

# Book Reviews

Dessler, Andrew E., and Edward A. Parson. 2006. *The Science and Politics of Global Climate Change: A Guide to the Debate*. Cambridge, UK: Cambridge University Press.

*Reviewed by Maria Ivanova  
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Climate change has generated unparalleled debate around the world and left many confused. Are apocalyptic events such as droughts, flooding, and species extinction really imminent or just Hollywood fiction? Are the economic and social costs of mitigation and adaptation going to bankrupt the world economy or save it? Or is it even reasonable to think that we could do anything to prevent climatic changes and save our species if nature has already dealt the cards?

In this context, Dessler and Parson set out to guide us through the various claims in the climate change debate sifting through the evidence, examining the facts, and dissecting the science and the policy process before outlining the available policy options. They provide perhaps the most comprehensive and comprehensible analysis of the debates around climate change. The book is likely to become a foundational text for students, scholars, policy-makers, and citizens seeking clarity on this topic. The authors are an atmospheric scientist and a law professor with extensive public policy experience, who effectively tackle the rough-and-tumble intersection of science and policy that has led to confusion and inaction.

The culture of science, the authors argue, is one of conservatism, with every statement couched in carefully constructed caveats. The pace of science is generally slow, with conclusions on important problems taking decades to reach. Since science focuses on the new, the controversial, and the interesting, disagreements appear rampant because there *is* regular discussion. Politics, on the other hand, is entirely different. It demands hard and immediate answers to the problems of the day. With persuasion more important than rational facts, scientific credibility is essentially irrelevant in policy, leaving the door open for misuse of science. The result is an unhappy marriage, with scientists feeling that their contributions have no impact, and policy-makers frustrated by the lack of definitive answers from scientists.

After a short introductory chapter to climate change, Chapter 2 begins by defining positive and normative statements. Positive claims (“The Earth is warming”) are the domain of science, and the book explains how the scientific community determines whether to accept a positive claim or not. Normative

claims (“We should take action to stop the warming”), on the other hand, are not amenable to the methods of science. Rather, these value-based claims are resolved through political debate. The book describes the strong incentives for policy-makers to use and misuse science, as well as how scientific assessments have been successfully used to manage the science-policy interface.

The scientific evidence for climate change is presented in Chapter 3, which focuses on answers to the following questions: is the Earth warming (yes), are humans to blame (likely yes), what warming do we expect in the future (possibly severe), and what are the impacts on the environment (wide ranging and possibly disastrous)? The authors present evidence from the surface thermometer record, glacier record, sea level, sea ice, sub-surface ocean temperatures, satellite temperature measurements and climate proxies (tree rings, ice cores, corals, ocean sediments, boreholes, combined proxy climate record). They outline the areas of agreement in the scientific community and issues where our understanding is weak.

Potential impacts of climate change on human civilization are addressed in Chapter 4, which also describes the available policy options: adaptation, mitigation, and geoengineering. The discussion includes an important section about the factors that determine emissions—population, wealth, and technology—and the argument that technological development is the politically acceptable way to reduce emissions. The authors then address the cost of greenhouse gas emission reduction, one of the common criticisms of action. They compare the costs of mitigation and adaptation and attempt to develop a balance between the two when offering options for how to structure greenhouse gas reduction policies at both the national and international level. Along the way, they discuss the economics of climate change impacts, carbon taxes, and cap-and-trade systems.

The final chapter starts off with a discussion of the present-day gridlock in the debate over what to do about global warming. It dissects many of the commonly made arguments, showing where they are valid and where they are not. In the final section of the book, the authors explicitly put forward their own opinion about what we should do about climate change, with an eye toward breaking the present-day deadlock.

The scholarly value of *The Science and Politics of Global Climate Change* is indisputable. Dessler and Parson independently possess significant authority on both the science and the politics of climate change. Their treatment of the subject illustrates the complexity of the problem with remarkable ease and clarity. By juxtaposing the scientific and the political processes, they enrich the academic literature which has traditionally separated the two and open up new avenues for exploring policy solutions. It can serve as a bridge between academic fields and a tool for substantive and meaningful dialogue. Scientists will find value in the discussion of how their work is used by policy-makers. Those knowledgeable about the politics of climate change will find value in the discussion of the science.

In addition, the carefully thought-through recommendations make this book critical reading for policy-makers. No political candidate for office can hide from the urgency of climate change any longer. Yet few politicians understand that scientific consensus does exist and that action is contingent upon the political sphere alone. This book makes the case for action in an objective and compelling manner, and should be mandatory reading for any policy-maker considering action on the issue.

Pirages, Dennis, and Ken Cousins, eds. 2005. *From Resource Scarcity to Ecological Security: Exploring New Limits to Growth*. Cambridge, MA: The MIT Press.

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It is rare that an opportunity comes along to move environmental theory forward in ways that can influence governance and behavior. The study of ecological security provides one such opportunity. Dennis Pirages and others have developed this concept in many forums. Unfortunately, Pirages and Ken Cousins have missed the opportunity to develop our understanding of this important field in this edited volume.

The book begins promisingly enough, with a strong opening chapter by Pirages that explains the concept of ecological security and connects it to the most pressing current issues in environmental and resource management. This chapter explains the need for both an updated analysis of the challenges to ecological security and the application of this concept to critical resource management issues. These issues, which are addressed in the subsequent chapters, include population, food and water, energy, climate change, and the loss of biological diversity. Pirages also points us to the nexus of globalization and ecological security as a consideration that has ripple effects throughout every resource management arena. Finally, he challenges us to consider that “it is the persistence of values, institutions, and patterns of behavior that evolved during an era of resource abundance into a new era of much changed opportunities that is largely responsible for growing ecological insecurity” (p. 18).

Teachers and practitioners in the field of global environmental politics must realize that we cannot operate in our professional niches, whether they are related to governance, economics, ethics, or science, without understanding the broader social processes in which they are embedded. Implicit in Pirages’ challenge is that we must be able to ask the probing questions that will help disentangle the complexity of the problems we face. Most of the topical chapters of the book, however, fail to accomplish this untangling, and as a packaged unit of scholarship they provide no cohesive approach to better understanding, much less addressing, the problems at hand.

Many of these chapters review technical trends and conditions, and some of this information is well presented. In almost every case, however, deficiencies