

States start chipping at greenhouse gasses

By THOMAS A. STONE

Climate change is a "transformative" issue that is expected to change laws, economies, governmental relations, institutions, and societies. An example of this is the beginning, in a few months, of the interstate Regional Greenhouse Gas Initiative or RGGI.

The RGGI is a plan to attack a part of the regional greenhouse gas problem by placing upper limits on how much carbon dioxide (CO₂) electric power plants can emit across the region. The initiative covers 10 Northeastern and Mid-Atlantic states that contain 47 million people or 16 percent of the population. The eight original RGGI states combined are the 11th largest CO₂ emitter in the world, with a \$1.8 trillion economy. The entire region releases 14 percent of U.S. greenhouse gas emissions, or about the same amount as Germany.

The regional initiative is the brainchild of New York's former Gov. Pataki and grew out of his and many others frustration with the complete lack of federal leadership on the problem. The proposed limits on electrical power plants are quite modest initially but tighten progressively over the 2009-2019 period to enforce a decline of 10 percent from current levels. A "business as usual" scenario over the years would predict a 25 percent increase in CO₂ emissions, so RGGI would be, in effect, a 35 percent decline.

To get there, RGGI will use a method called "cap and trade," which has a history of success in reducing sulphur dioxide emissions (which causes acid rain) and is currently being used in the European Union for limiting CO₂

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What is cap and trade and how does it work? On Jan. 1, 2009, the right to emit CO₂ from the region's larger electrical generating power plants becomes a tradable commodity across the RGGI region. Then, there will be an upper limit or "cap" on the amount of CO₂ that can be emitted. Emission permits, or allowances, will be bought and sold (the "trade") by power plant operators. An allowance is the right to emit one ton of CO₂.

It is important to note that only electricity generation is covered by RGGI. The transportation sector, a major emitter responsible for about a third of our emissions, is not covered by RGGI because the US Federal government regulates mileage standards.

In a parallel effort, California with five other western states and two Canadian provinces have agreed to reduce their GHG emissions 15 percent below the 2005 level by the year 2020 instead of "waiting for Federal action" in an even broader plan that includes agriculture and transportation along with electricity generation. California alone accounts for half of the emissions from that region.

The European Union has a similar cap and trade the Emissions Trading System. This plan,

started in January 2005 and covering some 11,000 large industrial emitters, is currently in Phase I (2005-2007). Admittedly, mistakes were made initially in Europe due to handing out emission permits freely to emitters. But those problems are now recognized and will be tightened in Phase II, which goes from 2008 to 2012.

Of course, the big question is, "has Europe's Emissions Trading System worked?" Two sources of evidence say "yes."

Surveys of European industrial emitters indicate that 65 percent of them have reduced emissions within their companies. And, second, national level estimates show an 8 percent reduction of CO₂ by 2005, compared to 1990 or 1995 base years, by the original 15 EU member states. And, as Europe's Phase II will be tighter and include a larger part of economy, we should expect even more significant declines in CO₂ emissions from them in the future.

What does RGGI mean for Cape Codders? As purchasing permits by utilities will cost money, the initial concern might be that electricity prices will rise. However, the money raised from the sale of permits (allowances) will go largely into improving energy efficiency. Some argue

that these increases in efficiency will be great enough to lower the demand for electricity and therefore save consumers money. And, of course, as it becomes more expensive for the dirtier and less efficient power plants to operate, they will be used less and the associated pollutants emitted such as mercury, nitrogen, and sulphur will decline and will result in cleaner air. Also, as conventional power plants will become more expensive to operate, it will make alternative energy sources more competitive.

The region's contribution to alleviating greenhouse gas problems will be more than a symbolic drop in the bucket. RGGI, along with California and the Western States initiative, are likely to function as models for a future national program. There are several CO₂ reduction bills currently being discussed in Congress, each of which are "transformative." They would transform not only national energy policy but the economy and society as well. We need to find the best of these bills, demand federal leadership, and move now to reduce CO₂ emissions to slow the rate of climate change.

We need leadership at all levels, local, state, regional, national, and international to confront this problem. Meetings being held this week at the UN in New York are a hopeful sign that we can develop a plan for improving upon the Kyoto Protocol and moving forward.

Let's hope the United States joins in.

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