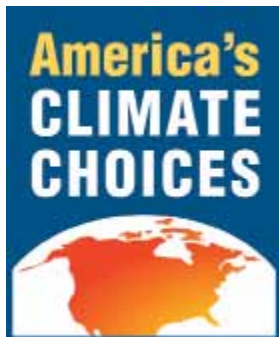


KEY FINDINGS



America's Climate Choices

The significant risks that climate change poses to human society and the environment provide a strong motivation to move ahead with substantial response efforts. Current efforts of local, state, and private sector actors are important, but not likely to yield progress comparable to what could be achieved with the addition of strong

federal policies that establish coherent national goals and incentives, and that promote strong U.S. engagement in international-level response efforts. The inherent complexities and uncertainties of climate change are best met by applying an iterative risk management framework and making efforts to: significantly reduce greenhouse gas emissions; prepare for adapting to impacts; invest in scientific research, technology development, and information systems; and facilitate engagement between scientific and technical experts and the many types of stakeholders making America's climate choices.

Key Findings of the ACC Final Report

1. Climate change is occurring, is very likely caused primarily by human activities, and poses significant risks to humans and the environment. These risks indicate a pressing need for substantial action to limit the magnitude of climate change and to prepare for adapting to its impacts.
2. Decisions about the exact magnitude and speed of response efforts will depend on how much risk society deems acceptable. But, in the judgment of the report's authoring committee, there are numerous motivations for action, including for instance:
 - The faster that greenhouse gas emissions are reduced, the lower the risks, and the less pressure there is to make steeper and potentially more expensive reductions later.
 - Investments currently being made in energy-related infrastructure and equipment will lock in emissions commitments for decades to come. Enacting relevant policies now will provide crucial guidance for those investment decisions.
 - The risks of continuing "business as usual" are greater than the risks associated with strong efforts to limit and adapt to climate change. Policy changes can potentially be reversed or scaled back if needed, whereas many adverse changes in the climate system would be difficult or impossible to "undo."



3. Uncertainties in projecting future greenhouse gas emissions and in estimating the sensitivity of the climate system to greenhouse gases make it difficult to project the exact severity, location, and timing of climate change impacts. Uncertainty is not a reason for inaction, however; it is, in fact, a compelling reason *for* action, especially given the possibilities of abrupt, unanticipated, and severe impacts.
4. Reducing greenhouse gas emissions would reduce the need for adaptation but not eliminate it. There is a need to begin mobilizing now to reduce vulnerability to climate change impacts.
5. Emissions reductions and adaptation efforts should be guided by an iterative risk management approach, which emphasizes taking action to reduce risks while continuously incorporating new information and adjusting efforts accordingly.
6. Response efforts currently being advanced by state and local governments, non-governmental organizations, and the private sector are significant, but not likely to yield progress comparable to what could be achieved with strong national policies and leadership.
7. A comprehensive U.S. response to climate change includes efforts to:
 - Substantially reduce greenhouse gas emissions (ideally, through a national carbon pricing system and strategic complementary policies)
 - Begin mobilizing for adaptation at all levels
 - Invest in research and development, both to advance basic understanding and to improve/expand response options
 - Develop effective systems to inform and evaluate climate choices
 - Link scientific analysis with public deliberation
 - Actively engage in international response efforts
 - Coordinate the many related components of the nation's response efforts

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Albert Carnesale (*Chair*), University of California, Los Angeles; **William Chameides** (*Vice-Chair*), Duke University; **Donald F. Boesch**, University of Maryland Center for Environmental Science, Cambridge; **Marilyn A. Brown**, Georgia Institute of Technology; **Jonathan Cannon**, University of Virginia; **Thomas Dietz**, Michigan State University; **George C. Eads**, CRA Charles River Associates, Washington, DC; **Robert W. Fri**, Resources for the Future, Washington, D.C.; **James E. Geringer**, Environmental Systems Research Institute, Cheyenne; **Dennis L. Hartmann**, University of Washington, Seattle; **Charles O. Holliday, Jr.**, DuPont (Ret.), Nashville; **Diana M. Liverman**, University of Arizona and University of Oxford, UK; **Pamela A. Matson**, Stanford University; **Peter H. Raven**, Missouri Botanical Garden, St. Louis; **Richard Schmalensee**, Massachusetts Institute of Technology; **Philip R. Sharp**, Resources for the Future, Washington, DC; **Peggy M. Shepard**, WE ACT for Environmental Justice, New York, NY; **Robert H. Socolow**, Princeton University; **Susan Solomon**, National Oceanic and Atmospheric Administration, Boulder; **Bjorn Stigson**, World Business Council for Sustainable Development, Geneva; **Thomas J. Wilbanks**, Oak Ridge National Laboratory, Tennessee; **Peter Zandan**, Public Strategies, Inc., Austin; **Laurie Geller** (*Study Director*), National Research Council.

The National Academies appointed the above panel of experts to address the specific task, sponsored by the National Oceanic and Atmospheric Administration. The members volunteered their time for this activity; their report is peer-reviewed and the final product signed off by both the committee members and the National Academies. This report brief was prepared by the National Research Council based on the committee's report.



For more information, contact the Board on Atmospheric Sciences and Climate at (202) 334-3426 or visit <http://nationalacademies.org/basc> or America's Climate Choices at americasclimatechoices.org. Copies of *America's Climate Choices* are available from the National Academies Press, 500 Fifth Street, NW, Washington, D.C. 20001; (800) 624-6242; www.nap.edu.

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