



Global Climate Policy Costs and Benefits

International and domestic climate policies may cost the global economy trillions of dollars. Cost-effective implementation and technology advances can substantially reduce the cost of achieving the environmental objectives of these policies. Scientific, economic, and technological concerns of the electricity sector must be addressed in the policy debate. Research results are critical to informing stakeholder discussions over proposed national and international policies. The Electric Power Research Institute's (EPRI's) Global Climate Policy Costs and Benefits program provides members and public- and private-sector decision makers with analysis and information on the potential costs and benefits of domestic and international global climate policy proposals.

This program provides local, state, national, and international policymakers with crucial information for making economically and environmentally sound climate policy decisions. The program focuses on estimating the economic costs of climate policy proposals, identifying policy principles for reducing these costs, and comparing these potential costs with the potential benefits of lower GHG concentrations, taking into account the role of uncertainty. The program examines in depth the role of technology advances in limiting policy costs. It also explores the role of both domestic and international offsets in a cost-effective compliance strategy.

Research Value

Climate policies will fundamentally change the economics of electricity and energy, and smart policy approaches can substantially reduce the costs of meeting the environmental goals of these policies. This program's primary value is its ability to provide integrated assessments of potential costs and benefits of climate change management proposals and impacts on national and international economies. Within these analyses, the program illuminates the role of technology in achieving climate policy goals, with a specific emphasis on the electricity sector. The program's nationally and internationally recognized experts are able to bridge gaps between the technical and policy communities. This research provides

- a highly respected and valuable source of information and analysis to U.S. decision makers and the global modeling community,
- efficient and thoughtful design principles to inform national and international policy debates, and
- a strong analytical basis for the representation of electric utility industry issues in climate policy discussions.

Approach

The program informs the public policy process by communicating research results to the broadest possible audience. The program provides issue briefs; newsletters; congressional testimony; briefings for stakeholders, policymakers, researchers, and the press/media; and peer-reviewed literature submitted to prestigious journals. This program delivers

- high-profile messages on the value of technology in climate policy discussions,
- scenario analyses through analytical models,
- study results for program members to use in presentation materials for internal and external communications, and
- program experts that provide expertise to the domestic and international climate science and policy communities.

Accomplishments

Program accomplishments include the following:

- The Intergovernmental Panel on Climate Change (IPCC) and the U.S. Secretary of Energy highlight EPRI research on the importance of climate policy flexibility.
- The U.S. Climate Change Science Program uses three EPRI-supported models for scenario analysis.
- EPRI research on the value of technology development informs research and development investment decisions.

- EPRI research on developing country emissions and the implications of coalitions of countries agreeing to climate policy has helped inform international negotiations.
- EPRI experts are playing key roles in a new National Academy of Sciences study, America's Climate Choices, and in the initial efforts to define the IPCC's 5th Assessment Report.

Current Year Activities

Program R&D for 2011 will continue to focus on informing climate policy at the state, national, and international levels. Key collaboration with EPRI programs in EPRI's Generation Sector (e.g., Coal Fleet) and Power Delivery and Utilization (e.g., energy efficiency and electric transportation) sector will be crucial to providing comprehensive climate policy analysis. Specific efforts will include

- analysis of the costs of specific proposed climate policies at the national and international level for use in policy negotiations,
- integrated assessment of potential costs and benefits of alternative climate change management proposals,
- examination of the role of technology and electrification in achieving climate policy goals, and
- development of U.S. regional modeling capability to assess domestic climate policy details.



Estimated 2010 Program Funding

\$5.0M

Program Manager

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