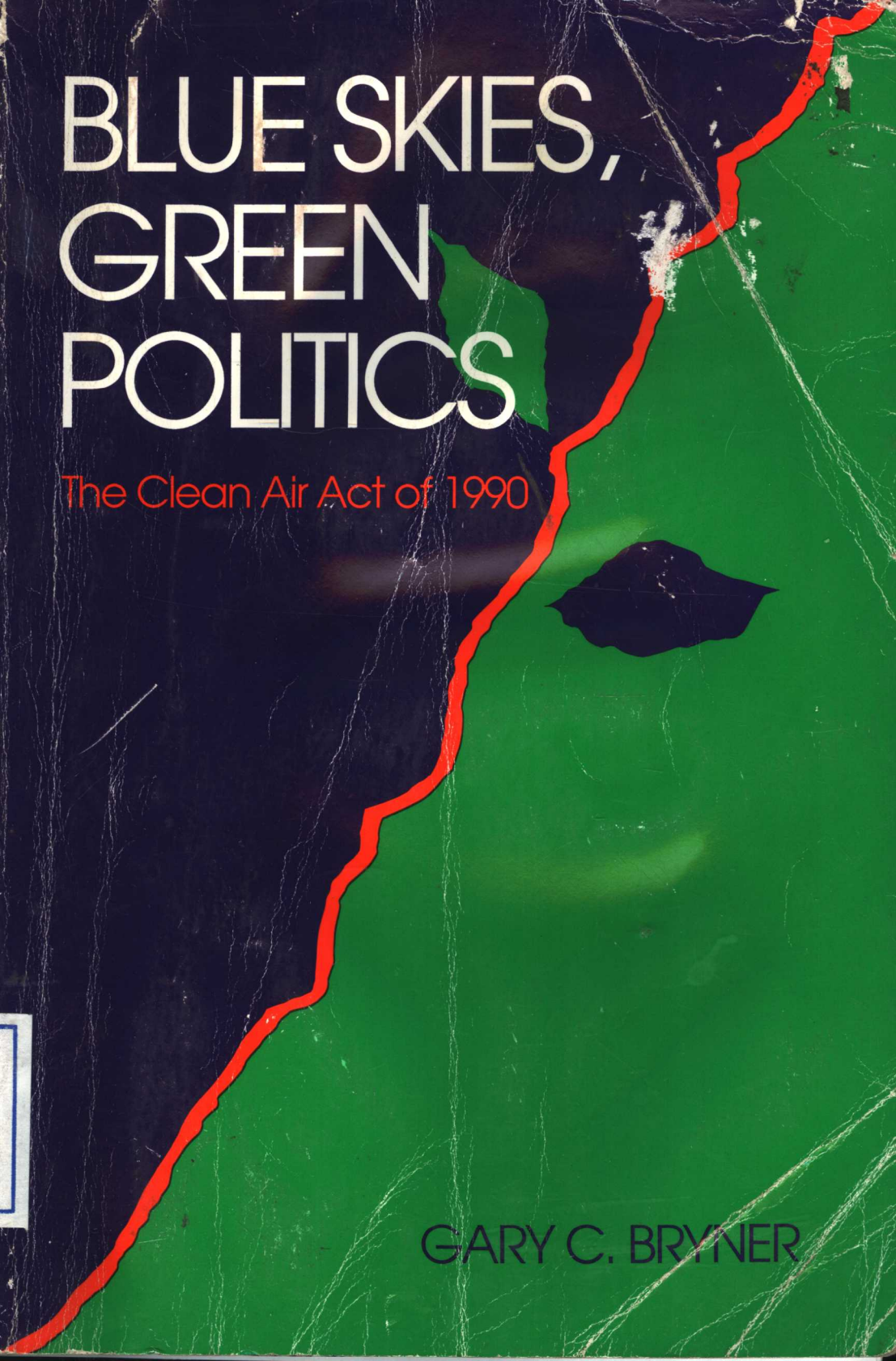
BLUE SKIES, GREEN POLITICS

The Clean Air Act of 1990



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CQ PRESS
A Division of Congressional Quarterly Inc.
Washington, D.C.

Printed in the United States of America

Cover design by Paula Anderson

Library of Congress Cataloging-in-Publication Data

Bryner, Gary C., 1951-
Blue skies, green politics : the Clean Air Act of 1990 / Gary C. Bryner.
p. cm.
Includes index.
ISBN 0-87187-668-X
1. Air--Pollution--Law and legislation--United States. 2. Environmental policy--United States. I. Title.
KF3812.Z9B78 1992
344.73'046342--dc20
[347.30446342] 92-34505
CIP

Preface

The passage of the Clean Air Act Amendments of 1990 was an impressive political achievement: it produced the comprehensive revision (after nearly a decade of deadlock) of one of the most important statutes ever enacted by Congress. It also serves as proof that divided government can work—that a legislative branch under the control of one political party can cooperate with an executive branch controlled by another party to produce major legislation.

In *Blue Skies, Green Politics*, I attempt to give readers an opportunity to examine what Congress and the executive branch were trying to do in revising the Clean Air Act and to provide a framework that enables them to assess for themselves how well the two branches did their work. I hope that the information presented will encourage discussion about how to achieve cleaner air and how to ensure the effectiveness of public policies whose aim is to improve environmental quality. I encourage readers to seek their own answers to the questions posed here; my proposals are offered to stimulate their thinking.

One focus of this book is on the process of policy making. Passage of the 1990 amendments to the Clean Air Act provides a useful case study of how public policies are formulated. The central questions examined include how the issue of clean air came to be put on the national policy agenda; how the policy subsequently evolved; and how successfully Congress and the executive branch dealt with the political conflicts, policy disputes, and institutional limitations that caused the deadlock. Members of Congress not only had to confront regionally divisive issues but also had to sort out the competing demands of powerful interest groups, grapple with complicated scientific and technical issues, and balance public concerns about environmental quality and economic growth.

A second focus of the book is on the outcomes of the policy process. Here the questions examined are to what extent the goals of the statute are likely to be achieved and to what extent Congress provided the policy tools and incentives necessary to achieve them. This assessment also considers whether the goals themselves are appropriate and whether they reflect an adequate understanding of the nature of air pollution and of the political, economic, and legal contexts in which regulation takes place. The ultimate

public policy questions are will the goal of cleaner air be realized under this new statutory framework and, if so, at what price. Much has been written about environmental law in general, and the Clean Air Act of 1970 and the 1977 amendments in particular. A review of some of these studies provides an opportunity to analyze whether Congress satisfied the criticisms of its earlier statutory handiwork in producing an improved model of clean air legislation in 1990.

A third focus of the book is on subsequent actions to implement the law. As is true of most major laws enacted by Congress, passage of the law is only the first chapter in the policy-making process. The debate then shifts to another forum, the federal and state regulatory agencies that are responsible for translating legislative mandates into effective administrative programs. In so doing, they will review most of the policy choices made by Congress and the executive branch. Given the complexity of the causes of air pollution, and the wide range of activities that must be regulated in order to control it, Congress will likely have to revisit the 1990 Clean Air Act, and the actions taken to implement it, sometime in the future. Changes in industrial technologies, the development of new pollution control capabilities, population growth and increases in pollution-causing transportation, conclusions drawn from new research on the health effects of air pollution, and changes in the global economy will extinguish any belief that Congress has finished its work.

Congress and the executive branch had been bitterly divided on the subject of environmental regulation during most of the 1980s. The law was made possible, in part, by an extraordinary set of negotiations between a group of senators and representatives of the executive branch in early 1990, when the bill had become stalled in the Senate. The new Clean Air Act raises, but clearly does not settle, a number of questions that are central to formulating regulatory policy and structuring administrative power, such as how much discretion should be given to agencies implementing regulatory statutes and how detailed and prescriptive statutes should be. Given the past ten years of conflict between Congress and the Environmental Protection Agency over how environmental laws are to be implemented, many members of Congress distrust executive branch officials and are seeking new ways to ensure that the goals of the laws they enact are more fully realized. Their experience with the new law illustrates the difficulties of trying to make certain that agencies faithfully adhere to congressional intent, yet are allowed sufficient flexibility to administer the law in an effective manner.

The Clean Air Act also raises fundamental questions about how responsibility for implementing regulatory legislation should be divided between the states and the federal government. Many people have argued that states should be given flexibility in deciding how to balance the

improvement of environmental quality and the regulation of industrial, commercial, and individual activities. Since pollution levels are much higher in some areas, different standards and approaches may be required, depending on the seriousness of the problems they face. Others have argued that standards should apply uniformly throughout the United States; otherwise, some states might relax standards in an attempt to attract industries from other states.

Because the Clean Air Act of 1990, like other complex statutes, relies on a variety of policy instruments, it is also a useful vehicle for assessing the strengths and weaknesses of traditional approaches to regulation as well as alternative policy mechanisms, including the use of marketlike incentives. One of the most important provisions in the new law creates a marketlike system for reducing emissions of the pollutants responsible for acid rain. The 1990 Act is a complex combination of the traditional regulatory approach that imposes technology-based limits on emissions as well as market-based innovations that will help shape the future of environmental law.

The story of the passage of the Clean Air Act Amendments of 1990, including an explanation of what Congress and the Bush administration were trying to do in producing some 400 pages of statutory language, requires the reader to confront a mass of detailed, technical information. But the technicalities cannot be avoided if one is to grasp the essential elements of the Clean Air Act, to get a sense of how Congress deals with complicated policy issues, and to assess the response of Congress and the executive branch to the problem of air pollution.

The underlying goal of the Clean Air Act is to ensure that air pollution does not continue to harm public health. Air pollution causes the premature death of thousands of people each year and requires the hospitalization and medical treatment of many more. It indirectly contributes to poor health by weakening the human immune system, thus increasing susceptibility to disease. Perhaps most significantly, it is a risk that most people expose themselves to involuntarily. The economic benefits of some pollution-producing activities, such as industrial processes, are received largely by corporate owners and workers, whereas the adverse health effects are experienced by the entire community. Children and the elderly are especially susceptible to the hazards of air pollution and often lack the resources to seek community support to protect their interests. Viewed from this perspective, reducing air pollution becomes a moral imperative.

Clean air is also compatible with other policy goals such as a strong economy. Because environmental quality affects the health of workers and consumers, its improvement is a prerequisite for efficient economic activity. Moreover, since pollution from industrial activity is waste,

reducing it can reduce the costs of production. Pollution from energy sources can be reduced in ways that also conserve those sources and thus save money. Pollution reduction is often achieved by modernization and quality control improvements that also increase industrial competitiveness. The problem is that the costs of instituting cleaner processes and technologies are immediate and often narrowly focused, at least initially, whereas the benefits are frequently delayed and dispersed geographically. Those who profit from the status quo will continue to lead the fight against change; they have considerable resources and incentives to block new approaches and inhibit new research. Nevertheless, increasingly stringent environmental regulations are inevitable. Other countries, such as Germany and Japan, have concluded that improving environmental quality represents great economic opportunities. The United States may no longer be the leader in environmental regulation because of industry resistance to change and government timidity in encouraging these changes.

Although it is difficult to dispute the argument that the benefits of the Clean Air Act (or any other policy initiative) should exceed the costs of complying with them, it is also difficult to assess the Clean Air Act from that perspective alone. It is not clear, for example, how many lives will be saved by improving air quality by specific increments, since a host of other factors are involved, from personal behavior to weather patterns. We do not know how to quantify the benefits of cancer cases prevented and respiratory attacks avoided. Similarly, the costs of compliance are difficult to assess, since industrial practices are dynamic; changes in production methods, reduced use of materials, and modernization of equipment may all ultimately reduce costs. Given the moral implications of imposing the risks of pollution on involuntary victims, however, the uncertainties about costs and benefits cannot justify inaction. We buy insurance against the possibility of bad things happening, and pollution controls are simply another form of insurance against unknown hazards. That reasoning does not eliminate the possibility of weighing costs and benefits, but allows them to be viewed more realistically. Cost-benefit analysis might help us allocate resources among competing public concerns. If we spent less money on air pollution controls, we could spend more money on safer highways or research to find more efficient drugs. But at present we have no mechanism for making such comprehensive risk comparisons; therefore, most policies cannot simply be assessed and analyzed on the basis of their distribution of costs and benefits.

The expectations created by the language of the Clean Air Act greatly exceed the resources provided to implement it, and over time, this inconsistency is likely to contribute to our cynicism about government. The EPA might not meet its deadlines for issuing regulations; states might not fully implement the programs assigned them; the investments

necessary to achieve compliance will be greater than what businesses believe they can afford to spend; and we will probably not reach our air quality goals. Advocates of clean air may argue that we should aim high, so that if we fall short, we have nevertheless made considerable progress. That argument may make sense solely from the perspective of improving environmental quality. But the viability of democratic government and the capacity of the policy-making process must also be considered; the Clean Air Act continues a tradition of detailed statutes that seek to force the executive branch to take actions it might not otherwise take. Although the Clean Air Act proves that divided government can work, the tension and disagreement between Congress and the president concerning implementation of the law that surfaced soon after its passage is an ominous sign.

Blue Skies, Green Politics begins with a discussion of environmental problems in general and some of the challenges they pose for the policy-making process; Chapter 1 also presents a model of the policy-making process. Chapter 2 explores different ways in which the problem of air pollution can be defined and understood. Chapter 3 traces the evolution of clean air policy in Congress and the executive branch and provides a detailed account of the passage of the 1990 law. Chapter 4 examines some of the important issues central to the passage of the 1990 law, which have implications for the future of environmental law and regulation in the United States. The final chapter analyzes the prospects for successful implementation of the Clean Air Act Amendments and for achieving the goal of clean air.

Acknowledgments

I owe an enormous debt to many people who contributed to this book in many ways. I benefited greatly from the opportunity to interview a number of congressional staff members, executive branch officials, and representatives of environmental organizations and industry groups. Those interviews were largely held off the record and therefore have not been acknowledged. But they were absolutely indispensable, and I greatly appreciate the time these individuals took to answer questions and explain events. They include Richard Ayres, Greg Barnett, Bill Becker, John Blodgett, Rob Brenner, David Cantour, Jeff Clark, Trent Clark, Jack Clough, Len Coburn, Mira Courpas, Kathy Cudlipp, Terry Davies, David Doninger, Blake Early, Rick Erdheim, Bill Fay, Eddie Flaherty, Dirk Forrester, Bob Friedman, David Gardiner, Theresa Gorman, Bob Grady, Melanie Griffin, Heidi Halek, David Hawkins, Ed Heidig, Kate Kimball, Jessica Laverty, Skip Luken, Chris Neme, Jimmy Powell, Bill Roberts, William Rosenberg, Philip Schiliro, Zoe Schneidner, Russ Shay, Deborah Sheiman, Mike Shields, Dan Weiss, Greg Whetstone, Ron White, and Terry Yosie.

The Brookings Institution provided office space and support when I was studying the Clean Air Act in 1990 and 1991; I especially appreciate the help of Tom Mann and the staff members at Brookings during my stay there.

I attended a number of conferences and lectures and, in particular, benefited greatly from the opportunity to attend the Inside EPA Clean Air Conferences in 1990 and 1991, as well as the Clean Air Strategy Session organized by the Natural Resources Defense Council and the Natural Resources Council of Maine. Earlier versions of some chapters of this book were presented as papers at meetings of the American Political Science Association, the Association for Policy Analysis and Management, and the Association for Canadian Studies in the United States. I am most grateful to those who offered comments and criticisms or discussed with me their views on the Clean Air Act, particularly Bob Katzmann, Mike Kraft, Paul Light, Ted Lowi, Norm Vig, Kathy Wagner, Aaron Wildavsky, and Ned Woodhouse.

The Canadian Government Faculty Research Program; the College of

Family, Home, and Social Sciences; and the Political Science Department at Brigham Young University provided resources to help finance the research. I learned much about air pollution from members of the Utah County Clean Air Coalition, officials from Region 8 of the EPA, the Division of Environmental Quality of the State of Utah, and, in particular, from the research of C. Arden Pope III and Samuel Rushforth. Barry Balleck, John Dunn, Rex Facer, Paul Kube, David Passey, and Jon Tasso, students at Brigham Young, provided outstanding research help. Students in my public policy classes at the university helped me develop many of the ideas expressed here through their thoughtful questions about and discussions of environmental policy. Lisa Miller's word-processing skill was indispensable to the project. Jane Stevens Bryner helped in innumerable ways throughout this project.

Criticisms and suggestions by the reviewers whose comments were arranged by CQ Press greatly improved the manuscript, and I appreciate their candid assessments. The editors at Congressional Quarterly, Brenda Carter, Chris Karlsten, and Shana Wagger, have marvelously balanced helpful criticism of and supportive interest in the project. Their efforts and the painstaking editing of Lydia Jeanne Duncan have improved immensely what I first submitted to them.

Finally, I have learned a great deal from a wide range of scholars who have written about American politics and public policy, environmental regulation in general, and air pollution in particular. I have acknowledged their outstanding work in the endnotes, but those references do not adequately express my indebtedness to them and to their knowledge, creativity, and skill.

Contents

Tables and Figures

Tables

Figures

1 Challenges in Environmental Policy Making

Protecting the environment has become a major policy concern of government at all levels. Public opinion polls and other measures of public sentiment show strong support for more aggressive laws and regulations to attempt to solve pollution problems and to protect natural resources. According to recent polls, more than 70 percent of Americans believe that "protecting the environment is *so* important that requirements and standards cannot be too high, and continuing environmental improvements must be made *regardless* of cost" (italics in original).[1] Political candidates have used environmental issues as a springboard to electoral success. Environmentalism played a significant role in the 1988 presidential election as well as in a number of other political races.

Environmental protection has also become a major public health issue. Toxic waste dumps that contaminate drinking water, the release of hazardous chemicals into the air and water, damage to the stratospheric ozone layer that filters out harmful ultraviolet radiation, and a host of other problems threaten human health and natural resources. Air pollution is one of the most serious environmental problems in the United States and throughout the world. According to the Environmental Protection Agency's 1990 report of urban air quality trends, more than 100 million Americans live in areas where pollution exceeds federal air quality standards. According to one study, some forms of air pollution alone are responsible for more than 50,000 to 60,000 premature deaths in this country every year.[2]

The Clean Air Act[3] is one of the most important environmental laws ever enacted in the United States for it is the primary legislative means of addressing one of the nation's most serious environmental problems. The flagship of some two dozen environmental laws, it has raised widespread expectations for a remedy to the problem of air pollution. The act also has major economic consequences for virtually every sector of the economy. Given its importance, the Clean Air Act can improve our understanding of the policy-making process and shed light on the prospects for improving policy-making capabilities in environmental and other areas. This chapter examines some of the challenges confronting policy makers attempting to solve environmental problems.

Overview of Environmental Policy Making

Environmental regulation poses a number of particularly difficult challenges to policy makers. There is considerable uncertainty surrounding the causes and consequences of pollution; furthermore, long lead times are frequently required before the adverse health effects and other consequences of pollution are discovered. Policy making must therefore include learning from experience and making adjustments, which can be particularly risky because the effects of some environmental hazards are largely irreversible, in terms of loss of human life or ecological changes.

There is little agreement concerning how much needs to be known about the health and environmental effects of pollutants and how much risk should be accepted before regulatory action is taken. A central issue is how risks should be calculated. Some argue that intervention should ensure that all persons are protected, including those most susceptible to the effects of pollution; others insist that the risk posed to the community in general should be the basis of regulatory action. A second issue is how reduction of environmental risks should be balanced with other values such as individual and corporate freedom.

The distribution of the consequences of technological advances is another issue facing policy makers in a democracy. Many of the adverse environmental consequences of industrial activity will be felt by future generations, whereas the benefits are largely confined to the current generation. It is not clear how their interests, and specifically those of subgroups of the population that have limited economic and political resources, can be protected in a political system dominated by well-financed interest groups.

Environmental policy makers must consider both environmental and economic goals and concerns. The question they attempt to answer has often been posed in stark terms of whether priority should be given to the protection of human health and ecological systems, or to economic growth and competitiveness. Environmentalists argue that the benefits promised by regulation outweigh projected costs, that protection of human health must be provided regardless of cost, and that benefits are so difficult to estimate that any comparison of costs and benefits is unfair. Opponents are quick to argue that environmental regulations restrict the global competitiveness of U.S. industry and will simply drive jobs overseas.

Cost-benefit analysis has been widely heralded as the way to balance environmental protection and economic growth. But there is usually little agreement about what costs and benefits to include in the calculations. Should costs be limited to pollution control equipment, for example, or should they include the impact on individuals who lose their jobs when industries cannot afford to meet regulatory requirements? The benefits in

terms of lives saved or illnesses prevented are similarly difficult to measure. Disagreements also focus on how to assess the distribution of costs and benefits across generations and whether the current monetary value of costs and benefits should be discounted in comparing their long-term value. Cost-benefit analysis also provides little help in determining the advantages and disadvantages for different industries subject to regulation.

Some of the progress that has been made in reducing air pollution has been a consequence of economic growth and modernization. In many cases, when new, more efficient equipment and machinery has been put in place, pollution has diminished. Regulation can easily cement into practice established control technologies, however. One of the central challenges to the makers of environmental policy is to encourage continual modernization and development of more efficient, less polluting processes and equipment.

Finally, all the lawmaking and administrative rule making in the world is of little use if laws and regulations are not enforced and complied with. Regulatory programs must therefore include effective incentives for compliance. Some believe that economic or marketlike incentives (such as taxes on emissions of pollutants) are the key to increasing compliance at lower cost; others prefer traditional regulatory approaches (standards are set by federal agencies and implemented by state officials). Incentives must extend to state and local regulatory officials, to encourage them to make the difficult choices that are required. Perhaps most important, regulatory programs should reduce and prevent pollution rather than simply transfer it from one medium to another. These issues are explored in more detail in subsequent chapters.

The Policy-making Process

Although observers and students of the policy-making process often disagree about how that process *ought* to take place, there is a fair amount of agreement concerning the way it *actually* does take place. Policy making is a dynamic process. Charles Lindblom has described it as a "complex analytic and political process to which there is no beginning or end, and the boundaries of which are uncertain." [4] It is also a continual process of identifying problems, formulating governmental responses or policies, organizing administrative mechanisms for carrying out the policies, and evaluating the extent to which policy objectives are achieved.

Most policy efforts are incremental rather than comprehensive; they are primarily a series of marginal adjustments of earlier efforts rather than dramatic departures from past practices. Although many scholars have defended such an approach as reasonable, given the limitations of policy analysis and the impossibility of formulating comprehensive solutions to