

To the Reader:



We are pleased to be able to present this *Strategic Plan* for the Climate Change Technology Program (CCTP). The technology strategy detailed in this *Plan* is an essential element of a comprehensive climate change strategy that includes undertaking short-term actions to reduce greenhouse gas emissions intensity, advancing climate science, and promoting international cooperation.

CCTP was created by the President in 2002—and subsequently authorized in the Energy Policy Act of 2005—to coordinate and prioritize the Federal Government’s portfolio of investments in climate-related technology research, development, demonstration, and deployment (RDD&D). The portfolio totaled about \$3 billion in Fiscal Year 2006.

The *Plan* expands on the themes presented in CCTP’s *Vision and Framework for Strategy and Planning*. It provides the underpinnings for a robust RDD&D effort that can make advanced technologies available sooner and at a lower cost. It takes a century-long look at the nature of the climate change challenge and the potential for technological solutions across a range of uncertainties. Most anthropogenic greenhouse gases emitted over the course of the 21st century will come from equipment and infrastructure not yet built, a circumstance that poses significant opportunities to reduce or eliminate these emissions. The technologies outlined in this *Plan*—hydrogen, biorefining, clean coal, carbon sequestration, nuclear fission and fusion, advanced concepts in buildings, industry, transportation and electric energy storage and distribution, and others—have the potential to transform our economy in fundamental ways that can address not just climate change, but energy security, air quality, and other pressing needs.

The *Plan* articulates a vision of the role for advanced technologies, defines a supporting mission for the CCTP, establishes guiding principles for Federal R&D agencies to use in formulating R&D portfolios, outlines approaches to attain CCTP’s strategic goals, and identifies a series of next steps toward implementation. We believe this *Plan* will strengthen the U.S. research enterprise and stimulate U.S. innovation and advance technology development in myriad ways. It is our hope that this *Plan* will inspire similar initiatives in other nations and enhance international collaboration on development and deployment of these technologies.

This document is the outcome of a long process involving governmental working groups, expert review, and a public comment period that stimulated thoughtful and energetic dialogue. It is our hope that with publication of the *Plan*, this dialogue will continue to inform and improve the Program.

The United States is working to ensure a bright and secure energy and economic future for our Nation and a healthy planet for future generations. Through a combination of near-term actions, enhanced scientific understanding of climate change, advanced technology development, and international cooperation, this future can become a reality.

Carlos M. Gutierrez
Secretary of Commerce

Chair, Committee on
Climate Change
Science and Technology Integration

Samuel W. Bodman
Secretary of Energy

Vice-Chair, Committee on
Climate Change
Science and Technology Integration

John H. Marburger III, Ph.D.
Director, Office of
Science and Technology Policy
Executive Director, Committee on
Climate Change
Science and Technology Integration