabling networks required to facilitate participation as well as established channels for providing input into global conferences and negotiations. Most also lack sufficient funds to support participation, and the few that participate are not sufficiently confident to take an active role in the ongoing discussions and formation of lobbying positions within the BINGO constituency.<sup>13</sup>

The BINGOs constitute a rather diverse group of organizations representing members with different interests, mandates and strategies. Indeed, their views on climate change mitigation policies and mandatory GHG regulation range from strong opposition to support and pro-regulation lobbying. The following section gives an account of the characteristics of the different types of BINGOs active in the negotiations, placing them along a continuum from gray (low or no environmental profile and mandate) to green (high environmental profile and mandate). (See Table 1.)

Gray BINGOs (the first category) are typically characterized by their explicit opposition to climate change mitigation and mandatory GHG regulation. The main mandate and strategy of these organizations has been to prevent the adoption of binding targets and timetables by states, and thus to preserve fossil-fuel-intensive industries' right to emit unlimited amounts of greenhouse gases (GHGs). Gray BINGOs are known for utilizing financial inducements to complement their lobbying tactics, such as financial contributions to government decision-makers, or paying expenses and/or leisure trips for members of delegations.<sup>14</sup> While financial inducements may be more common at the national level, it is notable that BINGOs generally do not perceive such tactics to be legitimate or appropriate in the context of UN negotiations.<sup>15</sup>

The best-known example of a gray BINGO is the Global Climate Coalition (GCC). The efforts of the GCC to obstruct and delay the negotiations for the Framework Convention and subsequently the Kyoto Protocol are widely recognized and have been well documented elsewhere.<sup>16</sup> However, with the signing and ratification of Kyoto, the GCC suffered declining support from industry, and in the late 1990s several of its core members such as BP, Shell and General Motors left the organization because they felt they could no longer be associ-

13. Interview with Suresh Patel, Agrochemicals Manufacture Saroc Limited and ICC, Nairobi, 13 November 2006.

14. See Levy and Egan 1998; and personal communication with two Australian delegates [anonymity requested], Nairobi, 12 November, 14 November, and 17 November 2006.

15. Interview with Stastny 2007; interview with Koch 2007; and interview with Alders 2007.

16. See Levy and Egan 1998; 2003; Newell and Paterson 1998; Leggett 2001; Newell 2000; Levy and Newell 2002; and Levy and Newell 2005.

ated with its aggressive anti-climate stance.<sup>17</sup> After thirteen years in operation, the GCC was officially disbanded in 2002.<sup>18</sup> More recent examples of gray BINGOs include the Australian Industry Greenhouse Network (AIGH) and the Australia Aluminum Council (AAC). These organizations, also referred to as the “Greenhouse Mafia,” successfully sought to undermine Australia’s ratification of the Kyoto Protocol under John Howard’s Liberal government from 1996 to 2007,<sup>19</sup> and maintained a close relationship with lead negotiators to ensure continued opposition to any Kyoto-like framework.<sup>20</sup> Yet, the 2007 change of government and the subsequent ratification of Kyoto by Prime Minister Rudd marked the ultimate failure of these business groups to block Australia’s adoption of binding targets.

Indeed, by the turn of the century, gray and reactionary BINGOs had almost disappeared from the scene, which reflects a more general shift in corporate strategies in Europe and North America from opposition to accommodation and cooperation.<sup>21</sup> Many of the formerly reactionary industries now organize through BINGOs that can be placed at the gray middle (the second category). These organizations no longer oppose regulations per se, but seek to influence regulatory design and the adoption of favorable mitigation technologies and methodologies by Kyoto Parties. Middle-gray BINGOs include both sector-specific and cross-sectoral interest associations such as the World Nuclear Association (WNA), the World Coal Institute (WCI), the International Petroleum Industry Energy Conservation Association (IPIECA) and the International Chamber of Commerce (ICC). The mandates and strategies of sector-specific BINGOs are usually to promote solutions that enable these sectors to survive, or to maintain or capture new markets in a carbon-constrained economy. Some increasingly aspire to a greener profile, by placing more emphasis on developing low-emission technologies such as carbon capture and storage (CCS) and clean coal technologies or, as in the case of the WNA, marketing nuclear power as a sustainable and clean energy option. The ICC, despite being a large, cross-sectoral business organization, has in reality been dominated by the US oil giant ExxonMobil, a company infamous for its aggressive anti-climate stance. This has prohibited the ICC Council on Environment and Energy from moving further towards a pro-regulation stance.<sup>22</sup>

BINGOs situated at the green middle of the continuum (the third category) have an explicitly greener or pro-regulation profile. One of the most prominent BINGOs in this category is the International Emissions Trading As-

17. Skjærseth and Skodvin 2004, 167.

18. Sourcewatch 2006.

19. Interview with Dr. Guy Pearse, speechwriter for the Australian Environment Minister 1997–2000, shown in the documentary “The Greenhouse Mafia” by *Four Corners* 2006. Transcript available at <http://www.abc.net.au/4corners/content/2006/s1568867.htm>.

20. Personal conversations with two Australian delegates [anonymity requested], Nairobi, 12 November, 14 November, and 17 November 2006.

21. Levy 2005.

22. Personal communication with sources at the ICC [anonymity requested].

**Table 1**  
 Gray-Green Continuum of BINGOs in the Climate Regime

BINGO Continuum	↔				"Green"
	1	2	3	4	
Views on climate change mitigation	Reactionary, anti-emissions control	Accept frameworks for climate mitigation and GHG regulation	Acknowledge/ endorse need for climate mitigation and GHG regulation	View climate change as a business opportunity	
Mandates and strategies	Obstruct efforts to negotiate binding regulations	Promote the interests of member companies in the regime, in particular with respect to regulatory/policy instruments and mitigation options	Promote business-friendly regulations, including market mechanisms and specific mitigation technologies; Promote level playing fields	Promote stringent, mandatory GHG regulation and financing of cleantech development	
Tactics	Financial inducement and lobbying	Information-based lobbying	Information-based lobbying & discursive tactics	Information-based lobbying	
Examples	GCC, AIGH, ACC	WCI, IPIECA, WNA, ←-ICC	IETA, WBCSD→	BCSE	

sociation (IETA). From its establishment in 1999, the organization has grown to become by far the largest and most active BINGO in the regime.<sup>23</sup> The main objectives of IETA are to advocate the use of market mechanisms as climate policy instruments, to promote effective and functional systems for trading in GHG emissions, and to help ensure the effective functioning of the Kyoto flexibility mechanisms.<sup>24</sup> IETA consists of a diverse group of corporations, including emitters, traders and verifiers. What unites these different sectors is a common interest in promoting well-functioning market mechanisms and regulatory designs. Another prominent BINGO with a greener profile is the World Business Council for Sustainable Development (WBCSD). The WBCSD explicitly endorses the need for GHG regulation and international frameworks, and presents itself as a constructive partner in the effort to find solutions that can help mitigate climate change. In general, the WBCSD focuses on long-term policy advocacy by disseminating papers and through direct collaboration with decision-makers and the UNFCCC secretariat.<sup>25</sup> While WBCSD members come from a range of sectors with different interests and carbon liabilities, what unites these diverse industries behind a pro-mitigation agenda is the view that a failure to take action—that is, to prepare for a future regulatory environment in which GHGs carry a high price—imposes a great risk to their long-term competitiveness and market survival.<sup>26</sup> As the WBCSD secretariat puts it,

If you are a smart CEO these days you will realize that climate change issues will have a big impact on your future business. So you might as well get involved right from the beginning. A lot of companies that are around today will not be around in 50 years, because they didn't manage to respond to a different economic environment which will be shaped by sustainable development issues.<sup>27</sup>

However, because many of the WBCSD members still have a high carbon liability and operate in highly competitive global sectors, the organization's lobbying and advocacy has focused more on creating level playing fields, i.e. including all major emitters in a global framework, than on supporting a more stringent Kyoto-like framework post-2012. It has also tended to lend vague regulatory support rather than promoting stringent, quantified targets for a future deal, and focused on promoting fossil-fuel-friendly mitigation technologies and nuclear power.<sup>28</sup>

Finally, green BINGOs (the fourth category) may be characterized by an unambiguous pro-mitigation and regulation agenda. These are typically organi-

23. At the COP/MOP 2, IETA registered over 130 participants, amounting to nearly one-third of the BINGO constituency.

24. IETA 2006; and interview with Alders 2007.

25. Interview with Koch 2007; see also Timberlake 2006.

26. Interview with Koch 2007; interview with M. Xerri, Areva and WBCSD, Paris, 1 February 2007; interview with Mette Vågnes-Eriksen, Statskraft and WBCSD, Oslo, 26 March 2007; interview with Jacque Toraille, Michelin and WBCSD, Paris, 5 February 2007; and interview with Elin Myrmel-Johansen, Storebrand and WBCSD, Oslo, 13 March 2007.

27. Interview with Koch 2007.

28. Statement by Björn Stigson at the Bali Business Day, 10 December 2007.

zations representing businesses that would benefit commercially from climate policies and more stringent regulation of GHGs, and which therefore lobby parties to take on more rigorous, binding commitments to reduce their emissions. Renewable energy industries, for example, have experienced significant growth with the proliferation of GHG regulations in recent years, including national and regional policies and subsidies for clean energy,<sup>29</sup> and thus promote GHG regulation that will further incentivize and accelerate investment into energy efficiency and renewable energy technologies and companies.<sup>30</sup> The most prominent organization representing such industries has been the Business Council for Sustainable Energy (BCSE). More recently, however, actors from the financial services sector have joined the renewable energy lobby. As the volume of carbon trading has increased with the coming into force of GHG regulations, this sector has seized opportunities to develop new financial and insurance instruments, products and advisory services that facilitate trade and investment in emissions reduction projects. As such, many in the financial industries would benefit from more stringent regulations, which would increase trading and boost demand for their services. Similarly, with the growth of clean-tech ventures, an increasing number of investors could also profit from tighter caps on GHGs.<sup>31</sup>

BINGOs situated at the middle gray to the green end of the continuum usually employ tactics that correspond to Alpin and Hegarty's notion of information-based political strategies,<sup>32</sup> defined here as information-based lobbying. Information-based lobbying may involve providing governments with expert advice, technical reports and position papers, and assisting decision-makers directly with policy formulation and the writing of legal texts.<sup>33</sup> The aim of information-based lobbying is to make industry preferences known to decision-makers, or to estimate and elucidate the costs and benefits for the market in relation to specific issue outcomes or regulatory designs.<sup>34</sup> Using networks established with key decision-makers in governments and international institutions to disseminate policy-relevant information and recommendations is considered to be the most effective means by which to provide input to the political process.<sup>35</sup> Some BINGOs however, in particular the WBCSD, also utilize what may be termed discursive tactics. This implies the strategic use of information, ideas and political discourse to construct broad policy arguments, frame debates and get issues on the agenda. Such strategies are thus comparable to those often employed by environmental NGOs.<sup>36</sup>

Clearly, not all BINGOs can be placed in any one category. The intention

29. Boyle 2004.

30. BCSE 2006; and interview with Lisa Jacobsen, US Business Council for Sustainable Energy, Bali, 12 December 2007.

31. Labatt and White 2007, iv, 21 and 54; and interview with Daniel Rossetto, JP Morgan and IETA, Bali, 11 December 2007.

32. Alpin and Hegarty 1980.

33. Hillman and Hitt 1999, 834.

34. Alpin and Hegarty 1980.

35. Interview with Alders 2007; interview with Koch 2007; and interview with Stastny 2007.

36. See e.g., Keck and Sikkink 1998; Khagran et al. 2002; and Princen and Finger 1994.



of drawing up a continuum from gray to green is not to place each organization at a fixed point, but rather to provide the reader with a brief overview of the main business approaches to GHG regulation and the relationship among the different interests, mandates and strategies employed.

## **A Framework for Analyzing BINGO Influence in the Climate Negotiations**

The framework for assessing BINGO influence draws on a methodology developed by Michele Betsill and Elisabeth Corell for analyzing NGO influence in international environmental negotiations.<sup>37</sup> Building on this framework facilitates a comparison of the impact of ENGO and BINGO activities and strategies in negotiations.

Following Knoke,<sup>38</sup> Betsill and Corell define influence as the process of one actor (A) intentionally transmitting information to another actor (B), which alters what B would do lacking such information.<sup>39</sup> However, while rightly defining a causal relationship between the behavior of actors A and B, this conceptualization fails to define the type of behavior being caused. The definition appears to imply that any response by B to the activities of A can be read as an indication of influence. A more precise definition should recognize that influence is also contingent upon the response of actor B reflecting the intentions of actor A. Therefore, influence is defined here as the activities of actor A bringing about intended effects in the behavior of actor B.

This definition can be interpreted as being related to a behavioral and relational notion of power: A having the power to get B to do something that B would not otherwise do.<sup>40</sup> While power and influence are intimately linked concepts, it is possible to distinguish between them. For example, influence can be defined as a relationship resulting in a modification of one actor's behavior by that of another, whereas power refers to capability, that is, the spectrum of resources available to actors.<sup>41</sup> In both instances however, this approach conceives of power and influence as inherently behavioral and relational concepts—as things traceable to the actors' behavior—which is contingent upon the maintenance of access and communication channels among them.<sup>42</sup>

Influence can be understood as a two-dimensional concept: While it is instigated by (i) the transmission of information (advocacy and lobbying) by one actor, it is also contingent upon causing intended effects in (ii) the behavior of other actors.<sup>43</sup> To gather evidence on the first dimension, one might look for in-

37. Betsill and Corell 2001. See also Corell and Betsill 2001.

38. Knoke 1990, 3.

39. Betsill and Corell 2001. See also Corell and Betsill 2001.

40. See Dahl 1957.

41. Cox and Jacobson 1973, 3.

42. Knoke 1990, 3.

43. Betsill and Corell 2001, 72.

formation regarding *how* actors attempt to exercise influence in negotiations. The following indicators are used to collect data for the first dimension:

1. *Access*: opportunities to participate and intervene in formal negotiating arenas, and access to national delegations (ratifying parties);
2. *Resources*: material resources (financial assets) or non-material resources (information and knowledge); and
3. *Activities*: interventions in negotiating sessions, working directly with negotiators on issues, various forms of lobbying, providing expert advice, disseminating knowledge, campaigning, and protests.

However, while access, activities and resources may be preconditions to influence, they do not automatically translate into influence. Rather, influence is dependent on the behavior of other actors (the second dimension) and whether the business groups' activities are successful in terms of fulfilling the goal(s) set for them. Following Keck and Sikkink,<sup>44</sup> this study seeks to identify "goal attainment" at different levels, that is, to assess whether political outcomes reflect the objectives of BINGOs. One might look for goal attainment both in relation to the *process* of negotiations—for example, by investigating whether negotiators discussed issues proposed by BINGOs—and in relation to the final *outcome*—by investigating whether final agreements reflect BINGO goals and principles, or contain text drafted by BINGOs. Thus it is possible to distinguish between *procedural influence* and *influence over negotiation outcomes*. However, while the concept of goal attainment may be used to indicate influence, it is potentially limited in terms of mapping patterns of causality. Indeed, one easily runs the risk of confusing correlation with causation. For example, some states may choose to adopt positions and policies that correspond to those of business lobbies, but for other reasons. Thus, after having established goal attainment, it is necessary to look for further evidence concerning what factors may have influenced states' positions and policies.

Process tracing is a technique often used to demonstrate causation. Zürn defines it as endeavoring to "assess causality by recording each element of the causal chain."<sup>45</sup> In this context, process tracing thus requires building a logical sequence of evidence linking BINGO lobbying and advocacy to process development, the behavior of delegations and decision outcomes. In other words, the observable activities of the "influencer"<sup>46</sup> must be spelled out, and the extent to which these activities affected the reasoning and behavior of "influencees" must be assessed.<sup>47</sup>

44. Keck and Sikkink 1998, 25.

45. Zürn 1998, 640.

46. Following Knoke 1990, the analysis utilizes the terms "influencer" and "influencees," the former referring to those actors (x) attempting to exert influence, and the latter referring to those actors (y) that the other actors (x) are trying to influence.

47. See Zürn, 1998, 640; and Corell and Betsill 2001, 71.

This article also distinguishes between two levels of goal attainment. BINGO activities (advocacy and lobbying) can cause intended effects in both

1. The general position of a delegation on a given issue, and/or
2. The fine print and details of negotiation processes and decisions/regulations, e.g., the specific formulation of legal text and design of regulatory mechanisms.

Assessing and analyzing the second dimension of influence also warrants a clarification of the characteristics of potential “influencees” (states). One might discern three major groups of “influencees.” The first group consists of those delegations whose interests and positions on the issue in question correlate with the relevant business group(s). The correspondence between the interests of the “influencer” and the “influencees” makes it rather meaningless to talk about goal attainment or influence in relation to the first level identified above, the general position on a given issue. However, there is still a potential for business groups to influence delegations’ work on the fine print or details of decisions (second level). The second category of “influencees” consists of national delegations whose interests and positions on the issue in question clearly conflict with those of BINGO(s). Influencing the positions of these delegations (first level) is, due to their fundamentally differing views, likely to prove particularly difficult, if not impossible. Finally, the third group of “influencees” consists of national delegations whose interests and views in relation to the issue in question are uncertain, unstable or undecided. Often, delegates have insufficient knowledge and expertise related to an issue under negotiation and may in those cases look to other parties or nonstate actors, including business, for information and arguments necessary to develop their positions. These delegations are likely to be more susceptible to pressure, which renders them an important target for BINGOs in their attempt to influence both the issue position (the first level) and input on the details (the second level) of a decision. Thus, the three groups of “influencees” each represents a different strategic challenge, both in terms of how prone they are to BINGO advocacy and lobbying, and in terms of the level at which influence may be exercised.

The adoption of a framework grounded in relational and behavioral conceptions of power for assessing influence suffers several shortcomings. While the scope and impact of concrete lobbying and advocacy efforts by business groups can be assessed and analyzed within a relational approach, it may fail to capture more indirect, tacit and structural forms of influence and power. Indeed, the influences of business lobbies are often subtle rather than transparently visible. Governments may anticipate industry opposition to legislation that would harm their activities, which may result in the legislation’s being deemed undesirable.<sup>48</sup> Business is often implicitly influential by virtue of its positional power,

48. Newell and Paterson 1998, 687.

owing to its mere size, economic power and ubiquity.<sup>49</sup> Furthermore, the intimate link between state interests and capital accumulation in modern capitalist societies, with the state depending on economic growth to maintain legitimacy, implies that “those who organize the process (capital) gain great structural power with regard to state decision making.”<sup>50</sup> Given the centrality of fossil-fuel-based energy in twentieth-century economic growth, the regulation of GHG emissions fundamentally challenges the premises of modern industrial development. Thus the reluctance of many states to commit to binding regulations cannot be explained without reference to the structural power of the companies involved in the production of fossil-fuel energy, and to the state-industrial nexus.<sup>51</sup> These types of indirect, tacit and structural forms of power cannot be captured by relational and behavioral approaches to studying business influence.

A relational approach also ignores the important relationship between power and knowledge. Indeed, power is more than something that is possessed and exercised by certain actors; it also is manifest in knowledge structures such as specific methods or techniques that shape, direct, constrain and modify social interaction and behavior.<sup>52</sup> In these terms, influence may be derived from the power to develop and control various forms of knowledge and techniques. Falkner’s notion of corporate technological power highlights “the critical role that corporate actors play in shaping the knowledge framework of international environmental policymaking” by having the power to innovate, develop, diffuse and implement new technologies that help regime implementation.<sup>53</sup>

Notwithstanding the good reasons that a study of business influence in the climate negotiations should be guided by a structural analysis, this paper adopts a relational approach to gathering data on business influence. While the structural argument has been developed elsewhere, the major aim of this article is to trace, illustrate and analyze a concrete process of business lobbying and advocacy at the international level. Certainly, this endeavor can hardly highlight all the ways in which business actors are powerful and exert influence in global environmental regimes. It can, however, add one piece to our understanding of the various ways that business exercises political influence, by illustrating how business organizes itself in the climate regime and by tracing the process in which it attempts to influence the ongoing negotiations.

While a relational approach can shed light on how business groups (endeavor to) exert influence, the focus on behavioral mechanisms does less to *explain* it. Rather than approaching an explanation from a structural perspective, this paper applies Falkner’s concept of corporate technological power in analyz-

49. Bachrach 1967, 80.

50. Newell and Paterson 1998, 691.

51. Newell and Paterson 1998. See also Levy and Egan 1998.

52. Lukes 1974; Foucault 1984; and Haugaard 2002.

53. Falkner 2005, 106–107.

ing the sources of business influence in the negotiations. This approach proceeds from the assumption that BINGOs contribute to the development of the regulatory discourse by virtue of their capacity to innovate, develop and implement climate mitigation technologies.

Understanding how domestic factors influence the politics and behavior of national delegations is crucial to the analysis of international politics. The dependence of governments on particular economic activities and industries, combined with the multitude of well-established access channels to politicians and decision-makers, provides business lobbies with a particular leverage to influence government policy at the domestic level.<sup>54</sup> Governments often formulate their positions and policies prior to the commencement of a COP/MOP.<sup>55</sup> Indeed, some BINGOs view efforts of the international BINGOs to influence delegations during negotiations as redundant, emphasizing instead the sway of national interest associations.<sup>56</sup> A complete analysis of business influence in the climate negotiations should therefore warrant a systematic assessment of the influence of industry groups at the national level. However, it is unfortunately beyond the scope of this study to explore both international- and domestic-level variables. Therefore, a choice was made to focus on the former because the aim of this paper is to illustrate *one* specific dimension of business influence, namely the international or transnational dimension. Indeed, most of the leading BINGOs such as the ICC, WBCSD, IPIECA and IETA emphasize the importance of this dimension to their work.<sup>57</sup> While studies of business power in international climate politics commonly focus on how business efforts at the national level have fed into the international process, studies of the transnational organization of business activities at the international level are less common. This study thus attempts to broaden our understanding of the nature and impact at the *international level* of business activities, which have been increasing since the adoption of the Kyoto Protocol,<sup>58</sup> notwithstanding arguments that the analysis ideally should be controlled for domestic-level variables.

The strategy for gathering data on the role and influence of BINGOs utilizes the so-called method of triangulation, i.e., the use of multiple data types and sources.<sup>59</sup> First, documentary analysis was conducted of relevant primary and secondary sources such as draft negotiation texts, country statements, lobbying material, final agreement texts, the *Earth Negotiations Bulletin*, the NGO newsletter *ECO*, press releases and media reports. Second, interviews and per-

54. See, for example, Levy and Egan 1998.

55. Interview with Harald Dovland and Per Stiansen, Norwegian Environment Ministry and Head of Norwegian delegation, Oslo, 19 October 2006.

56. Personal conversation with Jonathan Cobb, WNA, Nairobi, 6 November 2006; and personal conversation with Magnus Mori, WNA, Nairobi, 9 November 2006.

57. Interview with Koch 2007; interview with Alders 2007; interview with Stastny 2007; and interview with Warren 2006.

58. Interview with Frede Cappelen, Statoil and IPIECA/IETA. Oslo, 31 October 2006; and interview with Dovland and Stiansen 2006.

59. Miles and Huberman 1994.

sonal conversations<sup>60</sup> were conducted with BINGO staff and BINGO member corporations prior to, during and after negotiations. Some ENGOs and national delegates were also interviewed and consulted. Finally, much of the data gathering was enabled by direct observation by the researcher. Receiving formal accreditation by the International Chamber of Commerce enabled me to attend a wide range of closed BINGO meetings and to follow their activities intimately. This facilitated a large number of conversations with BINGO members, which proved essential to the process.

### **Indicating BINGO Influence: Access, Resources and Activities**

*Access:* BINGOs enjoy considerable access to negotiating forums. All accredited nonstate actors are admitted to plenary sessions and contact groups.<sup>61</sup> However, informal consultations, which are usually set up for the final stages of bargaining, are closed to observer organizations. BINGOs frequently “intervene” during negotiating sessions, that is, deliver formal position statements to delegates on particular agenda items. They also have both formal and informal access to the UNFCCC Secretariat. Closed consultative meetings between the BINGO constituency, the COP President, the Workshop Chairs and the Executive Secretary are arranged by the Secretariat throughout negotiations. These formal intervention opportunities and access channels are established for all the nonstate actor constituencies participating in the regime. The Secretariat appears to consider business access and input crucial to its work. According to the Executive Secretary and the COP President, the Secretariat has always “considered the views of business to be very important to the political processes,”<sup>62</sup> and asserts that business “engagement in the process and with policy-makers makes a positive contribution.”<sup>63</sup> BINGOs also have formal and informal access to a multitude of national delegations. Informal network and social ties are invoked both during and outside of negotiations to make heard business preferences on particular policy and regulatory options.

*Resources:* Intellectual capital, in the form of technical knowledge and expertise, technological proficiency and innovation capacity, no doubt represents one of the most important and empowering resources of the BINGOs. Indeed, de facto ownership of specific mitigation technologies and methodologies and the

60. The distinction between interview and personal conversation is that all interviews were formally recorded, while personal conversations were not. During negotiations, participants often do not have the time to sit down for a formal interview. Some participants also request anonymity and thus the personal conversation format was used instead of the interview format.

61. However, observer organizations may be asked to leave a contact group if one-third of the parties object to their presence.

62. Quote from a statement by the Executive Secretary, Yvo de Boer, at a closed meeting between the President and the BINGO constituency, Nairobi, 8 November 2006.

63. Quote from a statement by the COP President at a closed meeting with the BINGO constituency, Nairobi, 10 November 2006.

ability of BINGOs and their members to calculate costs and benefits for the market in relation to particular regulatory options and implementation outcomes provide them with significant leverage in the negotiations.<sup>64</sup> Furthermore, financial assets represent an important resource. While BINGOs tend not to provide direct financial contributions to delegates, financial assets enable BINGOs to arrange fully catered side events, cocktail receptions, dinners and other social events during negotiations. These events are important networking arenas. BINGOs also benefit from considerable administrative resources, which help the companies navigate within the chaotic environment of the negotiations.

*Activities:* Numerous activities are usually undertaken at a COP/MOP. While some are coordinated and agreed upon by the constituency as a whole, others are performed by individual organizations alone or in coalition with other BINGOs. BINGOs hold daily meetings for the constituency members, intervene in the formal negotiating sessions,<sup>65</sup> arrange seminars and side events, and set up stands. Side events, such as seminars, presentations and panel discussions, are seen as an important way to raise critical debate and to explore issues that are not considered in the formal negotiations.<sup>66</sup> Stands provide interested parties with material such as reports and policy statements. BINGOs also host cocktail receptions and dinners for participants, which serve as informal meeting points for BINGO staff, companies, NGOs, national delegates and the secretariat.<sup>67</sup> Furthermore, BINGOs arrange private meetings with the secretariat staff and national delegations, distribute lobby documents and position papers, and assist delegates in the formulation and writing of legal texts in the final stages of negotiations. Indeed, BINGOs tend to approach any national delegation if they consider it helpful to promoting a particular goal.<sup>68</sup> For example, IETA has established a far-reaching network of working relationships with delegations worldwide. Communication and cooperation between business and state delegates during negotiations are dependent on who is involved in a particular negotiation, rather than contingent upon national ties. Moreover, BINGOs are also approached *by* delegates asking for input. According to IETA, the organization is generally involved in the drafting of legal texts in at least one or two contact groups at each COP. This implies that IETA staff and some of their members who are experts on the issue at stake sit down with the designated delegates to

64. Interview with Warren 2006; interview with Alders 2007; interview with Koch 2007; and interview with Stastny 2007.

65. At the COP/MOP 2, BINGOs made seven interventions in negotiating sessions.

66. At the COP/MOP 2, BINGOs hosted or co-hosted 24 side events. IETA arranged sixteen of these, some of them in collaboration with the World Bank.

67. At the COP/MOP 2, IETA hosted a dinner for the European Commission and the CDM Executive Board, and co-hosted a lunch with the World Bank for the heads of delegations and the Secretariat. The WBCSD President, moreover, was the keynote speaker at a dinner and a lunch for the newly arrived ministers during the high-level segment of negotiations.

68. Interview with Alders 2007.

work out viable text options for a particular decision. As the IETA Secretariat put it, "We sometimes get very clear questions: what is it that *you* want and how can we achieve that?"<sup>69</sup>

### **Tracing a Process of BINGO Influence: The Case of Carbon Capture and Storage in the Clean Development Mechanism**

This section illustrates how BINGOs seek to influence negotiations at the international level, by looking specifically at the issue of including (geological) Carbon Capture and Storage (CCS) technologies as a mitigation option in the regime, through an approval of CCS as project activity under the Clean Development Mechanism (CDM).<sup>70</sup> CCS is "a process consisting of the separation of CO<sub>2</sub> from industrial and energy-related sources, transport to a storage location and long-term isolation from the atmosphere."<sup>71</sup> Stable geological formations such as hydrocarbon fields and aquifers are currently considered the most viable locations for storage.<sup>72</sup> According to the International Energy Agency, CCS could provide for up to 55 percent of the emissions reductions necessary to stabilize global warming by 2050; if the right action is taken to increase investment and development of the technology, CCS could become an essential technology in the transition to a sustainable energy system during the next 50 to 100 years.<sup>73</sup> Several issues related to safety and environmental risk may need further research and assessment, particularly regarding leakage of CO<sub>2</sub> from storage sites. Nevertheless, with appropriate site selection, monitoring programs, regulatory systems and methods to stop or control CO<sub>2</sub> leakage, it is very likely that 99 percent of stored CO<sub>2</sub> can be retained in geological reservoirs over a period of 1000 years.<sup>74</sup>

Although the concept of CCS has only recently been introduced in the UNFCCC, it is increasingly recognized as one of the main future GHG mitigation options available. However, while the Kyoto Protocol indirectly recognizes CCS under article 2.1 (a) (iv) by its reference to carbon sequestration technologies, there is no explicit mention of CCS in the Convention or the Protocol.

The fact that CCS offers the opportunity to continue using fossil fuels without significant CO<sub>2</sub> emissions makes it an attractive solution for the oil, gas and coal sectors. Indeed, several fossil-fuel-producing industries and governments have already devoted considerable resources to the development and deployment of CCS.<sup>75</sup> CCS technologies originate from the oil and gas industry, including companies such as ChevronTexaco, Shell and ExxonMobil, which first

69. Interview with Alders 2007.

70. For information about the CDM, see <http://cdm.unfccc.int/index.html>.

71. IPCC 2005, 3.

72. Torvanger et al. 2005, 694.

73. International Energy Agency 2004, 3.

74. IPCC 2005, 12–14.

75. IPIECA side event on CCS at the COP/MOP 2, Nairobi, 6 November 2006.



developed CCS for the purpose of enhanced oil recovery (EOR). Statoil's "Sleipner Project" in the North Sea, which captures and stores CO<sub>2</sub> in underground geological formations, was the first CCS project initiated for the purpose of reducing GHGs, an innovation put in practice in response to the introduction of the Norwegian CO<sub>2</sub> tax in the early 1990s.<sup>76</sup> Statoil, in partnership with the Norwegian government, has also commenced building the world's largest gas-powered electricity generation facility (Mongstad) with CCS, scheduled to be completely operational by 2014. The coal industry, for their part, also view CCS as one of the major technological solutions that will enable coal to meet its environmental challenges, and are currently making considerable investment in research and development of CCS for coal-fired power generation facilities.<sup>77</sup> It is clear that the survival of fossil fuels as a major energy source in a carbon-constrained world is contingent upon CCS technologies' being successfully developed and approved. Thus, companies and BINGOs representing the fossil-fuel sectors have a vested interest in seeing CCS recognized as a mitigation option within the climate regime.

According to business, the widespread deployment of CCS is currently uneconomical, and policy and regulatory frameworks are required in the near term to provide financial incentives to stimulate investment if CCS is to contribute to global GHG emissions reductions. Because of its current uncertain status in the international regime, there have been few incentives for companies to invest in the research and development of geological CCS.<sup>78</sup> Therefore, business views the inclusion of CCS in the CDM as an important way to provide incentives for investments in further development and commercialization of the technology.<sup>79</sup> Business groups also believe there to be few negative impacts of deploying CCS on a full scale, and that with appropriate site selection and the development and utilization of appropriate monitoring systems, CCS can be conducted safely and with environmental integrity.<sup>80</sup> The ENGOs and the Climate Action Network (CAN), on the other hand, argue that accepting CCS within the Kyoto framework is problematic because it may divert and delay a long-wanted shift from the use of fossil fuels to renewables.<sup>81</sup> CAN also considers CCS an unviable option under the CDM because no regulatory framework is currently in place to address the monitoring and verification of emissions reductions, and to ensure that CO<sub>2</sub> will be safely stored. If CCS were to be included in the CDM, it could

76. Interview with Cappelen 2006; interview with Warren 2006; and IPIECA side event on CCS, Nairobi, 7 November 2006.

77. Interview with Christine Copley, World Coal Institute, London, 30 October 2006.

78. Torvanger et al. 2005, 700.

79. Letter to the European Presidency, Pirkko Heikinheimo, Environmental Protection Department, Ministry of the Environment, Finland, from IETA President Andrei Marcu, 4 October 2006.

80. Letter to Ms. Christine Zumkeller from IETA, signed by Andrei Marcu, Geneva, 7 February 2006; and IPIECA submission to the UNFCCC Secretariat, February 2006.

81. Interview with Gabriela von Goerne, Greenpeace/Climate Action Network, COP/MOP 2, Nairobi, 14 November 2006.

divert investments from renewables, energy efficiency and small-scale projects that have direct benefits for local communities.<sup>82</sup> There is also disagreement between major groups of national governments on whether CCS represents a viable climate-change mitigation option. Some parties, most notably major oil and gas producing countries such as Norway and the OPEC countries, but also Japan and the European Union (EU), have expressed support for including CCS as a CDM project activity. Others parties, including Brazil and several other Latin American countries, do not recognize this option. The opposition argues that CCS technologies are being pushed too fast in view of the many uncertainties, their limited geographical application and the risk that an increase in CCS project activities would divert investments from renewables.<sup>83</sup>

The fact that CCS as a mitigation option might provide significant emissions reductions by 2050, if recognized in the regime and implemented on a full-scale basis, makes it an interesting case for study. The currently unresolved status of this technology and the disagreement between business, environmental NGOs and national governments also provide fertile ground for analyzing influence and power. The following section gives an account of key events as well as major BINGO and ENGO activities that led up to the adoption of decision FCCC/KP/CMP/2006/L.8 at the COP 12/MOP 2 in Nairobi (2006) and decision FCCC/SBSTA/2007/L.19 at COP 13/CMP 3 in Bali (2007) regarding CCS in CDM.<sup>84</sup> The aim of this section is to demonstrate *how* the efforts to influence the negotiation process transpired.

Prior to the Nairobi conference, IETA and IPIECA wrote to the EU Presidency and UNFCCC Secretariat,<sup>85</sup> urging them to promote the approval of CCS as a CDM project activity at the COP 12/MOP 2.<sup>86</sup> IPIECA and IETA also held two side events on CCS as a mitigation option at the beginning of the Nairobi meeting, which were widely attended by government delegates. When delegates formally discussed the issue, first during a plenary session and later during a contact group, the IETA President made two interventions arguing for the inclusion of CCS in the CDM. A group of experts on CCS from the BINGO constituency also wrote a position paper entitled "Ad-Hoc Expert Group Statement on Carbon Capture and Geological Storage (CCS) in the Clean Development Mechanism (CDM)," which was widely distributed at the conference. The statement recommended that "a working group be set up under the UNFCCC process . . . to enhance capacity building on CCS . . . and to enable CCS within the CDM by COP/MOP 3 [2007]," argued that that the COP/MOP 2 decision must not impede the development of CCS, and recommended that Parties support

82. See the ENGO newsletter *ECO*, Nairobi, 9 November 2006.

83. Plenary debate on CDM, Nairobi, 9 November 2006; and contact groups, Nairobi, 10 November and 16 November 2006.

84. UNFCCC 2006b; and UNFCCC 2007.

85. Letter to Ms. Christine Zumkeller from IETA, signed by Andrei Marcu, Geneva, 7 February 2006; and IPIECA submission to the UNFCCC Secretariat, February 2006.

86. Letter from IETA President Andrei Marcu to the European Presidency Pirkko Heikinheimo, Environmental Protection Department, Ministry of the Environment, Finland, 4 October 2006.

capacity building and deployment of the technology to avoid increases in emissions. Twelve industry representatives signed the statement, including IPIECA, IETA, and the ICC. Throughout the two weeks of negotiations, IETA and IPIECA also lobbied several delegations directly, including the EU, Norway, the Latin American delegations and some African delegations.<sup>87</sup> The EU and Norway assured them that they would promote CCS as CDM methodology in the informal consultations, and encouraged the BINGOs to approach other delegates to demonstrate—based on industry experience—that carbon can be safely stored and monitored in the long term, and that a rejection of CCS would affect technological development negatively.<sup>88</sup> BINGO efforts to persuade the Latin Americans, however, were unsuccessful. Apparently, these delegations had brokered a deal with Brazil to oppose CCS in the CDM prior to the negotiations. Brazil's firm opposition was known to the BINGOs from previous unsuccessful attempts to lobby for a change in their position.<sup>89</sup> However, lobbying the African delegations proved relatively successful. When the issue was first raised in the plenary, several African delegations spoke out against CCS in the CDM, and expressed concern over the inequitable geographical distribution and high costs of CDM projects. In the contact groups, however, the African countries refrained from opposing approval of CCS, which indicated a shift in their position.<sup>90</sup> Indeed, between the plenary session and the contact groups, IETA and IPIECA met with these delegations to try to convince them of the positive effects of approving CCS for Africa, which could receive increased private-sector investments in project activities through the CDM. The appearance of a leading Botswana delegate<sup>91</sup> in the panel of an IETA side-event on CCS at the end of the Nairobi meeting—supporting CCS in the CDM and arguing that the approval of the technology would benefit industrial development and climate mitigation in Africa—also indicates a change in position.

Meanwhile, the ENGOs did their share of lobbying against CCS in the CDM in Nairobi. The Climate Action Network (CAN) on behalf of the ENGOs intervened in the plenary meeting and the contact group, and met with a number of delegations, including the EU, Norway, AOSIS and some developing countries. While AOSIS and some of the Latin American delegations supported the ENGOs, their efforts to challenge the EU position were unsuccessful.<sup>92</sup> CAN also challenged the Norwegians on several occasions. This resulted in a retort from the head of delegation: "We cannot defend anyone who attempts, simply

87. Research observation and conversation with BINGO members in Nairobi, November 2006; and interview with Alders 2007.

88. Conversation with IPIECA representative, Nairobi, 8 November 2006; statement by IETA and IPIECA members at BINGO meeting, Nairobi, 9 November 2006; and statement by head of Norwegian delegation, Harald Dovland, Nairobi, 14 November 2006.

89. Conversations with IPIECA and IETA members, Nairobi, 10 November and 14 November 2006.

90. Statements made during Contact Group negotiations on the CDM; and conversations with IETA and IPIECA representatives, Nairobi, 14 November 2006.

91. Mr. David Lesolle.

92. Interview with Goerne 2006.

by principle, to exclude one of the most promising technologies for emissions reductions from a mechanism like the CDM [. . .] Norway is a frontrunner in this technology and the current government intends to continue to push for recognition of it. Including it in the CDM represents a way to create incentives for CCS.<sup>93</sup> CAN's "fossil of the day" prize, which is granted to the main "laggards" during negotiations, was on several occasions given to delegations supporting CCS in the CDM. The ENGO newsletter *ECO*, which is widely read by all participants in the negotiations, also took several swipes at CCS supporters in their advocacy articles.<sup>94</sup>

The Nairobi decision on CCS in the CDM<sup>95</sup> did not make a final ruling. While it requested the CDM Executive Board to continue to *consider* CCS projects, it did not yet allow the Board to *approve* them. Instead, intergovernmental organizations, NGOs and parties were asked to submit more information addressing technical issues to the UNFCCC Secretariat, to provide a basis for the Subsidiary Body for Scientific and Technological Advice (SBSTA) to make an assessment and recommendation to the Kyoto Parties. The decision scheduled a reconsideration of the issue at the Bali meeting in 2007, with a view to reaching a final agreement at the Poznan conference in 2008. While it did not prohibit CCS, the decision to request that the CDM Executive Board continue to consider CCS projects meant that final approval of CCS methodologies can only occur after *further guidance* from the Kyoto Parties. The decision, furthermore, invited intergovernmental organizations, NGOs and parties to submit more information addressing technical issues to the UNFCCC Secretariat, and requested SBSTA to compile this information and prepare recommendations on CCS as CDM project activities for consideration at the Bali meeting in 2007, with a view to taking a decision at the at Poznan conference in 2008.

Between the Nairobi and the Bali meeting, two workshops called "CCS and CDM: A Capacity Building Effort in Africa" were held in Senegal<sup>96</sup> in September 2007. Shell and Statoil established the workshops upon the suggestion of the Energy Research Centre of the Netherlands (ECN), which was responsible for implementing the workshops. While Shell and Statoil were the main founders and sponsors; the Norwegian Ministry of Foreign Affairs and the UK Department of Business, Enterprise and Regulatory Reform supported the project; and the UNFCCC, UNEP, the IPCC, the IEA and the European Commission also acted as formal collaboration partners. According to the ECN, the main objective of the workshops was to provide African delegates, companies and NGOs with reliable information about CCS technologies, in order for them to make an informed decision about CCS in the CDM. However, the underlying expectation

93. Statement by Harald Dovland (translated by author) on a meeting between the Norwegian delegation and Norwegian observer organizations, Nairobi, 14 November 2006.

94. Of particular notice was the 9 November issue (prior to the first negotiating session), which devoted nearly a page to advocating against CCS in the CDM.

95. UNFCCC 2006a.

96. See <http://www.ccs-africa.org/home/>.

**Table 2**  
Process Timeline for Main Activities and Events in the Negotiation of CCS in the CDM 2006–2007

1.	[February–October 2006]: BINGO letters to UNFCCC Secretariat and the EU	2.	[7 November 2006]: BINGO side events on CCS	3.	[9 November 2006]: ENGO anti-CCS statement in ECO	4.	[9 November 2006]: Plenary session on CCS in the CDM; BINGO and ENGO intervention	5.	[10 November 2006]: Contact Group on CCS in the CDM; BINGO and ENGO intervention	6.	[11 November 2006]: Fossil of the Day Prize awarded to pro-CCS delegations	7.	[11 November 2006]: Informal consultation starts
8.	[11–14 November 2006]: BINGO lobbying: The EU, Norway, African and Latin American delegations	9.	[11–14 November 2006]: ENGO lobbying: The EU, Norway, AOSIS, African and Latin American delegations	10.	[12–15 November 2006]: Distribution of BINGO position/lobby paper on CCS	11.	[14 November 2006]: BINGO side event on CCS; African delegate gave pro-CCS speech	12.	[16 November 2006]: FCCC/KP/CMP/2206/L.8	13.	[6–11 September 2007]: CCS-Africa Workshops: Capacity-building for CCS in the CDM in Africa	14.	[10 December 2007]: Decision FCCC/SBSTA/2007/L.19

was that the workshop would influence African delegates to support the approval of CCS in the CDM.<sup>97</sup>

Because decision FCCC/KP/CMP/2006/L.8 established the COP 14/CMP 4 in 2008 as the designated forum for reaching a final decision on the issue, BINGO and ENGO lobbying and advocacy in Bali was insignificant. However, in a SBSTA contact group on CCS in the CDM at the Bali meeting, Nigeria—representing the Group of African Countries—spoke out in support of CCS. This intervention represented a major shift in position, from initial opposition at the first plenary session in Nairobi to pro-CCS advocacy in Bali. As expected, however, the decision adopted at the Bali conference<sup>98</sup> did not make a final ruling on the issue, but allowed for further submissions and one more meeting under SBSTA before the COP 14/CMP 4 in 2008.

### **Assessing BINGO Efforts: Goal Attainment and Influence**

Having demonstrated how business groups have tried to influence the negotiations on CCS in the CDM, this section seeks to evaluate the success of these efforts. First, this involves assessing goal attainment: whether the decisions and/or the position of delegations reflect the objectives of business. As regards the decisions, while the BINGOs did not achieve their ultimate goal of CCS approval—since the decisions did not prohibit submission of projects using CCS—their efforts may be read as relatively successful compared to the ENGOs who wanted CCS ruled out. As IETA argued, “business achieved what it could achieve, which means that CCS is still on the agenda . . . [due to the opposition from ENGOs and some prominent Parties] it was certainly expected that there was a serious risk that there would be a very negative response . . . that CCS would be ruled totally out.”<sup>99</sup> Furthermore, the Ad-Hoc Expert Group’s recommendation to establish a working group to enhance capacity building and discuss unresolved technical and legal issues is partly reflected in decision FCCC/KP/CMP/2006/L.8, which requests additional workshops, submissions from parties and stakeholders, and further analysis of the technical issues at stake before a final decision is taken. Nevertheless, because final approval of CCS in the CDM was not successfully negotiated, it makes more sense to investigate BINGO goal attainment in relation to procedural developments than to the final outcome.

However, while the establishment of procedural goal attainment demonstrates correlation, it does not necessarily prove causality and thus influence. To establish procedural influence it is necessary to further investigate the causes of goal attainment at each of the two levels outlined in the methodology: first, in relation to state positions, and second, the fine print/details of regulations. As previously noted, influence is contingent upon how and whether the activities

97. E-mail correspondence with Heleen C. Coninck, Energy Research Centre of the Netherlands, 21 February 2008.

98. UNFCCC 2007.

99. Interview with Alders 2007.

of the “influencer” (BINGOs) brought about the intended effects in the behavior of the “influencees” (delegations). The research framework distinguishes between three major groups of “influencees:” i) delegations with corresponding/similar interests and positions; ii) delegations with opposing interests and positions, and iii) delegations with undetermined interests and positions.

The first group of influencees consists mainly of oil-, gas- and coal-producing countries, including Japan, the United States, Australia, Canada, Norway, Qatar, Saudi Arabia, Iran, and Kuwait, as well as the EU. These states’ economic dependency on the extraction of fossil fuels makes them structurally dependent on the continued survival of the fossil-fuel industry. Because the recognition of CCS as a mitigation option would enable these countries to continue to extract fossil fuels *and* reduce their emissions, it is certainly in their interest to approve CCS as a CDM project methodology. Many of these countries have already invested heavily in research and development of CCS technologies and projects.<sup>100</sup> For example, several medium- and large-scale CCS projects are under consideration in Australia.<sup>101</sup> Norway publicly aspires to become a leading country on CCS, and intends to export this technology to developing countries such as China and Indonesia.<sup>102</sup> In partnership with major companies such as Statoil, Shell and Aker Kværner, several of the world’s largest and most ambitious CCS projects are currently under development and construction in Norway.<sup>103</sup> The EU also supports the inclusion of CCS in the CDM, as long as outstanding methodological and technical issues are satisfactorily resolved. With a current research portfolio on CCS worth over 170 million and several CCS initiatives currently running in EU countries,<sup>104</sup> it is clear that it is in the interest of the Commission and many of the member states to have CCS approved. From a structural perspective, the positions of these countries on CCS may be seen as essentially determined by the interests vested in the state-industrial nexus of the fossil-fuel sector. Therefore, business interests may be interpreted as preconditioning the positions of these delegations. From a relational approach, however, assessing BINGO influence on their positions (the first level) is irrelevant, as their interests correlate to begin with. Yet, BINGOs may still exercise considerable influence on formulation of the details and fine print (the second level). The wording of the EU position, which notes the need to resolve several technical issues before CCS could qualify as a CDM methodology,<sup>105</sup> indicates that there is considerable room for exercising influence on the details, which would ultimately also feed into the formulation of their position (the first level).

100. Parties’ submissions to and statements made during the SBSTA workshop on CCS prior to the Nairobi meeting demonstrate the link between their positions and national economic interests; see FCCC/SBSTA/2006/7 and UNFCCC 2006a.

101. FCCC/SBSTA/2006/7.

102. Statement by Gro Harlem Brundtland, speech to the UN Commission on Sustainable Development, Fifteenth Session, 10 May 2007.

103. For example, the gas-powered generation facility at Mongstad and Kårstø.

104. FCCC/SBSTA/2006/7.

105. FCCC/SBSTA/2006/7; and UNFCCC 2006a.

IETA, and in particular IPIECA, representing the oil and gas sector from which the development of CCS originates, possess much of the capacity for technological innovation to further develop CCS as a mitigation option. They also have the necessary (technical) knowledge and expertise to develop satisfactory project methodologies and to resolve matters such as project boundary and safety issues, possible accounting methods for long-term leakage, permanence, site selection, monitoring methodologies, long-term liability, and the operation of reservoirs. Industry's capacity and expertise as such clearly provide them with a particular leverage vis-à-vis the ENGOs in the attempt to influence the decision-making process, and in terms of being able to act as consultants to delegations in the policy and regulatory formulation regarding the inclusion of CCS in the regime. The EU's lead negotiator on CCS in the CDM confirmed the use of industry expertise during negotiations, noting, "While we always attempt to consider the views of *all* the major observer groups, in the case of CCS it was industry that had practical experience and expertise to share."<sup>106</sup> Business actors' central role in the process of negotiating the details of a CCS decision is also evident by their active role during the SBSTA workshop, where members of IPIECA were asked to make five presentations on technical and regulatory issues, while the ENGOs made only one. These factors indicate that the technological innovation capacity and knowledge of IPIECA, IETA and their member companies enabled them to successfully exercise some influence on the details of the decision on CCS in the CDM and, more broadly, on the development of a common approach to CCS as a mitigation option, including possibilities for managing and regulating CCS project activities under the CDM.

The second group of "influencees," the delegations opposing CCS in the CDM, includes Brazil and some other Latin American countries. Brazil has received a high share of investment through the CDM in renewable energy projects, such as biomass and solar energy. It therefore appears to be in Brazil's economic interests to exclude CCS from the CDM to minimize the risk that investments will be diverted elsewhere. The other Latin American delegations, for reasons unknown, appear to have brokered a deal with Brazil to support their position. As expected, BINGO advocacy and lobbying towards these delegations were unsuccessful, despite the apparently good working relationship between IETA and the Latin American countries.<sup>107</sup> There is thus no evidence of successful goal attainment on either level as regards this group of delegations.

The final group of "influencees" consists of delegations whose positions on CCS in the CDM were more or less undecided at the commencement of the Nairobi meeting. These include the African delegations, some South Asian and Southeast Asian countries, and the Alliance of Small Island States (AOSIS). Because of the lack of clear similarity between these groups' positions and the

106. E-mail correspondence with Matt Allen, Department for Environment, Food and Rural Affairs, UK, and EU lead negotiator on CCS in the CDM, Nairobi, 22 January 2007.

107. Interview with Alders 2007.



BINGO position, a further assessment of first-level goal attainment is warranted. In the case of AOSIS and the Asian countries, BINGOs made few visible efforts to lobby these groups, and there is no correlation in position. AOSIS has remained true to its long-standing alliance with the ENGOS<sup>108</sup> and opposed CCS in the CDM. While China has not announced its position on the issue, India came out against CCS in the CDM in the Bali contact group.<sup>109</sup> As regards the African delegations, however, the data indicate both correlation and causation. Indeed, the positions of the African delegations changed from initial opposition in Nairobi to explicit support in Bali. The apparent change in their position during the Nairobi conference corresponds with BINGOs' efforts to convince African delegates of the benefits of CCS in the CDM, while the explicit shift in position that became evident in the Bali contact group matches the intention of the CCS-Africa workshops held prior to the meeting. According to Shell, one of the main founders and organizers of CCS-Africa, the workshops made a significant contribution to the shift in position from Nairobi to Bali.<sup>110</sup>

While it is clearly possible to establish first-level BINGO goal attainment towards the African delegations, establishing causation, and thus influence, is problematic. Unfortunately, no African delegate was willing to comment on the degree to which business actors influenced the change in position. Indeed, while the BINGOs and the CCS-Africa workshop organizers viewed their efforts as successful,<sup>111</sup> perceptions of influence can be exaggerated. Therefore, while there is clear evidence of correlation, one can only make a cautious assumption as regards causation between business activities and the positions of the African delegations.

### **Explaining BINGO Efforts: How and Why Are BINGOs Influential?**

The case demonstrates the various ways in which BINGOs seek to influence climate negotiations at the international level. Formal and informal access and communication channels between BINGO staff/members, national delegations and the secretariat facilitate the transmission and exchange of views and information, which may take on various forms ranging from formal letters and policy statements to ad-hoc advocacy papers, workshops and formal or informal meetings. BINGOs lobby a wide range of delegations and secretariat staff during negotiations, including delegations from developing countries, LDC and staff from the UNFCCC subsidiary working bodies. They also cooperate with international institutions to establish arenas for knowledge dissemination and thus

108. See Leggett 2001.

109. Both countries have the potential to receive investments in CCS through the CDM—China particularly due to its large number of coal-fired plants. However, support for CCS may create political tension within the G-7 considering the number of developing countries that are currently opposed to the technology.

110. E-mail correspondence with Wolfgang Heidung, Shell and IPIECA/IETA, 21 February 2008.

111. Research observation and conversations with BINGO members.

information-based advocacy, as was evident with the CCS-Africa workshop. As such, business influence at the international level is enabled by their capacity to draw on established networks of relationships with decision-makers. The case, therefore, does not support the conventional assumption—as posed by Hirst and Thompson<sup>112</sup>—that corporations are less inclined to be transnational agents than are NGOs. These findings also differ from previous research on channels of corporate influence in the climate negotiations, which found that business influence at the international level has been limited due to the absence of social ties between industry groups and country delegates and the apparent insulation of international institutions from business pressures.<sup>113</sup> The case illustrates the relatively recent change in business organization within the climate regime, which may be noted since the adoption of the Kyoto Protocol and its associated flexibility mechanisms.

The CCS case illustrates how BINGO influence within the climate negotiations may be conceptualized as a form of “technological power.”<sup>114</sup> Business’s control and ownership of energy technologies, and its ability to draw on technological expertise and know-how in the context of negotiations, constitute an important source of power. In the climate regime, innovation processes that originate and stem from industry research and practice drive much of the development of new mitigation technologies and regulatory instruments. Indeed, this was the case with geological CCS, which is increasingly recognized as a mitigation option with great potential to reduce emissions on a global basis. Corporate power can therefore be conceptualized partly in structural terms, as derived from business’s innovation capacity and control and ownership of mitigation technologies. But technological power also provides a source of influence in a more relational sense. Business’s expertise and possession of technological information enables it to influence the views and positions of other actors, and the development of policy and regulatory text. In this case, it is clear that IPIECA’s and IETA’s expertise in the field of CCS technologies provided them with a privileged position vis-à-vis the ENGOs in terms of providing input to delegates on the issue, particularly as regards the details of regulatory design. The CCS-Africa workshops, too, illustrate how business’ capacity as technological innovators attributes to them legitimacy as sources of policy-relevant knowledge and as political players. In this case, such legitimacy enabled them to arrange workshops in collaboration with highly acclaimed research institutions and international organizations such as the IEA, IPCC and UNEP, through which business can disseminate information and engage in information-based lobbying and advocacy. As such, the case exemplifies how technological power allows BINGOs “to play a decisive role in shaping regulatory discourses, particularly with regard to the design and phasing of environmental regulations.”<sup>115</sup>

112. Hirst and Thompson 1996.

113. Levy and Egan 1998, 106–107.

114. Falkner 2005, 106.

115. Falkner 2005, 107.

## Conclusion

This article has assessed the nature, scope and effect of the activities and strategies of Business and Industry NGOs (BINGOs) within the international negotiations of the Kyoto Mechanisms under the UNFCCC. The BINGO constituency constitutes an increasingly diverse group of organizations with differing views on climate change mitigation and GHG regulation. Placing BINGOs that are active in the regime along a continuum from “gray” to “green,” it is evident that business activities and mandates have moved towards the green(er) end of the spectrum, reflecting a more general shift in corporate strategies from opposition towards more accommodative and constructive approaches to climate change mitigation.

The paper developed a methodology for measuring and analyzing the influence of BINGOs in the regime. The methodology combines an examination of *how* BINGOs attempt to exercise influence (by looking at access, resources and activities) with an assessment of goal attainment and its determinants in relation to both the negotiation process and the final outcome. This framework was applied to a case study of the negotiation of Carbon Capture and Storage (CCS) technologies as a mitigation option under the CDM. The review of BINGO activities showed that BINGOs appear to have exercised considerable influence on the *process* of negotiating a regulatory design for including CCS as a CDM project activity. The case also established BINGO goal attainment vis-à-vis the African delegations, which changed their position from opposition to support for CCS in the CDM from the Nairobi to the Bali meeting. While the case also indicates causation between BINGO lobbying and advocacy efforts and the position of group of African delegations, the evidence only warrants a cautious inference of the influence of BINGOs in this particular case.

In contrast to previous research on business influence in the climate negotiations, this paper has demonstrated how BINGOs strategically utilize networks, informal relationships and social ties with a multitude of delegations, international organizations and UNFCCC secretariat staff to disseminate information about business preferences and put pressure on decision-makers. Consequently, transnational networks appear to facilitate business efforts to influence the negotiation process at the international level, which corresponds to a growing emphasis on the regulatory effects of networks in the literature.<sup>116</sup> It is also evident that the technological ownership, innovation capacities and know-how of BINGOs and their members provide them with particular capabilities and leverage vis-à-vis other nonstate actors. Technological power enables business to influence delegations and to play a central role in the shaping of regulatory frameworks for climate change mitigation.

116. Haas 1992; Keck and Sikkink 1998; Reinecke and Deng 2000; Thompson 2003; Slaughter 2004; and Djelic and Sahlin-Andersson 2006.

## References

- Alpin, J., and H. Hegarty. 1980. Political Influence: Strategies Employed by Organizations to Impact Legislation in Business and Economic Matters. *Academy of Management Journal* 23 (23): 438–450.
- Bachrach, Peter. 1967. *The Theory of Democratic Elitism: A Critique*. Boston, MA: Little, Brown.
- Betsill, Michele and Elisabeth Corell. 2001. NGO Influence in International Environmental Negotiations: A Framework for Analysis. *Global Environmental Politics* 1 (4): 65–85.
- Boyle, G. 2004. *Renewable Energy: Power for a Sustainable Future*. Oxford: Oxford University Press in association with the Open University.
- Business Council for Sustainable Energy (BCSE). 2006. An Energy Agenda for the 21<sup>st</sup> Century. Available at <http://www.bcse.org/>, accessed 12 December 2006].
- Corell, Elisabeth and Michele Betsill. 2001. A Comparative Look at NGO Influence in International Environmental Negotiations: Desertification and Climate Change. *Global Environmental Politics* 1 (4): 86–107.
- Cox, Robert W. and Harold K. Jacobson. 1973. *The Anatomy of Influence: Decision Making in International Organizations*. New Haven, CT: Yale University Press.
- Dahl, Robert. 1957. The Concept of Power. *Behavioral Science* 2 (3): 201–215.
- Depledge, Johanna. 2005. *The Organization of Global Negotiations: Constructing the Climate Change Regime*. London: Earthscan.
- Djelic, Marie-Laure and Kerstin Sahlin-Andersson, eds. 2006. *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge: Cambridge University Press.
- Falkner, Robert. 2005. The Business of Ozone Layer Protection: Corporate Power in Regime Evolution. In *The Business of Global Environmental Governance*, edited by David L. Levy and Peter J. Newell, 105–135. Cambridge, MA: MIT Press.
- Foucault, Michel. 1984. *Essential Works of Foucault*. London: Penguin.
- Four Corners. 2006. Interview with Dr. Guy Pearse. Transcript of Janine Cohen's interview with Dr Guy Pearse, Speechwriter for the Environment Minister 1997–2000. Available at <http://www.abc.net.au/4corners/content/2006/s1568353.htm>, accessed 14 December 2006.
- Haas, Peter. 1992. Epistemic Communities and International Policy Coordination. *International Organization* 46 (1): 1–35.
- Haugaard, M. 2002. *Power: A Reader*. Manchester: Manchester University Press.
- Hillman, Amy J. and Michael A. Hitt. 1999. Corporate Political Strategy Formulation: A Model of Approach, Participation and Strategy Decisions. *Academy of Management Review* 24 (4): 825–842.
- Hirst, Paul and Grahame Thompson. 1996. *Globalization in Question*. Cambridge: Polity Press.
- Intergovernmental Panel on Climate Change (IPCC). 2005. *IPCC Special Report on Carbon Capture and Storage*. New York: Cambridge University Press.
- International Emissions Trading Association (IETA). 2006. Sustainable Market Solutions for Global Environmental Problems. Available at <http://www.ieta.org/ieta/www/pages/getfile.php?docID?858>, accessed 12 December 2006.
- International Energy Agency. 2004. *Prospects for CO<sub>2</sub> Capture and Storage*. Energy Technol-

- ogy Analysis. Report by OECD/IEA. Available at <http://www.iea.org/textbase/nppdf/free/2004/prospects.pdf>, accessed 2 January 2007.
- Keck, Margaret E., and Kathryn Sikkink. 1998. *Activists Beyond Borders: Advocacy Networks in International Politics*. Ithaca, NY: Cornell University Press.
- Khagram, Sajneev, James V. Riker and Kathryn Sikkink. 2002. *Restructuring World Politics. Transnational Social Movements, Networks and Norms*. Minneapolis, MN: University of Minnesota Press.
- Knoke, David. 1990. *Political Networks: The Structural Perspective*. Cambridge: Cambridge University Press.
- Labatt, Sonia and White, Rodney R. 2007. *Carbon Finance. The Financial Implications of Climate Change*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Leggett, Jeremy. 2001. *The Carbon War. Global Warming and the End of the Oil Era*. New York: Routledge.
- Levy, David L. 2005. Business and the Evolution of the Climate Regime: The Dynamics of Corporate Strategies. In *The Business of Global Environmental Governance*, edited by David L. Levy and Peter J. Newell, 73–105. Cambridge, MA: MIT Press.
- Levy, David L. and Daniel Egan. 1998. Capital Contests: National and Transnational Channels of Corporate Influence on the Climate Change Negotiations. *Politics and Society* 26 (3): 335–359.
- 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 (4): 803–829.
- Levy, David L., and Peter J. Newell. 2002. Business Strategy and International Environmental Governance: Towards a Neo-Gramscian Synthesis. *Global Environmental Politics* 2 (4): 84–101.
- Levy, David L. and Peter J. Newell. 2005. *The Business of Global Environmental Governance*. Cambridge, MA: MIT Press.
- Lukes, Steven. 1974. *Power: A Radical Approach*. London: MacMillan.
- Miles, Matthew B., and Michael A. Huberman. 1994. *Qualitative Data Analysis*, 3rd edition. Thousand Oaks, CA: Sage Publications.
- Newell, Peter J., and Matthew Paterson. 1998. A Climate for Business: Global Warming, the State and Capital. *Review of International Political Economy* 5 (4): 679–703.
- Newell, Peter J. 2000. *Climate for Change: Non-State Actors and the Global Politics of the Greenhouse*. Cambridge: Cambridge University Press.
- Princen, Thomas and Matthias Finger. 1994. *Environmental NGOs in World Politics: Linking the Local and the Global*. London: Routledge.
- Reinecke, Wolfgang H. and Francis Deng. 2000. *Critical Choices: The United Nations, Networks and the Future of Global Governance*. Ottawa: International Development Research Center.
- Skjærseth, Jon B. and Tora Skodvin. 2003. *Climate Change and the Oil Industry: Common Problems, Varying Strategies*. New York: Manchester University Press.
- Slaughter, Anne-Marie. 2004. *A New World Order*. Princeton, NJ: Princeton University Press.
- Sourcewatch, 2006. The Global Climate Coalition (GCC). Available at [http://www.sourcewatch.org/index.php?title?Global\\_Climate\\_Coalition](http://www.sourcewatch.org/index.php?title?Global_Climate_Coalition), accessed 14 December 2006.
- Thompson, Grahame F. 2003. *Between Hierarchies and Markets: The Logic and Limits of Network Forms of Organization*. New York: Oxford University Press.

- Timberlake, Lloyd, for the World Business Council for Sustainable Development. 2006. *Catalyzing Change: A Short History of the WBCSD*. Atar Roto Presse SA. Available at [www.wbcsd.org](http://www.wbcsd.org), accessed 1 October 2007.
- Torvanger, Asbjørn, Kristin Rypdal and Steffen Kallbekken. 2005. Geological CO<sub>2</sub> Storage as Climate Change Mitigation Option. *Mitigation and Adaptation Strategies for Global Change* 10: 693–715.
- United Nations Framework Convention on Climate Change. 2006a. *Consideration of Carbon Capture and Storage and Clean Development Mechanism Activities. Submissions from Parties*. 13 March. Workshop working paper, Bonn, 22 May 2006.
- United Nations Framework Convention on Climate Change (UNFCCC). 2006b. Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol. *Further Guidance Related to the Clean Development Mechanism. Decision FCCC/KP/CMP/2006/L.8*. Nairobi, 17 November.
- United Nations Framework Convention on Climate Change (UNFCCC). 2007. Subsidiary Body for Scientific and Technological Advice. *Carbon dioxide capture and storage in geological formations as clean development mechanism project activities. Decision FCCC/SBSTA/2007/L.19*. Bali, 10 December
- Zürn, Michael. 1998. The Rise of International Environmental Politics: A Review of Current Research. *World Politics* 50 (4): 617–649.











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From Foe to Friend? Business, the Tipping  
Point and U.S. Climate Politics

**Irja Vormedal**, *University of Oslo*



# From Foe to Friend? Business, the Tipping Point and U.S. Climate Politics

Irja Vormedal

## Abstract

This article develops a model for analyzing corporate strategy formation and regulatory change in environmental politics. The model emphasizes how conditions that materialize through the dynamic interplay between corporate preferences and multilevel environmental governance can trigger the emergence of “tipping points,” at which a critical mass of leading industries begin to push for regulatory change. It is argued that tipping points often generate new political momentum and may lead to considerable progress in political and legislative bargaining. The model is applied to a case study of U.S. climate politics between 1990 and 2010. The case demonstrates that the tipping point model provides a plausible account of the intersection between business strategies and the failures and successes of federal climate action in this period.

**KEYWORDS:** environmental governance, tipping point, business, climate politics

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## Introduction

When climate change first emerged on the political agenda in the early 1990s, talk of the need to curb emissions of carbon dioxide and other greenhouse gases (GHGs) encountered strong and united, business opposition. Throughout the 1990s, the fossil-fuel lobby—representing leading U.S. companies from the oil, coal, chemical, and automobile industries—led a public and political crusade against GHG regulations which severely limited the viability of federal action. These pollution-intensive industries obscured the science and economics of GHG regulation by funding contrarian research, negative advertisement and direct lobbying of Congress and the White House. Indeed, it is widely acknowledged that business opposition to GHG regulation provides a major explanation for Washington’s lack of climate action in the 1990s and well into the next decade, including the blockage of Kyoto Protocol ratification.

However, by the turn of the century, it became increasingly evident that a growing, albeit small, number of prominent U.S. corporations were beginning to adopt more accommodating approaches to climate change mitigation. By 2005, the number of climate-constructive business organizations had increased significantly. By 2007, a coalition of leading U.S. industries, including some of America’s largest utilities, coal mining, chemical manufacturers and environmental organizations, had established a new pro-regulation lobby. Now, the gradual shift in business strategy from opposition to regulatory support had become manifest in political action, and as the coalition started lobbying the Capitol for a federal cap-and-trade program, the previous business veto on climate legislation was effectively broken.

This article provides an account of this strategic shift amongst leading U.S. industries from opposition to support for GHG legislation and examines its effect on U.S. climate politics. It begins by presenting a model for analyzing change in business political strategies that emphasizes how the dynamics between embryonic, multilevel governance and corporate preferences can generate new conditions for change and lead to so-called “tipping points” in business strategies. Tipping points are defined as thresholds at which the strategies of a critical mass of affected industries have begun to exercise support and push for regulatory change.<sup>1</sup> It is argued that the materialization of a tipping point is also likely to generate new political momentum and more enabling conditions for political bargaining, which may spur considerable progress in the legislative process.

The tipping point model is then utilized to analyze U.S. climate politics between 1990 and 2010. Through a detailed case study of business lobbying and the evolution of climate politics in this period, this model demonstrates how the

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<sup>1</sup> Vormedal 2011.

strategies of a prominent share of leading U.S. businesses “tipped” in response to emerging conditions. The analysis also illustrates that while business opposition provided a major obstacle to regulatory change for over a decade, this dynamic clearly changed after the manifestation of a tipping point. Indeed, from 2007, many previously antagonistic U.S. businesses started to play an enabling and constructive role in the drafting of new GHG legislation. First, in the negotiation and drafting of the Waxman-Markey climate bill—which was successfully adopted by the House of Representatives in July 2009—and second, in negotiating and collecting support for the Senate version of the bill, known as the Kerry-Lieberman-Graham (KGL) “tripartisan” initiative. However, despite widespread business support and lobbying for its adoption, the KGL ultimately fell short of collecting the 60 Senate votes needed for it to become legislation. But this time around it was not business opposition but the lack of presidential commitment and the tough political environment before the midterm election that led senators to pull the plug on climate legislation in the 111<sup>th</sup> Congress.

*The Interplay between Environmental Governance and Business Strategies: The Tipping Point Model*

All corporations operate within a broader societal structure that determines the scope and conditions for current and future business operations. Changes in a corporation’s external environment, such as new regulations and policies, technological developments, shifts in public opinion or consumer preferences, can alter the limits and possibilities of business conduct. Corporations must therefore continuously consider how expectations, demands, and future trends in the external environment are likely to affect their organization.<sup>2</sup>

For those corporations whose operations, products or services cause environmental degradation, new mitigation policies and regulations may limit their ability to conduct business as usual. Regulations that require a significant reduction of hazardous emissions may induce high compliance and adjustment costs if there is no technologically feasible or commercially viable alternative. Because such environmental regulations may threaten the business models of large emitters, the anticipation of new regulations and/or de-facto regulatory developments represent an important determinant of corporate strategy.<sup>3</sup>

When proposals for new environmental regulations first emerge on the policy agenda, affected industries are likely to pursue a strategy of opposition. Indeed, initial business resistance to emerging environmental governance—such as publicly questioning the underlying scientific claims and warning against the

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<sup>2</sup> Johnson et al. 2005; Gunningham et al. 2003.

<sup>3</sup> Henriques and Sadorsky 1995; Rugman and Verbeke 1998a; 1998b.

costs associated with regulatory action—is well documented.<sup>4</sup> For example, in the case of ozone layer depletion, the large producers of Chlorofluorocarbons (CFCs)—the major ozone depleting substance—led a Congressional lobbying effort which argued that the scientific basis for regulatory action was weak and inconclusive, and that any mandatory restriction on the use of CFCs would be too costly.<sup>5</sup>

However, under certain conditions that may emerge as a particular issue area of environmental governance matures, business opposition is likely to decrease, become more fragmented and shift towards regulatory support. This model emphasizes three conditions that may cause corporations and business lobbies to begin to support and/or push for the adoption of new environmental regulations; i) the emergence of uneven playing fields, ii) the increase of regulatory threats and uncertainties and iii) the proliferation of new market opportunities.

First, efforts to deal with modern environmental problems are usually multiple and fragmented. Such environmental problems are commonly trans-boundary in nature, meaning that pollution or toxic wastes are transmitted through water or air across geopolitical units. The effects of trans-boundary pollution are experienced not only near the source but also far from the source, and even to other countries in the GHG case. Moreover, the globalization of the world economy has led to a diffusion of environmentally-harmful production methods and products. Multinationals have amplified the transnational nature of environmental problems by moving their production to and between new, low-cost regions and countries. While some local environmental problems such as the depletion of a natural resource might be treated in isolation, efforts to mitigate trans-boundary and transnational problems seldom emerge in one country alone. Therefore, they are likely to clarify calls for concerted international action.

The emergence of an international regime often marks a defining moment in time when the environmental problem's scientific evidence, salience and urgency has gained almost universal acceptance. Yet, processes of institutional formation are usually tedious and may be stalled by countries seeking to free-ride on the actions of others. Therefore, in its early phases of development, environmental-governance structures may constitute an uneven patchwork of different standards and measures at multiple and sometimes overlapping levels. This scenario in-effect creates uneven playing fields for regionally and/or globally competitive industries, as companies operating in regulated localities have a competitive disadvantage vis-à-vis companies operating in unregulated or less regulated areas. At this point we may expect those industries that are

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<sup>4</sup> Falkner 2008, 54.

<sup>5</sup> *Ibid.*, 55.



disproportionally disadvantaged by non-universal compliance costs to begin to push for regionally or internationally harmonized rules.<sup>6</sup>

Second, the growth of governance measures and political pressures for new or more stringent regulations will increase perceptions of regulatory uncertainty and risks among liable industries. Because uncertainty impedes corporations' ability to plan future investments, over time the cost of inaction may be perceived as greater than the cost of compliance. Furthermore, if political momentum for regulation persist and corporations are faced with a high probability or perceived inevitability of being regulated in the short to medium term, many liable industries may begin to prefer to adopt regulations to enhance predictability. Many will also seek to support and become constructively engaged in the regulatory process in order to get a seat at the negotiating table, where they can push for and shape rules that favor their strategic positioning.<sup>7</sup>

Third, regulatory uncertainties also create business opportunities. Environmental regulations, or the credible threat of future regulations, signal the coming of a market shift towards greener production and may spur investments in clean technologies and production methods. Early movers in the development of technological solutions may find their strategic positioning improved vis-à-vis competitors. As Falkner argues, 'if market leaders can hope to lower the compliance costs relative to their competitors, then an increase in regulatory standards and compliance costs may shift the competitive balance in their favor, thus making regulation more acceptable to them.'<sup>8</sup> Therefore, market opportunities related to new regulation may impel emerging technological frontrunners to begin to pursue a strategy of regulatory entrepreneurship.<sup>9</sup>

In sum, under and in response to one or a combination of the above conditions—including emerging or de-facto uneven playing fields, the growth of regulatory threats and uncertainties, and the proliferation of market opportunities—the strategies of affected corporations and business lobbies may shift from opposition to regulatory support and entrepreneurship.

The model identifies the threshold at which a critical mass of leading industries and business lobbies begins to lobby for regulatory change as the manifestation of a "*tipping point*." Tipping points signal the disruption of a previous trajectory or path and the commencement of new political advocacy and action. The concept of tipping was first introduced by sociologists studying segregation in American cities.<sup>10</sup> Later, it was further developed by Schelling, who defined tipping as the point "when a recognizable new minority enters a

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<sup>6</sup> Vormedal 2011; DeSombre 1995.

<sup>7</sup> Hoffman and Woody 2008, 20; Vormedal 2011.

<sup>8</sup> Falkner 2008, 34.

<sup>9</sup> Vormedal 2011.

<sup>10</sup> Grodzins 1957; Mayer 1960.

neighborhood in sufficient numbers to cause the earlier residents to begin evacuating.”<sup>11</sup> In contrast to more recent and popular notions of tipping points—such as Malcom Gladwell’s definition of tipping as ‘change that does not happen gradually but at one dramatic moment’<sup>12</sup>—this article departs from Schelling’s notion of it as a threshold which is part of a gradual and cumulative process of change. It begins among the few, gradually builds up to change among a critical mass, and becomes manifest in new forms of political activity.

It should be noted that a tipping point in business strategies does not imply that all liable industries and business lobbies have become regulatory entrepreneurs or favor legislation, but that a clearly identifiable and prevailing group of corporations and/or business lobbies—large enough to make a political difference—have begun to exercise support and push for regulatory change.<sup>13</sup>

The rate of change may depend on the nature of existing triggers and conditions. First, the velocity and form of the embryonic, environmental governance structures influence perceptions of risks and opportunities and therefore strategy construction. Stronger political and regulatory momentum hastens strategic change, while political setbacks and decreasing momentum may cause the process to slow down. Second, the more fragmented and uneven the playing field, the larger the efforts by competitively-disadvantaged industries to lobby for harmonized rules. Third, change will depend on available adaptation strategies, i.e. rate of innovation and the commercial viability of alternative technologies and production methods. Finally, one might also identify a certain psychological dynamic behind and inherent to the tipping point process. Perceptions of risk are often informed by the risk perceptions of others. The likelihood of universal adoption increases when a particular interpretation of threats and opportunities is shared by a critical mass of market actors. Because an actor’s strategy is partly influenced by de-facto or expected actions of others, tipping points are more likely to materialize when a sizeable share of dominant corporations anticipates that future adoption of regulation is very likely, if not inevitable.

Empirically, the observed and verifiable change in the strategies, goals and activities of business lobbies over time provides a functional indicator of a tipping point. The most prominent and active business lobbies in a particular issue area usually represent large and dominant market actors directly affected by the existing or proposed regulations. The process of “tipping” can thus be informed by longitudinally tracking changes in the constellation of strategies and activities of dominant business lobbies.

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<sup>11</sup> Schelling 1971, 181.

<sup>12</sup> Gladwell 2000, 9.

<sup>13</sup> Vormedal 2011.

Tipping points are also likely to spur the creation of “Baptist and bootlegger” coalitions of business and environmental organizations. In the analogy, both ‘Baptists and bootleggers favor prohibition or regulations on alcohol, the former for religious or moral reasons, the latter because of the profit they can make on illegal liquor.’<sup>14</sup> In this case, environmental organizations and businesses will join forces to lobby for regulations, the former for moral reasons, and the latter for reasons of competitiveness. Finally, a tipping point in business strategies may also generate new political momentum. When the strategies of key business lobbies ‘tip’ and these groups begin to push for the adoption of new regulation and/or legislation, it improves conditions for political bargaining and places constructive pressure on the rule-making process. The dispersion of antagonistic lobbying and the parallel emergence of lobbying *for* regulatory change may thus spur legislators to take action.

The tipping point model differs from other, notable frameworks for analyzing the intersection of business strategies and environmental governance. The neo-Gransican model rightly emphasizes how business strategies are structurally determined, that is, how they are influenced by the evolution of environmental governance itself. Yet, the *a priori* assumption of markets and market actors’ structural power in the construction of hegemonic fields<sup>15</sup> in environmental governance<sup>16</sup> provides a rather deterministic account of regulatory outcomes. The model lacks a more precise notion of how dynamics between structures and actors’ preferences can generate conditions for trajectory change. The neo-pluralist school, on the other hand, provides a less deterministic account that considers environmental governance a pluralistic field where the power of actors to shape policy outcomes is determined by the particular range of constraints and opportunities pertaining to the given issue-area.<sup>17</sup> Falkner’s model for business power and conflict<sup>18</sup> has contributed significantly to our understanding of corporate preference and strategy formation. However, it fails to explain how and why business strategies change over time and provides an unsatisfactory account of how dynamics between strategic engagement and governance can generate conditions for change. Therefore, by emphasizing and demonstrating mechanisms for change and the significance of dynamic thresholds in triggering momentum and progress, the tipping point model provides a timely extension of the neo-pluralist account of the intersection of business strategies and environmental governance.

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<sup>14</sup> DeSombre 1995, 54.

<sup>15</sup> Hegemony is defined as the unison of economic, political and ideological aims and beliefs amongst members of a dominant group who exercise leadership in society.

<sup>16</sup> Levy and Newell 2005.

<sup>17</sup> Cerny 2010.

<sup>18</sup> Falkner 2008.

In the next section, the article utilizes the tipping point model to analyze the development of business lobbying and climate change politics in the United States between 1990 and 2010.

### *Business Strategies and Climate Change Politics in the United States*

Climate change represents one of the most complex and pressing environmental problems facing mankind today. Since 1850, the global mean temperature has increased by 0.76° C, and if appropriate action is not taken, the average surface temperature is likely to rise by a further 1.8- 6.4° C over the course of the century.<sup>19</sup> An overwhelming majority of scientists now conclude that most warming since the advent of the industrial era is caused by human activities which release heat-trapping greenhouse gases (GHGs) into the atmosphere.<sup>20</sup> The most important sources of GHGs are fossil-fuel consumption, agriculture, and land-use changes such as deforestation. If temperatures rise more than 2° C above pre-industrial levels, global warming may bring about irreversible and potentially catastrophic changes in the earth's climate system. Widespread melting of snow and ice would cause sea levels to rise between 18 and 59 cm, producing more frequent and extreme weather events including droughts, floods and storms.<sup>21</sup> As such, climate change is not only an environmental problem, but represents an all-encompassing threat to development, economic growth, human security, food supplies and health.<sup>22</sup>

### *Denial and Opposition: A Non-Climate for Change*

In the United States, climate change first emerged on the political agenda in the early 1980s. In response to growing alarm from scientists, a number of congressional hearings were held to investigate the global warming problem. In 1988 Dr. Hansen of NASA testified to the House that the greenhouse effect was already occurring, and that an almost unprecedented warming of the earth's atmosphere was to be expected in the coming century.<sup>23</sup> Climate change quickly rose to become an internationally recognized problem, and in 1990, when the newly established Intergovernmental Panel on Climate Change (IPCC) concluded that GHGs were likely to cause global warming, the international community called for negotiations for a multilateral convention to curb the rise of GHG emissions.

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<sup>19</sup> Intergovernmental Panel on Climate Change 2007b.

<sup>20</sup> Intergovernmental Panel on Climate Change 2007a; Human Development Report 2007/8.

<sup>21</sup> Intergovernmental Panel on Climate Change 2007c.

<sup>22</sup> Human Development Report 2007/8; Agder et al. 2003; O'Brien 2006.

<sup>23</sup> Manzur and Lee 1993.

Fossil-fuel-intensive industries reacted swiftly and aggressively in response to the emerging regulatory threat. Over 50 companies and trade associations from oil, coal, chemical manufacturing and automobile industries formed a new, anti-regulation lobby—the Global Climate Coalition (GCC)<sup>24</sup>—which quickly rose to become the most prominent business voice on climate change. To block U.S. legislative action, the GCC sought to spread doubt about the scientific and economic basis for limiting GHG emissions. The lobby argued that the theory of anthropogenic warming was based on a series of scientific uncertainties, and that the observed rise in the average ocean and air temperatures reflected a natural climate variability. They also argued that regulating GHGs would be too costly and cause serious economic decline and loss of employment in the United States.<sup>25</sup>

In 1992, President George H.W. Bush signed the UN Framework Convention on Climate Change (UNFCCC), which established a shared goal to stabilize GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system (Article 2). But since the Convention did not include mandatory targets and timetables for emissions reductions, the GCC considered their campaign a success.<sup>26</sup>

After the ratification of the UNFCCC and during the years of the Clinton administration (1992-2000), the GCC scaled up their efforts to prevent Congress and the White House from adopting federal climate policies and legislation. When President Clinton proposed the BTU tax<sup>27</sup> in 1992 to achieve his campaign goal of reducing emissions to 1990 levels, the business lobby quickly set out to melt it down. In 1993 the bill was declared dead due to the vast opposition from industry associations.<sup>28</sup> The GCC used advertising and “front groups” to spread opposition to climate action amongst the general public. For example, the Information Council for the Environment (ICE)<sup>29</sup> launched a number of media campaigns which sought “to reposition global warming as a theory, not a fact,” targeting what they considered vulnerable groups such as “older, less educated men” and “young, low income women.”<sup>30</sup> GCC members also set up a Science Advisory

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<sup>24</sup> GCC members included American Petroleum Institute, Amoco, Chevron, the Chrysler Corporation, Dow Chemicals, Duke Energy, DuPont, Edison Electric Institute, ExxonMobil, the National Mining Association, Shell, and Texaco, U.S. Chamber of Commerce.

<sup>25</sup> Dunn 2002; Levy 2005; Levy and Egan 1998; Skodvin and Skjærseth 2003; Corporate Watch Magazine 1997. *Disguise the limit: The Global Climate Coalition*. Issue 4.

<sup>26</sup> Legget 2001; Newell and Paterson 1998; Levy and Egan 1998.

<sup>27</sup> Legget 2001; Newell and Paterson 1998; Levy and Egan 1998.

<sup>28</sup> Pooley 2010, 86-87; Levy and Egan 1998; Skodvin and Andresen 2009.

<sup>29</sup> The ICE was founded in 1991 by GCC members from the coal, oil and utility industries—including the Edison Electric Institute and the National Coal Association.

<sup>30</sup> Levy and Egan 1998, 350; Pooley 2010, 41.

Panel fronted by prominent climate skeptics<sup>31</sup> that received industry funding. Some ran advertisements on TV and distributed educational kits for classrooms, which argued that climate change was not a real problem.<sup>32</sup> In addition, the lobby commissioned a series of economic studies, which argued that GHG regulation would cause serious economic decline and that measures to curb emissions by 20 percent would reduce GDP by 4 percent and slay 1.1 million jobs annually.<sup>33</sup> In Congress, the GCC successfully managed to gain the support of a key group of Republicans.<sup>34</sup> In a 1995 congressional hearing, the chair of the House Science Subcommittee on Energy and Environment, Dana Rohrabacher, invited several industry-funded “skeptics” to testify before her committee, after which she publicly declared global warming a “liberal clap trap.” Later that year, the House approved a bill that prohibited the EPA from spending money on climate change research.<sup>35</sup>

Meanwhile, the Clinton administration agreed to the “Berlin Mandate” which established a path for negotiating international reduction targets for industrialized countries under the UNFCCC. The GCC responded with a third line of attack, focusing on the loss of U.S. competitiveness under an international protocol that exempted developing countries from legally binding emission limitations. To prevent U.S. participation, the GCC allegedly hand-picked Senator Chuck Hagel of Nebraska to sponsor a “sense of the senate” resolution together with Senator Robert Byrd (West Virginia),<sup>36</sup> which stated that “the United States should not be a signatory to any protocol, at negotiations in Kyoto or thereafter, which do not mandate developing nations to abide by the same restriction imposed on the United States, or that would result in serious harm to the U.S. economy.”<sup>37</sup> Four months prior to the Kyoto meeting, the senate adopted Byrd-Hagel by a unanimous vote (97-0). While the Clinton administration signed the Kyoto protocol in 1997, the President never submitted the treaty for ratification in the Senate because it would have suffered humiliating defeat.<sup>38</sup>

In 2000, the newly elected President George W. Bush announced that his administration would formally withdraw its Kyoto signature due to lack of Senate support and its negative effects on growth, jobs and U.S. competitiveness.<sup>39</sup> Anti-

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<sup>31</sup> These included S. Fred Singer, Pat Michaels and Robert Balling.

<sup>32</sup> Levy and Egan 1998; Levy 2005.

<sup>33</sup> Levy and Egan 1998, 351.

<sup>34</sup> Including the Chair of the House Science Subcommittee on Energy and Environment Dana Rohrabacher (California), the House Majority Whip John Doolittle (California) and Chair of the Science Committee Robert Walker (Pennsylvania).

<sup>35</sup> Levy and Egan 1998, 344.

<sup>36</sup> Fischer 2006.

<sup>37</sup> Byrd-Hagel Resolution, 105<sup>th</sup> Congress, 1<sup>st</sup> Session, S. Res. 98.

<sup>38</sup> Interview with Senator Byrd.

<sup>39</sup> Speech delivered in Washington by President George W. Bush on 11 June 2001.

climate business lobbyists played a major role the construction of the new White House climate policy or lack thereof. In 2001, the administration hired the ex oil-lobbyist Philip Cooney<sup>40</sup> as chief of staff at the White House Council on Environmental Quality (CEQ),<sup>41</sup> and former ExxonMobil lobbyist Larisa E. Dobriansky as deputy assistant secretary for national energy policy with responsibility for managing the department's Office for Climate Change Policy. At the CEQ, Cooney led a systematic effort to downplay the urgency of climate action by editing climate change reports produced by the federal bureaucracy. According to a House committee investigation, Cooney made nearly 300 edits to the administration's Climate Change Science Program's strategic plan, edits designed to "exaggerate or emphasize scientific uncertainties or to deemphasize or diminish the importance of the human role in global warming."<sup>42</sup> Furthermore, in the EPA's Draft Report on the Environment, White House staff insisted on edits so extreme that the EPA choose to eliminate the entire section on climate change.<sup>43</sup> However, by 2005, the formal influence of these corporate lobbyists came to a halt. After a leak exposing Cooney's edits to the New York Times, he resigned from the White House and went to work for ExxonMobil.<sup>44</sup> The Guardian also exposed documents that showed the Under Secretary of State Paula Dobriansky, Larisa Dobriansky's sister, thanking ExxonMobil executives for their active engagement with the administration on climate change policy. This indicated that the President's withdrawal from Kyoto was partly based on input from the GCC.<sup>45</sup>

In sum, the above review of business lobbying during the Bush Sr., Clinton and Bush Jr. administrations clearly illustrate how business opposition to climate policy and legislation severely limited the scope for federal action to mitigate climate change.

### *Scaling Up: Emerging, Multilevel Climate Governance*

Nevertheless, by the turn of the century, a new wave of climate-related governance initiatives emerged at the state and municipal levels. State-level regulation is significant because large U.S. states such as Texas and California have emissions equivalent to or larger than many key industrialized countries

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<sup>40</sup> For fifteen years Cooney worked as a lobbyist for the American Petroleum Institute (API). At the API Cooney had worked to ensure that federal climate policy was consistent with the objectives of Big Oil, and to make sure that uncertainties and doubts regarding global warming science became part of the conventional wisdom.

<sup>41</sup> Pooley 2010, 46.

<sup>42</sup> Ibid., 47.

<sup>43</sup> Ibid., 47.

<sup>44</sup> Ibid., 47.

<sup>45</sup> The Guardian, "Revealed: How Oil Giant Influenced Bush," 8 June 2005.

participating in the Kyoto Protocol. By 2006, 28 states had issued climate action plans, 9 had established state-wide GHG reduction targets, and 22 had implemented renewable energy portfolio standards for electric utilities and power plants. Half of all U.S. states had also established public funding in support of energy efficiency and/or renewable energy development.<sup>46</sup> In California, the legislature has adopted targets to reduce GHG emissions 11 percent by 2010, 25 percent by 2020 and 80 percent by 2050 in large industrial sectors such as utilities, oil refining and cement production.<sup>47</sup> Governor Schwarzenegger has also launched an initiative to regulate carbon dioxide emissions from vehicles.<sup>48</sup> Many other states have joined forces to establish common GHG reduction goals and regulatory systems. In 2001, six New England states committed to reduce their emissions to 1990 levels by 2010 and 10 percent below 1990 levels by 2020. In 2005, ten North-East and Mid-Atlantic states formed the 'Regional Greenhouse Gas Initiative' (RGGI): a cap-and-trade scheme which aims to stabilize emissions from large power plants from 2009 to 2014, and subsequently to ratchet-down GHG caps by 25.5 percent a year.<sup>49</sup>

Furthermore, a coalition of states has engaged in a series of legal suits against the federal government for its inaction on climate change mitigation. In 1999, the International Centre for Technology Assessment and 18 other organizations petitioned the EPA to establish GHG standards for new vehicles under the Clean Air Act. In 2003, the EPA denied the petition, since Congress had not granted EPA the authority to regulate GHGs.<sup>50</sup> A few months later, the state of Massachusetts, joined by 12 other states<sup>4</sup> and U.S. territories, filed a new petition to review the EPA's ruling, but in 2005 the Court of Appeals sided with the EPA. Despite this setback, Massachusetts et al. appealed to the U.S. Supreme Court<sup>51</sup> and in 2007 it ruled in their favor, requiring the EPA to assess and adopt an official position on the public health risks posed by GHG emissions. The Court's decision granted the EPA the authority needed to regulate GHGs.<sup>52</sup>

The number of U.S. municipalities implementing climate-change policies also grew during this period. By 2006, 150 out of 674 local governments participating in the Cities for Climate Protection program (CCP)<sup>53</sup> were located in the United States. Participation in the CCP requires cities to establish energy and emissions inventories and forecasts, emissions reduction targets, a plan for implementation and a process for monitoring and verifying results. Furthermore,

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<sup>46</sup> Selin and VanDeveer 2007.

<sup>47</sup> California Assembly Bill 32, The Global Warming Solutions Act.

<sup>48</sup> California Low Carbon Fuel Standard.

<sup>49</sup> An initiative of the Northeast and Mid-Atlantic States of the United States.

<sup>50</sup> United States Environmental Protection Agency. 28 August 2003.

<sup>51</sup> "EPA Set to regulate Greenhouse Gas Emissions," by Brian Lewis, Ph.D. 26 July 2010.

<sup>52</sup> Supreme Court Decision on Massachusetts et al. vs. EPA. 2 April 2007.

<sup>53</sup> The CCP is part of the International Council for Local Environmental Initiatives.



by 2006 over 275 mayors representing more than 48 million Americans had accepted Mayor Nickels' (Seattle) challenge to adopt the U.S.-Kyoto commitment.<sup>54</sup>

Meanwhile, other industrialized nations were moving forward to ratify the Kyoto Protocol and implement national and/or regional systems for reducing GHGs. In 2003, the European Union (EU) adopted Directive 2003/87/EC establishing the world's largest, economy-wide GHG trading program—the EU Emissions Trading System (ETS)—which entered into force in January 2005. The system also linked up with Kyoto's Clean Development Mechanism (CDM), allowing European industry to buy and sell most credits acquired from emissions-reduction projects in developing countries.<sup>55</sup>

After the White House's withdrawal from Kyoto, several attempts to introduce federal, emissions-trading-based legislation emerged in the Capitol, albeit unsuccessfully. In 2003, Senators Joe Lieberman and John McCain sponsored the Climate Stewardship act, which sought to reduce GHG emissions from major utilities through federal cap-and-trade. The bill was defeated 55 to 43 in a Senate vote. A revised version of McCain-Lieberman was also defeated in 2005, this time collecting only 38 votes.<sup>56</sup> Yet, the congressional debates on federal climate action were becoming more substantial and constructive. In 2005, the Senate adopted a "sense of the senate" resolution stating that human activity was causing climate change, and that this required the Senate to implement federal legislation in the future.<sup>57</sup>

These developments illustrate that despite the lack of federal climate policy and regulation in this period, from the turn of the century many U.S. industries nevertheless faced growing regulatory pressures at home and abroad. The establishment of new regulatory schemes at the state level and in other developed economies, coupled with the Supreme Court ruling which granted the EPA authority to regulate GHGs in the future, signaled that the political momentum to legally curb GHGs was not going to fade. Indeed, in the medium to

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<sup>54</sup> Selin and VanDeever 2007.

<sup>55</sup> Ironically, the concept of emissions trading was not born in the EU but in Washington. The idea—influenced by the EPA Acid Rain Program, which established cap-and-trade scheme for sulfur dioxide and nitrogen oxides—was first developed by the Environmental Defense Fund (EDF). In 1996, the EDF began selling it to the EPA, Energy Department, State Department and finally the White House, who took it to Kyoto. Indeed, at this point the Europeans were skeptical of this American innovation, which many believe contained too many American "capitalist characteristics." But lead negotiator Eizenstat managed to reach a compromise: In exchange for "market mechanisms" the United States would agree to stronger emission reduction targets. However, the problem was that due to the Byrd-Hagel resolution, global cap-and-trade wouldn't fly in the U.S. Senate.

<sup>56</sup> Pooley 2010.

<sup>57</sup> Selin and VanDeever 2007.

long-term, the adoption of more widespread and stringent GHG regulation was becoming increasingly likely.

*The Tipping Point in Business Strategies*

In parallel, a growing share of leading U.S. industries started to recognize the global warming problem and adopt more accommodative positions on mitigation. The emerging scientific consensus and policy responses to global warming forced many prominent companies to reconsider their lobbying tactics.<sup>58</sup> In 1997, DuPont and BP pulled out of the GCC, followed by Shell Oil in 1998, Ford in 1999 and DaimlerChrysler, GM and Texaco in 2000. Defending BP's withdrawal from the coalition, CEO Lord Browne argued that "the time to consider the policy dimensions of climate change is not when the link between GHGs and climate change is conclusively proven, but when the possibility cannot be discounted and is taken seriously by the society of which we are part. We in BP have reached that point."<sup>59</sup> By 2002 the majority of GCC's prominent members had withdrawn their support and the GCC officially closed shop.

Four years later, negotiations for a new, pro-regulation lobbying coalition of U.S. businesses and environmental organizations was secretly taking shape.<sup>60</sup> The core group consisted of 6 corporations and 4 Washington NGO heavyweights: Alcoa, BP America, Caterpillar, Duke Energy, DuPont, and General Electric (GE), and the Environmental Defense Fund (EDF), the World Resources Institute (WRI), Pew Center on Global Climate Change, and the Natural Resources Defense Council (NRDC). In January 2007, the *U.S. Climate Action Partnership* (USCAP) revealed its "Call for Action," a policy-advocacy document which called for swift legislative action at the federal level to slow, stop and reverse the growth of GHG emissions in the United States. The USCAP argued that climate change science was now uncontroversial, and that the technological and product innovations needed to allow the phasing-out of GHGs would lead to increased U.S. competitiveness and energy security. Therefore, the USCAP recommended that Congress should enact a mandatory curb on GHG emissions for large stationary sources, transportation, and energy use in commercial and residential buildings as quickly as possible. To deliver the

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<sup>58</sup> Skodvin and Skjærseth 2003.

<sup>59</sup> SourceWatch. Statement made by BP CEO in 1997.

<sup>60</sup> Vormedal 2008. In Europe and in the international arena, more progressive business lobbies supportive of the need for GHG regulation and seeking to influence the regulatory development had begun to emerge a few years earlier, at the same time as the break-up of the GCC. These include organizations such as the International Emissions Trading Association (IETA), BusinessEurope, the World Business Council for Sustainable Development (WBCSD) and the 3C Business Leaders Initiative.

required short and mid-term emissions reduction targets,<sup>61</sup> the government should establish a federal cap-and-trade program alongside a national system for incentives to accelerate technology research, development and deployment.

By September 2007, the USCAP had more than doubled its membership, now representing over 25 of the world's largest corporations from a range of different sectors. These included many former GCC members from the coal, oil, electric utilities, automobile and chemical manufacturing industries.<sup>62</sup>

Shortly after its launch, the Chairwoman of the Environment and Public Works Committee, Barbara Boxer (California), invited a group of USCAP CEOs to testify before the committee. Present at the hearing was Senator John Warner (Virginia), who had just started working with Senator Lieberman on a new climate bill. "You CEOs," he argued after hearing what the executives had to say, "have begun to move this whole new concept into the Big Leagues now [...] When I see such an extraordinary cross section of America's free enterprise system, together with the environmental groups, come and form a group like this—you've got my attention."<sup>63</sup> Indeed, the fact that the USCAP had effectively broken the 1990s business veto on climate action could be a game-changer. Subsequently, Lieberman and Warner set out to write a centrist bill and in December, the bill passed the committee. However, in order to attract enough votes on the Senate floor to send a signal to the next president that legislators were getting serious about passing a climate bill, some key issues still needed to be resolved.

A major concern was the issue of allocation versus auctioning of allowances. The USCAP hadn't yet agreed on specifics, but they would advocate initial, free allocation to many of the capped entities. Free allocation would smooth the transition and ensure fair treatment of economic sectors, regions and income groups disproportionately impacted by GHG regulations. To some USCAP members, including one of America's largest electric utilities, Duke

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<sup>61</sup> The Call for Action recommends an emissions reduction pathway of i) "between 100-105 percent of today's levels within five years of rapid enactment," ii) "between 90-100 percent of today's levels within ten years of rapid enactment," and iii) "between 70-90 percent of today's levels within fifteen years of rapid enactment." Furthermore, "Congress should specify an emission target zone aimed at reducing emissions by 60-80 percent from current levels by 2050" (pg. 7).

<sup>62</sup> USCAP members included RioTinto, the Exelon Corporation, Alcoa, BP America, Caterpillar, Duke Energy, DuPont, FPL Group, General Electric, Lehman Brothers, PG&E, PNM Resources, American International Groups (AIG), Alcan, Boston Scientific, Johnson & Johnson, ConocoPhillips, Deere & Company, The Dow Chemical Company, General Motors Corp., Marsh, PepsiCo, Shell, the Chrysler Group, Xerox, Siemens, the Environmental Defense Fund (EDF), the World Resources Institute (WRI), Pew Centre on Global Climate Change and the Natural Resources Defense Council (NRDC), the Nature Conservancy and the National Wildlife Federation.

<sup>63</sup> Warner quoted in Pooley 2010, 164.

Energy,<sup>64</sup> free allocation represented *the* deal-maker or –breaker. The chairman, president and CEO Jim Rogers had over the past years become convinced that in the future, regulations were going to be implemented regardless of opposition from the coal industry. Based on his good experience with the EPA Acid Rain Program—a cap-and-trade scheme for limiting sulphur-dioxide emissions from power plants—Rogers was prepared to support a similar system for GHGs. In the case of SO<sub>2</sub>s, the EPA had initially allocated most of the allowances for free to utilities,<sup>65</sup> enabling them to finance a clean-up using so-called “scrubbers.” While critics argued that the system represented a way to secure corporate “windfall profits” or “giveaways,” Rogers argued that free allowances were used to abate rising costs for consumers.<sup>66</sup> In the case of GHGs, the allowance revenues could similarly help Rogers modernize Duke Energy’s power plants and finance the development and deployment of carbon capture and storage (CCS). Arguably, he could not have afforded to do so otherwise. As such, it made sense for Rogers to participate in the USCAP and lobby for a GHG cap-and-trade legislation. But he alleged that he needed enough free allowances to be able to invest in the technology and make the transition to clean electricity affordable for his customers.<sup>67</sup>

Lieberman and Warner supported both the USCAP and Roger’s position. They viewed free distribution of allowances as a means to ensure fairness, ease economic burdens and help finance the development and deployment of CCS for coal. But the environmental left saw things differently. They argued that people in environmentally conscious coastal states already paid more for their electricity, and that the free-ride for Midwestern utilities—that relied on dirty coal—had to end. To satisfy the left, Lieberman-Warner did not allocate enough free permits to satisfy coal-based utilities, so Rogers, the U.S. Chamber of Commerce and the National Association of Manufacturers set out to block their initiative. When the bill was called up in June 2008, it was essentially defunct because Boxer had not been willing to compromise, and because its foes in business had stirred up so much opposition in the Republican Party and the media.<sup>68</sup>

The battle over allocation in Lieberman-Warner clearly demonstrated that USCAP companies were still divided on the economics of cap-and-trade. Electric utilities could not agree on how the allowances should be distributed between

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<sup>64</sup> Duke supplies and delivers energy to approximately 4 million customers. Due to its vast number of coal-fired power plants, the company is the third largest emitter of CO<sub>2</sub> in America and the 12<sup>th</sup> largest emitter amongst corporations worldwide.

<sup>65</sup> Each allowance represented the right to emit one ton of sulfur dioxide in a given year. Altogether, 3 percent of allowances in the system were auctioned by the EPA while the remaining 97 percent were distributed for free based on each company’s historic emissions levels.

<sup>66</sup> Pooley 2010, 149.

<sup>67</sup> Pooley 2010.

<sup>68</sup> *Ibid.*, 201-227.

them, while the oil companies were not sure they could embrace a cap if power companies got so many free allowances. Furthermore, Rogers had spent over \$2.8 million on lobbyists, and used the media to debunk Lieberman-Warner. On a positive note, if the USCAP had dissolved then and there, the coalition would still have been remembered for breaking the 1990s business veto on climate action.<sup>69</sup>

But the lobby survived after a new round of negotiations. For their message to be consistent and effective, the USCAP had to reach an agreement on how a climate bill could help finance the clean-up for coal-based electricity without being unfair to other sectors. They also had to strike a balance between the costs of reduction and stringency of emissions limitations. By the end of 2008 members had successfully agreed to, and developed a comprehensive manifesto: “*A Blueprint for Legislative Action: Consensus Recommendations for U.S. Climate Protection Legislation.*”<sup>70</sup> In short, the Blueprint sketched out a detailed plan for the development of legislation in the 111<sup>th</sup> Congress.<sup>71</sup> The plan included a design for a cap-and-trade system and established a pathway for emissions reduction targets of 80-86 percent of 2005 levels by 2020, 58 percent of 2005 levels by 2030 and 20 percent of 2005 levels by 2050. It recommended that the cap cover large stationary sources and fossil-based fuels used by remaining sources and the use of abundant offsets<sup>72</sup> for cost containment. Allowances should initially be distributed for free to capped entities, including a “significant portion (e.g. 40 percent)” to utilities. Furthermore, the program should provide credit for those taking early action to reduce GHG emissions and a set of complimentary measures for technology transformation, including for coal, transportation, buildings and energy efficiency.

By January 2009, 26 companies and the 4 founding environmental organizations had signed up for the Blueprint, thereby agreeing to specifics that would bind and unify their lobbying efforts. Now, USCAP companies would not be able to lobby for something weaker than the Blueprint, while the environmental organizations could not demand something stronger.

The decline of the GCC and the birth of the USCAP demonstrate the emergence of a tipping point in business strategies and the creation of a “Baptist and bootlegger” coalition for GHG regulation in the United States. Indeed, the review of USCAP activities shows how this strategic shift among leading U.S. industries resulted in new political action and lobbying for regulatory change. The

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<sup>69</sup> Ibid., 316.

<sup>70</sup> Available for viewing at the U.S. Fish and Wildlife Service website.

<sup>71</sup> The Blueprint also noted that the recommendations do not represent the only path forward, and that USCAP therefore stood ready to work with the Administration, Congress and other stakeholders to develop a new climate bill.

<sup>72</sup> An offset is a reduction in GHG emissions made to compensate for an emission made elsewhere.

strengthening and deepening of the USCAP mandate through the Blueprint further marks the manifestation of a tipping point.

*Catalyzing Change: The Tipping Point Drivers*

This section examines the drivers and causes behind the strategic shift in political and lobbying tactics amongst USCAP industries. In line with the tipping point model, it demonstrates how the emergence of regulatory threats and uncertainties, uneven playing fields, and new market opportunities constitute central drivers behind the illustrated strategic change. It argues that the tipping-point model thus provides a plausible account of why this prominent group of leading U.S. industries began to support and lobby for the implementation of mandatory federal GHG caps.

First, it is evident that the steady acceleration of climate change governance in the United States and internationally has contributed to an increase in perceptions of regulatory risk among liable industries.<sup>73</sup> Perceptions of looming regulation have been heightened by several governance trends: the emergence and expansion of state-level initiatives, the entering into force of international and regional markets for mandatory GHG reduction, the Supreme Court ruling establishing EPA's authority to regulate GHGs under the Clean Air Act and the increasing efforts of U.S. senators to sponsor federal GHG legislation. When the USCAP was founded, the emerging belief amongst leading industry executives that the adoption of federal GHG legislation was ultimately inevitable provided one of the major grounds for action. According to Eileen Claussen, President of the Pew Center and founder of USCAP, there is not a single USCAP CEO who does not consider future GHG regulation inevitable.<sup>74</sup> This rationale also provided a key motivation for Jeff Immelt, the CEO of General Electric (GE) and co-founder of the USCAP, to gather fellow-minded corporations and environmental organizations to establish a new pro-change lobby for federal cap-and-trade.<sup>75</sup> As Rogers of Duke Energy argued, "Legislation is coming. We can help shape it or we can stand on the sidelines and let others do it."<sup>76</sup>

The perception of high risk or inevitability of GHG regulation has also generated significant uncertainty about the future rules of the game. The cost of uncertainty can be considerable because regulatory ambiguity can impede

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<sup>73</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009; Author's interview with Jennifer Layke, World Resources Institute, Washington D.C., March 2009.

<sup>74</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009.

<sup>75</sup> Pooley 2010, 138-139.

<sup>76</sup> Pooley 2010, 170. Statement by Jim Rogers in an e-mail to Robert Murray, CEO of Murray Energy.

corporations' abilities to make decisions on future investments. As Claussen argued, "If you don't know what's coming down the road, you don't know where to make investments or how big they should be. You can't move forward with this regulatory uncertainty."<sup>77</sup> When the USCAP was founded, many corporations felt that the level of uncertainty now signaled an end to business as usual.<sup>78</sup> An increasing share of companies were beginning to realize that if they did not start promoting favorable regulation and take a seat at the table, they would end up being worse off.<sup>79</sup> They could be the victims of a badly designed and costly regulatory system, or they could work actively to push for business-friendly and cost-efficient legislation. Thus, for many industries the anticipated costs of continued legislative inaction were perceived as greater than the anticipated costs of compliance with a well-designed cap-and-trade program. For example, to coal-based utilities such as Duke Energy, badly designed future GHG regulations could threaten its very existence. The best way for them to ensure that coal would survive in a carbon-constrained market was to work with legislators and push for rules that would help them finance, develop and deploy carbon capture and storage (CCS).<sup>80</sup>

Thus, it is evident that the emergence of regulatory threats and uncertainties, an important condition identified by the tipping point model, constitutes a major driver behind the strategic shift among USCAP companies.<sup>81</sup>

Second, the emergence of a patchwork of different standards and measures for GHG emissions reductions at the state and municipal levels has created an uneven playing field for businesses operating in the United States. For these companies, lobbying for federal legislation through the USCAP represents a way to promote harmonization of the rules. To the USCAP multinationals, the adoption of a federal cap-and-trade program would also enable harmonization of regulations internationally, by linking them to established emissions-trading systems such as the Kyoto mechanisms and the EU ETS. Such linkages would reduce the cost of operating in and complying with several different regulatory

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<sup>77</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009.

<sup>78</sup> Author's interview with Jennifer Layke, World Resources Institute, Washington D.C., March 2009.

<sup>79</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009; Author's interview with Jennifer Layke, World Resources Institute, Washington D.C., March 2009; Author's phone interview with ConocoPhillips, March 2009; Rogers, quoted in Pooley 2010, 161.

<sup>80</sup> Pooley 2010, 171.

<sup>81</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009; Layke 2009.

systems worldwide.<sup>82</sup> Thus, the need for harmonization of uneven regulatory playing fields also constitutes an important driver of tipping-points.<sup>83</sup>

Third, a federal cap-and-trade program would also generate considerable commercial opportunities for many U.S. industries. Because federal legislation can further enhance the commercial viability and competitiveness of clean, low-carbon energy technologies and options, it is rational for companies with considerable investment in such technologies to start pushing for the adoption of GHG-limiting legislation. Indeed, some USCAP companies have been early movers in the race to develop new, low-carbon solutions. For example, GE is a frontrunner in CCS technologies for coal and is also the biggest wind-turbine maker in the United States. Each of these turbines includes fourteen products made by DuPont. To the major polluters such as coal-fired utilities, it is the free allocation of allowances and financial incentives for technological transformation that constitutes the main regulation-induced business opportunity. As Rogers of Duke Energy argues,<sup>84</sup> since allowance revenues would help finance investment in carbon-neutral facilities, cap-and-trade represents a business opportunity that would chart a future for coal in a carbon-constrained world.<sup>85</sup> As such, the range of business opportunities for different sectors that would materialize through the implementation of federal legislation represents another major tipping-point driver.

Also worth noting, many USCAP companies have already begun to implement procedures to cut GHG emissions, for various reasons related to sub-national compliance, pre-compliance risk management, or green branding. Lobbying for a particular design of cap-and-trade therefore represents a way to ensure that early action is appropriately awarded. Moreover, after decades of debate, most of the USCAP CEOs believe that global warming is real and do not want to be blamed by future generations for their neglect.<sup>86</sup>

In sum, it is evident that regulatory risks and uncertainties, unbalance playing fields and business opportunities, all key conditions identified by the tipping point model, constitute important drivers behind the establishment, mandate and lobbying of the USCAP. The next section considers the impact of

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<sup>82</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009; Author's interview with Jennifer Layke, World Resources Institute, Washington D.C., March 2009; Author's phone interview with ConocoPhillips, March 2009.

<sup>83</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009; Author's interview with Jennifer Layke, World Resources Institute, Washington D.C., March 2009; Author's phone interview with ConocoPhillips, March 2009.

<sup>84</sup> Duke has a portfolio of old coal-fired power plants expected to expire in fifty years at the latest.

<sup>85</sup> Pooley 2010, 154.

<sup>86</sup> Author's interview with Eileen Claussen, Pew Center on Climate Change, Arlington, March 2009; Author's interview with Jennifer Layke, World Resources Institute, Washington D.C., March 2009; Pooley 2010.



this tipping point in business strategies on U.S. climate politics by examining how USCAP lobbying influenced the negotiations of federal climate legislation after the release of the Blueprint in 2009.

*A New Climate for Progress?*

In January 2009, Representative Henry Waxman, a Democrat from California, took over the powerful House Energy and Commerce Committee, while Representative Ed Markey, a Democrat from Massachusetts, took the reigns as Chair of the Environment and Economy subcommittee.<sup>87</sup> Since the Supreme Court ruling on *EPA vs. Massachusetts*, Waxman had warned about the costs of command-and-control regulation and argued that Congress needed to get serious about writing a more cost-efficient legislative alternative. He had also observed that U.S. businesses appeared to be caught in a worrying investment dilemma. Companies are “reluctant to invest in old polluting technologies,” he argued after taking over the committee, “because they know that tougher regulations are inevitable. But they can’t invest in new, cleaner technologies until they know what Congress is going to require.”<sup>88</sup> Furthermore, the fact that leading U.S. businesses and environmental organizations had joined forces in support of legislation had caught his attention. On January 15, his first hearing in the Energy and Commerce Committee, Waxman invited the USCAP CEOs to unveil the Blueprint. With the cooperation of USCAP, Waxman could write a centrist and interest-group supported climate bill.

Waxman, Markey and USCAP leaders found common ground on principles for legislative design. In early March, Rogers (Duke) and Krupp (EDF) traveled to the Capitol to comment on the draft bill that was under preparation. While the White House had called on Congress to enact cap-and-trade with “a 100 percent auction to ensure that the biggest polluters do not enjoy windfall profits” in the February budget, Waxman supported the USCAP view on allocation. In his opinion, they were correct in their view that in order to cushion electricity customers in coal-dependent states, allowances should be allocated to local distribution companies for free during a transition period. Moreover, free allowance distribution was likely to please Midwestern senators concerned about regional equity.<sup>89</sup> Soon, the President announced that the White House had abandoned the plan for full auctioning.<sup>90</sup>

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<sup>87</sup> Before this chairmanship, Markey had served as the leader of Pelosi’s committee on global warming.

<sup>88</sup> Statement by Senator Waxman at a committee hearing on 15 January 2009 quoted in Pooley 2010, 332.

<sup>89</sup> Pooley 2010, 336-340.

<sup>90</sup> At a March 24 press conference Obama signaled that his auction plan was dead.

On March 31, Waxman released the first draft of his new climate bill. Like Lieberman-Warner, it sketched out a federal cap-and-trade system, but it also included a number of complementary measures for technology transformation, including generous subsidies and incentives for CCS and a provision for grandfathering allowances to existing coal-fired plants. The bill left open the issue of allowance distribution and the overall stringency of the cap. After several rounds of discussion in the committee, senators agreed to mandate free transitional allowances for utilities in return for their acceptance of a 17 percent emissions reduction target.<sup>91</sup> The power sector was allocated 35 percent of all allowances covering 90 percent of their total emissions. The oil refineries, which were standing on the sidelines, were granted only 2 percent of the allowances.

Meanwhile, the new EPA administrator Lisa Jackson announced that the agency had deemed climate change a danger to public health and welfare, and she thus began to prepare rules for GHG emissions reductions, first dealing with vehicles and then with stationary sources such as power plants and manufacturing facilities. For the business lobby and cost-wary senators, it was a reminder of the seriousness of the command-and-control regulatory threat. This reinforced their motivation to push a cap-and-trade bill through the House. Yet, outside the committee negotiations, opposition to the bill was growing. Critics argued that the financial crisis had weakened the case for a market-based approach to GHG regulation, and warned that legislators had failed to address weaknesses in emissions trading that could lead to the emergence of “subprime carbon” and the creation of a “carbon market bubble.”<sup>92</sup> Many on the environmental left had therefore grown more than skeptical towards Waxman-Markey due to its abundant provision of free allowances to the big polluters. On the other hand, conservative Republicans started attacking the bill from the right, labeling it “cap-and-tax” and “freedom-limiting legislation.”

Nevertheless, in the House, negotiations continued to move forward. In May, Waxman announced that the committee had successfully reached a compromise and publicly thanked the USCAP members for their help and leadership.<sup>93</sup> On May 21, the Waxman-Markey bill passed the Energy and

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<sup>91</sup> The bargain was made between Representatives Waxman, Markey and the previous chair Rich Boucher (Virginia) and the power sector represented by the USCAP and the Edison Electric Institute (EEL).

<sup>92</sup> Chan 2009. The Director of the Green Investment Program and Friends of the Earth, Michelle Chan, also testified before the U.S. House Ways and Means Committee in March 2009, arguing that without adequate market oversight, financial intermediaries would enter the market and allow speculators to push up prices and create a carbon bubble.

<sup>93</sup> To a crowd of legislators, lobbyists, policy specialists and environmental leaders at the Capitol, Waxman stated that “we used that proposal as a model for our legislation. I believe that the only hope we have to get legislation passed is to show a consensus of American business and environmentalists.” (Waxman, quoted in Pooley 2010, 375).

Commerce committee by a vote of 33 to 25, and on June 26 it passed in the House of Representatives by a 219-212 vote. It was a tight margin that had required a lot of political bargaining as well as the engagement of President Obama, who had personally asked uncommitted members from both parties for their votes. It was a historic moment, nonetheless, because for the very first time, legislators, corporate lobbyists, environmentalists and labor unions had worked together to arrive at a grand bargain that would impose mandatory reductions of GHG emissions in the United States.

For legislation to become law, however, a bill must be passed by both chambers of Congress, the House and the Senate, and then signed by the President. Because of Senate rules which give the minority power to stall votes, controversial bills often require 60 votes just to be heard on the floor. With no shortage of Republicans and even a few Democrats intent on filibustering, any climate bill would require a 60-vote supermajority in the Senate. After one failed attempt by Boxer and Kerry to forge a more left-oriented edition of Waxman-Markey through the Senate, Kerry teamed up with Lieberman and Republican Lindsay Graham (South Carolina) to write a revised, centrist version.

Initially, the Kerry-Lieberman-Graham (KGL) initiative met some renewed resistance from industry groups, primarily due to emerging conflicts of interests over allowance allocations. Amongst coal-based utilities, some members of the American Coalition for Clean Coal Electricity (ACCCE)—from which the USCAP utilities had resigned—now said they did not want to support a climate bill in 2010. Opposition had also grown from the oil refineries, who were dissatisfied with the low proportion of allowances they had been attributed relative to utilities. The American Petroleum Institute (API) began disseminating reports, which argued that the costs of KGL would harm the U.S. economy.<sup>94</sup> Furthermore, the API encouraged all its members to send their employees to partake in a so-called “Energy Citizen” rally against GHG legislation. In February 2010, BP and ConocoPhillips pulled out of the USCAP because they thought the coalition favored coal at their expense.<sup>95</sup>

However, when negotiations for KGL got serious in the autumn of 2009, the business opposition was successfully appeased. From October 2009 to April 2010, Kerry and Lieberman met regularly with business lobbies such as the USCAP, the U.S. Chamber of Commerce, the API, the EEI, the National Association of Manufacturers and others to reach consensus and make sure everyone was satisfied with the bill’s provisions. During this process, the senators

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<sup>94</sup> For example, a study cooked up by the Heritage Foundation, a think tank partly funded by ExxonMobil, argued that the cost of gasoline would increase by \$4 a gallon and lead to huge job losses.

<sup>95</sup> The Hill, “USCAP Departures Fray Industry Green Climate Unity,” 6 February 2010; The Washington Post, “ConocoPhillips, BP and Caterpillar Quit USCAP,” 2 February 2010.

reached a non-aggression pact with the API and the Chamber, whereby industry promised to refrain from publicly attacking their proposal in exchange for a number of concessions designed to keep compliance costs low.<sup>96</sup> The first draft established a cap-and-trade system for the electric power sector only, a carbon “fee” linked to the price of allowances for oil companies and a cap for steelmakers and other energy-intensive industries that would be phased in slowly. USCAP and other business lobbies immediately threw their weight behind it. Some groups, such as the EEI, even issued public statements in support of the bill.<sup>97</sup>

Industry efforts to pass KGL were significant. In April, Rio Tinto sent a letter to Senate Majority Leader Harry Reid (D-NV)—since the majority leader is responsible for setting the Senate agenda—which pleaded for climate legislation in 2010. In the letter, CEO Preston Chiaro argued that neglect “will not only delay the action necessary to address the climate imperative, but will increase, rather than reduce, the uncertainties for businesses like Rio Tinto as we face a more rigid and expensive regulatory process under the Clean Air Act.”<sup>98</sup> In May, 60 leading U.S. corporations also sent a letter to President Obama, Senator Reid and the Republican Minority Leader Senator Mitch McConnell,<sup>99</sup> which strongly urged them to “move forward this year on comprehensive energy and climate legislation.” The letter emphasized the opportunities related to climate action and argued that “we face a critical moment that will determine whether we will be able to unleash homegrown American innovation or remain stuck in the status quo... Americans need and deserve a comprehensive energy and climate policy and we urge you to take action without delay.”<sup>100</sup>

Thus, KGL had the support of a coalition of major environmental groups and leading U.S. industries, including a large share of the nation’s biggest polluters. No previous attempts to pass climate legislation had ever come this far.<sup>101</sup> Yet, in the summer of 2010, senators pulled the plug on the KGL bill. On July 8, Graham announced that he would no longer support the bill he had helped to author, and with the loss of this pivotal bipartisan bridge, climate change

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<sup>96</sup> Politico, “Talks Might Not Save Climate Bill,” 22 July 2010; The New Yorker, “As the World Burns,” 11 October 2010.

<sup>97</sup> Pooley 2010; The New Yorker, “As the World Burns,” 11 October 2010.

<sup>98</sup> Letter from CEO Preston Chiaro of Rio Tinto to Senate Majority Leader Harry Reid. 28 April 2010.

<sup>99</sup> Together these companies represent over 1 million employees and revenues over \$1.2 trillion. The list includes AEP, Alcoa, Alstom, Areva, Chrysler, DTE Energy, Duke, EEI, Ford, GE, GM, Honeywell, NRG Energy, PG&E, Shell, Siemens, Dow and others.

<sup>100</sup> Letter to the President, Senator Reid and Mitch McConnell from sixty corporations. 27 May 2010. See TreeHugger, 28 May 2010. “Big Corporations Lobby President, Congress for Climate Legislation.”

<sup>101</sup> The New Yorker, “As the World Burns,” 11 October 2010.

legislation was pretty much dead.<sup>102</sup> By the end of the month it was clear that there simply were not enough votes. What led the process to collapse?

KGL's cooperation with industry and their attempt to forge a grand bargain by handing out concessions to big polluters did not sit well with the environmental left. After its release, over 200 grass-root groups and some prominent green organizations including Greenpeace and Friends of the Earth immediately came out in opposition to the bill.<sup>103</sup> These groups strongly contested the design of KGL, which they considered to be a major corporate bailout, for providing abundant windfall profits to the oil, coal, nuclear and agribusiness industries.<sup>104</sup> Until senators could agree on a stronger bill that did not shower billions of dollars on polluters, many on the environmental left preferred the implementation of EPA regulations over the democratic legislative approach.<sup>105</sup>

More importantly, despite its market-based and business friendly approach, KGL failed to harvest enough support from Republicans and Blue-Dog Democrats.<sup>106</sup> Democrats had hoped that with the support of their industry backers they would be able to collect enough Republican votes.<sup>107</sup> But this proved much more difficult than expected. While Senator Graham was showered with new financial support from pro-regulation utilities in return for his work on the climate bill,<sup>108</sup> he was the only Republican willing to work with Democrats on this particular legislation. There were other Republican climate advocates including Florida Senator LeMieux and Maine Senators Olympia Snowe and Susan Collins, but they never came out in support of KGL. Furthermore, John McCain, a long-standing climate advocate and co-writer of the Lieberman-McCain cap-and-trade bill of 2009, also ended up withdrawing his support for climate legislation during a hostile election challenge in the Arizona primary. He was attacked as a moderate and was forced to defend his position on global

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<sup>102</sup> Politico, "Energy Bill Stuck In Neutral," 9 July 2010; The Economist, "Lindsay Graham Kills His Bill," 9 June 2010.

<sup>103</sup> Grist, "Big Green and little green clash over the American Power Act," 18 May 2010.

<sup>104</sup> The Daily Green, "The Kerry-Lieberman Climate and Energy Bill," 12 May 2010; Environment News Service, "Kerry-Lieberman Climate Bill Generates Praise and Outrage," 12 May 2010.

<sup>105</sup> Grist, "Big Green and little green clash over the American Power Act," 18 May 2010; Friends of the Earth, "The American Power Act," May 12, 2010. Also, see Kerry-Lieberman Bill which gave billions to nuclear power companies.

<sup>106</sup> Politico, "Climate Bill Gets GOP Cold Shoulder," 28 June 2010.

<sup>107</sup> The New Yorker, "As the World Burns," 11 October 2010.

<sup>108</sup> The New Yorker, "As the World Burns," 11 October 2010. Grahams PAC contribution from utilities grew from nothing in 2009 to \$49,000 in 2010, and Fred Krupp from the EDF and USCAP furthermore introduced Graham to businesses new donors who were willing to contribute to his campaign in exchange for promoting climate legislation.

warming to conservative voters, who were increasingly skeptical that cap-and-trade was just another energy tax.<sup>109</sup>

Already during the run-up vote on Waxman-Markey in 2009, Republican campaigns and their coverage by media-outlets targeted climate legislation. This may have undermined support for Democrats leading up to the midterm elections. Cap-and-trade was re-branded as cap-and-tax, a strategic attempt to frame the legislation as a hidden national energy tax and paint Democrats as out-of-control regulators.<sup>110</sup> The tax phraseology was also an important contributor to Graham's withdrawal and thus, the death of the bill. Initially, the KGL included a linked fee for oil refineries, but this was re-negotiated due to the possibility that it would be conceived of as a tax and because the refineries agreed to shelve the fee and accept a system for fixed-price permits. But the White House, afraid of being accused for supporting a tax-hike, went on to sabotage the bill and the commitment of its bipartisan bridge, Graham. Based on a leak from within the Administration, on April 15 Fox News reported that "White House Opposes Higher Gas Taxes Floated by S.C.GOP Sen. Graham in Emerging Senate Energy Bill," in effect labeling the now non-existent linked-fee as a 'gas tax' and blaming Graham for it. Since the Administration leaker deliberately went to Fox in South Carolina, it may seem as if the leak was intended to spur criticism of Graham amongst Republicans and Tea Party supporters in his own constituency. Democrats made their implicit decision to kill the bill even more apparent when Majority Leader Reid announced in the end of April that he wanted to pass immigration reform before a climate bill. It was the last straw for Graham, who had gone out on a limb to cooperate with Democrats and felt he had been stabbed in the back. He would ultimately abandon the KGL initiative.<sup>111</sup>

With the exception of the days spent whipping the vote for Waxman-Markey in June 2009, President Obama never engaged actively with Congress or the Senate to draft legislation and/or push for a cap. On the contrary, the gas-tax leak and the sabotage of Graham indicated that the White House sought to kill the KGL bill due to the risk that it would spur a political back-lash against Democrats. As long as the polling numbers and/or the 60 senate votes were not clearly there, Obama's advisors Rahm Emanuel and David Axelrod believed it was better for the president to pursue a hands-off approach. Emanuel was most concerned with acquiring and maintaining presidential power and was not willing to squander the president's political capital on a potentially lost cause.<sup>112</sup> "We want to do this climate bill," Emanuel argued to a group of CEOs in a USCAP-White House meeting. "But we need to put points on the board. We only want to

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<sup>109</sup> The New Yorker, "As the World Burns," 11 October 2010.

<sup>110</sup> Pooley 2010.

<sup>111</sup> The New Yorker, "As the World Burns," 11 October 2010.

<sup>112</sup> Pooley 2010; The New Yorker, "As the World Burns," 11 October 2010.

do things that are going to be successful. If the climate bill bogs down, we move on. We've got health care."<sup>113</sup> Thus, despite President Obama's campaign promises to prioritize energy and climate change, it seemed to have slipped further and further down the agenda. He stood silent while opponents hijacked the public debate and did little to prevent the negative effects of the cap-and-tax phraseology. Indeed, it could be argued that his administration hastened that trend. Carol Browner, the Obama-appointed director of the White House Office of Energy and Climate Change Policy, had only three aides working directly for her. While the office attended the meetings of KGL staffers, they never expressed a policy preference or attempted to take the lead in the process. And despite continuous pressure from industry, environmental groups and leading U.S. senators to provide hands-on leadership, the Obama Administration did nothing to help collect the 60 votes needed for KGL.<sup>114</sup>

Clearly, this time around it was not industry that hobbled efforts to forge a centrist "grand bargain" for federal climate legislation, but the lack of presidential leadership and commitment, Republican framing and the tough political environment surrounding the midterm elections. According to Senator Kerry, it was the cooperation with industry that helped them come as far, and it is industry cooperation that will help pass climate legislation in the future: "The bottom line is that for more than a decade, climate change legislation was dead in the cradle because senators pointed to opposition from their home-state industries and businesses, and millions upon millions of dollars in negative advertising ground every debate to a halt."<sup>115</sup> The review of the negotiations behind Waxman-Markey and KGL illustrate that after the emergence of a tipping point in business strategies, this dynamic changed dramatically. Indeed, the USCAP and its allies helped pass climate legislation in the House and played a key role in the attempt to forge KGL through the Senate.

## **Conclusion**

This article has presented a model for analyzing change in business strategies related to climate change regulation. It is demonstrated that under certain conditions that may emerge as a particular issue area of environmental governance matures, including the emergence of regulatory threats and uncertainties, uneven playing fields and new market opportunities, the strategies of many prominent and leading industries are likely to shift from opposition to regulatory support and entrepreneurship. The model identifies the culmination of

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<sup>113</sup> The Climate Desk, "Obama's Climate Complacency: Blame Rahm?," 10 June 2010.

<sup>114</sup> Rolling Stone Magazine, "Climate Bill, R.I.P.," 21 July 2010; The New Yorker, "As the World Burns," 11 October 2010.

<sup>115</sup> Quote by Senator John Kerry in Politico, "Talks might not save climate bill," 22 July 2010.

this gradual process of change as a “tipping point,” at which a significant share of leading corporations and business lobbies begin to support and push for regulatory change. It is also argued that a tipping point in business strategies is likely to generate new political momentum and enabling conditions for political bargaining, which may spur significant progress in the regulatory negotiation process.

The article has used the tipping-point model to analyze the evolution of climate change politics in the United States. The case study finds that the model provides a plausible account of, first, the lack of federal climate action in the 1990s and early 2000s, and second, the new momentum to impose federal GHG legislation between 2008 and 2010. While business lobbying provided a major obstacle to regulatory change for over 15 years, this dynamic clearly changed after the emergence of a tipping point in business strategies. The tipping point is identified here as the establishment of the pro-change lobbying coalition USCAP and their efforts to push for the adoption of a federal cap-and-trade program. The case also demonstrated how the tipping point generated new political momentum and progress in efforts to negotiate federal climate legislation. USCAP and their allies played a key, enabling role first in the negotiations behind the Waxman-Markey climate bill, which passed the House in 2009, and second in the bargaining process behind the KGL bill and the attempt to forge it through the Senate in 2010. It is argued that the KGL negotiations collapsed not due to, but in spite of, continuous industry support and lobbying. Rather, it was the lack of presidential leadership and commitment, Republican framing and the tough bipartisan political environment leading up to the midterm elections that caused the process to collapse.

## References

- Agder, Neil W., Katrina Brown, Declan Conway, and Mike Hulme. 2003. “Adaptation to Climate Change in the Developing World.” *Progress in Development Studies*, 3: 179.
- Cerny, Philip G. 2010. *Rethinking World Politics. A Theory of Transnational Neo-Pluralism*. New York: Oxford University Press.
- Chan, Michelle. 2009. “Subprime carbon? Re-Thinking the Worlds New Largest Derivatives Market.” *Friends of the Earth*, March.
- DeSombre, Elizabeth R. 1995. “Baptists and Bootleggers for the Environment: The Origins of United States Unilateral Sanctions.” *Journal of Environment and Development* 4: 1.
- Dunn, Seth. 2002. “Down to Business on Climate Change.” *Greener Management International*. Autumn.



- Falkner, Robert. 2008. *Business Power and Conflict in International Environmental Politics*. Hampshire: Palgrave Macmillan.
- Fisher, Dana R. 2006. "Bringing the Material Back In: Understanding the U.S. Position on Climate Change." *Sociological Forum* 21, 3: 467-94.
- Gladwell, Malcom. 2000. *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little, Brown and Company.
- Gunningham, Neil, Robert Kagan, and Dorothy Thornton. 2003. *Shades of Green: Business Regulation and the Environment*. Stanford, California: Stanford Law and Politics.
- Grodzins, M. 1957. *Metropolitan Segregation*. Chicago, IL: University of Chicago Press.
- Human Development Report (HDR). 2007. *Fighting Climate Change: Human Solidarity in a Divided World*. UNDP. Houndsmills: Palgrave Macmillan.
- Henriques, Irene and Perry Sadorsky. 1995. "The Determinants of an Environmentally Responsive Firm: An Empirical Approach." *Journal of Environmental Economics and Management* 30, 381-395.
- Hoffman, Andrew and John Woody. 2008. *Climate Change: What's Your Business Strategy?* Cambridge, Mass.: Harvard Business School Publishing Corporation.
- Intergovernmental Panel on Climate Change. 2004. "16 Years of Scientific Assessment in Support of the Climate Convention."
- Intergovernmental Panel on Climate Change. 2007a. *Climate Change 2007: Synthesis Report. Summary for Policymakers*. Cambridge: Cambridge University Press.
- Intergovernmental Panel on Climate Change. 2007b. *Climate Change 2007: The Physical Science Basis*. Contribution of the Working Group I to the Fourth Assessment Report. Cambridge: Cambridge University Press.
- Intergovernmental Panel on Climate Change. 2007c. *Summary for Policymakers Climate Change 2007: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report. Cambridge: Cambridge University Press.
- Johnson, Gerry, Kevan Scholes, and Richard Whittington. 2005. *Exploring Corporate Strategy*. 7<sup>th</sup> edition. Essex: Pearson Education Limited.
- Legget, Jeremy. 2001. *The Carbon War: Global Warming and the End of the Oil Era*. New York: Routledge.
- Levy, David and Daniel Egan. 1998. "Capital Contests: National and Transnational Channels of Corporate Influence in the Climate Negotiations." *Politics and Society* 26 (3).

- Levy, David. 2005. "Business and the Evolution of the Climate Regime: The Dynamics of Corporate Strategies." In *The Business of Global Environmental Governance*, edited by David Levy and Peter Newell. Cambridge, Mass.: MIT Press.
- Levy, David and Peter Newell. 2005. *The Business of Global Environmental Governance*. Cambridge, Mass.: MIT Press.
- Manzur, Allan and Jinling Lee. 1993. "Sounding the Global Alarm: Environmental Issues in the U.S. National News." *Social Studies of Science* Vol. 23, 681-720.
- Mayer, A.J. 1960. "Russell Woods: Change Without Conflict." In Glazer, N and D. McEntire. eds. 1960. *Studies in Housing and Minority Groups* Berkeley, Calif.: University of California Press.
- Newell, Peter and Matthew Paterson. 1998. "A Climate for Business: Global Warming, the State and Capital." *Review of International Political Economy* 5 (4): 679-703.
- O'Brien, Karen. 2006. "Are We Missing the Point? Global Environmental Change as an Issue of Human Security." *Global Environmental Change-Human and Policy Dimensions* 16 (1): 1-3.
- Pooley, Eric. 2010. *The Climate War. True Believers, Power Brokers, and the Fight to Save the Earth*. New York: Hyperion.
- Rugman, Alan M. and Alain Verbeke. 1998a. "Corporate Strategy and International Environmental Policy." *Journal of International Business Studies*, 29, 4: 819-834.
- Rugman, Alan M. and Alain Verbeke. 1998b. "Corporate Strategies and Environmental Regulations: An Organizing Framework." *Strategic Management Journal* Vol. 19, 363-375.
- Schelling, Thomas C. 1971. "Dynamic Models of Segregation." *Journal of Mathematical Sociology* 1: 143-186.
- Selin, Henrik and Stacy D. VanDeever. 2007. "Political Science Prediction: What's Next for U.S. Climate Change Policy?" *Review of Policy Research* Vol. 24, No. 1.
- Skodvin, Tora and Jon Birger Skjærseth. 2003. *Climate Change and the Oil Industry: Common Problems, Varying Strategies*. New York: Manchester University Press.
- Skodvin, Tora and Steinar Andresen. 2009. "An agenda for change in U.S. climate policies? Presidential Ambitions and Congressional Powers." *International Environmental Agreements* 9: 263-280.
- Vormedal, Irja. 2011. "States and Markets in Global Environmental Governance: The role of Tipping Points in International Regime Formation." *European Journal of International Relations*, forthcoming.