

Climate Change Debating America's Policy Options

By David G. Victor

A Council Policy Initiative

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FOREWORD

Climate change is among the most complex problems on the foreign policy agenda. Even with a mounting consensus that humans are causing a change in the world's climate, experts are divided on the severity of the problem and the necessity and nature of policy responses. Practically any course of action implies that today's societies will incur costs as they deviate from the status quo, and any benefits of their efforts will accrue mainly in the distant future. Such intergenerational bargains are always hard to strike.

Compounding the difficulty is the reality that this problem is truly global in scope. A few nations—led by the United States, which is responsible for one-quarter of the effluent that is linked to global warming—account for most emissions. Yet in a global economy some measure of global coordination will be required to ensure that some do not ride free on the efforts of others. This issue thus involves all the factors that make it hard to construct successful foreign policy: highly complex yet uncertain scientific knowledge, widely diverging interests, and the need for effective international arrangements.

In the United States, climate change has become a lightning rod. On one side is a sizable minority that dismisses most or all of the science. There are as well those who view the threats of climate change with such seriousness that nothing less is required than a prompt and complete reorganization of the modern industrial economy—away from the use of fossil fuels (whose combustion emits carbon dioxide, the leading human cause of climate change) and toward some alternative energy future. Bridging this divide will likely prove impossible, and generating a middle position that a credible majority supports will take considerable time. Yet the longer we wait, the more urgent the issue becomes as the concentrations of so-called greenhouse gases build in the atmosphere.

Climate Change: Debating America's Policy Options

Ever since withdrawing from the Kyoto Protocol in 2001, the United States has incurred widespread criticism for its stance on climate change. But what should guide the federal and state governments as they struggle to craft practical policies on this issue? This is a question more easily asked than answered. As a result, the Council has chosen to tackle this issue by sponsoring a Council Policy Initiative (CPI) rather than seek an unlikely consensus on this highly divisive question.

In this CPI, we present three alternative policy options the United States could pursue. One option calls for modest precaution, including investment in science, voluntary emission reductions, and a rejection of any binding international agreement. A second option seeks to reengage with an improved international agreement—a successor to the Kyoto Protocol—that would set achievable goals for the United States while requiring developing countries to accept binding limits on their emissions. The second option would also create a global system of “emission trading,” allowing firms and governments to trade emission credits in an effort to find the most economically efficient solution. A third option would dismiss a global “top-down” scheme and, instead, aim to create markets for new low-emission technologies both in the United States and overseas, notably in developing countries. This last option also envisions the eventual emergence of an international emission trading system, but from the “bottom up” through meaningful national trading systems that could be interconnected over time, much as international currency markets have evolved.

Our goal with this CPI is to present clearly and comprehensively the many issues involved in climate change and the range of options available to policymakers. We aim to draw attention to this important issue and to inform the public on the range of available alternative policy options; we intend to galvanize serious debate rather than to advocate any particular strategy. We use the “three speeches” format because many of the critical federal policy decisions ultimately require the president to give a speech—to articulate the chosen policy and explain why it is superior. We are mindful that this issue cannot be neatly compressed into just

Foreword

three options, and thus a cover memo explains the many dimensions of choice in more detail—from the science to the involvement of developing countries to the role of the president in shaping public opinion.

I thank David Victor for directing and authoring this initiative. He has produced a balanced, comprehensive, and educational book, one that translates the complex and sprawling studies on this issue into simple but sophisticated language. I am also particularly grateful to the advisory committee that helped David strike the right tone while ensuring that the final product reflects a broad range of opinion on this complex issue. Their efforts have produced a timely and thoughtful book.

Richard N. Haass
President
Council on Foreign Relations
June 2004

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I am grateful to Richard N. Haass and James M. Lindsay at the Council on Foreign Relations for asking me to direct this study. They tasked Margaret Winterkorn-Meikle at the Council to help with the effort, and for her assistance I am especially thankful. She has learned the essentials of climate science and policy rapidly while managing every aspect of this report with grace and close attention to detail. Her central involvement was crucial to the endeavor.

I have benefited enormously from the stellar and diverse advisory committee members listed at the end of this book. They helped frame the outline for the study and supplied counsel through the writing and editing. We held three off-the-record Council meetings to review a draft—in Washington, DC, with the advisory committee (chaired by Jim Lindsay), as well as sessions with Council members in New York (chaired by Rodney W. Nichols) and in San Francisco (chaired by William K. Reilly). I thank the chairmen and other participants at those meetings for their focused attention and critical comments. In addition, many others helped with detailed written reviews of drafts and with background conversations that have helped me strike the right tone and balance: Paula DiPerna, Paul Epstein, Thomas C. Heller, Fred Krupp, Michael M. May, Martin McBroom, Richard Moss, John O. Niles, Michael Oppenheimer, Glenn Prickett, C. Bruce Tarter, Michael Totten, Christopher Walker, and Robert M. White. At Stanford University, my home base, I am particularly grateful for research and editorial assistance from Becca Elias and Joshua House, and for administrative help from Michelle Klippel. At the Council in New York I thank Patricia Dorff and her colleagues in the Publications Department for ably seeing this through production.

Needless to say, the final book is my responsibility alone. It is customary to say that not everyone who has helped with this study

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will agree with the conclusions. Often, the author issues that caveat with the secret hope that his powers of persuasion will erase all doubts and every reader will align with his views. In this case, I am certain that nobody will agree with all that I have written, for this book in its entirety is self-contradictory. My aim is to make the best defense for three quite distinct approaches to American policy on climate change. Those three approaches are radically different—supporters of one will be horrified by the others. Where I hope that some common ground will emerge is in the cover memo that unpacks all the major dimensions for policy decisions on this issue. I intend that memo to be a balanced, comprehensive, and digestible treatment of the issues with which a president must grapple.

All I can hope is that the ensuing debate is vigorous and informative. For a decade or so the American people have struggled to find a politically viable strategy to address climate change, and so far we don't have much to show for our efforts. This is an important issue, and we must find a serious approach that is worthy of the stakes.

David G. Victor

June 2004

LIST OF ACRONYMS

°C	degrees centigrade (temperature)
BTU	British thermal units
CAFE	Corporate Average Fuel Economy
CCSP	Climate Change Science Program
CCTP	Climate Change Technology Program
CCX	Chicago Climate Exchange
CDM	Clean Development Mechanism
CEA	Council of Economic Advisers
CO ₂	carbon dioxide
DARPA	Defense Advanced Research Projects Agency
DOE	Department of Energy
EMF	Energy Modeling Forum
EPA	Environmental Protection Agency
GATT	General Agreement on Tariffs and Trade
gC/\$	grams of carbon emitted per dollar of economic output (“carbon intensity”)
GCM	general circulation model
IGCC	Integrated Gasification Combined Cycle
IPCC	Intergovernmental Panel on Climate Change
kWh	kilowatt hours
LNG	liquefied natural gas
mpg	miles per gallon
NAS	National Academy of Sciences
NAST	National Assessment Synthesis Team
NOAA	National Oceanic and Atmospheric Administration
OECD	Organization for Economic Co-operation and Development
PCF	Prototype Carbon Fund
PIPA	Program on International Policy Attitudes
PNGV	Partnership for a New Generation of Vehicles

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ppm	parts per million
PUHCA	Public Utilities Holding Company Act
TW	trillion watts (terawatts)
USAID	United States Agency for International Development
USGCRP	United States Global Change Research Program
WTO	World Trade Organization