Climate Change and American Foreign Policy

Edited by Paul G. Harris

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Chapter 1

Climate Change and American Foreign Policy: An Introduction

Paul G. Harris

Climate change, sometimes labeled global warming or the enhanced "greenhouse effect," is the extraordinary warming of the Earth from increased concentrations of "greenhouse gases" (GHGs) and the climatic consequences of that warming. Many of those consequences are likely to be harmful to humans and to the natural environment. Over the last decade, governments have negotiated international agreements to address climate change, most notably the 1992 Framework Convention on Climate Change (FCCC). American foreign policy has become intimately involved in the politics of climate change. This policy is explained by a myriad of factors, ranging from concerns for American national interests and the pluralism of American domestic politics, to the influence of ideas and international norms on foreign policymakers.

Climate change has moved to the front burner of United States foreign policy and international relations. While scientists have thought about the potential problems of climate change for a century, it is only in the last two decades that it has found its way onto the main agendas of governments, and only in the last ten-odd years has it become the focus of concern in the foreign policy circles of the American government. If the scientists are right, climate change will have potentially devastating impacts on the global ecosystem, thereby posing challenges for the U.S. government and for policymakers the world over.

The case of the United States is particularly important. The United States is the world's largest contributor to climate change. In aggregate, its emission of gases that contribute to climate change exceed those of all other countries, and on a per capita basis its emissions are among the high-

est on the planet. With only about four percent of the world's population, the United States produces nearly 25 percent of the gases that cause climate change.[1] Thus, by reducing their emissions of greenhouse gases, Americans can have a disproportionately positive impact on this problem. Americans also have substantial financial and technological resources that can be brought to bear against climate change, notably through the ability of the United States to assist less developed countries in their efforts to combat climate change and its adverse effects. Furthermore, it is likely that other countries will follow the lead of the United States. If it acts in earnest to combat climate change, other countries may use it as an example. At the very least, as international negotiations on climate change show, other countries are unlikely to act before the United States is seen to be doing so. And, of course, one could argue that the inordinate contribution that Americans have and are making to the problem of climate change means that they have a moral responsibility to act first and to act in earnest.

Understanding the role of American foreign policy is one important factor—some might argue the central factor—in international efforts to deal with climate change. Complex combinations of actors, processes, and institutions of American foreign policy are what decide American actions, not, as we might like to think, the decisions of only the president, or only the Congress, or even the American people. Thus, understanding the complexities of American foreign policy is one prerequisite for understanding the larger international debate and the intricacies of global collective action on climate change. What is more, examining the role of climate change in American foreign policy—and vice versa—tells us a great deal about American foreign policy more generally. This may be helpful in understanding America's role in other pressing issues confronting the global community.

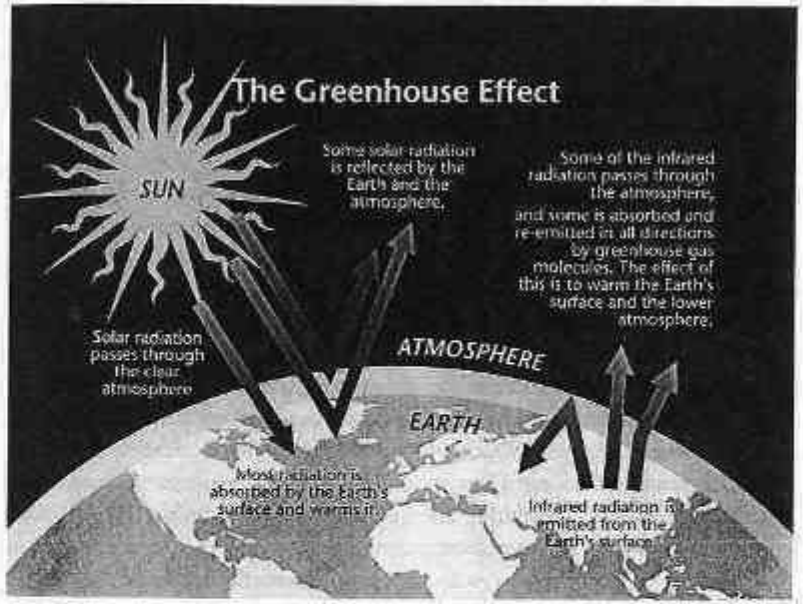
Climate Change: Causes and Consequences

The science of climate change is complex. Indeed, its complexity, and particularly disagreements among scientists and politicians about its causes and consequences, explain much about American climate change policy. In this volume several authors therefore take up the question of science. Here we present a layperson's introduction to the climate change and its potential effects as a backdrop to the following chapters' discussions of American foreign policy.

Narrowly defined, climate change is the climatic consequences arising

from the enhanced "greenhouse effect." More broadly understood, climate change refers also to regional and local changes in weather resulting from global warming, and the socioeconomic impacts thereof. Solar radiation is trapped by the Earth's atmosphere, warming the Earth much like what occurs in a gardener's greenhouse. This is a good thing, because without this heat the Earth would be far too cold for life as we know it. However, anthropogenic greenhouse gases—such as carbon dioxide and methane—absorb some of the radiation that would otherwise leave the atmosphere and pass into space, leading to additional warming of the lower atmosphere and the Earth's land and oceans. (See figure 1–1.)

According to the Intergovernmental Panel on Climate Change (IPCC), human activities are adding greenhouse gases to the atmosphere.[2] For example, carbon dioxide, the chief greenhouse gas, is produced when fossil fuels (e.g., coal, oil, natural gas) are burned to produce usable energy for industry, transportation, and personal uses, and when forests are cut down and burned. Other greenhouse gases, namely methane and nitrous oxide, emanate from agriculture, and yet others (carbon compounds like chloro-



Source: United States Global Change Research Project, "The Greenhouse Effect," from *Climate Change: State of Knowledge Charts* <http://www.nace.usgcrp.gov/images/1Greenhouse.jpg>

fluorocarbons that contribute to stratospheric ozone-layer depletion) are released by industrial processes.

International negotiations on climate change were bolstered by the IPCC's second assessment report, issued at the end of 1995.[3] This report, which concluded that "the balance of evidence suggests that there is a discernible human influence on global climate," substantially reduced doubt about the existence of climate change, although it did not establish with certainty which countries would suffer most, or how.[4] The timing and extent of global warming, as well as the effects of resulting climate change, were uncertain. Because the conclusions were mostly general in nature, there was only rudimentary guidance for policymakers concerned with how climate change might affect their jurisdictions and their national interests. Nevertheless, the IPCC's findings were a driving force behind the 1997 Kyoto Protocol and other recent efforts to strengthen the FCCC.[5]

Among the IPCC's general findings on global climate change were expectations that average global temperature will increase by 1–3.5 degrees Celsius in the next century, with effects ranging from a global mean sea level rise of 15–95 centimeters in the next century; increased frequency of storms, floods, water shortages, changes in precipitation and soil moisture; extreme high temperature events; adverse effects to agriculture; possible threats to ocean and especially freshwater fisheries; infectious disease transmission; and the like.[6] As yet not fully studied consequences excluded from present models, such as Gulf Stream and other ocean current changes, could lead to catastrophic effects. Models for *global* impacts are fairly good at mirroring reality, but assessments of local and regional impacts are more uncertain than the global findings.

Scientists continue to refine their predictions, however. Among ongoing efforts are research to determine the local, national, and regional effects—and thereby, presumably, to tell the politicians and policymakers what they really want to know. Confidence in, and the resolution of, models is growing, but substantial *uncertainties* about regional and smaller scale impacts remain. Many feedback processes may never be grasped fully. This of course leads one to ask: How much will the U.S. government and other governments demand scientific *certainty* about impacts before taking more concerted action to address climate change?

Toward this end, smaller scale impacts are being predicted, with the IPCC issuing an important report at the end of 1997.[7] The report's overview of regional vulnerabilities to climate change is sobering, especially for the most vulnerable areas. Africa is most vulnerable due to widespread poverty that limits adaptation capabilities. Most African countries

may experience adverse effects to rangelands, forests, and species biodiversity, especially in the most arid regions; increased shortages of water in many areas (especially on the Horn of Africa); damage to agriculture due to heavy reliance on the rainy season; inundation and erosion in coastal areas, and extreme storm events; increased vector-borne diseases and reduced nutritional status; and adverse effects on wildlife and tourism.

Similarly, the Middle East and western Asia can expect extant water shortages to be exacerbated (increasing the likelihood of conflict between countries). Decreased water and food production, along with changes in disease vectors, may adversely affect human health. In the Caspian and Aral seas areas, further changes in water levels and associated effects on ecosystems, agriculture, and health may occur. Likewise, Australasia has vulnerable ecosystems and water systems, although predictions are that adverse impacts on agriculture will likely be low in the next few decades because affected countries have high adaptability, albeit at high cost (greater adverse effects are anticipated in later decades). However, the Australasia region has extremely vulnerable coastal areas.

Europe is anticipated to experience increased floods in the north and droughts in the south; lowered water quality and increased water demand during hotter summers; loss of up to 95 percent of Alpine glacier mass by 2100, affecting the water regime; reduced crop yields in southern and possibly western Europe, with potentially increased yields in central and eastern Europe; risk to coastal areas (especially the Netherlands, Germany, Ukraine, Russia, Mediterranean areas, and Baltic coastal areas); lowered air quality in cities; and more vector-borne diseases. This region, however, has significant capacities to adapt to these and the many other impacts of climate change.

In Latin America, mountain ecosystems and transitional zones between vegetation types are extremely vulnerable, and additional stress to threatened rainforests is expected, with biodiversity loss and reduced rainfall and runoff. Arid areas are especially vulnerable, with the possibility that water shortages could lead to conflict among users. Agricultural productivity and traditional peoples' livelihoods (i.e., traditional crops) are threatened, as are coastal areas and marine ecosystems (e.g., coral reefs). There is also the prospect of increased malnutrition, as well as increased illnesses due to vector-borne and infectious diseases.

Much of North America, like Western Europe and Japan, will be able to adapt to changes. Thus it is more *sensitive* to climate change than *vulnerable* to it. Nevertheless, North American countries may be forced to adapt to climate changed-induced effects like longer dry periods and more

extreme weather events. Furthermore, vast coastal areas are threatened; for example, as much as 50 percent of North America's coastal wetlands could be eliminated in the next century.[8] Indeed, some scientists surmise that the apparent increase in floods, tornadoes, droughts, and other severe weather-related events in the United States are possible consequences of global warming. At least they are indications of what the future may hold for the United States.[9]

In contrast to the affluent North American countries, the small island states are especially vulnerable to climate change effects. They can expect freshwater shortages and damage to coastal areas and adjacent infrastructure, with concomitant adverse effects on tourism. Indeed, in extreme cases it may one day be necessary for some of these nations to abandon their territory altogether. Representatives from these countries have argued that they are already feeling the effects of rising oceans.[10]

Temperate Asia faces decreased water supplies in most areas, changes in crop yields (the predictions for Chinese rice production range from −78 percent to +15 percent, depending on the scenario), saltwater intrusion and infrastructure damage in coastal areas, and direct human consequences of heat stress and higher mortality. Southern tropical Asia is likely to see reduced snow melt from the Himalayas, changes in forest types, lowered agricultural productivity,[11] increases in vector-borne diseases, and the effects of sea-level rise. This includes inundation, erosion, flooding, and saltwater intrusion along coastal areas, as well as risk to delta regions and low-lying areas.

The IPCC regional report summarizes the predicted effects of climate change this way:

> Scientific studies show that human health, ecological systems, and socioeconomic sectors (e.g., hydrology and water resources, food and fiber production, coastal systems, and human settlements), all of which are vital to sustainable development, are sensitive to changes in climate. . . . Whereas many regions are likely to experience adverse effects of climate change—some of which are potentially irreversible—some effects of climate change are likely to be beneficial. Climate change represents an important additional stress on those systems already affected by increasing resource demands, unsustainable management practices, and pollution, which in many cases may be equal to or greater than those of climate change. These stresses will interact in different ways across regions but can be expected to reduce the ability of some environmental systems to provide, on a sustained basis, key goods and services needed for successful economic and social development, including adequate food, clean air and water, energy, safe shelter, low levels of disease, and employment opportunities. Climate change also will take place in the context of economic development, which may make some groups or countries less vulnerable to climate change—for example, by increasing the resources available for adaptation; those that experience low rates of growth, rapid increases in population, and ecological degradation may become increasingly vulnerable to potential changes.[12]

Other reports (often based on IPCC scientific findings) have focused on particular aspects of potential impacts from climate change. According to a World Health Organization report, climate change will affect agricultural productivity through effects on soil, photosynthesis, pests and diseases, with especially adverse impacts on lower-latitude, lower-income countries. In those places, malnutrition and hunger, along with other health problems, could increase. Children may be particularly at risk. Indirect health effects may arise from social-demographic disruptions caused by rising sea levels and shortages of natural resources like fresh water and food.[13] The Food and Agricultural Organization likewise reports adverse effects from climate change, suggesting that, "Combined with changes in population concentrations and the positive skew of many climatological elements (such as wind and rainfall), as well as sea-level rise itself, this indicates that relatively greater disasters are likely."[14] However, the report is largely inconclusive, pointing out that determination of effects and consequences of climate change remain quite elusive. The upshot from the report, however, is that developing countries—and particularly small island countries—are at risk.[15] In short, for most developing countries, the predictions of the IPCC and related reports are rather bleak, and those for the industrialized countries may be particularly challenging.

In addition to international assessments from the IPCC and others, several national governments have been examining the consequences of climate change for their citizens and economies.[16] For example, the United States undertook a multiyear assessment of climate change impacts in its various regions. These assessment activities involved scientists, as one would expect, but also stakeholders who have direct interest in what climate change may bring. As such, the assessments themselves included input from actors who could pressure the federal government to change its positions in international deliberations on climate change.[17]

Have improved assessments of vulnerability actually affected international cooperation on climate change in a positive way? The general picture is rather spotty so far. Each country's position in the climate change negotiations is driven by a variety of factors. Among those that are most

important are perceptions of national interests (usually *economics* for most countries); geography (location, land forms, water systems, soil types, etc.); and existing national and international political coalitions, blocs, and friendships. Climate change impacts—more accurately, *assessments* of expected impacts—combine with domestic and international politics to shape the course of the climate change deliberations. In short, politics intervenes in interpretations of science and policy related to climate change.[18]

The developed industrialized countries have agreed to reduce their overall emissions of greenhouse gases to below those of 1990. For example, in the 1997 Kyoto Protocol the European Union (EU) countries agreed to an overall reduction of eight percent, the Americans agreed to seven percent, and the Japanese promised to reduce emissions by six percent. In contrast, some developed countries received the go-ahead to increase emissions beyond 1990 levels, with the most prominent example being Australia. Overall, the reductions agreed to by these countries were slightly more than five percent. This amount, much like the limitations on ozone-destroying chemicals first agreed to by governments in Montreal in 1987, has little direct relationship to the science. The scientists have said that stabilization of carbon dioxide concentrations at present levels would require immediate reductions of 50 to 70 percent—and further reductions thereafter (carbon dioxide is only one of several greenhouse gases, albeit the most important one).[19] Clearly, the five percent agreed to at Kyoto does not begin to mirror the scientific conclusions. The science provided the stimulus for action, but policy does not yet reflect its conclusions.

The developing countries are the greatest potential victims of climate change; they are, in short, both the most sensitive due to geography (e.g., low-lying coastal areas, arid regions, water shortages) and the most vulnerable due to large populations, poverty, and weak economies. Individuals in developing countries are particularly vulnerable to malaria and other diseases that may increase from climate change, in part due to poor medical infrastructure and welfare systems for managing consequences, in addition to adverse affects on food production and nutrition. But these countries have focused on economic development and equity: They are more concerned with economic growth, poverty eradication in the short and medium term, and with seeing the most responsible countries of the industrialized world take action and provide assistance to the developing world for climate change mitigation efforts. The South's perception of exploitation (the North is, after all, the main cause of problem, especially on a per capita basis) can cloud perceptions of interest and risk.

It is possible that in many countries—both developed and developing—

improved understanding of local and national impacts from climate change may motivate local and regional stakeholders to pressure their governments to do more. But political will at the local level—despite competence to act—is often lacking, even in the industrialized countries.[20] The developing countries will suffer the most. Do they recognize this? The developed countries will likely have to pay more to fix the problems brought on by climate change than they would to undertake preventative measures. Will there be a sufficient perception of risk and political leadership to take action in coming years and decades? It is likely that climate change is still too abstract for most people: "What people respond to are things that are directly in front of them—things they can see and touch and smell. Air pollution you can see. Garbage you can touch. Bad water you can smell. But global warming? It's so . . . abstract."[21] In both North and South—and particularly in the United States—concerns about economic development and growth can override concerns about climate change. So far the prospects of this changing seem limited, at least beyond incremental action and no-regrets policies motivated largely by other, usually economic, factors. This preference among governments for very limited, incremental action has been reflected in international climate change negotiations.

Climate Change Diplomacy

Most of the contributors to this volume have their own interpretations of the history of the international climate change negotiations. In this section we offer an outline of climate change deliberations as an introduction to the contributors' discussions.

The Negotiations

International diplomacy to address climate change began in earnest in the 1980s, and grew in intensity in the 1990s.[22] 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, perhaps largely, separated from science. International and domestic politics, then, served as the ongoing stimulus for continued efforts to address climate change.

The First World Climate Conference, held in 1979, was a gathering of scientists interested in climate change 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."[23] From that conference a program

of scientific research was established that would contribute to the establishment of the IPCC in 1988 by the World Meteorological Organization and the United Nations Environment Program. The IPCC's 1990 first assessment report on climate change and the Second World Climate Conference in 1990 added stimulus to initial concerns about climate change among diplomats. In December 1990, therefore, the United Nations General Assembly established the Intergovernmental Negotiating Committee (INC) for a Framework Convention on Climate Change. The goal of the climate change INC was to negotiate a *framework* convention that would be the basis for subsequent international protocols dealing with climate change.[24] Between 1991 and the 1992 "Earth Summit" (the UN Conference on Environment and Development, held in Rio de Janeiro), representatives of over 150 countries negotiated the Framework Convention on Climate Change, a document that provides guidelines for international action on climate change.[25]

The FCCC called on countries to reduce their emissions of greenhouse gases to 1990 levels by 2000. Clearly, very few have done so. Particular responsibility is laid on the developed countries (listed in the FCCC as "Annex I" countries) to provide "new and additional" resources to developing countries to help the latter with their efforts to reduce greenhouse gas 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. By the end of 1999, 181 countries had ratified the FCCC, demonstrating that its general and nonbinding wording could be supported by most governments.[26]

In the years following the FCCC's adoption, several meetings of the parties to the convention were held to negotiate the details of how 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. Those negotiations were noteworthy for several milestones, most notably the so-called Berlin Mandate, the Kyoto Protocol, and the Buenos Aires Declaration.

The first COP was held in Berlin in 1995. This conference established the Ad Hoc Group on the Berlin Mandate (AGBM), 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 greenhouse gas emissions and to assist the developing countries, which were excluded from substantial commitments for emissions reductions. At this meeting the developed countries acknowledged that they had a greater share of the responsibility for climate change and would act first. Thus the first COP affirmed the notion of "common but differentiated responsibilities." (See chapter 11.)

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"[27]) and called for a legally binding protocol with specific targets and timetables for reductions of greenhouse gas emissions be developed country parties. Thus, the Geneva Declaration served as the negotiating basis of the Kyoto Protocol, signed at the third COP in Kyoto, Japan.[28]

The Kyoto conference, in December 1997, proved to be especially contentious, not least because the United States seemed to be reneging on the Berlin Mandate when President Clinton called for "meaningful participation" of the developing countries. After heated negotiations, however, the conference managed to agree to the Kyoto Protocol, which established specific emissions goals for developed countries, but which did not require significant new commitments by developing countries.[29] The developed countries agreed to an overall goal of reducing emissions by about five percent below 1990 levels between 2008 and 2012. The United States agreed to reduce its emissions by seven percent. It is this commitment that would prove to be the most contentious in Washington. The Kyoto Protocol catered to some U.S. demands by endorsing emissions trading programs that would allow developed countries to buy and sell emissions credits among themselves. The protocol also established a Clean Development Mechanism to manage programs of joint emissions efforts between developed and developing countries. This would allow developed countries (perhaps more likely industries in developed countries) to pay for—and receive emissions credit for—emissions-reduction projects in developing countries. These programs would allow entities in the developed countries to seek greenhouse gas reductions programs in other countries at lower cost.

Some of the means by which the five percent goal would be reached were codified at the fourth Conference of the Parties, held at 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 to the conference agreed to reach decisions by the end of 2000 on several key issues, including guidelines for emissions trading, joint implementation, the Clean Development Mechanism, and technology

transfers.[30] At Buenos Aires the United States signed the Kyoto Protocol. At the fifth Conference of the Parties at Bonn in October 1999, parties agreed to a timetable for completing outstanding details of the Kyoto Protocol by the sixth Conference of the Parties in November 2000 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."[31]

At the time of this writing, there is little prospect that the U.S. Congress will ratify the Kyoto Protocol, however, at least not without substantial new side agreements. Until it does, the United States has no legal obligation to meet the goals set out in Kyoto, much less the more stringent GHG emissions reductions that will be needed to limit climate change. Congress has demanded that developing countries join in efforts to limit emissions of greenhouse gases. There lies a key issue that permeated the climate change deliberations for all of the 1990s.

The Policies of Major Actors

The international negotiations on climate change have been characterized by many important themes. As in many international negotiations, especially those with so many participants, the policies of countries varied, sometimes markedly. Here we introduce several themes that reemerge in subsequent chapters: North-South differences; South-South differences; North-North differences; and the importance and influence of American foreign policy throughout the negotiations (the latter is introduced in the next section).

On the face of things, the most visible aspect of the climate change deliberations has not been the agreements and instruments negotiated, but the acrimony that was created between the developed countries of the North—particularly the United States—and the developing countries of the South. The developed countries have 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 be required to manage and eventually reduce their emissions of greenhouse gases. Because greenhouse gases originate all over the world—for example, carbon dioxide is produced largely by industrial processes and private transport, and methane comes from agricultural practices—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 argued that their per capita emissions of greenhouse gases, particularly carbon dioxide, remain very low relative to the developed countries. What is more, it is the industrialized developed countries that have benefited from past emissions of greenhouse gases since the Industrial Revolution. It is the responsibility of the developed countries, therefore, to reduce their emissions of greenhouse gases, while they allow the countries of the South to focus on economic development. The developing countries also by definition have far weaker economies; 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 greenhouse gas emissions.

Thus the international negotiations have been plagued by efforts of the North to get developing countries to commit to emissions limitations, on the one hand, and developing country efforts to avoid substantial commitments on the other. These differences were briefly "solved" by the Berlin Mandate and the affirmation of the principle of "common but differentiated responsibility," meaning that all countries were responsible to act, but that the developed countries were most responsible and would act first. At Kyoto, however, this agreement was challenged by the United States (see below).

It would be wrong to assume, however, that there were no differences between the countries of the South. Indeed, the goals of some groups of developing countries differed sharply. At one extreme were the oil producing countries, for example, members of the Organization of Petroleum Exporting Countries (OPEC). They agreed until recently with many politicians and interest groups in the developed countries that the science of climate change was uncertain. Therefore, they argued, action on climate change should be postponed until this uncertainty is reduced or eliminated. They joined with the United States and other developed countries in attempting to water down proposals for substantive reduction of carbon dioxide emissions in particular (which derive largely from the burning of oil and coal). 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. But in Buenos Aires, Argentina and Kazakhstan agreed in principle to voluntary limitations on their greenhouse gas emissions. China's position and that of OPEC also contrasted with the goals of the members of the Association of Small Island States (AOSIS), which fear that they will be among those countries most severely affected by climate change 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. Of course, developed countries were able to exploit these and other differences among the developing countries.

Similarly, the developed countries were not always in agreement. In the run up to the Kyoto conference, for example, the countries of the European Union were calling for firm targets and timetables that would require emissions reductions to be much higher than those finally agreed upon at Kyoto. 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 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 Americans and some others were calling for firm commitments from the more well-off developing countries. There were also differences regarding the so-called European "bubble," whereby EU countries would agree to their overall emissions limitations and then distribute those emissions among themselves. Thus, for example, Britain would reduce emissions well above the overall amount agreed for Europe—finally set at eight percent—and Portugal would be allowed to *increase* its emissions. Other developed countries, such as the United States and Japan, argued that this provision would be unfair. Indeed, they argued that if the Europeans could have their bubble, the Americans, Japanese, Russians, and others could form their own. This would work well for them, because the base year of 1990 meant that the Russians were already well below their reduction quota (due to falling economic output in the 1990s), and could sell the surplus to other countries.[32] This would mean that industries in, say, the United States could buy low-cost emissions reductions from Russia, thereby avoiding having to make any real reductions of their own.

American Climate Change Policy

The climate change negotiations have for the most part been dominated by the United States. Indeed, the United States has often achieved its objectives—but not always. Like most other countries, the United States took a concerted interest in climate change in the late 1980s. However, despite the interest among many American scientists, environmentalists, and some politicians, the Bush administration did not agree that climate change posed real dangers for the United States. When the consensus of scientists began to be reflected in international negotiations, the Bush administration began to take the issue seriously. But this interest came in the form of efforts by U.S. diplomats to limit international action. Indeed, it was likely

that targets and timetables could have been agreed to prior to the signing of the FCCC in 1992 were it not for the United States, which—almost alone among developed countries—refused to allow targets and timetables to be part of the framework agreement. (This mirrored U.S. opposition to most forms of international regulation of the American economy.) To the extent that the United States was willing to reduce its greenhouse gas emissions, it did so largely for other reasons (e.g., to improve local air quality or to improve energy competitiveness).

Arguably, the positions on climate change taken by the Clinton administration were qualitatively different than those of its predecessor (see chapter 2). While the Bush administration would not acknowledge the accuracy or immediacy of the IPCC's findings, the Clinton administration eventually accepted that climate change was a real concern, and that the United States was disproportionately responsible for it. It implemented some modest programs to reduce U.S. greenhouse gas emissions, although it faced congressional opposition to most of these efforts, and it accepted the need for binding emissions targets and timetables. Nevertheless, the Clinton administration caused disdain among foreign diplomats when it seemed to challenge the Berlin Mandate and the nascent international climate change norm of "common but differentiated responsibility" (see chapter 11). Before Kyoto—and this writing in mid-2000—the Clinton administration demanded that developing countries agree to "meaningful" commitments to limit their greenhouse gas emissions. The United States was also the most forthright in pushing for market mechanisms (particularly emissions trading, which had worked effectively within the United States in meeting domestic goals to reduce the emissions of various pollutants) and joint implementation programs, which were resisted by most developing countries and many developed countries.[33]

The upshot is that the United States sometimes achieved its objectives in the climate change deliberations. The FCCC itself was a crude framework not requiring any obligatory action—as the United States wanted. The Kyoto Protocol and the Buenos Aires Declaration affirmed the importance of market mechanisms to meet many of the objectives of the FCCC—as the United States wanted. But the United States was not always successful. The Kyoto Protocol requires the developed countries to meet tougher restrictions than the United States had wanted—if not nearly enough to have a major impact on the problem. And the protocol does not require developing country participation—again running counter to U.S. objectives. The subsequent Buenos Aires pledge also does not move much in the direction of U.S. objectives in this regard. These are only a few of

the areas where U.S. influence was surprisingly spotty, especially if one starts from the assumption that, as the world's sole "superpower," it ought to get its way much more often.

Again, this is merely an introduction to the climate negotiations and the American view of them. Subsequent chapters deal with these issues in far greater detail. The contributors to this volume endeavor to understand and explain, and in some cases to critically evaluate, American policy on climate change.

Understanding and Explaining American Climate Change Policy

Clearly there are many issues worthy of consideration in understanding and explaining American foreign policy on climate change. Many variables fed into the policy process that produced American climate change policies. There are many interpretations of these causes and explanations, and also different evaluations of the merits and ethics of U.S. climate change policies. One could arguably boil down many of these explanations to three broad areas: the impact of power and "realist" conceptions of the world; domestic politics and the pluralistic nature of American politics; and the influence of ideas and norms in international relations. But, as subsequent chapters show, things are even more complex than that. And there are, of course, other explanations and evaluations not included in this volume.

The remaining chapters of this book are organized into three sections. In the first section, "Critiquing U.S. Climate Change Policy," we critically evaluate American foreign policy in the context of climate change. Is the United States behaving as it *ought* to, given the potential consequences of climate change outlined in this introduction? In what ways is it "behaving" or "misbehaving" relative to the expectations of emerging international standards? The second section, "Politics of U.S. Climate Change Policy," aims to explain and understand U.S. climate change policy. If the United States is not doing enough to combat climate change, why not? To the extent that it is joining international efforts to deal with climate change, what explains its behavior? We argue that many of the answers lie in politics—both domestic and international—broadly defined. Finally, the last section, "International Norms and U.S. Climate Change Policy," examines the role of international norms in shaping U.S. climate change policy. The degree to which the United States cooperates in the future with other countries to limit the causes and consequences of climate change may, to a great extent, be a function of whether it adopts and embraces emerging international norms in the area of climate change.[34]

Critiquing U.S. Climate Change Policy

In the next chapter, Paul G. Harris assesses the extent to which the United States has—or has not—taken on its fair and equitable share of burdens associated with climate change. Any examination of such questions in international affairs encounters many different conceptions of international fairness and equity. Several are introduced briefly in the chapter, including those premised on rights, causality and responsibility, utilitarianism, Kantian ethics, Rawlsian justice, and impartiality. These varying philosophical conceptions of fairness and equity affect the real world of climate change politics and the practical distribution of benefits and burdens of climate change in several important ways: distribution of emissions; financial resources and technology transfer; compensation; and representation. The chapter argues that U.S. *policy* and *rhetoric*, beginning with the Clinton administration, fit with and supported common conceptions of fair and equitable burden sharing. Through the late 1990s, U.S. *actions* were at least moving in that direction, albeit in a very modest way when compared to U.S. responsibility for the problem and the potential magnitude of climate change effects. The United States *began* to share the burden of climate change with the rest of the world. It took action at home and plans substantially more in future. Furthermore, the government allocated substantial sums of money—when viewed in light of opposition to foreign aid in the United States—to assist less affluent countries in their efforts to meet provisions of the FCCC. While Clinton administration statements and policies were understandably often couched in terms of U.S. national interests, they were nevertheless a substantial shift by the U.S. government toward an acceptance of international fairness and equity as important objectives of U.S. climate change policy. This is especially evident when such statements and policies are compared with the posture of the U.S. government during the Reagan and Bush administrations, and when compared with the history of U.S. foreign policy more generally. However, *actualization* of this new policy was modest, at best.

Why has U.S. policy and rhetoric moved toward more action on climate change, and why has the United States done what it has to address this issue? Alternatively, why has the United States not done far more—as many people think it should—to address the problem of climate change, and why is it unlikely to act robustly in the near future? Subsequent chapters explain—or at least help us to better understand—the issues underlying these and related questions.

In chapter 3, Peter Doran offers a very critical, and potentially controversial, evaluation of U.S. climate change policy. He draws on Michel Foucault's concept of governmentality and post-structuralist interventions in

the discipline of International Relations to explore the deep-rooted contradictions underlying the industrialized world's energy-intensive consumption and production patterns, which, he argues, are only possible due to a privileged geopolitical status. The contradictions explain inevitable tensions in American attempts to "green" its foreign policy in recent years. At the heart of these tensions is the U.S.'s domestically-driven imperative to defend and indeed celebrate a dominant model of development while simultaneously embracing an evolving climate change regime intended to deal with consumption and production patterns made possible by privileged access to resources. To illustrate the tensions, reference is made to the U.S. strategy at the Fourth Conference of the Parties to the FCCC (Buenos Aires, November 1998), where the United States succeeded in at least opening a route for developing countries to take on new commitments to abate their greenhouse gas emissions. This U.S. "success" deepened suspicions among many developing countries about the level of commitment to greenhouse gas reductions in the United States and other industrialized countries. Doran maintains that the Kyoto Protocol places a large question mark over the viability of the energy-intensive consumption patterns celebrated in American popular culture and pursued in many of the capitals of the industrialized world. Unless and until the dominant energy- and resource-intensive model of development pursued by the United States changes, there may be little prospect of developing country leaders shifting their own development trajectories.

Politics of U.S. Climate Change Policy

In chapter 4, Jacob Park examines the factors that contributed to climate change moving from scientific obscurity to foreign policy prominence in the United States. Once a strictly scientific problem, the global climate change issue has evolved in less than two decades to become a major U.S. foreign policy dilemma, with many interest groups actively trying to shape the direction of policy. Park's chapter argues (1) that the "comprehensiveness" of climate change as an ecological, economic, technological, and social problem has led to an unprecedented increase in both the number of stakeholders and the degree of their involvement; and (2) that the struggle to shape the U.S. climate change agenda reflects in many ways the growing influence of nongovernmental actors in formulating U.S. foreign policy. The chapter provides a brief overview of climate change policy development in the United States before analyzing and highlighting the governance and policy implications of this change for stakeholder involvement. Three questions and issues guide the discussion. First, why did climate change become such an important U.S. foreign policy issue? Second, how did climate change develop from an obscure scientific issue to a major concern in U.S. foreign policy and international diplomacy? Third, who are the key policy actors in U.S. climate change policy?

In chapter 5, Neil E. Harrison argues that U.S. policy on global environmental issues has not been consistent. The United States was a leader on stratospheric ozone depletion but has been a laggard on climate change. As anticipated by the metaphor of two-level games, domestic politics partly explains this inconsistency. Harrison traces the effects of domestic politics on U.S. foreign policy on ozone depletion and climate change. Until the effect of proposed international regulation of greenhouse gases became evident, the issue was decided by only a few individuals, as well as being influenced by the structure of the policy process. Once important groups were able to define their interests, climate change policy reflected the contention between those groups. That is, domestic politics became important. The chapter briefly outlines the nature of the ozone and climate change issues and explains that, because scientific uncertainty makes outcome and action preferences largely indeterminate, these issues present policymakers with new challenges. The United States played a leading role in ozone negotiations. In contrast, Harrison argues that early U.S. opposition to an effective climate change convention came from a policy-making process centered in the White House, where the debate was dominated by economic issues. The chapter highlights the ways domestic politics moved U.S. foreign policy on climate change several times from the early to late 1990s.

In chapter 6, Gary Bryner undertakes an institutional analysis of the U.S. Congress and the ways in which it has addressed climate change in general and the FCCC and Kyoto Protocol in particular. In the first section of his chapter, Bryner describes how Congress responded to initiatives by the Clinton administration concerning climate change between 1993 and 1998, including hearings, budget and appropriations bills, resolutions, and other actions. Bryner then assesses these congressional responses to the threat of climate change in light of the changing research on the nature of the threat. The third section of the chapter explains these congressional efforts in light of several theories of congressional politics, foreign policy-making process, and environmental policy-making. The final section of Bryner's chapter offers some conclusions about the implications of these congressional efforts for the international response to climate change. It also examines changes that might cause Congress to become more engaged in policies aimed at addressing the threats posed by climate and other global environmental problems.

Andreas Missbach sketches the relationship between Fordism, environment, and development in chapter 7. He does this to show that international environmental policy cannot be regarded as an isolated area of international politics, separated from the economy, nor can there be a strict separation of domestic policy and foreign policy. Using a regulation theory approach, Missbach tries to capture this interconnectedness of state and economy, as well as the different levels of policy. As the first step, Missbach briefly compares regulation theory and regime theory to show the peculiarities of the regulation approach. The central part of the chapter analyzes the role of the United States in international climate policy from this theoretical viewpoint. Following some general remarks on the dynamics of climate diplomacy, Missbach analyzes the U.S. "political project" in the area of climate change. He discusses the degree of success in implementing this project, using the Kyoto Protocol as an example. The significance of economic and domestic factors in shaping the U.S. position in international environmental policy is examined, highlighting two important actors: the Senate and industrial lobbies. In concluding remarks, Missbach synthesizes the foregoing material with a regulationist reformulation of the "crisis of hegemony."

In chapter 8, Karen Fisher-Vanden analyzes factors influencing the policy instruments seriously considered and actively promoted by U.S. policymakers in the climate change debate. A variant on John Kingdon's public policy-making model is used to describe how these factors and actor groups affect the "pool" of instruments considered—not only influencing which instruments go into the pool but also those that bubble to the surface and those that sink to the bottom in prominence. Three process streams, coupled with influences of time and historical experience, determine the prominence of individual policy instruments in the pool: (1) a "politics/economics" stream, which contains contextual factors (such as national mood and macroeconomic conditions) that constrain the type of policy instruments policymakers can consider; (2) a "policy options" stream, which generates and promotes particular policy instruments; and (3) an "issues" stream, which contains the policy goals faced by policymakers. Actor groups can affect any of these streams and can act as "policy entrepreneurs" by advocating the use or disuse of certain instruments. Regarding formal (i.e., report like) assessments of climate change, Fisher-Vanden finds that formal assessments have an *indirect* impact and could have a larger direct impact in the future. This indirect impact can be explained by (a) the primary use of alternative channels of information (e.g., advisors, briefings, memos) by policymakers; (b) the lack of attention given in assessments to the contextual factors constraining policy instrument choice; (c) the discrepancies between the goals assumed by assessors (e.g., a specific environmental goal) and the actual goals faced by policymakers; and (d) the assessment's intended audience.

In chapter 9, Jorge Antunes looks at how some of the participants in the Joint Implementation (JI) issue area of the climate change regime assess its effectiveness. In the first part of the chapter, JI is situated within the broad issue of climate change, and particularly within U.S. environmental foreign policy. Antunes examines how JI fits with other aspects of the U.S. environmental policy, the ways in which the United States is a key player, and the stakes the United States has in JI. Drawing on the relevance of the U.S. role in this issue area (namely, that of the strongest policy advocate of the so-called "flexibility mechanisms" for addressing climate change), the second part of the chapter examines how the United States shaped international climate change policy. The theoretical framework underpinning the analysis is that of the International Political Economy (IPE) literature, particularly regime theories. Conceptually, Antune's interest is not with the actual effectiveness, or "score," of the regime, but rather how some of its participants go about assessing effectiveness. That is, through what processes and according to what criteria do they arrive at their assessments of regime effectiveness, and what sorts of hypotheses from the IPE literature best account for an explanation of their arguments? The aim of the chapter is to determine the extent to which a traditional set of hypotheses of IPE literature better explains U.S. policy toward the JI regime, and its strengths and shortcomings. The upshot is that a cognitive set of explanations in assessing regimes gives us insights into the difficulties encountered by the United States in the area of JI. The set of explanations about the determinants of effectiveness of international regimes, as told by the participants in this regime, hint at cognitive arguments.

International Norms and U.S. Climate Change Policy

In chapter 10, Michele M. Betsill argues that emerging international norms in the area of climate change have influenced U.S. foreign policy. Countries involved in international climate change deliberations have created new norms to govern their behavior. The FCCC formalized a norm that called on developed countries to stabilize their greenhouse gas emissions. This norm was less stringent than what most industrialized states were doing already, thereby reflecting the U.S. position of limited action. The U.S. was able to impose its preferred norm in the case of the FCCC due to its power in this issue area at that time. But U.S. power cannot, accord-

ing to Betsill's reading, explain subsequent norm development on the issue of climate change. Indeed, the provisions of the Kyoto Protocol, which require most developed countries to reduce their greenhouse gas emissions, was vigorously opposed by the United States. Betsill explains why the United States was able to control the outcome of the FCCC negotiations but not those of the Kyoto Protocol. Drawing on a constructivist approach, she shows that climate change norm development was the result of a political process in which the ability of various actors to shape the outcome was enabled or constrained by the way the climate change issue was framed. During the FCCC negotiations, most countries doubted the value of combating climate change, an attitude that enabled the United States to get its way. However, new scientific information presented before and during the Kyoto Protocol negotiations convinced most countries that action on climate change was essential, and indeed would be cost-effective. Thereafter, the United States was no longer viewed as such a critical actor in addressing climate change, losing some of its leverage—and some of its credibility—because its proposals were often inconsistent with new international norms on climate change.

In chapter 11, Paul G. Harris focuses on the 1997 Kyoto Protocol and its implicit reassertion of the principle of "common but differentiated responsibility" found in the FCCC and the Berlin Mandate. Did the United States agree that developing countries should not be required to take on major commitments to address climate change, as this principle was generally interpreted? U.S. diplomats went to Kyoto insisting that developing countries undertake new "meaningful" commitments. Because the protocol does not do this, there is almost no likelihood that the Senate will ratify it without new side agreements. Paradoxically, Harris argues that the U.S. government accepts the principle of common but differentiated responsibility, and it never intended otherwise at Kyoto. This bodes well for the norm of common but differentiated responsibility in the future. An accurate understanding of the U.S. position might improve chances for an even more comprehensive agreement—one that can be sold to the Senate so that the United States can take on legal international obligations to reduce its greenhouse gas emissions.

Conclusion

The dangers posed by climate change are potentially monumental, requiring global action if they are to be reduced and mitigated. The world's governments and other important actors cannot deal effectively with climate change without the United States playing an active role. Its economy is too large, its diplomatic influence is too great, and its specific contributions to the causes of, and solutions to, climate change are too extensive. It is therefore important for scholars and practitioners, and all those interested in this problem, to understand how and why the United States takes the positions on climate change that it does, and whether these positions deserve to be supported or opposed. Many explanations and interpretations of American climate change policy exist, as the authors of this volume show. Their work helps us to understand not only the causes of U.S. policy, but also the issues and actors that activists might want to focus on in their efforts to bring about more robust action on the part of the United States. These chapters also tell us a great deal about U.S. foreign policy generally, and thus they will help us understand other issues—environmental, economic, political—that will be on the front burner of foreign policy in the decades to come.