

Analytical framework

This chapter outlines the analytical framework of our empirical analysis. Our point of departure is to identify the sources of corporate strategy choice: what factors determine the strategies chosen by the oil industry to meet climate-change challenges? We explore the impact of three main groups of factors, related to: (1) company-specific features; (2) the political context of corporate activity at the domestic level; (3) the international institutional context in which multinational companies operate. Each of these three clusters of factors forms a focus for one of the three ‘models’ that will be used to shape the analysis. As described in the previous chapter, these are not models in a formal sense, but are rather tools that provide simplified and complementary pictures of the driving forces behind corporate choice at different decision-making levels.

The first model, which we have labelled the Corporate Actor (CA) model, is based on contributions from the business environmental management literature. The CA model focuses on factors that can shape a company’s climate strategy, with an emphasis on factors such as environmental risk, environmental reputation and organisational learning capacity.

The second model, referred to as the Domestic Politics (DP) model, is based on the assumption that even multinational companies are heavily influenced by the framework conditions of their home-base countries in which they have their historical roots, have located their headquarters and have their main activities. This model is based on theories of state–society relationships and highlights social demands for environmental quality, govern-

mental supply of environmental policy and the political institutions linking demand and supply. Political institutions shape the channels of interaction between industry, governments and other interested parties.

The last perspective is referred to as the International Regime (IR) model. This model takes us from domestic to international politics, and is based on the assumption that the key sources of corporate strategies are found within the context of international regimes rather than in the political context of the companies' home-base countries. Climate change is a global problem, largely caused by global target groups like the oil industry, dealt with within the framework of international institutions. This model is based on international regime approaches and emphasises how international environmental regimes may trigger changes in corporate strategy choice. The main focus of analysis within this perspective, therefore, is changes in corporate strategies over time. This model thus captures the *dynamic* relationship between multinational corporate actors and international regimes.

Before looking at the models in more detail, let us first explore corporate strategies with respect to climate change.

Focus for explanation: corporate climate strategies

To explain why corporations choose different climate strategies, we first have to distinguish between different strategies. Most of the business environmental management literature operates with a rough distinction between reactive/defensive, proactive/offensive, indifferent, and innovative strategies (see e.g. Steger, 1993). Given a certain environmental risk inherent in a company's activities, a proactive company motivated by profits and survival will exploit market opportunities and support environmental regulation. An innovative company will go further in tapping the market potential by implementing major changes in the production process or by developing new technologies and products. Conversely, a reactive company will deliberately leave market opportunities unexploited and oppose environmental regulation. Indifferent companies will not develop any conscious environmental strategy.

In the context of climate change we need to know precisely what distinguishes the various strategies from one another. A

careful selection of indicators is particularly important in a case such as this, where the companies under investigation operate within the same branch and even in the same markets. In this study, we base our ranking of climate strategies on a continuum from *reactive* to *proactive* strategic responses, with an emphasis on what companies actually do rather than on the rhetoric they use. Companies in between these extremes are referred to as intermediates. This implies that the 'indifferent' category is excluded; our reasoning is that since oil companies make a living from the main causes of GHG emissions, climate policy is simply too important to be ignored. The 'innovation' category is also left out. Although interesting, it resists empirical analysis in this case, because technological innovation is so closely related to the operational purpose of the individual companies. Since an innovative strategy also tends to be proactive, we believe the category of proactive to be sufficient.

In essence, there are four main ways in which oil companies can reduce GHG emissions: (1) increasing energy conservation and efficiency; (2) switching to fuels with lower carbon content; (3) investing in renewable energy sources; and (4) decarbonising flue gases through carbon dioxide (CO₂) separation and sequestration. Most large oil companies are engaged in options (1) and (4), while switching from coal to oil to gas as well as more long-term investments in renewables represent more significant changes.

Measuring differences in current climate strategies, however, is by no means a simple task. First, the public profile of a corporation may diverge significantly from its actual behaviour, for strategic or practical reasons. Thus, differences in climate strategies may be more visible in their public profiles – the rhetoric they use – than in their actual operations. Second, the distinction between rhetoric and actions may be particularly valid with regard to climate strategies, since climate change is a relatively new issue area on the political agenda, at least as compared to, for instance, water and air pollution (which have their roots in the early 1970s). Changing the behaviour of target groups takes many years and is normally a matter of incremental change. In the study of public policy implementation, approximately 10–15 years from the adoption of commitments to evaluation of implementation is recommended (Sabatier, 1986). We therefore have to

rely mainly on a set of ‘soft’ indicators, which nevertheless can provide us with a good indication of the kind of climate policy futures the three companies are preparing for. Moreover, we will try to move beyond simple rhetoric by giving emphasis to what companies do, particularly in terms of significant investment and divestment decisions with potential long-term implications for the companies’ future operations. However, the ‘proof of the pudding’ lies in actual behavioural change in terms of GHG emissions reduction. Regrettably, reliable and comparative time-series data on CO₂ emissions do not exist for the three companies selected in this study.

We thus consider the following four indicators as the basis for our assessment of the companies’ climate strategy choice:

- the corporations’ acknowledgement of the problem of a human-induced global climate change;
- their positions on the Kyoto Protocol;
- their GHG emissions targets and measures to achieve those targets;
- the degree of reorientation in their core business areas.

The first indicator is based on the extent to which the companies acknowledge the main conclusions from the IPCC, which, crudely put, states that the problem is real and that there is sufficient scientific evidence to act accordingly. The second indicator is based on explicit announcements. However, public statements made by the companies regarding their stand on the Kyoto Protocol may not accurately reflect their intentions to act. Therefore, we ‘control’ such announcements by a third indicator pointing to the adoption of (voluntary) GHG emissions reduction targets and measures for their own operations, such as emissions trading. The fourth indicator takes us further towards substance. Here, we make an effort to judge whether a company’s response implies a significant reorientation – with long-term implications – in its core business areas. A main focus is on a company’s investment or divestment decisions, particularly in terms of decarbonising the company’s portfolio. This should give us a picture of the resources with which a company’s climate rhetoric is supported. Taken together, these indicators provide us with a sufficiently solid basis to assess and compare the climate strategies of oil companies.

As noted by Rowlands (2000), it is difficult to assess the cause-and-effect relationship between a proactive strategy to climate change and a strategy of decarbonisation of fuels and renewables – it is not at all obvious which is cause and which is effect. If a company divests in coal for competitive reasons and then points to the coal divestment as its climate strategy, we have a classic ‘chicken-and-egg’ problem. Thus, we will address this problem explicitly according to whether policy or action came first.

The ultimate aim of exploring differences and change in corporate strategies is to understand more about the conditions that promote the shift towards an effective climate policy. As noted in the introduction, large oil companies and the fossil-fuel industry in general represent crucial target groups for a viable climate policy. A proactive strategy among key target groups is a necessary but not sufficient condition for ‘environmental problem solving’ within the context of climate change. The oil industry can influence the effectiveness of climate policy in at least two ways. First, oil companies can do so by the extent to which they cut their own GHG emissions from upstream activities and improve the quality of products from downstream activities; in contrast to states, a multinational company can require its branch offices around the world to comply with its climate policy. Second, oil companies can achieve this by the way they actively support or obstruct the development of climate policy at national and international levels; companies can lobby against decision-making or lead the way by setting an example for other corporations as well as governments.

Explanatory perspectives

There are essentially two main views on the extent to which large multinational companies are controllable or not within the present state system. On the one hand, some argue that such companies outmatch states in terms of resources and power, consequently operating increasingly beyond the control of nation states. There has been a concern that multinational capital and the growth of international economic institutions, such as the World Trade Organisation (WTO), have circumvented constraints from governments and social movements at the national level (Levy and Egan, 1998). Moreover, there appears to

be a mismatch between global corporate activity and democratic governments: while a national government cannot require a part of a company operating in another country to comply with its environmental policy, a multinational company *can* require its parts located abroad to meet corporate standards around the world. In principle, this mismatch in regulatory competence can be dealt with through international environmental institutions. However, while such institutions may have an adequate geographical scope, non-state actors are not formal parties to international agreements and thus not directly committed to international obligations.

On the other hand, others dispute the validity of the claim that international economic integration or globalisation has produced the 'global corporation', which owes allegiance to no state. Rather, they posit that multinational corporations operate within enduring political structures that continue to account for striking differences between them (Doremus et al., 1998; Pauly and Reich, 1997). Multinational corporations are not only under the control of all the states in which they operate, they are also largely controlled by their home-base countries in which they have their historical roots, headquarters location, and frequently main operations. A government has the authority to set standards and enforce regulations for all entities within its borders, while a company cannot set standards and require other companies to comply with them.

These opposing claims have some important implications for environmental governance. The first claim implies that global corporations are virtually out of regulatory reach in the present world system – characterised as it is by the absence of a central global authority. The latter claim is more optimistic in terms of governance: global corporations can be controlled within the existing frameworks of the nation state and by international regimes.

The three models presented below will shed light on these different claims. If large multinational oil companies tend to operate beyond national control, we would expect that the CA model has high explanatory power. The CA model suggests that differences between the companies themselves are more important than differences in political context for explaining the strategies they choose. The two other models are linked to the second

claim. The DP model indicates that global corporations are controlled by their home-base countries. The IR model suggests that multinational companies are influenced by the rules, norms and procedures of international regimes, and that these regimes can affect corporations directly by shaping collective corporate expectations, or indirectly by harmonising regulations in member countries.

The Corporate Actor model

As the demand for industry to give a higher priority to environmental issues has increased, a separate business environmental management literature has been developed. A number of models and approaches have been produced to explore and explain the environmental strategies and performance of corporate actors.¹ This body of literature is relatively new and is still to a large degree in the conceptual and exploratory phases. However, three main sources of influence on corporate strategy can be identified: (1) factors linked to the political and legal context within which the companies operate; (2) factors linked to the business context of the companies; and (3) company-specific features. Factors linked to political and legal contexts will be included and specified in the DP model, discussed below. In this section we will focus on the latter two sources of influence, looking specifically at three main factors relevant for a company's choice of climate strategy:

- the environmental risk associated with the company's activities;
- its environmental reputation;
- its capacity for organisational learning.

As pointed out by Steger (1993), the main concern of businesses is survival or profit maximisation. It is thus reasonable to assume that a consciously developed strategy to improve the corporation's environmental performance enters into the equation only when poor environmental performance threatens to undermine long-term survival. Steger thus views a company's environmental strategy as being determined by the level of *environmental risk* inherent in the company's activities. Environmental risk is in turn assumed to interact with market opportunities provided through environmental protection. In our

framework, however, provision of market opportunities by means of renewable energy policy, for example, is defined as a part of the political context in which the companies operate rather than as part of the companies themselves.

As are other industrial sectors, the oil industry is presently targeted by environmental regulations covering air, water and soil in every link of the production chain, from exploration to retail distribution. Regulations of product quality or emissions to air or water seldom represent a threat to the survival of oil companies, although the stringency of regulations varies from country to country (Estrada et al., 1997). In contrast to 'traditional' environmental regulation, the risk of regulation faced by oil companies in the field of climate change may be more lenient in the short term, but more severe in the long term. In addition to regulations directed at GHG emissions from oil industry activities, stringent international regulations may also affect the volume of production, since the oil industry earns its livelihood from the main sources of GHG emissions. Following the same logic, we have to search for nuances in the companies' fossil-fuel portfolio in order to understand differences in climate strategies.

Most multinational oil companies produce oil, gas and coal. Coal is the most carbon intensive, followed by oil and gas respectively. According to Rowlands (2000), it is reasonable to assume that the more carbon intensive the fossil-fuel portfolio of the oil companies, the higher the risk of the companies being targeted by stringent regulation and the more likely they are to resist such policies. The *relative* importance of coal, oil and gas will thus determine climate strategies: companies with more emphasis on coal and oil are more likely to adopt a reactive climate strategy than companies with a larger relative emphasis on gas. Carbon intensity is explored in terms of core business areas, exploration and production volume as well as resource reserves.

A company's perceptions of risk is also linked to another key factor: its *environmental reputation*, including its experience with public exposure and criticism in relation to environmental incidents. Such criticism may damage the brand name of a company. Environmental reputation may affect climate strategies directly and indirectly. A direct causal pathway may be discerned in the sense that companies with experience of strong public criticism stemming from severe incidents, such as the *Exxon Valdez* spill

(see chapter 4), will seek to avoid negative public scrutiny by adopting a proactive climate strategy. In this way, a company may respond effectively to an enhanced public concern for climate change. A poor environmental reputation may also affect companies indirectly, by initiating a reorganisation process aimed at streamlining the implementation of environmental standards within the company in order to prevent parts of the company from damaging the reputation of the whole. In turn, this may also stimulate a proactive climate strategy (see below). On this basis, we assume that a negative environmental reputation induces companies to choose a proactive rather than a reactive climate strategy.

While these factors are company-specific, they represent external sources of influence on a company's environmental strategy choice. Another set of factors that may have an impact on strategy choice and corporate environmental performance stems from internal sources. Here we focus on a company's capacity for *organisational learning*. Organisational learning basically concerns two main dimensions (see also Post and Altman, 1992; Neale, 1997): First, a company's capacity to learn depends on its openness towards its external environment; that is, the degree to which it exposes itself to the outside world and its capacity to capture signals of trends in areas of relevance to its business. Thus, the extent to which a company has institutionalised a systematic monitoring of future trends is one important determinant of the company's learning capacity. Second, a company's capacity to learn also depends heavily upon its capacity to make use of – internalise – the knowledge generated through monitoring mechanisms. This dimension of learning thus concerns the extent to which the organisational structure of the company facilitates effective intra-organisational communication and coordination.

The first dimension of organisational learning – the institution of monitoring systems in the organisation – may be decisive for the future of energy supplies companies prepare for. For instance, why have some major oil companies redefined themselves towards *energy* companies, with a stronger focus on non-fossil-fuel energy sources, while other companies continue to focus exclusively on fossil fuels? We assume that this may have something to do with differences in the companies' emphasis on and

interpretation of the ‘shadow of the future’ – i.e. the companies’ capacity and willingness to understand a changing world.

Since fossil fuels represent a non-renewable energy source, most multinational oil companies monitor future reserves and markets. Companies may nevertheless differ along two dimensions. First, they may differ in the extent to which and how monitoring of future trends is institutionalised within the organisation and used systematically as a decision premise within the organisation. Such systems are likely to be directed at understanding future markets, consumer preferences and opportunities, and risks arising from relevant political contexts. Second, even though companies have institutionalised such systems to the same extent, they do not necessarily have the same vision of the future. What they see will depend on previous experience with related changes. For instance, if two oil companies both see a window of opportunity for solar energy, they may still respond differently depending on whether they have positive, negative or no past experience with such technology. What they see will also depend on where they look: whether at their own history or at features characterising the context in which they operate.

The extent to which the companies are capable of making use of the information generated through monitoring systems is to a large extent linked to the organisational structure of the company, with a rough distinction running between centralised and decentralised companies. It could be argued that a centralised company is better equipped for internal communication and coordination, and thus has a larger capacity to make internal use of information generated through monitoring. A decentralised company, on the other hand, would be less capable of communicating trend shifts from one part of the organisation to another, and would thus also be less capable of internalising this kind of information.

These two dimensions of organisational learning are thus both necessary for a company’s learning capacity: without a certain degree of openness towards the external environment and a systematic approach to monitoring future trends, a company is incapable of identifying relevant trend changes when they occur. Similarly, without effective channels of internal communication and coordination, the company is incapable of making use of the knowledge generated. In addition, as discussed above, a

company's interpretation of future trends also depends upon its history and past experience.

This indicates that the relationship between learning capacity and corporate strategies is characterised by causal complexity and is hence difficult to determine (Ragin, 1987). Causal complexity refers to a situation where it is the combination of conditions that produces change – which is different from saying that each variable in itself produces a change in another variable. When the relationship between a set of variables is characterised by causal complexity, the *direction* of influence, which in our case would be whether one variable leads to a proactive or a reactive strategy, depends on the value of another factor or variable. This implies, first, that a company has a high learning capacity only to the extent that it both monitors future trends and has an organisational structure equipped for communicating and coordinating the insights from its monitoring activities. In addition, how information generated through monitoring activities is interpreted may depend upon the company's history and previous experiences. The presence of causal complexity implies that similarities in learning capacity produce similarities in climate-strategy choice only in combination with similarities in other factors. At the most general level, however, we nevertheless expect that a company that anticipates a significant role and demand for renewable energy sources in the future and has the organisational capacity to internalise this vision is more likely to adopt a proactive climate strategy.

In general, we assume that similarities in company-specific features will lead to similarities in the companies' responses to climate change. Likewise, we assume that variation in company-specific features will lead to variation in the companies' responses to climate change. More specifically, we propose that a low level of environmental risk, negative public scrutiny, and high organisational learning capacity (conditioned by other factors) will lead to a proactive strategy on climate change.

Moderating factors In addition to the three factors chosen here, scholars in business environmental management have suggested a set of company-specific factors that may determine environmental strategies, including leadership, capital availability, human resource availability, corporate tradition and ownership (see inter

alia, Ghobadian et al. 1998). With respect to leadership, there are a number of references to the unique role of Sir John Browne in directing BP towards a more proactive stance on climate change (see e.g. Rowlands, 2000). Differences in leadership may, however, be prohibitively difficult to assess empirically in relation to climate strategies in a comparative perspective. The same is true when it comes to capital availability. Kolk and Levy (2001) argue that low profitability may lead to a reorientation towards renewables. On the other hand, low profitability may also lead to caution concerning new and more risky investments. Human resource availability can be expected to be roughly equal for global companies operating in the same global market. However, there may be differences in in-house scientific and technological expertise that may influence the perception of causes as well as solutions to environmental problems characterised by scientific uncertainty.

Finally, an important organisational dimension with a potential impact on environmental strategy choice is the *ownership structure* of the corporation. First, there is a major distinction between state and private ownership. Shell and ExxonMobil are private companies, while Statoil was, until recently, fully owned by the Norwegian state. National oil companies may be less accountable to the capital market, and even when they are exposed to competition, they often operate in a privileged position with close consultative relationships with their government owners, who also regulate the industry (Noreng, 1996). It is difficult, however, to establish the weight of this factor and even the direction of its impact, but it seems reasonable to assume that government-owned companies are likely to adopt a climate strategy in accordance with the position of their government owners. Second, ownership may have an impact on strategy choice in the sense that shareholders in private companies may pressure the corporate leaders to adopt a more proactive strategy. Third, differences in shareholder patterns between Europe and the US may have implications for the extent to which corporate leaders adopt a long-term perspective in their financial decisions, or whether they merely focus on short-term shareholder returns. Such differences may have relevance for the companies' climate strategies (Pauly and Reich, 1997). This is extremely difficult to explore empirically, however, because the causal chains are long and complex.

The Domestic Politics model

The DP model is a well-established approach within political science (Underdal and Hanf, 2000). It suggests that key sources of state behaviour can be found at the domestic political level rather than in the international society: differences in state responses to common problems may be traced back to the state, or government itself, the society, or the relationship between state and the society. We have used this model to shed light on how multinational corporations adopt climate strategies. Accordingly, we assume that corporations are affected by a social demand for environmental protection, governmental supply of climate policies and the political institutions linking supply and demand. Notice that the DP model was originally developed to understand political decision-making rather than corporate decision-making. This difference in what the models are designed to represent has particular consequences for the social demand dimension (see below).

Multinational oil companies are potentially affected by social demands and policies in all countries where they operate. However, some researchers have argued that the ‘nationality’ of private multinational companies is of particular importance for their attitudes and culture (Gleckman, 1995; Rowlands, 2000). The strongest influence is likely to be found in the companies’ home-base countries, where they have their historical roots, have located their headquarters and have concentrated most of their activities. This observation is supported by a survey of multinationals revealing that the most important motivating factor for establishing corporate-wide environmental management systems is the environmental policy of the companies’ home-base countries (Gleckman, 1995). Thus, it seems reasonable to assume that long-standing national ties affect the way in which companies approach new problems such as climate change.

Social demand The key mechanism whereby social demands can affect the actions of governments is the voting power of electorates. In this analysis we transform social demand from being an analytical tool for understanding governmental behaviour to one for understanding corporate behaviour. The key mechanism whereby social demands are assumed to affect corporate strategies is thus consumer behaviour rather than voting power.

A social demand for environmental protection affects corporations engaged in activities associated with environmental risk (Rondinelli and Berry, 2000). Public values and attitudes as well as organised social interests, such as environmental groups, control a powerful tool for inducing specific modes of corporate behaviour: consumer behaviour. 'Green' consumerism has become a significant force in Organisation for Economic Cooperation and Development (OECD) countries, and this phenomenon has the capacity to stimulate and weaken product markets. There are at least two mechanisms through which social demands may affect corporate strategy choice on environmental issues. First, consumer campaigns initiated by the green movement can damage companies' reputation and affect their market share. Second, in their choice of environmental strategy, companies may be responding to 'green' consumers' willingness to pay a higher price for clean products, such as clean energy.² While the latter mechanism provides companies with business *opportunities* like new markets in renewable energy, the former exposes companies to *pressure*. A strong social demand for climate policy is thus likely to trigger opportunities and pressures simultaneously. Whenever national imprints overlap with market exposure in terms of pressure and opportunities, we suspect that social demands in the companies' home-base countries will influence their environmental strategies.

A social demand for a viable climate policy is likely to affect corporate strategies only marginally if changes in values and attitudes are perceived as expressions of short-term fluctuations only. According to Inglehart (1971), support for different social movements, including the environmental movement, represents a political expression of post-materialistic values that will strengthen their position on the political agenda as the new generations become older. We would thus expect that the strength of a social demand for environmental protection would increase gradually in the form of 'new' values and attitudes. In contrast, Downs (1972) proposes that environmental issues, like other political issues, will follow an 'issue-attention cycle'. Environmental issues will fade from the interest of the public over time and be replaced by new issues, regardless of whether problems actually have been solved. The point here is that the relevance of these explanations can vary between countries, providing corporations with different signals

with regard to what can be expected in the future concerning people's willingness to pay higher prices for clean energy. For example, fluctuations in environmental attitudes in Norway and the Netherlands – the home-base countries of Statoil and Shell – have been interpreted in line with Downs and Inglehart respectively (Weale, 1992; Aardal and Valen, 1995).

The fact that the key mechanism through which companies may be affected by social demands is consumer rather than voting behaviour implies that there is also an indirect pathway through which social demands can affect target groups – namely, through public policy. Public pressure is in itself a contextual factor shown to be important for explaining outcomes of national environmental policy (Jänicke, 1992, 1997). Since politicians in democratic systems are accountable to their electorates, change and variance in public environmental values and attitudes to climate change may affect governmental climate policy. Thus, societies characterised by a strong social demand for environmental protection are also more likely to enforce stronger environmental regulation. Social demands, therefore, can affect both the strength of climate policy (with an indirect effect on companies' strategy choice) and consumer behaviour (with a direct effect on companies' strategy choice).³ Companies are thus sensitive to the social context in which they operate for many reasons. On this basis, it is reasonable to assume that a strong social demand for environmental quality will stimulate a proactive strategy. Conversely, a weak social demand for environmental quality is likely to go hand in hand with a reactive strategy.

Governmental supply In democratic systems, social demands represent a significant force in shaping public policy. Public policy, however, is not only driven by social demands. Governments have both their own views and the capacity to act independently. Governmental regulation has been seen as an important factor behind the 'greening' of industry since the UN Conference on Human Development in Stockholm in 1972 (Falkner, 1996).

Governmental supply of an ambitious climate policy is here understood in terms of targets and policy instruments. The world is full of political declarations that are not seriously intended and never realised – a well-known phenomenon from large diplomatic

conferences and election campaigns. Even well-specified climate targets, including deadlines and baselines, do not necessarily send any clear signal to target groups unless they are backed up with policy instruments. Climate-policy instruments represent the ‘sharp end’ of public policy and are particularly important for companies’ climate strategies.

Three broad categories of environmental policy instruments have evolved over the past 30 years (OECD, 1999).⁴ The first is regulatory instruments – often referred to as ‘command and control’ – whereby public authorities mandate a certain performance or technology. The second is economic instruments whereby target groups are given financial incentives to reduce environmental damage. Voluntary agreements constitute the third type. These types of policy instruments resemble both the stick and the carrot, as well as agreements at the interface of sticks and carrots: the government may force us, pay us or have us pay, or persuade us to strike a deal in the ‘shadow’ of hierarchy.

In the 1990s, voluntary agreements between governments and industry received increased attention in climate policy, and more than 350 voluntary programmes have been adopted in 22 OECD countries (IEA, 1997). Voluntary agreements involve commitments by target groups to improve their environmental performance beyond what is strictly legally demanded. There are two main types of agreements: negotiated agreements and public voluntary programmes. Negotiated agreements are binding, highly structured, and developed through bargaining between a public authority and industry. In contrast, public voluntary programmes are optional commitments in which companies are invited to participate (OECD, 1999).

Different policy instruments have different qualities in accordance with different problems, and may be judged according to a number of criteria, such as goal attainability, capacity to stimulate technological innovation, cost-effectiveness and transparency (Skjærseth, 2000). However, the *authoritative force* of policy instruments appears particularly important for companies’ climate strategies. Authoritative force represents the degree of constraint the government exercises on the target group, affecting the group’s discretionary room for manoeuvre (Vedung, 1997).⁵ Policy instruments based on a high degree of authoritative force, like direct regulation or economic instruments, send a clear signal

to target groups: the authorities acknowledge the problem and expect companies to change their behaviour accordingly. In contrast, public voluntary programmes are normally used as a first step in the exploration of a new policy area (OECD, 1999). Thus, these programmes tend to be associated with a high level of uncertainty with regard to future regulation.

A viable climate policy based on clear targets and mandatory policy instruments can reduce uncertainty, create regulatory pressure and grant market opportunities for companies. Reduction in *uncertainty* concerning future options is particularly important for the oil industry, which earns its livelihood from non-renewable resources expected to run out sometime in the future. Predictability in regulatory frameworks is important when oil companies make decisions on their own climate targets, abatement measures or investments in renewable energy. Since 1971, Shell has, for example, addressed uncertainty in its strategy formulation through scenario planning (see chapter 4). A proactive response can also be seen as a function of regulatory *pressure* exercised within a political context of the increasing importance of insurance companies, responsibility and liability. The oil industry has experienced a gradual strengthening of environmental policy since the 1950s (Estrada et al, 1997). Today, every link in the oil industry chain – exploration and production, transportation, refining and distribution – is controlled by a series of regulations aimed at preventing water, air and soil pollution. Regulatory pressure creates corporate attention, which represents the first step towards any conscious climate strategy. Pressure further induces unilateral company targets as well as abatement efforts. Neglecting regulation exposes oil companies to economic risks. A proactive strategy may reduce this risk: ‘the more the oil industry opts for a ‘wait and see’ approach, the more it is likely to attract the attention of regulators’ (Estrada et al., 1997: 16). Thus, companies sometimes adopt a proactive strategy in order to gain more favourable treatment by regulatory agencies (Rondinelli and Berry, 2000). In addition, climate strategies are likely to be influenced by previous corporate experience with environmental regulation in other issue areas. An ambitious climate policy can also create market *opportunities*. Governmental targets and measures on renewable energy will provide the industry with incentives to focus accordingly. In addi-

tion, increasing abatement costs may stimulate development of commercially viable technology on energy efficiency.

The upshot of the above reasoning is the proposition that an ambitious climate policy in terms of targets and policy instruments will stimulate a proactive strategy among oil companies. If high social demands go hand in hand with an ambitious climate policy, a positive *interplay* between demand and supply can be expected. Conversely, low demands and lenient policy will point in the direction of a reactive strategy.

Political institutions linking demand and supply Western democratic political systems have two main channels for influencing decision-making by linking state and society: the numerical-democratic channel, which includes voters, political parties and parliaments; and the corporative channel, in which non-governmental and governmental decision-makers meet to consult, collaborate and negotiate. The relative importance of each of these channels has traditionally been summed up in the phrase ‘votes count, but resources decide’ (Rokkan, 1966). Thus, here we concentrate on the presumably more influential and relevant of the two: the corporative channel.

There are different theories of business–state relations. One view is that the state actively serves business interests that are able to act cohesively in the political arena. Another is that the state can maintain neutrality and independence from business interests (Levy and Egan, 1998). This section is based on the latter assumption, but we pragmatically adopt the view that this is essentially an empirical question that may lead to different answers in different cases.

Governmental decision-makers are, at least in theory, left with a choice between stimulating cooperation aimed at consensus-building between industry and governmental decision-makers, and a more conflict-oriented strategy based on imposition. The distinction between political institutions based on consensus or imposition is a fundamental one in the study of comparative environmental politics (Lundqvist, 1980; Jänicke, 1992; Andersen, 1993). Such distinctions are often referred to as significantly different national styles or approaches to regulation. Political institutions determine who is included in the decision-making processes, to what extent and in what way. A consensual

approach is characterised by open formal access for affected target groups, such as the oil industry. The aim of this collaborative strategy is to raise environmental awareness and promote social responsibility among companies. A recent trend in environmental policy highlights consensual principles such as ‘shared responsibility’ between firms and governments. In return, companies expect their interests to be taken into account in the design of relevant policy. Accordingly, we propose that a consensual approach stimulates a proactive corporate strategy. In contrast, a conflict-oriented approach is characterised by limited access to decision-making in climate policy for target groups. The rationale behind this approach is to avoid regulatory capture, i.e. the regulated taking control over the regulator. A conflict-oriented strategy is likely to produce resistance among target groups in the form of a reactive strategy.

Political institutions that stimulate a proactive approach do not necessarily lead to higher environmental effectiveness. With the conflict-oriented strategy, industry will have a limited opportunity to water down regulations, although opposition during implementation can be expected; if target groups have not been invited to have their say, their interests are less likely to be reflected in the goals and composition of policy instruments. Conversely, the collaborative strategy is likely to lead to cooperation during implementation, but often at the expense of more lenient goals and policy instruments. In short, these approaches may lead to different corporate strategies, but a similar outcome in terms of environmental effectiveness.

While the main focus here is how political institutions affect corporate strategies, corporations not only represent a potential target for social demands and governmental policies, but represent in themselves a social interest group with a potential to influence governmental policies. This is not least reflected in the emphasis given to the DP model in the emerging literature on the role of multinational actors in policy-making (see, for instance, Risse-Kappen, 1995). Corporations themselves may have the potential to influence governmental policies in specific issue areas. There is, however, no necessary relationship between formal access and influence. First, informal participation in the form of lobbying is widespread throughout the industrial world. Second, the insider/outsider model suggests that some actors or

alliances may enjoy a privileged status and represent the ‘core’ while others are more peripheral (Maloney et al., 1994). Still, formal access tends to stimulate a constructive, cooperative climate and increase probabilities of influence, since it does not necessarily exclude other forms of informal participation.

Companies may have good opportunities to affect the ambitiousness of climate policy particularly in their home-base countries, but such influence is probably less significant *in itself* as a determinant of corporate strategies. In the case of international regimes and global problems, however, corporate influence on the climate regime may in itself prove crucial for their collective climate strategies. This mechanism will be explored in the next section.

On the basis of this discussion of the DP model, we may generally assume that if domestic political context factors differ and are decisive for corporate strategy choice, corporations will tend to choose different, rather than similar, strategies towards common problems. More specifically, we explore the proposition that strong societal demands for climate policy, governmental supply of an ambitious policy, and a consensus-oriented approach to regulation will promote a proactive strategy among multinational oil companies.

The International Regime model

The IR model takes us from domestic to international politics. According to this model, the key sources of corporate strategies are found within the context of international regimes rather than in the domestic political context of the companies’ home-base countries. Climate change is a global problem, largely caused by global target groups such as the oil industry, dealt with within the framework of international institutions. We thus have to move beyond the study of single companies within single states in order to gain an understanding of *changes* in corporate climate strategies. Accordingly, this model is concerned with corporate alliances across states and how such alliances relate to international regimes. The DP model is more static and directed towards explaining differences in strategies rather than changes.

According to the regime perspective, corporate climate strategies are likely to be formed by the influence of industry on regimes and the influence of regimes on industry. This argument

is straightforward: if industry determines joint international commitments, the regime is in turn unlikely to affect industry strategies. Conversely, if industry exercises little influence on joint international commitments, the regime has in turn a potential to affect industry strategies. The IR model presented here is thus concerned with the *dynamic relationship* between corporate strategies and international institutional development. By dynamic, we mean a relationship in which institutions can affect the strategies of corporate actors, which in turn can affect institutions, or vice versa. This approach thus allows for a more systematic focus on the conditions triggering changes in corporate strategies.

In contrast to the national level, no central governing body exists at the international level that has the authority to define stakeholder involvement, solve disputes among affected actors or enforce regulations. The international system has been characterised as an anarchy based on a self-help system among *states* (Waltz, 1979). States can modify the self-help element of international relations by transferring authority to international regimes, such as the climate regime. International regimes can be defined as: ‘social institutions composed of agreed-upon principles, norms, rules, and decision-making procedures that govern interactions of actors in specific issue areas’ (Young and Osherenko, 1993: 1).

International regimes provide industry with both constraints and opportunities. On the one hand, corporations have limited influence over the development of international regimes because states, not companies, are parties to regimes. Since international environmental regimes tend to ‘mature’ over time by developing more stringent joint international commitments, regimes represent a serious challenge for reactive companies (Miles et al., 2001). A strong global regime carries the potential of affecting multinational companies all over the world, in sharp contrast to the policy of one single state. On the other hand, international institutions based on *agreement* may simply codify the behaviour of the most ‘reluctant actor’ – a mechanism known as the ‘law of the least ambitious program’ (Underdal, 1980; Sand, 1991). If a reactive industry determines the position of the ‘least ambitious’ state in international negotiations, and that state determines joint international commitments, the regime is unlikely to stimulate

proactive corporate strategies. This mechanism provides (a reactive) industry with the opportunity of exercising influence far beyond its home country. Alternatively, industry influence can affect the inclusiveness of the regime: reluctant states can choose the exit option, or the regime can allow for various 'fast-track' options allowing different obligations for a subset of the parties (Sand, 1991).

If the regime is based on qualified majority, single reluctant states can be outvoted and the influence of a reactive industry on the regime tends to decrease. In essence, the perceived influence of industry appears crucial for choice of climate strategy. In situations where a reactive industry has weak influence and the regime 'matures', we can expect a change towards a proactive strategy. In this case, there will be more to lose than to gain from a persistent reactive strategy. Conversely, if a reactive industry exercises strong influence and largely controls the development of the regime, a persistent reactive strategy can be expected. However, we cannot exclude the possibility that a company or branch may move towards a proactive strategy *prior* to any regime development. In this case, however, corporate strategies can influence regime development and not the other way around. One example here is the change in the strategies of the chemical industry, which contributed to a breakthrough in the ozone regime (Skjærseth, 1992). Such a development would not have been predicted merely by the IR model, but could be explained by additional factors linked to the DP or CA models.

In situations where industry exerts a weak influence on the regime, the regime can in turn also explain differences in corporate strategies to the extent that it generates different rules, norms and principles for different (groups of) actors. This factor is primarily linked to the inclusiveness of the regime: are all relevant/pivotal state actors included as members? As governments, regimes can provide companies with opportunities or pressure, though through different pathways. Moreover, international regimes can influence industry by producing knowledge on the causes and consequences of the problem at hand.

From the perspective that large multinational corporations actually cause a significant number of the problems international regimes have been established to solve, the state-centric approach of regime theory is a major shortcoming. Although ENGOs have

received increased scholarly attention, systematic studies of multinational corporate actors are almost non-existent in the regime effectiveness literature (see chapter 1). Thus, the next two sections will have a more exploratory status than the former two. Here, we will make an effort to include corporate actors in the study of international regimes by focusing on two key questions: to what extent and how can oil companies affect the climate regime? And how can the climate regime affect the strategies of the oil companies?

Corporate influence on international regimes Studies of international regimes have evolved rapidly, from focusing on regime creation to focusing on regime effectiveness. Different approaches within regime effectiveness theory are unified by a common assumption that international institutionalisation within specific issue areas can affect the will and ability of states to come to grips with common challenges. The concept of effectiveness has been defined in a number of ways, but all definitions direct our attention to the *consequences* of regimes (Young 1994; Underdal, 1992, 2001).⁶ A starting point in the study of how corporate actors can affect regime commitments is to turn the conventional chain of regime consequences upside down: our point of departure is the strategies of target groups rather than the consequences flowing from international regimes. This means that corporate actors can influence regimes through two main channels: the domestic and the international regime. Domestically, corporate actors can affect (1) the formation of national positions in international negotiations, and (2) the domestic implementation of joint commitments. In addition, corporate actors can affect (3) international cooperation directly through their presence (as observers or lobbyists) at international negotiations. In this section, we focus on the extent to which and how corporations can affect the stringency and geographical scope of joint climate commitments. The focus on joint commitments rather than their domestic implementation is necessitated by the short lifetime of the climate regime.

Notice that the main distinction between (1) and corporate channels at the domestic level lies in a shift in focus from national policy to the formation of national positions in international negotiations. In environmental policy, there is a probable but not

necessary relationship between national policy and international positions. Norway has, for example, been more ambitious in its environmental foreign policy abroad than at home (Skjærseth and Rosendal, 1995).

Determining the influence of a specific branch of corporate actors is extremely complicated. First, industry affects national positions and joint commitments both indirectly and directly (Newell, 2000). Indirect *structural* influence is related to states' dependence on industry: industry is important for economic growth, employment and technological innovation – particularly in the energy sector, which tends to be viewed as a strategic state objective. This structural dependency provides industry with privileged and informal access to decision-making, which is difficult to observe directly. Direct *instrumental* influence is based on huge in-house human, financial and technological resources, which are deployed to persuade decision-makers through PR firms, disputing climate science and developing economic models showing the high public costs of regulating GHG emissions. Moreover, large corporations have the ability to organise at all levels of society. Global companies such as Shell and ExxonMobil are particularly well suited to match global environmental regimes, and global presence is secured in business organisations such as the International Chamber of Commerce (ICC).

Second, the notion of industry influence is difficult to pinpoint precisely because the concept is closely related to power, and because power and influence have mainly been related to states. Power has in state-centric terms been related to capabilities, while influence is seen as a relationship between actors, which can modify behaviour (Cox and Jacobson, 1973). In the same way, we may say that industry possesses structural and instrumental capabilities. As pointed out by Betsill and Corell, however, the important question is how capabilities are translated into influence (Betsill and Corell, 2001: 74). These researchers' answer is to relate influence to persuasion when one actor intentionally transmits information to another that alters the latter's actions from what would have occurred without that information.

Third, it is difficult to separate the influence of one particular corporation or industry from that of others since companies tend to coordinate their positions within industry organisations. Thus, we take a broader view on industry in general, particularly the

fossil-fuel industry, in which the major oil companies have played an important if not dominating role.

At least three conditions related to the qualities of the target groups, institutions and other actors are important for understanding the influence of industry on joint regime commitments. These conditions are thus important for how industry perceives its influence. First, we assume that the influence of target groups tends to increase the more cohesive their strategies are. Political and financial resources, activities, and the strategies employed by target groups are likely to enhance influence if target groups stand united in their support for or opposition to specific policies. Target groups participate in international environmental politics in different ways: they organise themselves at all levels of society to affect policy whenever their interests are threatened; they lobby decision-makers when positions in international cooperative efforts are shaped; and they participate as observers in international negotiations (Newell, 2000).

Second, there is reason to assume that influence depends upon the *access* industry has to decision-making processes as well as the *decision-making procedures* applied. Since corporate actors can influence international regimes through the domestic as well as the international regime channel, access to decision-making processes relevant to the development of national positions in both international negotiations and the regime is important. Even though corporations do not participate in international regimes, their access as observers to preparatory sessions can vary significantly. We assume that influence will increase as industry has more access to decision-making processes. Decision-making procedures applied in international environmental cooperation vary as well. Unanimity is most demanding, requiring the positive approval of all parties. Under the condition of unanimity, reactive industry influence within one single state can block the efforts of all others. The requirement of consensus is less demanding in that it merely requires the absence of objections. Consensus is often used in combination with various ‘fast-track’ options, such as the principle of differential obligations and regionalisation of the cooperation (Sand, 1991). These opportunities limit the influence of a reactive industry to block the efforts of merely a subset of the parties. In the case of a qualified majority decision binding on the minority, reactive industry influence through domestic channels

will be further limited. In the EU, for example, a minority block of EU member industries can be forced – via reluctant national authorities – to implement a specific directive or regulation. If an industry fails to comply, it may be brought before a national court, which is required to interpret national laws in line with EU obligations. In addition, since 1993 the European Court of Justice has been empowered to impose fines on states that have failed to comply with previous rulings of the court.

Third, influence is likely to depend on the strength of counterbalancing forces, such as ENGOs. The environmental movement tends to represent a significant counterbalancing force to target groups. In essence, the more ENGO resistance to business strategies, the less industry influence can be expected. As in the case of industry, ENGO resistance can be exerted though domestic as well as international channels.

Regime influence on corporate strategies In this section, we shift the focus to how international regimes can affect corporate strategies, with a particular focus on changes in strategy over time. The dynamic twoway relationship between international institutions and corporate actors represents a fascinating aspect of climate policy and contains the seeds of change towards a more effective climate policy in the future. The study of institutional dynamics within regime theory has generally been related to the grand questions of ‘The rise and fall of international regimes’ (Young, 1989). Institutionalised cooperation may lead to path-dependent processes where earlier events affect subsequent ones. Our focus will be narrower, but feed into the topics indicated above.

The question in this section is whether and how the institution governing climate change has constrained or promoted subsequent actions among corporate actors due to its initial qualities. As noted, international regimes tend to ‘mature’ over time towards more stringent joint commitments. This observation is in line with the notion that institutionalised cooperation gathers momentum through a ‘snowball’ effect generating positive feedback and facilitating further steps (Andresen et al., 1996). According to Young, international regimes evolve continuously in response to their own inner dynamics (Young, 1989: 95). Levy has labelled such dynamics of international environmental insti-

tutions as ‘tote-board diplomacy’ (Levy, 1993). According to this perspective, we can expect that, over time, joint commitments will become more stringent and governments as well as corporations more ambitious in implementing them. It is reasonable to assume that this process becomes more likely when the initial institutional arrangements have a narrow scope, include lenient commitments and possess institutional feedback mechanisms that encourage dynamic development.

Even though most regimes tend to ‘mature’, others may decline. This possibility is reflected in the economists’ ‘law of diminishing returns’. According to this perspective, the first steps are likely to be the ‘easy ones’ in which marginal benefits clearly exceed marginal costs. Then when attempts are made to extend the scope of the institution or to tighten up joint commitments, marginal abatement costs will tend to increase, and benefits in the form of environmental quality will tend to decrease. For example, according to a rule of thumb applied by industry, costs will remain constant for each 50 per cent cut in discharges. This perspective would suggest that it will become increasingly difficult to step up joint commitments, and governments as well as corporations will become more reluctant in implementing them over time. The conditions triggering this development are more likely to appear when original institutional arrangements have a wide scope and include stringent commitments as well as dynamic qualities.

How can international regimes induce change in corporate strategies? We believe that the core mechanism may lie in the combination of the ‘snowball’ effect at the regime level and the lack of industry influence in international regimes. On the one hand, corporations increasingly participate as observers of international regimes. The UNFCCC places strong emphasis on participation by non-state actors, and the Global Climate Coalition (GCC) alone came with a delegation of 50 members to Kyoto (Raustiala, 2001). On the other hand, the principle of sovereignty provides states with significantly more rights than large corporations. States have the right to refrain from international agreements that they have not given their consent to. Sometimes states also have the power of veto and the right to block the efforts of other states. Corporations do not have these rights, even though a company like ExxonMobil is much larger in terms of economic

resources than many parties to the UNFCCC. ExxonMobil dislikes the international climate process and finds the international climate regime unrepresentative.⁷

We analyse the climate regime (the UNFCCC and the Kyoto Protocol) and the climate policy of the EU. The EU can be analysed both as an actor in the international climate regime and as a regional subregime (Skjærseth and Wettestad, 2002). We explore three causal pathways through which conditions linked to the international regime may have affected corporate strategy choice: knowledge, pressure and opportunity. These are compatible with three well-known causal mechanisms applied within regime theory: knowledge, power and interests (Young and Osherenko, 1993). Note that some of these regime qualities may serve the same functions as domestic policies. The main difference is that international regimes are able to carry out these functions on a wider scale than individual countries. In other words, a global regime has the capacity to affect global multinational companies in all countries in which they operate.

First, there is a scientific/technical *knowledge-based* pathway, which affects the extent to which corporations accept a common understanding of the problem at hand. The scientific uncertainty argument has repeatedly been used by the corporate fossil-fuel lobby to oppose any attempts to adopt a viable climate policy. We assume that differences along this dimension may be due to either differences in corporate access to the IPCC process, or differences between the corporations in their receptiveness to the information provided. Significant changes in the scientific knowledge base may also bring about corresponding changes in corporate strategies.

Second, international regimes may exert regulatory *pressure* directly on companies or indirectly by strengthening national climate policy. The general assumption is that 'strong' regimes will promote a stringent climate policy and proactive companies by shaping mutual expectations about the need for future regulation. In essence, strong regimes send a clear signal to target groups. Regime strength can be seen as a function of: (1) the authoritative force of commitments; (2) ambition and specificity of commitments; and (3) verification and enforcement systems.

Third, international regimes can also grant *opportunities* for companies. In our context, regimes can induce new market

opportunities for renewable energy sources as well as technologies for energy efficiency. In addition, international regimes can provide common policy instruments in order to establish equal competitive frameworks. One obvious example is emissions trading, which has received general support by industry. Business and industry tend to prefer internationally harmonised, flexible and cost-effective policy instruments (Skjærseth, 2000).

On this basis, we propose that change and differences along the above dimensions have led to change and differences between European and US-based companies. More specifically, we explore the proposition that a regime that progresses beyond the interests of industry, that provides a common understanding of the problem at hand, that induces pressure and grants opportunities will stimulate a proactive strategy among relevant target groups.

Conclusion

In this chapter, an effort has been made to identify critical factors or key conditions that determine the strategies chosen by the oil industry to meet climate-change challenges. Since large multinational oil companies represent important target groups for mitigating climate change, identifying such conditions will provide knowledge of whether and how corporate resistance to climate policy can be overcome. Of particular importance is the extent to which varying climate strategies are the result of company-specific factors, or whether they are located in the political context at national or international levels. Strong empirical support in the former case will point in the direction of corporations operating beyond the reach of climate policy-makers, while the latter case is more hopeful in terms of governance: corporate climate strategies can be affected within existing political frameworks at national and international levels.

The first task in this chapter was to distinguish between different corporate climate strategies. The main challenge is that the public profile of a company, i.e. the rhetoric it uses, may diverge significantly from actual behaviour. Accordingly, there is a real danger of exaggerating differences in corporate strategies. We have tried to deal with this pitfall by identifying indicators that emphasise the companies' activities rather than the rhetoric they use: what have the companies actually done to confront climate

change? Regrettably, comparable data on GHG emissions at corporate level are not available. We should also bear in mind that radical changes in behaviour should not be expected at this stage, since climate change is a relatively new issue area. We base our ranking of corporate strategies on a continuum from reactive to proactive.

The next step was to identify the key factors affecting corporate strategy choice. These factors can be identified within a multi-level governance approach. Variations in corporate strategies can be due to variations at corporate, national or international levels. The driving forces at these levels were captured within the framework of three models: the CA, the DP and the IR. The IR model deviates from the former two in that it places more emphasis on capturing the conditions triggering changes in corporate strategies over time.

Before we delve into an empirical scrutiny of these models, we will take a closer look at the specific climate strategies of ExxonMobil, Shell and Statoil.

Notes

- 1 See, inter alia, Post and Altman, 1992; Roome, 1992; Steger, 1993; Ketola, 1993; Hass, 1996; Ghobadian et al., 1998.
- 2 In addition, a company may adopt a proactive environmental strategy as a response to societal demand for environmental protection measures expressed by its own shareholders and employees. This dimension can also be extended to cover 'counter demand', e.g. demand for cheap petrol. If climate-change measures mean higher petrol prices, variation in demand for cheap petrol can contribute to an explanation of corporate climate strategies.
- 3 It is important to emphasise that the purpose here is *not* to explain why climate policy differs and changes within and across countries. Climate policy may be caused by other factors, such as energy-economic circumstances (see Chapter 5).
- 4 Climate-policy instruments can also be understood in a broader sense, when organisation, information and research and development (R & D) are included.
- 5 Note that there is no necessary relationship between authoritative force and effectiveness measures in terms of behavioural change.
- 6 In fact, international regimes produce a chain of consequences, and effectiveness can be measured at different points in this chain: *Output1* refers to joint international commitments; *output2* is

related to domestic policy and implementation of joint commitments; *outcome* points to changes in the behaviour of target groups; and impact refers to the tangible consequences affecting the physical problem at hand.

- 7 Personal communication with Brian Flannery, ExxonMobil, Irving, Texas, 16 March 2000.