

America's climate choices: Informing an effective response to climate change

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At the request of Congress, the National Academy of Sciences convened a series of coordinated activities to provide advice on actions and strategies that the nation can take to respond to climate change. As part of this suite of activities, this study examines information needs and recommends ways the federal government can better inform responses by enhancing climate change and greenhouse gas information and reporting systems and by improving climate communication and education. Demand for better information to support climate-related decisions has grown rapidly as people, organizations, and governments have moved ahead with plans and actions to reduce greenhouse gas emissions and to adapt to the impacts of climate change. To meet this demand, good information systems and services are needed. Without such systems, decision makers cannot evaluate whether particular policies and actions are achieving their goals or should be modified. Although the many non-federal efforts to reduce emissions and/or adapt to future climate changes carry considerable potential to reduce risks related to climate change, there is currently no comprehensive way to assess the effectiveness of those efforts. In addition, the diverse climate change responses to date have resulted in a patchwork of regional, state, and local policies that has prompted many state and business leaders to call for the development of a more predictable and coherent policy environment at the federal level. This report demonstrates that the nation lacks comprehensive, robust, and credible information and reporting systems to inform climate choices and evaluate their effectiveness. This report also argues that decision makers can benefit from a systematic and iterative framework for responding to climate change, in which decisions and policies can be revised in light of new information and experience and that improved information and reporting systems allow for ongoing evaluation of responses to climate risks. The climate-related decisions that society will confront over the coming decades will require an informed and engaged public and an education system that provides students with the knowledge to make informed choices. Although nearly all Americans have now heard of climate change, many have yet to understand the full implications of the issue and the opportunities and risks that lie in the solutions. Nonetheless, national surveys demonstrate a clear public desire for more information about climate change and how it might affect local communities. A majority of Americans want the government to take action in response to climate change and are willing to take action themselves. Although communicating about climate change and choices is vitally important, it can be difficult. This report summarizes some simple guidelines for more effective communications.