Europe and Global Climate Change

Politics, Foreign Policy and Regional Cooperation

Edited by

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Europe and the politics and foreign policy of global climate change

Paul G Harris

INTRODUCTION

The Earth is experiencing unnatural atmospheric warming that is leading to changes in climate and a host of mostly adverse side effects for humankind and the ecosystems upon which we depend for our wellbeing (see Houghton et al. 2001; Houghton 2004). Of this there is now little dispute. The world's governments, as well as many nongovernmental actors, have started to address the problems of global climate change (GCC) - global warming and resulting climatic changes, Alas, their responses to these problems have been modest at best relative to the scale of painful future changes to environmental and socio-economic systems that are anticipated by scientists. Europe is a crucial actor in the GCC debate and related diplomacy and policy responses. Like the United States (US), as a group the countries of Europe are a primary source of 'greenhouse' gases (GHGs) causing global warming, meaning that the extent to which they limit those emissions will be important for future climate change.2 They also possess technological and financial resources that are necessary to reduce GHG emissions globally and to assist those countries most vulnerable to GCC so that they can better adapt to its undesirable effects. While the European reaction, like that of the US, has not fully met the challenge of GCC, nowhere has the response to this problem been greater than among the member states of the European Union (EU).3 As a group they have taken greater steps at the national, regional and international levels to reduce their own and other countries' emissions of GHGs, and they, along with the EU itself, have done the most to at least begin assisting developing countries that will suffer inordinately from the effects of GCC (see Chapter 15).4

In this book we explore European and EU responses to global climate change. Our main aims are (1) to analyze the 'what, how and why' of GCC policies of several EU member states and of the EU itself (e.g., the European Commission and its agencies), and (2) to supplement existing knowledge

of GCC policies by explicitly adding environmental foreign policy analysis (FPA) to the mix of tools used to understand those policies. While many important arguments are made throughout the chapters that follow, the main one is this: analyzing and thinking about European GCC policies from the perspective of foreign policy - the crossover and interaction between domestic and international politics - will help us to better understand how and why Europe has responded to this issue and how (or whether) it will do so in the future. Much research has already been done on the GCC negotiations and related policies of European states and the EU. Our slant toward FPA, often in combination with or supplemental to other analytical approaches, can provide new insights not fully revealed by that of other work.

Toward that end, the chapters in this book describe the responses of individual European countries and the EU to GCC, discuss major issues of domestic and international politics and policymaking underlying those responses, frame the problem of global warming in terms of foreign policy, and place GCC in the context of increasing European regional cooperation, integration and development of a common European foreign policy.5 (The

chapters are summarized below.) We seek to answer several related questions: How has Europe responded to GCC? What explains Europe's response to what arguably is the world's most pressing environmental problem, and possibly the most important long-term threat to the world yet foreseen? Why have the EU and some of its member states been more proactive than other countries, notably the US? Why have they not done much more, especially given their major contribution to the problem and their ethical obligation to stop polluting the global atmosphere and to do much more to help those most affected by climate change? How can considerations of foreign policy processes - the use of FPA - add to our understanding of European GCC policies? Which theories of foreign policy and international relations can best help us to understand Europe's responses to global elimate change?

Undertaking such analyses is important simply because they address such an important topic. Global warming and climate change will have profound impacts on individuals, societies and states in the future. Indeed, some countries, such as the small island states, argue that they are already suffering from climate change, notably in the form of sea-level rise. It is likely that the world's rich countries, including those of Europe, will be able to adapt to many of the changes expected for this century, but this will not protect them from unwanted changes in the environment that could make life less enjoyable, might threaten national traditions and cultures dependent on particular local and national environmental conditions, and will inevitably require spending vast sums of money that could otherwise be directed at alternative national priorities. Of course, the adaptability of the world's rich countries, tied directly to their wealth, does not obtain in most of the world; most poor countries will be unable to avoid the many unwanted effects of GCC, and they will require costly assistance from the world's wealthy countries if their peoples are to prosper - or in some cases survive amidst climate change. Furthermore, GCC poses challenges to national and human security. As droughts become more frequent in parts of the world already suffering shortages of water, food production becomes more difficult and increasing heat and pests take their toll, domestic communities may experience civil unrest that could conceivably spread across borders. While Europe might not be directly affected by most of these problems, its overseas interests will be, and it will have little choice but to respond with aid. For these and other reasons, it is important for us to understand as best as we can Europe's responses to global climate change. By better understanding Europe's GCC politics and policy at all levels - local, national, regional and international - policymakers, scholars, activists and interested laypersons will not only be enlightened; they might also find ways of effecting more positive policy change in the future as the problems of global warming, climate change and related environmental issues grow worse,

The remainder of this chapter first summarizes the problems of global warming and climate change before briefly describing how the international community has responded to GCC, particularly with regard to efforts to foster international cooperation to reduce GHG emissions. The chapter then goes on to show how GCC policy can be thought of in terms of foreign policy. That is, politics and policies related to GCC cannot be fully understood by looking solely at domestic politics and policy making, on the one hand, or by examining international politics and diplomacy, on the other. Climate change is a problem, like many other environmental issues and indeed other challenges facing an increasingly globalized world, that by its very nature crosses over between the domestic and international arenas of politics and policymaking. As Foreign policy analysis focuses on the crossover between these levels of analysis, and indeed includes each of them, it is a potentially productive way of viewing the problem and its causes and potential solutions. This chapter concludes with a summary of the chapters to follow. Those chapters do much more to detail European and EU responses to GCC.

GLOBAL CLIMATE CHANGE

What are global warming and climate change, and what causes them?6 Particularly over the last decade or two, scientists have radically improved

Nous

their understanding of the causes and consequence of global warming the warming of the Earth as a consequence of GHGs building up in the atmosphere. Many of these GHGs, such as carbon dioxide (CO₂) and methane, while having natural sources, are also the products of human activities and industrialization. Carbon dioxide—the most influential GHG in aggregate—is created by the burning of fossil fuels (e.g., coal, oil, natural gas) for industry, transportation and other purposes, and when trees are felled and subsequently decay or are burned. Other GHGs, such as methane, are the result of agriculture, and yet others (e.g., chlorofluorocarbons, which also deplete the stratospheric ozone layer) are released mostly by industrial activities. The Intergovernmental Panel on Climate Change (IPCC) has concluded that human activities are adding GHGs to the atmosphere, and that this additional contribution over natural sources is having a discernable impact by increasing global temperatures (Houghton et al. 1996; Albritton et al. 2001; Houghton et al. 2001).

Climate change refers to the climatic changes and their consequences resulting from global warming, with the United Nations (UN) Framework Convention on Climate Change (FCCC) including under this rubric atmospheric changes connected directly or indirectly to human activities. The impacts of climate change on natural ecosystems and on human society and economies are potentially severe, ranging from sea level rise and melting ice at higher latitudes (the Arctic and Antarctic) and altitudes (mountain glaciers), to changing weather patterns characterized by increasingly severe storms, floods and droughts, and the attendant impacts of these changes, such as the spread of pests to newly warmed regions. Some areas could experience positive effects of climate change (e.g., an extended growing season in high latitudes), but these will likely be accompanied by adverse impacts and unpredictability at best. Overall, predictions point to adverse impacts, particularly in parts of the world where geographic vulnerability and poverty make adaptation difficult or impossible (see AfDB et al. 2002).

Global Warming and Climate Change: Causes and Consequences

The most authoritative reports on the causes and consequences of GCC come from the IPCC, particularly its 1995 Second Assessment Report' (SAR) (Houghton et al. 1996; Watson et al. 1996; Bruce et al. 1996) and its 2001 'Third Assessment Report' (TAR) (IPCC 2001; see especially Houghton et al. 2001; Albritton et al. 2001 and McCarthy et al. 2001). The TAR refined the findings of the first assessment, pointing out that climate change is likely to be worse and occur more rapidly than initially predicted (see NRC 2002). The IPCC and many other international and scientific organizations continue to study and refine our understanding of

global warming and climate change, but they all tend toward refining what we already know. These trends are quite clear and extremely worrying. This section introduces the IPCC's findings on global warming and summarizes some of the worldwide effects of climate change.

According to the IPCC's TAR (Houghton et al. 2001), there is now a collective picture, derived from an increasing body of observations, of a warming world and other changes in the Earth's climate system. The global average surface temperature increased during the twentieth century (WMO 2003). The ten hottest years since recording began in 1861 have been since 1989, with the 1990s as the warmest decade ever recorded (1998 being the warmest and 2004 [the most recent data] the fourth warmest) (Met Office 2004; WHRC 2004). Snow and ice cover have decreased, the global average sea level has risen, and the heat content of the oceans has increased. Other aspects of climate changed during the twentieth century, including changes in precipitation (e.g., increased heavy precipitation events) and cloud cover; fewer extreme low-temperature periods and more hightemperature periods; more frequent, persistent and intense episodes of the El Niño ocean-warming event (and related adverse effects on weather in many areas); and an increase in the number of areas experiencing drought and severe wet periods. Some climate related events, such as tornadoes or tropical storms, do not appear to have changed based on IPCC data. although the evidence is conflicting and there are suggestions that that is precisely what will happen (if it is not already) (see WMO 2003).

The TAR reports that human activities have increased the amount of GHGs (e.g., CO₂, methane, nitrous oxide, halocarbons) in the atmosphere, as well as their warming potential: 'atmospheric concentration of carbon dioxide (CO₂) has increased 31 per cent since 1750. The present CO₂ concentration has not been exceeded during the past 420,000 years and likely not during the past 20 million years. The current rate of increase is unprecedented during at least the past 20,000 years' (Albritton et al. 2001: 7). Three-quarters of human-induced emissions of CO₂ over the last two decades have come from the burning of fossil fuels, with most of the remainder a consequence of land-use changes, particularly deforestation, Natural causes of GCC have been relatively small.

According to the TAR, while uncertainties remain, understanding of climate processes and predicted effects has improved and models for predicting future climate are increasingly accurate and precise. New and stronger evidence points to human activities as the sources of observed global warming over the last 50 years, further strengthening the SAR's conclusion that the 'balance of evidence suggests a discernible human influence on global climate' (IPCC 1995; reaffirmed in IPCC 2001), Warming over the last 100 years is unlikely to have been natural, with studies showing

that global warming, particularly during the last 35–50 years, most likely resulted from human activities. Thus the TAR concludes: 'In light of new evidence and taking into account the remaining uncertainties, most observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations. Furthermore, it is very likely that the twentieth century warming has contributed significantly to the observed sea level rise ... and widespread loss of land ice' (Albritton et al. 2001; 10).

The TAR determined that human activities will continue to shape the Earth's atmosphere throughout this century and beyond, and average global temperatures and sea levels are projected to rise. Emissions from burning fossil fuels will be the dominant source of atmospheric CO, during this century. These emissions and those of other GHGs would have to be reduced to 'a very small fraction of current emissions' to stabilize climate (Albritton et al. 2001; 12). Global average temperature is projected by the IPCC to increase by 1.4 to 5.8 degrees Celsius during this century (more than anticipated in the SAR). This warming will occur at a rate faster than that observed in the twentieth century, 'very likely to be without precedent during at least the last 10,000 years' (Albritton et al. 2001; 13). During this century, warming is expected to occur in most areas, but it should be particularly pronounced at northern high latitudes during winter. The global mean sea level is expected to rise .09 to .88 meters in this century, with other likely changes to include higher maximum temperatures and more hot days over most land areas, higher minimum temperatures and fewer cold days over most land areas, more intense precipitation events over many areas, increased summertime continental drying and drought over mid-latitude continental interiors, and more severe storms in some regions,

The ecological and socio-economic impacts of GCC are likely to be very significant and frequently very painful. The TAR's findings on these impacts include the following (IPCC Working Group II 2001; McCarthy et al. 2001): Regional changes in climate have already affected many physical and biological systems, with temperature increases being the proximate cause. Observed changes in regional climate have occurred in terrestrial, aquatic and marine environments, and effects have included shrinking glaciers, thawing permafrost, reduced periods in which lakes and rivers are frozen, longer mid- and high-latitude growing seasons, shifts in animal and plant ranges to higher latitudes and altitudes, declines in populations of some animals and plants and reduced egg-laying in some birds, and insects populating new areas. It appears that increased floods and drought have already affected some social and economic systems. However, separating these ecological events from socioeconomic factors is difficult.

The TAR shows how many human systems are sensitive to GCC. These include water resources, agriculture, coastal zones and marine fisheries,

settlements, energy, industry, financial services (e.g., insurance industries affected by increased claims) and human health. Adverse impacts of GCC include reduced crop yields in most tropical and sub-tropical regions; decreased water availability in many water-scarce areas, especially the subtropics; more people exposed to increased mortality from heat stress and vector-borne diseases like cholera; widespread increase in flood risk from rising sea levels; and increasing demand for energy to cool areas affected by higher summer temperatures. Some impacts may be positive, such as increased crop yields in some mid-latitude areas; potentially more timber if forests are managed appropriately (although increased pests could more than offset this); increased water availability for some water scarce areas (e.g., Southeast Asia, at least until glaciers disappear); lower winter mortality in traditionally cold areas; and reduced winter demand for energy due to higher winter temperatures. Many of the risks are unclear, and there is substantial potential for 'large-scale and possibly irreversible impacts' from changing ocean currents, melting ice sheets, accelerated global warming due to atmospheric feedback effects, and so forth (IPCC Working Group II 2001: 4-5; see McCarthy et al. 2001).

What are the predicted consequences of GCC for Europe? According to the IPCC's assessment of regional impacts (Watson et. al 1998), Europe's ecosystems are particularly sensitive. Grasslands may shift and northern forests will likely spread to regions that are now tundra. The migration of local climate zones may be too fast for some species and types of forest to keep pace, making them potentially endangered - something that is almost certain for high-altitude species, which have nowhere to migrate. Wetlands and the water table will be degraded with warming, floods may increase in northern Europe, and water in southern Europe will likely become scarcer. Of particular concern are the anticipated changes to snow and ice cover. According to the report, as much as '95 per cent of Alpine glacier mass could disappear by 2100, with subsequent consequences for the water flow regime -affecting, for example, summer water supply, shipping, and hydropower'. Winter tourism would of course be adversely affected. Yields of winter crops may increase, 'assuming that neither precipitation nor irrigation are limiting and that water-use efficiency increases with the ambient atmospheric concentration of CO,". However, there may be decreased crop yields in southern Europe due to reduced water supplies, making irrigation 'an even larger competitor to domestic and industrial water use'. Coastal areas are already vulnerable to storm surges and will be susceptible to sea level rise and other changes associated with GCC. Without intervention, human health in Europe may suffer from increased heat-related mortality, more urban air pollution and expansion of vector-borne diseases, although there may be fewer cold-related deaths. The IPCC report concludes that the greatest impacts for Europe 'are likely to be felt through changes in the frequency of extreme events and precipitation, causing more droughts in some areas and more river floods elsewhere' (Watson et al. 1998).8

In addition to efforts to mitigate GCC through limiting GHG emissions. the TAR argues that adaptation is a necessary strategy. Europe is relatively wealthy and can, with significant investment, adapt to many adverse environmental changes resulting from GCC. However, those people and societies with the fewest resources are most vulnerable because they are least able to adapt. Projected warming may result in a mixture of economic gains and losses for developed countries, but developing countries can expect mostly losses: 'the projected distribution of economic impacts is such that it would increase the disparity in well-being between developed countries and developing countries,' with the disparities increasing the more the temperature increases (IPCC Working Group II 2001; 6), A report from the Working Group on Climate Change and Development (WGCCD) warns that GCC could 'threaten attainment' of the Millennium Development Goals (MDGs) for substantially reducing global poverty, disease and environmental destruction by 2015, and it 'threatens to reverse human progress, making the MDGs for poverty reduction unachievable' (WGCCD 2005: 2). The upshot is that, around the world, 'more people are projected to be harmed than benefited by climate change', even if temperature increases are somehow limited (IPCC Working Group II 2001: 6).

THE INTERNATIONAL POLITICS AND DIPLOMACY OF GLOBAL CLIMATE CHANGE

Europe's actions on GCC have taken place within the milieu of international negotiations that began in earnest in the 1980s and grew in intensity in the 1990s. ¹⁰ The initial stimulus for these efforts was science, but – as is true in other international environmental deliberations – diplomatic efforts eventually took on a life of their own that was partly separated from science, International and domestic politics joined the science as ongoing stimuli for efforts to address GCC. The First World Climate Conference, held in 1979, was a gathering of scientists interested in GCC and its relationship with human activities. The conference issued a statement calling on countries to 'foresee and prevent potential man-made changes in climate that might be adverse to the well-being of humanity' (UNFCCC 2002). From that conference a program of scientific research was established that would contribute to the creation of the IPCC in 1988 by the World Meteorological Organization and the United Nations (UN) Environment Program. The IPCC's 1990 first assessment report (see the previous section) and

the Second World Climate Conference in 1990 added stimulus to initial concerns about climate change among diplomats. In December 1990, therefore, the UN General Assembly established the Intergovernmental Negotiating Committee (INC) for a Framework Convention on Climate Change (FCCC). The goal of the climate change INC was to negotiate a framework convention that would be the basis for subsequent international protocols dealing with GCC.¹¹

From that point until the 1992 UN Conference on Environment and Development - the 'Earth Summit', held in Rio de Janeiro - representatives of over 150 countries negotiated the FCCC. The FCCC called on the world's most economically developed countries to reduce their emissions of GHGs to 1990 levels by 2000. None did so. 2 Particular responsibility is laid on the developed states (listed in the FCCC as 'Annex I' countries) to provide 'new and additional' resources to developing countries to help them with their efforts to limit GHG emissions. The FCCC came into force in 1994, after ratification by 50 countries. In 1995, the INC was replaced by the Conference of the Parties (COP), which became the FCCC's overriding authority. Almost all of the world's countries have now ratified the Convention. In the years following its adoption, several COP meetings were held to negotiate the details of how GHG emissions limitations would be achieved. While the negotiations leading to the FCCC were fraught with differences, particularly between developed and developing countries. it was the negotiations after 1992 that were most contentious. They were noteworthy for several milestones, particularly the Berlin Mandate, the Kyoto Protocol, the Buenos Aires Plan of Action, the Marrakech Accords and the New Delhi Declaration.

The first COP was held in Berlin in 1995. At this meeting the developed countries acknowledged that they had a greater share of the responsibility for climate change and would act first. The conference established the Ad Hoc Group on the Berlin Mandate, which subsequently negotiated details for implementing the objectives of the FCCC. Central to the Berlin Mandate was the demand by developing countries that the industrialized countries take on greater commitments to reduce their GHG emissions and to assist the developing countries, which were excluded from commitments to make emissions cuts. Thus the first COP affirmed the notion of 'common but differentiated responsibilities', meaning that, while all states have a common responsibility to address GCC, the developed countries have a greater 'differentiated' obligation to do so (see Chapter 15).

At the second COP, held in Geneva in 1996, countries endorsed the IPCC's second assessment report (which, again, concluded that 'the balance of evidence suggests that there is a discernible human influence on global climate') and called for a legally binding protocol with specific targets

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and timetables for reductions of GHG emissions by developed countries (Houghton et al. 1996). The resulting Geneva Declaration served as the negotiating basis for the Kyoto Protocol, which was agreed in December 1997 at the third COP in Kyoto, Japan (see UNCOP 1996).

The Kyoto conference proved to be especially contentious, not least because the US seemed to be reneging on the Berlin Mandate when President Bill Clinton called for 'meaningful participation' of the developing countries. Nevertheless, diplomats at the conference managed to agree to the Kyoto Protocol, which established specific emissions goals for developed countries, but which did not require significant commitments by developing countries (see Cirubb et al. 1999). The developed countries agreed to a goal of reducing their aggregate GHG emissions by 5.2 per cent below 1990 levels between 2008 and 2012. The EU member states agreed to reduce their collective emissions (what is called the EU 'bubble') by 8 per cent, with Germany and Britain making the largest cuts. The Kyoto Protocol also catered to some US demands by endorsing emissions-trading programs that would allow developed countries to buy and sell emissions credits among themselves. Other so-called flexible mechanisms adopted in the context of the protocol were joint implementation (J1), whereby developed countries could earn emissions credits when investing in one another's emissionsreduction projects, and the Clean Development Mechanism (CDM), which would manage programs of joint emissions efforts between developed and developing countries. The CDM was intended to allow developed countries to pay for - and receive emissions credits for - emissions-reduction projects in developing countries.

Some of the means by which the Kyoto Protocol's 5 per cent goal would be reached were codified at the fourth COP, held in Buenos Aires in November 1998. The Buenos Aires Plan of Action set a two-year deadline for finalizing many of the details for implementing the Kyoto Protocol. Parties agreed to reach decisions by the end of 2000 on several key issues, including guidelines for emissions trading. II, the CDM and technology transfers (FCCC 1998). At the fifth COP in Bonn during October 1999, parties agreed to a timetable for completing outstanding details of the Kyoto Protocol by the sixth COP and, in an effort to speed up negotiations, gave the conference president the power to 'take all necessary steps to intensify the negotiating process on all issues during the coming year' (FCCC 1999).

The sixth COP began in November 2000 in The Hague, but the talks broke down due to disagreements among delegates, particularly on the question of carbon sinks, which are processes, such as planting trees (afforestation) that can remove GHGs from the atmosphere (Betsill 2005: 113). The Kyoto Protocol's likelihood of ratification was put into doubt with the advent of President George W Bush in the US. Upon taking office he declared it

'fatally flawed' and withdrew all US support (which still obtains as this book goes to press in Autumn 2006). The sixth COP resumed in Bonn during July 2001. The resulting Bonn Agreement clarified plans for emissions trading, sinks, compliance mechanisms and aid to developing countries. At the seventh COP, held in Marrakech in late 2001, parties to the FCC agreed to a long list of ways to meet the Kyoto commitments. The result was the Marrakech Accords, a complicated mix of measures for implementing the Kyoto protocol, largely designed to garner ratification from enough states to allow the protocol to enter into force. Parties agreed to increase funding for the FCCC's financial mechanism, the Global Environmental Facility (GEF), as well as to establish three new funds that would provide more aid to poor countries: the Least Developed Countries Fund, the Special Climate Change Fund and the Adaptation Fund.

A milestone of sorts (arguably a dubious one) was reached at the October 2002 eighth COP in New Delhi. At that conference there was tacit agreement between the US, a few other developed countries (but not Europe) and several large developing countries, notably China and India, that shifted much of the focus away from mitigating GCC and toward adaptation (i.e., wealthy countries agreeing to help developing countries adapt to GCC, rather than the former countries having to reduce their GHG pollution) (Harris 2003: 32). Most European countries, while agreeing that aid to developing countries was an important obligation and being far more willing than the US to act on that obligation - nevertheless actually started, more or less unilaterally, to limit and reduce their GHG emissions. It was at this COP, as well as the ninth one, held in Milan, Italy, that diplomats discussed ways to implement the Marrakech Accords and prepare for ratification of the Kyoto Protocol. The tenth COP was held in Buenos Aires in December 2004. It was dubbed the 'Adaptation COP' because more of the discussion was about adaptation to GCC than the more common COP discussions about efforts to mitigate it through emissions limitations (ENB 2004). In the end, there were pledges for more assistance to aid poor countries most affected by GCC, but there were no firm commitments to make access to adaptation funds easier, and observers were left skeptical of how much the poor would benefit (ENB 2004). Importantly, it was also in 2004 that Russia ratified the Kyoto Protocol, allowing the agreement to finally enter into force in February 2005.

One visible aspect of the GCC negotiations has been the acrimony between the developed countries – particularly the US – and the developing world. Until the last few years, when Europe clearly diverged from US positions, the developed countries generally sought global restrictions on emissions reductions with flexible mechanisms for their implementation. What this would mean in practice is that the developing countries would

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be required to manage and eventually reduce their emissions of GHGs. As GHGs originate all over the world, the developed countries have argued that all countries, at least all the large ones, need to be part of emissions reduction efforts. In contrast, the developing countries have pointed out that their per capita emissions of GHGs, particularly CO₂, remain very low relative to their developed counterparts. What is more, it is the industrialized developed countries that have benefited from past emissions of GHGs since the Industrial Revolution. It is the responsibility of the developed countries, therefore, to reduce their emissions of GHGs, while they allow the countries of the global South to focus on economic development. The developing countries also, by definition, have far weaker economies and often-widespread poverty; they argue that they ought to be allowed to raise the living standards of their citizens without being constrained by costly measures to reduce their GHG emissions.

Thus, the international negotiations have been plagued by the efforts of developed countries to persuade developing countries to commit to emissions limitations, on the one hand, and developing country efforts to avoid such commitments on the other. These differences were briefly 'solved' by the Berlin Mandate and the affirmation of the principle of common but differentiated responsibility. Although the US challenged this principle at Kyoto, it failed to persuade developing countries to undertake GHG emissions limitations. This outcome was consistent with the policies of most European countries and the European Commission, which—while recognizing the need to get developing country involvement—adhered to the Berlin Mandate's requirement that the wealthy countries of the world reduce their GHG emissions before asking the rest of the world to do so (see Chapter 15; Harris 2003).

It would be wrong to assume, however, that there were no differences among the developing countries themselves. Indeed, the goals of some groups of developing countries have differed quite sharply. At one extreme are the oil-producing countries, notably members of the Organization of Petroleum Exporting Countries (OPEC), They agreed until recently with many politicians and industry interest groups in the US that the science of GCC was uncertain. Therefore, they argued, action on GCC should be postponed until this uncertainty is reduced or eliminated. They joined with the US and some other developed countries in attempting to water down proposals for substantive reduction of CO₂ emissions in particular. China, often in collaboration with other members of the Group of 77 developing countries, consistently sought to prevent wording in international agreements that would require developing countries to take action, even voluntary action. However, at COP4 in Buenos Aires, Kazakhstan and Argentina agreed in principle to voluntary limitations on their GHG

emissions. China's position and that of OPEC also contrasted with the goals of many very poor coastal states and members of the Alliance of Small Island States (AOSIS), which fear that they will be (or already are) among those countries most severely affected by GCC impacts, notably by rising sea levels. Indeed, while OPEC countries were calling for no action, AOSIS countries consistently called for far more action than almost all other countries were willing to accept. Developed countries wishing to avoid obligations to cut GHGs were able to exploit these and other differences within the developing world.

Similarly, the developed countries were not always in agreement. In the run up to the Kyoto conference, for example, the EU was calling for firm targets and timetables that would require emissions reductions to be much higher than those finally agreed upon. The Americans were calling for reductions lower than those agreed, and the Australians were demanding that they be allowed to increase their emissions (a concession they were

reductions lower than those agreed, and the Australians were demanding that they be allowed to increase their emissions (a concession they were granted in the Kyoto Protocol). The Europeans were also more willing to meet the demands of developing countries for special treatment in the form of new and additional financial and technological assistance, and they wanted to live by the understandings of the Berlin Mandate. The US and a few other developed countries have continued to call for firm commitments

from the largest and most well off developing countries.

These many ongoing differences among countries were manifested during the late 2005 conference of the parties to the FCCC, COP11, and the First Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol (COP/MOP-1) to the Kyoto Protocol, which were held simultaneously in Montreal (ENB 2005). At this gathering, European states were noteworthy for countering attempts by the US to derail the meeting and to prevent the robust implementation of the Kyoto Protocol. The meeting adopted the Marrakech Accords and formalized rules for implementing the protocol (e.g., rules for emissions trading, JI, crediting of emissions sinks and penalties for non-compliance), streamlined and strengthened the CDM, began negotiations for further commitments by developed country parties to the protocol beyond 2012 (when the Kyoto commitments expire), set out guidelines for the Adaptation Fund, and initiated a process for negotiating long-term action to combat climate change. Several developing countries, while still opposed to binding obligations, showed new interest in undertaking voluntary measures, in keeping with the principle of common but differentiated responsibility (see Pew Center 2005).

In the chapters that follow, the contributors look at different aspects of GCC diplomacy in much greater detail. ¹³ Their objective is to explain how and why individual European states and the EU have responded the way they have to this problem. They are particularly interested in the

politics underlying European national and international policies on GCC. Climate change is, of course, fundamentally caused by activities within countries. However, its consequences are felt much more broadly and, very importantly, it is simultaneously an issue for domestic and international politics and policymaking. One way of looking at these politics and the policies that result from them is to frame the issue of GCC in terms of environmental foreign policy, and to look in some detail at the actors and processes of foreign policy that, by definition, operate in the analytical space that crosses over between the domestic and the international.

GLOBAL CLIMATE CHANGE AND FOREIGN POLICY

Environmental foreign policy (EFP) can be conceived of as the interplay between (1) domestic forces, institutions and actors involved in environmental decision making and the implementation of environmental policies, and (2) international forces, institutions and actors, such as environmental changes themselves and their interaction with other forces (e.g., democratization, globalization), international environmental organizations and regimes, and powerful countries, corporations and non-governmental organizations (NGOs) with a role in shaping human responses to environmental changes. 14 From a policy perspective, EFP is about the international environmental objectives that officials of national governments seek to attain; the values and principles - including but not restricted to environmental ones underlying those objectives; the methods by which the objectives are sought; the processes by which these objectives, values and principles, and methods are developed and implemented; and the domestic and international actors and forces - including but not exclusively environmental ones - shaping environmental policies and actions both at home and abroad, but which have some international or external character.

Foreign policy objectives, actors and processes can be central in determining whether countries cooperate to address GCC and other environmental problems. What is particularly important about foreign policy is that it involves the *crossover and interaction* between domestic politics and processes, on the one hand, and international relations and institutions, on the other. Many environmental policy officials are simultaneously pressured to follow international norms and promote national interests and ideals. That is, they are buffeted by *hoth* domestic and international forces. They are part of EFP. Thus, looking at purely local or international variables seldom explains environmental policy within and among countries.

Environmental issues are often distinctive in the manner in which they ignore state borders; problems in one country affect others and problems restricted

to one country require the involvement of others (e.g., financial assistance and technology) if they are to be resolved or remain local. Many issues, actors and forces acting domestically and internationally affect and influence countries' national environmental regulations and their environmental foreign policies, and hence they impact international environmental cooperation. Yet, despite obvious (albeit not fully comprehended) connections between local and international policy processes, many studies do not fully account for the foreign policy aspects of environmental protection efforts. They tend to focus on international regimes or domestic politics as drivers of international environmental relations — which is indeed often the case—without also looking at the foreign policy processes and actors that can impact on responses to environmental issues.

Thinking about foreign policy focuses our attention on interactions among domestic political preferences and positions governments take in negotiations, the balancing of economic growth and popular demands for development with foreign pressures to join environmental regimes, and the rivalries and alliances between Foreign policy agencies and the individuals working in them (among many other considerations). A good reason for also looking at foreign policy processes more systematically is that they can reveal important national and institutional characteristics shaping state environmental behavior, both domestically and internationally.

Foreign policy is, to be sure, about pursuing and promoting national interests. Already complexities arise, however. It is not always clear what a country's national environmental interests are – or what a regional organization's environmental interests are – or ought to be, particularly with regard to complex environmental issues, and it is almost always debatable how best to promote them (Webber and Smith 2002: 43-44). As Roy argues, policy-making clites will disagree over national goals and how to achieve them:

Beyond its most basic formulation, the national interest is not a monolithic, objective concept, but rather a dynamic and unsettled one; subject to constant debate. [Moreover,] powerful groups and individuals are subject to self-interested behavior, and may support the policy option they calculate will enhance their power and prestige, even if it is not necessarily the best option for the nation as a whole. (Roy 1998: 137–38)

Thus, defining national interests, including the interests of states that have joined together rather tightly in a regional organization, and the ways to promote them, is a problematic and complex undertaking, involving actors and institutions seemingly unimportant to the casual observer, even when issues and associated interests are better understood than they usually are in environmental cases. ¹⁵

We cannot of course completely abstract out the forces of foreign policy. particularly if foreign policy is broadly defined. Foreign policy cannot be separated from, for example, domestic politics and institutions, at one end of a spectrum, and global regimes and international power balances, at the other end. What is useful, perhaps, is to go beyond thinking in terms of domestic and international levels of analysis to a 'two-levels-plus' game (cf. Putnam 1988; Evans et al. 1993). That is, we ought to consider international political dynamics and domestic politics, but we can also think explicitly about the additional 'level' of foreign policy processes, which almost always falls between and affects the international and domestic level factors.

Foreign policy analysis is well suited to studying responses to environmental changes because it considers the 'continuing erosion of the distinction between domestic and foreign issues, between the sociopolitical and economic processes that unfold at home and those that transpire abroad (Rosenau 1987: 3). Applying FPA techniques to our study of international environmental issues, or at least considering them along with other analytical approaches, can result in interesting findings simply because environmental issues like GCC are quite distinct from many others - given their often high level of uncertainty, often temporally distant impacts and the great number of, and disparity in, stakeholders actively involved in the issue area. 16

How might we analyze and thereby better understand and explain (and help policymakers and activists possibly manipulate) EFP in Europe? We can start by applying FPA to European foreign policy generally (White 1999) and by using FPA approaches to help us think systematically about the relationship between foreign policy and environmental change in particular. Barkdull and Harris (2002: 63-91) have shown how a number of theories and approaches to FPA might be deployed to better understand environmental foreign policy. They propose a typology (see Figure 1.1) that highlights a variety of potentially important variables in the shaping of foreign polices in particular circumstances related to addressing international environmental issues.17

Barkdull and Harris note that most theoretical approaches to foreign policy are of three major types based on the explanatory forces they emphasize: systemic, societal or state-centric (the top row of Figure 1.1; cf. Ikenberry et al., 1988). Systemic approaches argue that foreign policy stems from the role, identity or interests given to the state by systemic factors (e.g., regional or global configurations of power, hegemonic ideas). They direct our attention to the structural characteristics of international relations, showing that states may 'arrive at their roles, identities, and national interests as a consequence of the regional or global configuration of power ... or as a consequence of ideas. Systemic theory is distinct in that it does not attribute outcomes to factors such as domestic politics and institutions' (Barkdull

(In	Systemic	Societal	State-centric
	nternational System	n) (Domestic Politics)	(Government)
Power	Structural Realism; Hegemonic Model	Elite Theory; Class Analysis	Executive- Legislature Relations
Interests	National	Interest Group	Bureaucratic
	Interest	Politics; Pluralist	Politics
	Model	Models	Model
Ideas	Sociological Approach to International Regimes	Media Studies: Social Movements; Public Opinion	Foreigh Policy Executive; Psychology

Source: Adapted from Barkdull and Harris (2002: 69). Cells in the matrix show examples of illustrative foreign policy studies.

Figure 1.1 Typology of environmental foreign policy

and Harris 2002: 68). Consequently, this type of approach to EFP would divert our focus away from bureaucracy, public opinion and interest groups, pointing instead to, for example, 'environmental hegemons' like the US in largely determining GCC policies, even in Europe.

Societal theories point to the preferences of domestic actors, which are translated into policies adopted and implemented by the government. From this perspective, explanations for foreign policy are found in the ongoing struggle for influence among domestic social forces or political groups' (Ikenberry et al., 1988: 7). This approach might suggest that governments do not independently decide EFP; they are instead neutral or passive arbiters of policy struggles, or perhaps merely fragmented arenas for bargaining over policy. The international arena might be viewed as merely a venue for the expression of policies determined by society (or societies). Societal theories suggest that the forces shaping Europe's GCC policies are found within European societies - among elites, interest groups, social movements and public sentiments - not within the governments of member states or in international distributions of power (Barkdull and Harris 2002: 74-5).

Alternatively, state-centric approaches suggest that foreign policy is shaped by the structure of government and the individuals and agencies that promulgate and implement foreign policies on its behalf, often with an emphasis on the goal-oriented behavior of politicians and civil servants as they respond to internal and external constraints in an effort to manipulate policy outcomes in accordance with their preferences' (Renberry et al. 1988; 10). State-centric approaches often discount the importance of societal actors and forces in shaping foreign policy, instead placing a premium on the influence of institutions or the focus of top policymakers on promoting the national interest. 'The general message of this perspective', according to Barkdull and Harris (2002: 79), 'is that the state can act independently of societal interests', and 'foreign policy outcomes cannot be read off from the structure of the international system, however defined'. Alternatively, the structure of the state, such as the distribution of power between executive and legislative branches of government, or the workings and influence of bureaucratic agencies, largely determine foreign policy. Thus we might say that European GCC policies derive not from public pressure or international forces but instead from perceptions of threats to national interests by leaders, pressure from legislatures on policymakers, or the degree to which GCC is important to bureaucratic actors. In the latter case, the influence of environmental and foreign ministries, and perhaps the European Commission, deserve attention,

These three broad approaches to understanding foreign policy - focusing on the international system, domestic society or the state - can be refined by simultaneously considering, in each case, the role of power, interests and ideas (the left-hand column of Figure 1.1) (Barkdull and Harris: 67-8; of. Hasenclever et al., 1997). According to some power-based approaches, often characterized as 'realism', countries join international regimes due to hegemonic or oligopoly distributions of power in the international system. Hegemons (or small groups of leading powers) create regimes that serve their interests, and then force them upon other countries. Alternatively, interest-based theories, often associated with 'liberal institutionalism', posit that international cooperation stems from the desires of states to promote their interests in a given issue area. According to this perspective, hegemonic power is not essential because rational state actors will cooperate to achieve joint gains. Yet another set of theories focus on ideas and what Smith calls the 'social construction of foreign policy' (Smith 2004: 123). Ideas can direct international actors toward new ways to pursue their interests, whether unilaterally or multilaterally. From this 'constructivist' perspective, material interests and power may have limited influence compared to even more influential identities that the international system generates for global actors.

No single theory, or even type of theory, is necessarily best for explaining and understanding the EFPs of all states in all circumstances. Indeed, approaches might suitably be combined to arrive at the richest explanations for policy (although theoretical purists might not like this). For example, power in the international system is seldom going to adequately explain GCC policy. Certainly, the distribution of 'environmental power' of the US and China matters greatly - both can substantially diminish the efficacy of the GCC regime and thus wield tremendous influence in this context and Europe's 'power' in this respect is on the rise and of increasing utility. However, US power is wielded as it is largely due to state and society-based factors (e.g., the influence of special interests and bureaucracy on GCC policy) and is now so far beyond the pale that it has not prevented Europe starting to cut its GHG emissions even as the US does nothing.

Alternatively, principled ideas, such as the obligation of the EU to take on its fair share of the burdens of GCC (see Chapters 14 and 15), have influenced policy in this issue area, but power configurations among European and other states, as well as assessments of national interests in this context, mean that the influence of those ideas in shaping GCC policy are substantially reduced. In any case ascertaining how those ideas are influential requires looking at potential interactions and feedback loops at all levels of analysis.

A number of ways in which single or multiple FPA approaches can be useful in explaining EU and European national policies on GCC are demonstrated in the chapters that follow. The contributors to this volume draw on, or build upon, the typology described by Burkdull and Harris (Figure 1.1) as they explore Europe's responses to this major global problem. Chapter 16 returns to this framework to highlight a number of theoretical lessons that can be learned from the chapter case studies.

EUROPE'S RESPONSES TO GLOBAL CLIMATE CHANGE: CASE STUDIES

How has Europe responded to the problem of GCC? What explains those responses? In the chapters that follow, contributors undertake case studies of European and EU foreign policy to give detailed answers to these questions. The case studies are divided into two parts. In Part I, the contributors examine the politics and foreign policy of GCC in individual European states. It is difficult for European states to devise and implement policies on GCC. Each is a pluralistic democracy, meaning that industries, NGOs

and the public play a part in pushing for - and pushing against - each government's policies related to GCC and GHG emissions in particular. Each state is also a member of the EU (or greatly influenced by it, as in the case of Norway, which is examined in Chapter 8), meaning that their policies must be devised and actualized in the context of EU membership and all the requirements and constraints that it inevitably entails. Consequently, Part I examines efforts by European states, including new members of the EU, to maintain policy autonomy (e.g., 'subsidiarity') amidst attempts, some of them successful, by arms of the EU organization to co-ordinate a regional, EU-wide policy on GCC.

Part II of the book examines European regional cooperation on GCC. and especially the EU's role in international climate change negotiations and regime building. Global climate change is an issue that falls under the rubric of subsidiarity within the EU, which 'confines action by the EC to those matters whose objectives cannot be sufficiently achieved by the Member States and that can be better achieved by the EC' (Haigh 1996: 160; see Collier 1997: 48). By its very nature, global climate change cries out for European governments (and other actors in the region) to work together to address its causes and consequences both in Europe and internationally, The 'competence' of the EU (more specifically, in legal terms, the European Community [EC]) to be involved in international environmental agreements and negotiations, while not explicitly envisioned in the Treaty of Rome, has nevertheless evolved over time, reinforced by the Maastricht Treaty and, put simply, the need for the EU to complement the environmental foreign policies of the member states (see Chapter 9; Sbragia and Hildebrand 1998; 217). Compared to GCC policies of European states, formulating and implementing EU-level, and EU-wide, GCC policy can be equally, or even more, fraught with challenges for national and European policymakers, as demonstrated by doomed EU efforts in the 1990s to implement a carbon tax throughout the union. Nevertheless, the EU - that is, the European Commission - has almost inevitably taken on a co-ordination and even leadership role on matters related to climate change, despite resistance from some member states. Taken together, case studies from both parts of the book provide rich narratives and thoughtful explanations of GCC politics, foreign policy and regional cooperation in Europe.

Global Climate Change and Policymaking in European States

As Ute Collier points out, it is subjective and 'difficult to make any kind of classification' of European 'leaders' and 'laggards' on climate change (Collier 1997: 185). Nevertheless, the country case studies in Part I are ordered based on commitments made by EU states to contribute to the

Kyoto Protocol commitment of reducing overall EU emissions by 8 percent. Thus we begin by looking at three relative 'leaders' in this respect, namely, Germany, which agreed to cut its GHG emissions by 21 per cent, the United Kingdom (UK) (-12.5 per cent) and the Netherlands (-6 per cent), followed by Poland, which agreed to a 6 per cent cut before joining the EU. We then look at two relative laggards in the GHG emissions-control game, namely Sweden and Spain. Within the EU bubble, Sweden is allowed to increase its emissions by 4 per cent and Spain can increase its GHGs by up to 15 per cent. 18 The final chapter in this section examines a state that has persistently avoided joining the EU, but which plays an important role in Europe's collective efforts to address GCC. That state is Norway, which is permitted under the Kyoto Protocol to increase its emissions up to 1 per cent.

In Chapter 2, Michael T Hatch examines the politics of GCC in Germany. Germany has been an extraordinarily important player in the international negotiations on GCC and is central to the commitments assumed by the EU under the Kyoto Protocol. In the absence of substantial reductions of GHG emissions by Germany, the EU has little chance of meeting its international obligations. Hatch asks why the German government has pursued such a central role. The answer, he argues, is located largely in a domestic policy process that resulted in commitments to reductions in CO₂ emissions that are among the most ambitious in the industrialized world. More specifically, German policy has been shaped by a collaborative approach that enabled a consensus to coalesce around the view that global warming is a serious threat that warrants concerted action. Out of this consensual policy process emerged a commitment to dramatic reductions in GHG emissions. Domestic decisions over the extent of reduction targets and the means to achieve them, in turn, became intimately linked through German foreign policy to negotiations, at regional and international levels, on the shape of the FCCC and the Kyote Protocol.

In Chapter 3, Loren R Cass analyzes the UK in the context of European GCC policy. The UK's role in the development of a common European response to GCC presents a fascinating case study of the ability of individual member states to pursue their national preferences within the context of the broader European EFP process. Along with the Germans, the British have provided the vast majority of the EU's aggregate CO2 emission reductions. Without the British cuts it would have been much more difficult for the EU to pursue a relatively aggressive position (compared to, say, the US) on international GHG cuts. The UK played a critical role in shaping European negotiating positions and in acting as an intermediary between the US and the EU in the negotiations for the FCCC, the Kyoto Protocol, and the Hague and Bonn agreements on implementing the protocol. Cass's analysis of the interaction between British and European positions in the GCC negotiations suggests that EU member states have significant room to manoeuver within common European positions on climate change. Successive British governments supported EU initiatives when they served UK interests, but they were also willing to use the US and international institutions to constrain European initiatives that ran counter to Britain's broader interests. Cass shows that the UK played an indispensable role within the EU's climate policy by providing sizable emission reductions that allowed the EU to seize an international leadership position, while simultaneously preventing European foreign policy on GCC from developing too quickly for British tastes.

In Chapter 4, Norichika Kanie examines 'middle-power' diplomacy in the multilateral environmental institution-making process, focusing on the case of the Netherlands in the early climate talks leading to the Kyoto Protocol. For a middle power, the Netherlands has exerted more than its proportional influence in GCC regime building and the Kyoto Protocolrelated process in particular. This can be attributed mainly to two factors. One is the role that 'domestic capacity' (or leadership potential) played in the Netherlands's GCC policy. The term capacity here encompasses domestic policies and associated institutional developments, as well as the foreign policy knowledge base that emerged from policy-oriented research projects. In other words, experience in implementing policies, including growth of policy networks among actors working on GCC and the ideas that fed into negotiations, grew into leadership potential for this middle-power state.

While success in introducing any unilateral policy initiatives and connecting them with external policy strategies depends very much on time and issue specific domestic and external conditions and constraints, the efficient interaction between governmental and non-governmental actors, on the one hand, and an efficient strategy on the side of the nongovernmental actors, on the other hand, may be key factors in facilitating unilateral action on GCC. In tackling global issues, the effective role of government may function as a link not only between domestic and global policies, but also between the government and NGOs. Kanie argues that the early introduction of an advance or experimental GCC policy can be advantageous because it can set an example and thus provide a basis for a solid argument against countries that have not introduced a comparable policy. However, potential does not necessarily mean the attainment of a leadership role. This leads to a second reason for the Netherlands' disproportionate influence in shaping the early GCC negotiations and the Kyoto Protocol: the framework provided by a regional organization, namely the EU, functioned as a lever that enabled the Netherlands to actualize leadership in the GCC negotiations.

The EU expanded to 25 members in May 2004. Turning to one of the newest member states, in Chapter 5 Anita Bokwa describes climatic issues in Poland's foreign policy. Political decisions in Poland concerning environmental issues, including those related to GCC, have been pushed by the country's requirements for accession to the EU and its membership in the UN. Bokwa argues that the demands of membership in the EU shaped Poland's state identity, determined its national interests and thereby influenced its behavior. After 1990, joining the EU became the primary foreign policy objective of Poland and the source of its domestic environmental requirements. As she puts it, 'the aim of joining the EU was of such a high priority that other factors were put aside'. However, most improvements in environmental conditions within Poland have been a consequence of the deterioration of its industrial economy after the fall of communism. There is no strong green political party in Poland that could counteract the powerful coal-energy lobby inherited from the country's communist history. The upshot is that domestic policy on the environment has been driven by foreign policy. Bokwa argues that this is largely a consequence of the rigid thinking of bureaucrats who came of age in the communist system; they are accustomed to following diktats - now from Brussels - rather than thinking and acting creatively and proactively. If Poland's GCC policies are to be more than reactive, there will have to be 'a huge change of the social mentality, which most probably can be achieved only by the next generation'. Thus, Bokwa's chapter shows how much EU membership can affect a European state's GCC policies, although perhaps not quite in the manner advocates of the organization would want.

Chapter 6, by Kate E Marshall, uses Barkdull and Harris's (2002) typology of EFP (see above) to explore Swedish actions on GCC. Sweden is usually a lead state in global and European environmental politics, and Marshall notes its past successes in combating air pollution. Sweden has had particular success in engaging in what Marshall calls 'norms-based diplomacy' in European and international negotiating forums, corresponding to the ideational approaches in the Barkdull and Harris typology, However, Sweden has not emerged as a lead state in GCC diplomacy, a position at odds with its past performance. For example, in the late 1990s Sweden stalled intra-EU GCC negotiations due to its concern about the scope of a GHG emissions-trading program. Sweden wanted an unlimited trading scheme, while most EU members preferred one with limits on the quantity of GHG emissions credits that could be traded (meaning that member states would not be able to avoid making domestic GHG cuts). The factors that had historically pushed Sweden toward an environmentally friendly, normsbased foreign policy were present, but such a policy did not materialize, In an effort to explain this discrepancy, Marshall uses a combination of societal, state and systemic levels of analysis. She pays particular attention to the role of nuclear power within Sweden, and a 1980 referendum in which Swedes voted against the construction of new nuclear power plants. The upshot is that in seeking to protect its sovereignty, Sweden did not engage in its usual form of norms-based diplomacy, despite the fact that all the postulated factors for normative influence were present. Consequently, this chapter not only provides empirical material on an interesting incident in GCC politics, but also shows that a norms-based EFP has limits, and that, even in environmental lead states, sovereignty concerns can take priority.

The politics of GCC in Spain is the subject of Chapter 7, written by J David Tabara, Tabara's chapter aims to explain the reasons for what he characterizes as the failure of Spain's GCC foreign policy, and for the growing role taken by Spanish regional actors in the implementation of European and international environmental agreements. Tabara argues that Spain is a long way from fulfilling its international commitments on GCC. He examines institutional and political-cultural factors underlying Spain's GCC politics and the growth of its GHG emissions. His chapter emphasizes the lack of public participation in this area of environmental policymaking. Tabara argues that Spain will have to buy emission reductions from abroad or find new ways to reduce GHGs in a more decentralized manner in tune with its political organization, which is based on regional Autonomous Communities (ACs). The governments comprising ACs in Spain have substantial environmental responsibilities that are held by centralized state agencies in most other countries. This strongly decentralized political structure, particularly as it relates to environmental, industrial and energy issues, poses special difficulties for co-ordination of the Spain's implementation of the GCC regime. However, this decentralization is not the cause of Spain's failure in this regard. Rather, Tabara concludes that the governments of Spain's ACs provide differentiated and potentially more flexible opportunities for the successful implementation of international environmental policies.

In Chapter 8, Andreas Tjernshaugen and Ho-Ching Lee examine Norway's role in international climate change negotiations, in so doing focusing on the impact of NGOs. As Tjernshaugen and Lee point out, in countries where governments and the public are inclined to listen to the environmental movement, environmental NGOs (ENGOs) are likely to be one of several groups of actors with some degree of influence over foreign policy regarding climate change. Their chapter discusses the strategies chosen by Norwegian ENGOs and their international allies in seeking to influence Norway's behavior in the UN climate change negotiations. They focus on ENGO activities at major negotiating sessions and find that they mostly chose not to try to affect negotiation outcomes through lobbying negotiators.

directly. Instead, the ENGOs used the negotiating sessions as opportunities to shape the domestic political agenda by transmitting information and arguments to the media. The aim was to indirectly influence Norway's foreign policy and negotiating position by shaming its government into adopting policies preferred by the ENGOs and framing the domestic climate policy debate in terms favorable to the ENGO's objectives. Tjernshaugen and Lee show how actions taken in the international and domestic political arenas were closely intertwined in this case, and they argue that ENGO influence in international negotiations should be understood with such linkages in mind. Specifically, they emphasize that the ENGO's ability to threaten a government's legitimacy and popular image, as well as their ability to shape domestic actors' interpretations of international commitments, are potentially important vehicles of influence in EFP and thereby in international GCC (and other international environmental) negotiations.

The EU and Global Climate Change

Part II focuses on the politics and foreign policymaking of the EU, including the EU's role in international negotiations on GCC and further analysis of interactions between the EU and its member states in this issue area. Part II begins with a discussion, in Chapter 9 by Nuno S Lacasta, Suraje Dessai, Eva Kracht and Katharine Vincent, of how the EU articulated a consensus' on climate change. The authors urgue that GCC ranks highly on Europe's political agenda and continues to be a key area of foreign policy for the EU. Their chapter gives an overview of key processes and actors in the evolution of EU climate change policy since the adoption of the FCCC in 1992. They highlight the complexities arising out of the unique multilevel governance structure of the EU, whereby the issue of GCC contains elements of 'exclusive' and 'shared' competences. Major actors involved in shaping GCC policy are introduced in the chapter, including the member states, the European Commission, businesses and industry, ENGOs, the media and the public. Lacasta and colleagues undertake three case studies on several key elements of European GCC policy, namely those regarding policies and measures, burden sharing and the developing countries. They evaluate and offer predictions regarding the future prospects of EU GCC policy. The authors believe that the EU's main priorities should be to lead by example through effective domestic policies on GCC, to reform EU structures so that a collective position emerges more readily, and to attempt to bridge the gap between the US and developing countries so that both participate in future GCC efforts. By doing these things, the EU can lead international negotiations toward more effective management of the global commons.

In Chapter 10, another collaborative group of scholars — Martina Jung.

Axel Michaelowa, Ingrid Nestle, Sandra Greiner and Michael Dutschke

look at land-use processes that absorb GHGs from the atmosphere,
domestic stakeholders, and the formulation of a common EU foreign policy
on GCC. Terrestrial 'land use, land-use change and forestry' — LULUCF
in the official lexicon — have been among the most debated and complex
issues in the international climate change negotiations. The EU was one
of the most prominent opponents of the use of forests as carbon sinks
for mitigation of climate change, much as environmentalists have often
opposed them because they allow polluters to forgo emissions cuts. The
chapter outlines the main land use-related questions under discussion
since the Kyoto conference in 1997. It describes the complex structure of
country groupings in the international GCC negotiations as well as the
different positions of stakeholders, including NGOs and industries within
and outside the EU.

The chapter also examines various channels of influence used by these stakeholder groups to influence the European position in the LULUCF negotiation process. In addition to these external factors, the EU has faced a relatively complex internal co-ordination process and conflicting interests of different member countries that slows the organization's reaction to new developments in international GCC negotiations. As the authors of Chapter 10 note, despite EU opposition, a relatively powerful coalition of supporters of carbon sinks and other land-use changes finally managed to include LULUCF activities in the Kyoto framework. However, following the EU's failure to reach its goal of completely excluding carbon sinks, it shifted toward influencing the role of carbon sinks by proposing conservative rules and procedures for their implementation.

In Chapter 11, Sebastian Oberthür and Dennis Tänzler seek to describe and explain how external factors, namely international regimes, influence GCC policies within the EU. Their chapter highlights how the Kyoto Protocol in particular has influenced the adoption and diffusion of policy instruments in the EU and its member states, in the process changing the conditions for the EU's foreign policy on GCC. While the literature on policy diffusion has tended to focus on processes of spatial policy learning. Oberthür and Tänzler argue that the spread of selected climate policy instruments across the EU cannot be understood and explained properly without reference to the role of international institutions, in this case the Kyoto Protocol. The international regime on GCC was an important force driving the increasing acceptance and diffusion of policy instruments, such as climate policy plans and emissions trading, across Europe. Neither the FCCC nor the Kyoto Protocol – the constitutive legal foundations of the international climate change regime – mandates the adoption of

such policy instruments. Nonetheless, the international regime played a crucial role in triggering the diffusion of related GCC policies by increasing pressure on governments to take effective measures in order to reach their emissions targets and by providing incentives to implement innovative policy instruments like emissions trading. Importantly, these effects of the Kyoto Protocol occurred prior to its entry into force, arguably reinforcing the EU's leadership role in international climate politics.

Chapter 12 turns more explicitly inward, looking at how the EU has influenced the GCC policies in one member state and one non-member state. Guri Bang, Jonas Vevatne and Michelle Twena seek to understand and explain how the EU has influenced the GCC policymaking processes in Germany and Norway. They ask how the EU has influenced climate instrument choice. To answer this question empirically, Bang, Vevatne and Twena focus on the formulation of a prominent climate policy issue, namely emissions trading (ET). At Kyoto in 1997, parties to the FCCC agreed that trading in GHG emissions would be a cost-effective way to achieve overall emissions reductions. Thus ET schemes became central in foreign policy discourses. However, the specifics of how to implement ET were not agreed at Kyoto, instead being left to subsequent international deliberations. Only at the seventh conference of the parties in Marrakech in 2001 was agreement reached on the issue. The authors of Chapter 12 argue that the EU has been a decisive factor in laying the ground for an emissions trading system (ETS) in Germany, and has been influential in shaping the design of Norway's ETS. They explain how Norway started off being enthusiastic about ET, while Germany was openly against it. When the EU changed its position as a result of what happened at Kyoto, Norway and Germany changed their positions on domestic ET. Underlying Chapter 12's discussion is an analytical framework based on social constructivism, elitism and interest-based theory, which examines the roles of norms, ideas, power and interests in international climate change policy. The authors argue that these perspectives frame policy instrument choice, which results from the interplay between domestic actors and institutions, on the one hand, and international organizations, institutions and regimes, on the other,

In Chapter 13, Leonardo Massai discusses GCC politics and policies in the context of EU enlargement, building on issues raised in Chapter S's discussion of Poland's GCC policies. The EU's enlargement process reached a milestone in May 2004 with the admission of 10 Central and Eastern European Countries (CEECs). Massai argues that this enlargement will considerably affect European EFP, as well as many EU policy institutions. The accession procedure required that applicant states implement the Acquis communautaire, the EU's collection of primary and secondary legislation (and related instruments). After considering the requirements of EU

enlargement, Massai analyzes correlations between the environmental Acquis and European climate related legislation, and the extent to which representatives of CEECs have been involved in the shaping of new EU instruments on GCC. The CEEC's GHG emissions will fall (compared to pre-accession, business-as-usual policies) as a consequence of joining the EU. The accession requirements have forced these countries to set up new policies and measures that in turn have affected their national strategies for reducing GHGs within the framework of the FCCC and the Kyoto Protocol. However, in terms of reduction obligations, CEECs are considered separately from the 'old' member states, which are jointly committed to fulfilling the Kyoto Protocol under the EU's burden sharing agreement (the emissions bubble). With this in mind, the chapter examines the European Allowance Trading Directive, an important Kyoto Protocol-based mechanism being implemented in the enlarged EU.

In Chapter 14, Lyn Jaggard examines the 'reflexivity' of ideas in national, regional and international policy making on GCC. She uses the case of Germany to illustrate how discourse and particularistic ideas can influence policy. She points out that it is essential for individual countries to implement a variety of policies in order to manage the effects of GCC and to minimize its future adverse effects. However, as we have seen, the transboundary nature of this phenomenon necessitates international cooperation. The way GCC politics are conducted is influenced by the way in which the problem and its possible solutions are perceived. Jaggard highlights the manner in which values, ideas and concerns have been influential in shaping Germany's domestic climate change policies, which have in turn impacted related German foreign policy, and thus international negotiations. She argues that 'reflexivity' is evident among German domestic policy, foreign policy processes and cooperative international negotiations leading to GCC policies. A feature of German politics is the extensive discussion that is often required to reach a consensus, something that is particularly evident in Germany's foreign policies. The acceptability of the terms and inclusiveness of discussions, and hence the perceived justice of the results, must normally be addressed in the policymaking process. This is important because policies are more likely to succeed if everyone agrees with them - that is, if they are reflective of the ideas of the participants who have, through discussion, arrived at a consensual decision. Jaggard argues that analyzing and highlighting the linkages and feedbacks between the various levels of governance and policymaking can aid us in better understanding these processes. According to Jaggard, greater knowledge of these 'reflexive' processes can enable practitioners and policymakers to maximize the effectiveness of their policies.

In Chapter 15, Paul G Harris looks at some of the ethical-normative considerations, notably 'international environmental equity' (IEE) and fairness, which are central to efforts to address global climate change, Most economically developed countries, especially in Europe, have started to recognize and accept the proposition that they should take on their fair share of international burdens associated with GCC. In Chapter 15, Europe's policies and actions on climate change are subject to some (potentially controversial) normative assessment. Harris starts by introducing the notion of IEE in the context of the GCC agreements and shows how it, arguably, should and does apply in this issue area. He points out how Europe has been a leader on IEE in the GCC negotiations over the last decade and more, at least compared to other major actors such as the US, and he points to what European states and the EU have done to take on some of the burden of GCC, such as starting to actually reduce their emissions of GHGs and to help developing countries cope with suffering that will come from climate change. The upshot is that Europe is doing more than any other part of the world to address GCC and to share the burdens associated with it.

However, Harris argues that it is nevertheless not doing nearly enough. Both practical and normative considerations point to the need for much more urgent action by Europe to share the burdens of GCC. While ideas like IEE have helped shape or 'construct' Europe's identity and interests in this issue area, they must still serve as a normative guide for additional action in the future.

Why has Europe done what it has with regard to GCC? Why has it not done more? We return to these questions in the Conclusion (Chapter 16), highlighting a number of key theoretical lessons learned from the chapter case studies.

CONCLUSION

Europe's role in causing and combating GCC cannot be overstated. In this book we attempt to illuminate and explain the politics, foreign policy processes and regional cooperation that underlie European national and EU policies on this profound problem. The analyses that follow show that those policies are almost always a consequence of crossover effects between national and even sub-national politics and policymaking – that is, domestic politics – and international negotiations, diplomacy and regimes – international politics. These crossovers can be understood by thinking in terms of foreign policy, which is by definition about actors, issues and forces at both the domestic and international levels of policy action, as well as the interaction among them. This is not to dismiss the importance

of what happens within states alone, or the crucial role that international factors have by themselves in shaping outcomes related to GCC. Rather, the research portrayed in this book shows that we can focus our attention on what happens within or among countries, but we cannot do so exclusively - at least not if we want to understand reality. These chapters compel us to question what we mean by systemic, societal and state-centric approaches to international relations, especially the latter. Increasingly, we can think in terms of a European society and a European, or EU, 'state' that exists alongside the individual countries of Europe - despite setbacks associated with attempts to ratify a European constitution. Increasingly, even those Europeans not encompassed by the EU are part of the society shaping European and EU policies on GCC, and they are inevitably subject, at least in part, to the EU 'state'. Likewise, despite their collective wealth and power, neither the European countries nor Europe - the EU - can avoid the global impacts of what happens at home and the influence and implications. both practical and ethical, of what happens abroad. Global climate change, despite being caused by what each person does on a daily basis, is just that global. As such, it not only tells us about Europe's impact on the planet, but also Europe's role in the world and its interdependence with it.

NOTES

- 1. This scientific consensus is now well entrenched in Europe and beyond (see Oreskes 2004). Those who believe that global warming and climate change are not happening are among a dwindling number, now mostly restricted to the US. For discussions of the tactics of the 'climate skeptics', see e.g. Leggett (2001) and Gelbspan (2004).
- For a discussion of US climate change policy and its related obligations, see Harris (2000a, 2001).
- For an official summary of the EU position on climate change, see DGE (2002).
- 4. See Vogler and Bretheron (2006) for an investigation of the EU as an actor, and particularly the nature of the EU as a protagonist, in the GCC regime.
- 5. The integration of European domestic environmental policies more generally is beyond the scope of this book, although the manner in which integration has occurred is germane to climate change policy. For a discussion of environmental policy integration and coordination among EU countries; see, for example, Jordan (2005); Jordan and Liefferink (2004); Jordan et al. (2003); and Jordan, Schout and Zito (2004). For a summary of EU onvironmental foreign ('external') policy, see Thieme (2001): Voglet (2004) and On (2005). On the common foreign and security policy and convergence in EU external relations generally, see Bale (2000); Keisala (2004); Laursen (2002); Musu (2003) and
- See Drake (2000) for an introduction to global warming. This section adapts Harris (2003: 20-23).
- While the EU has, for a number of years, fully endorsed the IPCC's assessments of GCC, it was a breakthrough of sorts when President George W Bush, after years of refusing to accept that global warming is a reality, said at the 2005 G-8 (group of eight industrialized countries) summit that human activities are 'to some extent' to blame for it (BBC News 2005).

- 8. For a summary of unticipated chimate change impacts throughout Europe, see European Commission (2005; 12-16).
- 9. For a detailed examination of GCC mitigation strategies, see Metz et al. (2001). On the topic of adaptation to climate change, see McCarthy et al. (2001) and Lim et al. (2004).
- 10. For a largely first-hand account of GCC diplomacy, see Leggert (2001), and for complete accounts of all the FCCC-related negotiations, see the archives of Earth Negotiations Bulletin (2005) (available at http://www.iisd.ca/ vol12/). This section builds on Harris (2000b; 11-16).
- 11. The call for a "framework" convention was based on the success of the framework Vienna Convention on stratospheric ozone depletion that resulted in the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. See Benedick (1998).
- 12. There is some debate about possible exceptions, but, insofar as there are any, their rarify proves the point.
- For an ongoing historical account of the GCC negotiations, see the latest adition of the Earth Negotiations Bulletin, available at http://www.iisd.ca/enbvol/enb-background.
- 14. The interaction between the domestic and the international that defines EI/P is analogous to what Kern et al. (2001; iv) characterize as 'diffusion between the poles of national and international environmental policy.' Portions of this section first appeared in Harris
- 15. The ongoing debate about whether one can even talk of a 'European' (i.e. EU) foreign policy, and from that how one can (or cannot) go about analyzing it, is described sugginctly in Carlsnaes (2004). This debate applies particularly to the second part of this volume, where the contributors assume varying degrees of 'actorness' on the part of the EU. See Vogler and Bretheron (2006) and Chapter 9.
- On the importance of issue-area definition in FPA, see Potter (1980: 403-27).
- 17. See Barkdull and Harris (2002: 66 84), for a detailed exposition of this typology and elaboration of the examples in Figure 1.1. For a discussion of how major theories of international relations help explain the first decade of GCC negotiations, see Puterson
- 18. Actual changes in GHG emissions (percentages) from 1990 to 2001 for those in the former EU-15 are Germany (-32.1), UK (-12.0), Sweden (-3.3) and Spain (+32.1) (EEA 2003; Table 1).
- 19. The EU was opposed to GHG emissions trading before the Kyoto conference in 1997, subsequently becoming a leader on the issue. See Christiansen and Wettestad (2003) on the political process and Klepper and Peterson (2005) on implementation of the scheme. Heller (1998) describes early EU efforts to co-ordinate European policies on climate change.

REFERENCES

- African Development Bank et al. (AfDB) (2002), Poverty and Climate Change: Reducing the Vulnerability of the Poor, Consultation Draft (October), Washington, DC: World Bank.
- Albritton, Daniel L et al. (2001), Summary for Policymakers: A Report of Working Group I of the Intergovernmental Panel on Climate Change, Bonn: Intergovernmental Panel on Climate Change, available at http://www.ipcc.ch/pub/spm22-01.pdf.
- Bale, Timothy (2000), 'Field-level CFSP: EU diplomatic cooperation in third countries', Current Politics and Economics of Europe, 10(2), 187-212.
- Barkdull, John and Paul G Harris (2002), 'Environmental change and foreign policy: a survey of theory,' Global Environmental Politics, 2(2), (May): 63-91.

BBC News (2005), 'Bush Rejects Kyoto-Style G8 Deal' (4 July), available at http:// news.bbc.co.uk/1/hi/world/americus/4647383.stm.

Benedick, Richard E (1998). Ozone Diplomacy (enlarged edition), Cambridge, MA:

Betsill, Michele M (2005), 'Global climate change policy: making progress or spinning wheels?", in The Global Environment. Institutions, Law, and Policy, edited by Regina S Axelrod, David Leonard Downie and Norman J Vig. Washington,

Bruce, J. H Lee and E Haites (eds) (1996), Climate Change 1995: Economic and Social Dimensions of Climate Change, Cambridge: Cambridge University Press.

Carlsnaes, Walter (2004), 'Where is the analysis of European foreign policy going?', European Union Politics 5: 495-508.

Christiansen, Atle C and Jorgen Wettestad (2003), "The EU as a frontrunner on greenhouse gas emissions trading; how did it happen and will the EU succeed?",

Collier, Use (1997), 'Comparative analysis and conclusions', in Use Collier and Ragnar E Loftsedt (eds), Cases of Climate Change Policy: Political Reality in the European Union, London: Earthscan,

Directorate General for the Environment of the European Commission (DGE) (2002), EU Focus on Climate Change, Luxembourg: Office for Official Publications of the European Communities,

Drake, Frances (2000), Global Warming: The Science of Climate Change, New York:

Earth Negotiations Bulletin (ENB) (2004), 'Summary of the tenth conference of the parties to the UN Framework Convention on Climate Change: 6-18 December 2004, Earth Negotiations Bulletin 12, 260 (20 December), available at www.iisd.

Earth Negotiations Bulletin (ENB) (2005), Summary of the eleventh conference

of the parties to the UN Framework Convention on Climate Change and first conference of the parties serving as the meeting of the parties to the Kyoto Protocol: 28 November 10 December 2005', Earth Negotiations Bulletin 12, 291 (12 December), available at www.iisd.ca/vol12/enb12291e.html.

European Environment Agency (EEA) (2003), 'EU greenhouse gas emissions rise for second year running. News Release (6 May), available at http://org.eca.eu.int/ documents/newsreleases/ghg-2003-en.

European Commission (2005), "Winning the battle against global climate change", Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Brussels: European Commission.

Evans, Peter B, Harold K Jacobson, and Robert D Putnam (1993), Double-Edged Diplomacy: International Bargaining and Domestic Politics, Berkeley, University

Framework Convention on Climate Change (FCCC) (1998), 'Climate change meeting adopts Buenos Aires plan of action' (14 November 1998), available at www.unfccc.de/media/p111498.html.

Framework Convention on Climate Change (FCCC) (1999), 'Ministers pledge to finalize Climate Agreement by November 2000', Press release (5 November),

Gelbspan, Ross (2004), Boiling Point, New York: Basic Books.

Grubb, Michael, Christian Vrolijk and Duncan Brack (1999), The Kyoto Protocol: A Guide and Assessment, London: Royal Institute of International Affairs.

Haigh, Nigel (1996). 'Climate Change Policies and Politics in the European Community', in Politics of Climate Change, Tim O'Riordan and Jill Jager (eds). London: Routledge.

Harris, Paul G (ed) (2000a), Climate Change and American Foreign Policy, New York: St Martin's Press.

Harris, Paul G (2000b) 'Climate change and foreign policy; an introduction', in Paul G Harris (ed), Climate Change and American Foreign Policy, New York: St Martin's Press.

Harris, Paul G (2001), International Equity and Global Environmental Politics, Aldershot: Ashgate.

Harris, Paul G (2003), 'Climate change priorities for east asia: socio-economic impacts and international justice', in Global Warming and East Asia, Paul G Harris (ed.), London: Routledge.

Harris, Paul G (2004) 'Environmental foreign policy: a new subfield in international studies?', Paper presented at the Annual Convention of the International Studies Association, Montreal, Quebec (17-20 March 2004).

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

Heller, Thomas (1998), "The path to EU climate change policy", in Jonathan Golub (ed.), Global Competition and EU Environmental Policy, London: Routledge.

Houghton, John (2004), Global Warming: The Complete Briefing, Oxford: Oxford University Press,

Houghton, JT, Y Ding, DJ Griggs, M Noguer, PJ van der Linden and D Xiaosu (2001). Climate Change 2001: The Scientific Basis, Cambridge: Cambridge University Press.

Houghton, John T. LG Meiro Filho, BA Callander, N Harris, A Kattenburg, and K Maskell (eds) (1996), Climate Change 1995: The Science of Climate Change, New York: Cambridge University Press.

Ikenberry, John G. David A Lake and Michael Mastanduno (eds) (1988), The State and American Foreign Economic Policy, Ithaca; Cornell University Press.

Intergovernmental Panel on Climate Change (IPCC) (1995), 'Summary for policymakers: the science of climate change - IPCC working group I', available at www.ipcc.ch/pub/sarsum1.htm#four.

Intergovernmental Panel on Climate Change (IPCC) (2001), Climate Change 2001, 3 vols. Cambridge: Cambridge University Press.

IPCC Working Group II (2001), Summary for Policymakers, Climate Change 2001: Impacts, Adaptation, and Vulnerability, Geneva: IPCC Working Group II (19) February draft).

Jordan, Andrew (ed.) (2005). Environmental Policy in the European Union: Actors. Institutions and Processes, London: Earthscan.

Jordan, Andrew, Adriaan Schout and Anthony Zito (2004), 'Coordinating European Union Environmental Policy: Shifting from Passive to Active Coordination?', Paper presented at the workshop on 'Coordinating the EU', Birkbeck College, University of London (London: 28-29 November 2003).

Jordan, Andrew and Duncan Liefferink (2004), Environmental Policy in Europe: The Europeanization of National Environmental Policy, London: Routledge.

Jordan, Andrew, Rüdiger Wurzel and Anthony Zito (2003), "How "new" environmental policy instruments (NEPIs) spread in the European Union; an analysis of the role of the EU in shaping environmental governance', European Union Studies Association Biennial Conference (27-29 March 2003).

Keisala, Katja (2004), The European Union as an International Actor. Strengths of the European Civilian Power, Academic Dissertation, Finland, University of Townsers.

Kern, Kristine, Helge Jorgens and Martin Janicke (2001). 'The diffusion of environmental policy innovations: a contribution to the globalization of environmental policy', Discussion Paper FS II 01–302, Berlin: Social Science Research Center, Free University.

Klepper, Gernot and Sonja Peterson (2005), 'Emissions trading, CDM, II, and more: the climate strategy of Europe', Paper for the Climate Change Modelling and Policy Series, Fondazione Eni Enrico Mattei (April), available at www.feem. it/Feem/Pub/ Publications/WPapers/default.htm.

Laursen, Finn (2002), 'The EU in the global system', Paper for a lecture on 'The European Union in the global system: external relations and the common foreign and security policy (CFSP)', Graduate Institute of European Studies, Tamkang University, Tuipei: (March).

Leggett, Jeremy (2001), The Carbon War: Global Warming and the End of the Oil Era, New York: Routledge,

Lim, Bo, Ian Burton, Sallemal Huq, Elizabeth Malone and Erika Spanger-Siegfried (2004), Adaptation Policy Frameworks for Climate Change: Developing Strategies. Policies and Measures, Cambridge: Cambridge University Press.

McCarthy, James J, Osvaldo F Canziani, Neil A Leary, David J Dokken and Kasey S White (eds) (2001), Climate Change 2001: Impacts. Adaptation and Vulnerability, Cambridge: Cambridge University Press.

Met Office (UK), (2004), '2004; another warm year', News Release (16 December), available at www.meto.gov.uk/corporate/pressoffice/2004/ pr20041216.html.

Metz, Bert, Ogunlade Davidson, Rob Swart and Jiahua Pan (eds) (2001), Climate Change 2001; Mitigation, Cambridge: Cambridge University Press.

Musu, Costanza (2003). European foreign policy: a collective policy or a policy of converging parallels?, European Foreign Affairs Review 8: 35–49.

National Research Council (NRC) (2002). Abrupt Climate Change: Inevitable Surprises. Washington, DC: National Academy Press.

Oreskes, Naomi (2004), 'The Scientific Consensus on Chinate Change', Science 306, 5702 (December): 1686.

Ott, Hermann F. (2005). 'The European Union: a strategic actor for sustainable global governance', in Andreas Rechkemmer (ed.), UNEO: Towards an International Environment Organization, Baden-Baden; Nomos.

Paterson, Matthew (1996), Global Warming and Global Polities, London:

Pew Center on Global Climate Change (2005), 'COP 11 and COP/MOP 1 Montreal' (December), available at www.pewclimate.org/what_s_being_done/in_the_world/cop11/index.cfm.

Potter, William C (1980), 'Issue area and foreign policy analysis', International Organization 34(3) (Summer): 405-27.

Putnam, Robert D (1988), 'Diplomacy and domestic politics: the logic of two-level games', International Organization, 19: 345–66.

Rosenau, James N (1987), 'Introduction: new directions and recurrent questions in the comparative study of foreign policy', in Charles F Hermann, Charles W Keglay Jr and James N Rosenau (eds), New Directions in the Study of Foreign Policy, Winchester, MA: Unwin Hyman. Roy. Denny (1998), 'Restructuring foreign and defense policy: the People's Republic of China', in Anthony McGrew and Christopher Brook (eds). Asia-Pacific in the New World Order, London: Routledge.

Shragia, Alberta M and Philipp M Hildebrand, (1998), 'The European Union and compliance: a story in the making', in Edith Brown Weiss and Harold K, Jacobson (eds), Engaging Countries: Strengthening Compliance with International Environmental Accords, Cambridge, MA: MIT Press.

Smith, Michael (2004), 'Institutionalization, Policy adaptation and curopean foreign policy cooperation', European Journal of International Relations 10(1): 95–136.
Thisman Demical County 1997.

Thieme, Dominik (2001), 'European community external relations in the field of the environment', European Environmental Law Review 10, (8–9 August): 282–64.
United Nations Conference of the Parties to the FCCC (UNCOP) (1996), 'Review of the Implementation of the Convention and of Decisions of the First Session.

of the Implementation of the Convention and of Decisions of the First Session of the Conference of the Parties: Ministerial Declaration (July 18), FCCC/CP/1996/L.17.

United Nations Framework Convention on Climate Change (UNFCCC) (2002), "The International Response to Climate Change", (July), available at www.klima.ph/resources/UNFCCC/iuckit/fact17.html.

Vogler, John (2004), 'The External Environmental Policy of the European Union', in Olav Schram Stokke and Øystein B Thommessen (eds). Yearbook of International Co-operation on Environment and Development 2003/04, London: Earthscan.

Vogler, John and Charlotte Bretherton (2006), 'The European Union as a protagonist to the United States on climate change', International Studies Perspectives 7: 1–22.

Watson, RT, MC Zinyowera and RH Moss (1996), Climate Change 1995: Impacts, Adaptations and Mitigation of Climate Change – Scientific-Technical Analysis, New York: Cambridge University Press.

Watson, Robert T, et al., (1998). The Regional Impacts of Climate Change: An Assessment of Vulnerabifity. New York: Cambridge University Press, available at www.grida.no/climate/ipec/tegional/index.htm.

Webber, Mark and Michael Smith (2002), Foreign Policy in a Transformed World, Harlow: Prentice Hall.

White, Brian (1999), "The European challenge to foreign policy", European Journal of International Relations 5(1): 37–66.

Woods Hole Research Center (2004), 'Scientific evidence, increasing temperatures and greenhouse gases', available at www.whre.org/resources/online_publications/warming_earth/scientific_evidence.htm.

Working Group on Climate Change and Development (WGCCD) (2005), Up in Smoke?: Threats from, and Responses to, the Impact of Global Warming on Human Development, London: International Institute for Environment and Development.

World Meteorological Organization (WMO) (2003), "WMO statement on the status of global climate in 2002", Press Release No. 684 (17 December), available at www.wmo.ch/web/Press/Press.html#pr.