Message from the Coauthors

From the Preface

This new volume in the Climate Change Reconsidered (CCR) series, titled *Climate Change Reconsidered II: Fossil Fuels*, assesses the costs and benefits of the use of fossil fuels with a special focus on concerns related to anthropogenic climate change. It is the fifth volume in the CCR series produced by the Nongovernmental International Panel on Climate Change (NIPCC).

NIPCC was created by Dr. S. Fred Singer in 2003 to provide an independent peer review of the reports of the United Nations' Intergovernmental Panel on Climate Change (IPCC). Unlike the IPCC and as its name suggests, NIPCC is a private association of scientists and other experts and nonprofit organizations. It is not a government entity and is not beholden to any political or corporate benefactors. This and previous volumes in the CCR series, along with other publications and information about NIPCC, are available for free on NIPCC's website at www.climatechangereconsidered.org.

The NIPCC authors, building on previous reports in the CCR series as well as new literature reviews, find that while climate change is occurring and a human impact on climate is likely, there is no consensus on the size of that impact relative to natural variability, the *net* benefits or costs of the impacts of climate change, or whether future climate trends can be predicted with sufficient confidence to guide public policies today. Consequently, concern over climate change is not a sufficient scientific or economic basis for restricting the use of fossil fuels.

The NIPCC authors do something their IPCC counterparts never did: conduct an even-handed cost-benefit analysis of the use of fossil fuels. Despite calling for the end of reliance on fossil fuels by 2100, the IPCC never produced an accounting of the *opportunity cost* of restricting or banning their use. That cost, a literature review shows, would be enormous.

Estimates of the cost of reducing anthropogenic greenhouse gas (GHG) emissions by the amounts said by the IPCC to be necessary to avoid causing ~2°C warming in the year 2050 range from the IPCC's own estimate of 3.4% to as high as 81% of projected global gross domestic product (GDP) in 2050, the latter estimate nullifying all the gains in human well-being made in the past century. Cost-benefit ratios range from the IPCC's own estimate of 6.8:1 to an alarming 162:1. The costs of specific emission mitigation programs range from 7.4 times to 7,000 times more than the benefits, even assuming the IPCC's faulty science is correct.

The NIPCC authors conclude, "The global war on energy freedom, which commenced in earnest in the 1980s and reached a fever pitch in the second decade of the twenty-first century, was never founded on sound science or economics. The world's policymakers ought to acknowledge this truth and end that war."

We thank the more-than-100 scientists, scholars, and experts who participated over the course of four years in writing, reviewing, editing, and proofreading this volume. This was a huge undertaking that involved thousands of hours of effort, the vast majority of it unpaid. The result exceeded our hopes, and we trust it meets your expectations.

The NIPCC authors cite thousands of books, scholarly articles, and reports that contradict the IPCC's alarmist narrative. We once again tried to remain true to the facts when representing the findings of others, often by quoting directly and at some length from original sources and describing the methodology used and qualifications that accompanied the stated conclusions. The result may seem tedious at times, but we believe this was necessary and appropriate for a reference work challenging many popular beliefs.

We acknowledge that not every scientist, economist, or historian whose work we cite disagrees with IPCC positions or supports ours, even though their research points in that direction. We recognize there may be some experts we quote who are dismayed to see their work cited in a book written by "skeptics." We ask them to read this book with an open mind and ask themselves how much of what they think they know to be true is based on trust, perhaps misplaced, in claims propagated by the IPCC. Even scientists need to be reminded sometimes that skepticism, not conformity, is the higher value in the pursuit of knowledge.

Sincerely,

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About the Coauthors

Dr. Roger Bezdek is an internationally recognized energy analyst, president of MISI, a Washington, DC-based economic, energy, and environmental research firm, co-founder of energy technology firm Cavendish Energy, and Washington editor of *World Oil* magazine. He is the author or coauthor of 13 books and his writing has appeared more than 300 times in scientific and technical journals, including *Science, Nature, Energy Policy, Natural Resources Journal*, and *Public Finance*. He earned a Ph.D. in economics from the University of Illinois at Urbana-Champaign, where he served as a faculty member from 1971 to 1974.

Dr. Craig D. Idso is founder and chairman of the Center for the Study of Carbon Dioxide and Global Change. Since 1998, he has been the editor and chief contributor to the online magazine CO₂ Science. He is the author of several books, including *The Many Benefits of Atmospheric CO₂ Enrichment* (2011) and *CO₂*, *Global Warming and Coral Reefs* (2009). His writing has appeared in *The Quarterly Review of Biology, Energy & Environment, Geophysical Research Letters, Atmospheric Environment, Journal of Climate, Technology*, and other science journals. He earned a Ph.D. in geography from Arizona State University (ASU), where he lectured in meteorology and was a faculty researcher in the Office of Climatology.

Dr. David R. Legates is associate professor and director of the Center for Climate Research at the University of Delaware. He has taught at Louisiana State University, the University of Oklahoma, and the University of Virginia. He has been Research Scientist at the Southern Regional Climate Center, Chief Research Scientist at the Center for Computational Geosciences, and Visiting Research Scientist at the National Climate Data Center. He earned his Ph.D. in climatology from the University of Delaware.

Dr. S. Fred Singer is one of the most distinguished atmospheric physicists in the United States. He established and served as the first director of the U.S. Weather Satellite Service, now part of the National Oceanic and Atmospheric Administration (NOAA), and earned a U.S. Department of Commerce Gold Medal Award for his technical leadership. He is coauthor, with Dennis T. Avery, of *Unstoppable Global Warming Every 1,500 Years* (2007, second ed. 2008) and many other books. Dr. Singer served as professor of environmental sciences at the University of Virginia, Charlottesville (1971-94) and is founder of the nonprofit Science and Environmental Policy Project. He earned a Ph.D. in physics from Princeton University.

More complete biographies and publications records can be found at http://climatechangereconsidered.org/lead-authors/.

About NIPCC

The Nongovernmental International Panel on Climate Change (NIPCC) is an international panel of more than 100 scientists and scholars who have come together to present a comprehensive, authoritative, and realistic assessment of the science and economics of global warming.

Because it is not a government agency and receives no corporate funding, NIPCC is able to offer an independent "second opinion" of the evidence reviewed – or overlooked – by the Intergovernmental Panel on Climate Change (IPCC) on the issue of global warming. NIPCC's peer-review procedures and additional information appear on its website at www.climatechangereconsidered.org.

NIPCC traces its beginnings to a meeting held in Milan, Italy in 2003 organized by Dr. S. Fred Singer and the Science and Environmental Policy Project (SEPP). The purpose was to produce an independent evaluation of scientific evidence on the subject of carbon dioxide-induced global warming in anticipation of the release of the IPCC's *Fourth Assessment Report* (AR4). NIPCC scientists concluded the IPCC was biased with respect to making future projections of climate change, discerning a significant human-induced influence on current and past climatic trends, and evaluating the impacts of potential carbon dioxide-induced environmental changes on Earth's biosphere.

In 2008 SEPP partnered with The Heartland Institute to produce *Nature, Not Human Activity, Rules the Climate,* a summary of research for policymakers that has been widely distributed and translated into six languages. In 2009, the Center for the Study of Carbon Dioxide and Global Change joined the original two sponsors to help produce *Climate Change Reconsidered: The 2009 Report of the Nongovernmental International Panel on Climate Change (NIPCC)*, the first comprehensive alternative to the alarmist reports of the IPCC. Subsequent volumes in the Climate Change Reconsidered series were released in 2011, 2013, 2014, and now in 2019.

In 2013, the Information Center for Global Change Studies, a division of the Chinese Academy of Sciences, translated and published an abridged edition of the 2009 and 2011 NIPCC reports in a single volume. On June 15, the Chinese Academy of Sciences organized a NIPCC Workshop in Beijing to allow the NIPCC principal authors to present summaries of their reseach to Chinese scientists.

Today, NIPCC is a project of three independent nonprofit organizations: Science and Environmental Policy Project (SEPP), Center for the Study of Carbon Dioxide and Global Change (CO2 Science), and The Heartland Institute. Contributions to all three organizations help support the project and are tax-deductible. For more information, please visit NIPCC's website at www.climatechangereconsidered.org.

Impact of Fossil Fuels on Human Health

Weather is less extreme in a warmer world.

Fossil fuels can be used safely for centuries.

Fossil fuels are cleaner and produce fewer emissions than the fuels they replaced.

Less Severe Weather Sustainable Development Fossil fuels have lifted billions of people out of poverty.

Extreme cold kills more people than extreme heat.



Historically, conflicts increase during periods of cooling and decrease during warmer periods.

Fossil fuels reduce the area needed to produce the energy we need.

Aerial fertilization by CO₂ has increased food supplies by 25%.

Automobiles and electricity have vastly improved human safety.