



Climate Change

Focus on Technology, Research, Development and Deployment

Issue. Over the last 20 years, the U.S. and other countries have debated how to address the increase in greenhouse gases in the atmosphere. Carbon dioxide (CO₂), the primary greenhouse gas (GHG), is also a product of fossil fuel combustion. CO₂ has increased in atmospheric concentration from a pre-industrial level of 280 parts per million to about 383 parts per million today. Many scientists believe high GHG concentrations will result in a warming of the earth's atmosphere and changes in the climate, melting of the polar ice caps and sea level rise. In Washington, both Congress and the Administration are debating how to address climate change.

President Bush opposes mandates and supports voluntary reductions in GHG emissions through his Global Climate Change Initiative. Based on reducing the ratio of GHG emissions to economic output (Gross Domestic Product or GDP), the goal of the Global Climate Change Initiative is to reduce GHG intensity by 18 percent over 10 years through a variety of voluntary actions. To promote voluntary GHG reductions, the Energy Department improved its Section 1605(b) Voluntary Reporting of Greenhouse Gases Program and strengthened its research and technology program. In 2003, the Energy Department launched its public-private climate partnership – Climate Voluntary Innovative Sector Initiatives: Opportunities Now (Climate VISION). Currently, 15 industries are committed to increasing the GHG efficiency of their operations and on track with the President's 18 percent goal.

NRECA participates in this effort as part of an electric industry program called Power PartnersSM to enhance the efficiency of electricity generation, transmission and distribution, all of which help reduce GHG intensity. NRECA also signed a memorandum of understanding with the Department of Agriculture to identify ways to reduce emissions. This effort includes activities or technologies that reduce, avoid or sequester GHGs, and enhance the development of renewable energy by reducing technical and market barriers. Cooperatives are also expanding research and development of new electric technologies such as biogas recovery that are win-win solutions for the consumer, economy and environment.

In Congress, House Speaker Nancy Pelosi (D-CA) has called for climate legislation this year and created the House Select Committee on Energy Independence and Global Warming to increase public visibility on the issue. In the Senate, Majority Leader Harry Reid (D-NV) has promised to give floor time for global warming legislation if a cap-and-trade bill is reported by the Environment and Public Works Committee.

Status. The House and Senate have passed energy legislation with efficiency and renewable energy measures that the majority claims would reduce GHG emissions by as much as 10.4 billion metric tons of carbon dioxide by 2030. Committees in both chambers are discussing comprehensive climate change legislation. House Energy and Commerce Chairman John Dingell (D-MI) has announced plans to develop a mandatory, economy-wide cap-and-trade program with the goal of reducing greenhouse gas emissions by 60 to 80 percent by 2050. He also plans to introduce legislation this fall to establish a carbon tax on fossil fuels. The Senate Environment and Public Works Committee voted 11-8 on December 5, 2007, to report out a bipartisan bill (S. 2191) introduced by Sens. Joe Lieberman (I-CT) and John Warner (R-VA). This bill is expected to see Senate floor debate in 2008. The Lieberman-Warner bill would cut greenhouse gas emissions 70 percent by 2050 through an economy-wide cap-and-trade program. Energy and Natural Resources Chairman Jeff Bingaman (D-NM) has introduced the Low Carbon Economy Act of 2007 (S. 1766) that would establish an economy-wide cap-and-trade program with an economic safety valve (cost-control mechanism) and emission cuts of 50 to 85 percent by 2050.

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NRECA Position. Electric Cooperatives are prepared to work with Congress to develop responsible climate change legislation. Because more than half of U.S. electric production and more than two-thirds of electric co-op generation is from coal, NRECA's membership is keenly interested in developing responsible, cost-effective proposals to mitigate GHG emissions. Electric co-ops believe any effort to address climate change must focus on developing and deploying new technologies using appropriate incentives. Co-ops believe any proposal must also consider the economic costs of the plan and not cause significant negative impacts, must cover the entire economy, and must address emissions from other nations. NRECA does not, at this time, have a specific policy proposal to recommend to Congress nor supports a particular bill. However, any policy must meet certain principles before being passed by Congress. We urge Congress to only support legislation that meets these principles and protects electric co-op member-consumers from significant negative economic results from any climate change program:

- **Economy-wide.** Cover emissions from all economic sectors, not simply electricity generation, and should include provisions to ensure that other nations, including both developed countries and developing countries, are enacting policies to address this issue within their borders.
- **Fuel-Diverse.** Maintain fuel diversity, allowing a variety of fuel sources to meet the nation's energy and economic needs. Provisions to encourage new nuclear generation should eliminate any barriers to cooperatives participating in new projects with non-cooperative partners and should grant cooperatives the right to participate in new nuclear projects.
- **Minimize Negative Economic Consequences.** Include provisions, such as an economic safety-valve, to protect the U.S. economy from significant negative impacts. Additionally, Congress should work to protect both rural and urban consumers from any significant negative economic impacts from climate change legislation.
- **Terrestrial Sequestration-Focused (short-term).** Recognize that in the short term, terrestrial sequestration, conservation, and energy efficiency appear to be among the most cost-effective methods of mitigating GHG emissions at this time. Additionally, it should recognize that sequestration can provide benefits to rural areas and agricultural- and forestry-based economies.
- **Technology-Focused (long-term).** Recognize that in the long term, new technologies including the capture and sequestration of carbon dioxide from power plants will be critical to addressing this issue, but cost-effective, commercially-available technologies are still in development and are years or decades away from large-scale commercial applications. Every effort must be made, and appropriate funding provided, to accelerate the research, development, demonstration, and commercialization of these technologies. Additionally, potential liability issues associated with the injection and geologic storage of carbon dioxide should be addressed.
- **Provide Equitable Incentives.** Encourage cost-effective reductions and make incentives available to all segments of the utility industry to develop and deploy advanced electric generation, transmission, and distribution technologies.
- **Protect Economic and Energy Security.** Recognize that climate change policy and energy policy are inextricably linked, and that climate change policies can have a significant impact on our nation's economic and energy security.
- **Remove Existing Regulatory Barriers.** Remove regulatory and other impediments to increasing the efficiency of existing generating units.

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