REPORTING ON CLIMATE CHANGE: UNDERSTANDING THE SCIENCE

FOURTH EDITION

L. Jeremy Richardson, Editor,
with Bud Ward

THANKS TO TECHNICAL REVIEWERS & CONTRIBUTORS

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Reporting on Climate Change: Understanding the Science, Fourth Edition

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EDITOR'S NOTE

Considering the sheer number of advances in our understanding of climate science over the last decade, the release of this fourth edition of *Reporting on Climate Change: Understanding the Science* is long overdue. Although written primarily for journalists, this volume aims to assist educators, communicators, and the public at large.

The volume is particularly important at the present moment for at least three reasons. First, the changes in the reporting industry over the past decade are having a profound impact on science journalism. As the public moves away from print media toward online sources, the business model for news outlets has changed dramatically. In many cases, the first victims of budget cuts are—you guessed it—the science and environmental reporters. That has only exacerbated the fact that most journalists—even those assigned to covering science news—have no scientific or technical background. The need for a volume such as this has therefore only grown.

Second, the misinformation propagated by opponents of climate change action has grown more voluminous over the past year, following criticism of the Intergovernmental Panel on Climate Change (IPCC), a bunch of stolen e-mails, and an unusually snowy winter in much of the United States in 2010. As we shall see, the mistakes of the IPCC have been largely overblown, several independent reviews have cleared scientists of any scientific wrongdoing in the e-mail controversy, and the heavy snow (although allowing for easy jokes about Al Gore) is actually consistent with our understanding of climate change impacts. In short, none of these events has altered our fundamental understanding of the science of climate change. In reality, the science of human-induced climate change has become even more solid over the past decade. The third edition of this volume was based primarily on the IPCC's Third Assessment Report (TAR), released in 2001. In 2007, the IPCC released its Fourth Assessment Report (AR4), which established a stronger scientific consensus and a greater level of confidence in the conclusions.

Third, although the U.S. House of Representatives passed legislation in June 2009 to set up a cap-and-trade system to limit greenhouse gases, the 2010 elections have ushered in a new class of representatives who openly question the science of climate change, and many more aren't convinced that solving the problem is worth the cost. The political appetite on Capitol Hill for addressing climate change remains as low as ever. Even President Obama has acknowledged the reality that climate legislation will have to be tackled in "bite-size" pieces in the 112th Congress. It is critical that policy makers be armed with accurate information on the science of climate change—and the risks associated with failing to address the problem.

Finally, the editor would like to specifically recognize and thank the editor of the third edition, Bud Ward, whose talent in communicating the science of climate change was evident in that edition. The new edition relies heavily on his work, and many parts were so clear and accessible that they remain unchanged in this edition. Chapter 10 on the ozone hole was very ably updated by Stephen O. Andersen, David W. Fahey, Marco Gonzalez, K. Madhava Sarma, Stephen Seidel, and Durwood Zaelke, for whose insight and expertise we are very grateful. Special thanks to Jay Gulledge of the Pew Center on Global Climate Change, whose insightful comments and suggestions significantly improved this volume. The editors would like to offer sincere thanks to the sponsoring organization, the Environmental Law Institute, for its ongoing leadership in creating and updating this volume. Scott Schang at ELI led the effort to create the fourth edition. We would also like to thank the Department of Energy and many reviewers who made earlier editions of this guide possible.

We hope that the fourth edition of *Reporting on Climate Change: Understanding the Science* will find its way into the hands of reporters and editors alike, as they sort through the myriad dissonant voices in the public discussion on the science of climate change and what to do about it.

L. Jeremy Richardson, Ph.D.
Editor

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