

# CLIMATE ISSUES

## Are we ready to enact climate change legislation?

By Lydia Walters

Read any magazine or newspaper or watch the television news, and you've heard about global warming and climate change. In June, the Senate refused to take up the Lieberman-Warner Climate Security Act, which would have enacted a cap-and-trade system for industries like electric power generation.

This bill would have significantly increased the cost of electricity. Electric energy costs in Mississippi could have increased by \$1,500 per year (or \$125 per month) if the legislation had passed, according to the Mississippi Manufacturers Association.

Before legislation on climate change is enacted, Congress should consider several issues and ask these tough questions.

### 1. Do we have clear evidence that man-made carbon dioxide is affecting the climate?

Debates are ongoing among scientist and politicians on whether man-made carbon dioxide is affecting the climate. Simply put, scientists don't agree, and the evidence is inconclusive. There is evidence that the temperature has risen over the past 150 years; however, much of the warming took place before the modern industrial revolution in the 1940s and 1950s. Of the 10 hottest years on record, four of those years were in the 1930s.

Also, there is evidence that carbon dioxide levels may actually follow a rise in temperature. According to ice core samples, an increase in carbon dioxide may lag 800 years behind an increase in global temperatures. Also, carbon dioxide is less than 0.05 percent of the earth's atmosphere, and nearly 97 percent of the carbon dioxide in the atmosphere comes from natural sources, such as oceans, volca-

noes and decaying plant and animal life.

### 2. Does the United States have a clear plan for its energy future?

The United States does not have a comprehensive energy policy. In the absence of strong energy policy, the energy sector is fragmented. Congress should consider the future of energy in the United States. In the electric energy sector, needs for future generation should be evaluated, and goals set to meet increasing demand. Upgrades to the transmission grid should be considered. Lastly, funding sources, such as the Rural Utilities Service, should be available for construction of new base load generation (like coal or nuclear) and for research and development of new technology.

### 3. What is a cap-and-trade emissions program? How will it affect the U.S. economy?

Cap-and-trade is a system of buying and selling emission allowances. For example, Company A releases fewer emissions than Company B. Company B emits too much, so Company B can purchase allowances from company A to offset the excess.

Europe has been under this system of trading for many years and has seen no reduction in their greenhouse gas emissions, but has seen the cost of many of their products and services increase. This will be much like a tax on all market sectors that use energy, but no one will really know what the tax rate is. The Washington Post said it this way in their April 9, 2007 edition, a cap-and-trade system "could affect the cost of everything from windowpanes to airline tickets to electricity."

As mentioned earlier in this article, the cost of electricity in Mississippi could nearly double if a cap-and-trade system is adopted.

### 4. Does the technology exist to capture carbon dioxide at power plants?

Currently, there is no technology that can be attached to an existing power plant to capture carbon dioxide. Clean coal technology is becoming available in the market for new plants, but these advancements do not include capturing carbon dioxide. Funding for research and development must be included in a comprehensive energy policy, so new technology can be developed before legislation on climate change is adopted.

### 5. What are some of the options for lowering emissions?

The Electric Power Research Institute prepared a seven point strategy to reduce carbon emissions. The plan looks at the electric power and transportation industries and provides a plan for research and development. The seven steps to carbon reduction include energy efficiency, renewable energy, nuclear power, new coal technology, carbon capture technology, plug-in hybrids and distributed generation. Several of these items are in the early stages of research and design and need considerably more work before they are ready for the marketplace. Carbon capture technology is very early in the research stage, and plug-in hybrids are not ready for the market yet either. Also, plug-in hybrids will require electricity to run, so building new generation for electric power becomes more vital.

### 6. Can we produce enough electric energy with renewables in the future to sustain our quality of life?

Renewables should be developed; however, they cannot produce enough energy to replace base load generation, so renewables, nuclear and clean coal technology should all be considered as viable options for new generation. Renewables are an option for some areas of the country, but the Southeast does not have enough wind velocity or constant solar radiation to produce electric energy on a large scale.

The world and national populations are both increasing, and with those increases comes an ever-increasing demand for energy, specifically electricity. Some states have denied air permits to coal plants, and no nuclear plant has been permitted in the U.S. in nearly 30 years. To maintain the quality of life we currently enjoy, new electric power plants must be built.

*Ultimately, the question is this, "How do we balance the needs of the American people with the welfare of the environment?" There aren't easy answers, but we need to be sure that legislation addresses both – mankind and the environment.*

