The New York Times
nytimes.com

September 16, 2008

THE ENERGY CHALLENGE

States Aim to Cut Gases by Making Polluters Pay

By FELICITY BARRINGER and KATE GALBRAITH

Ten states from Maryland to Maine are about to undertake the nation's most serious effort yet to tackle climate change, putting limits on carbon dioxide emissions from utilities and making them pay for each ton of pollutants.

The program is due to get off the ground in nine days, but already there are worries that it may fail to reduce pollution substantially in the Northeast, undermining a concept that is being watched carefully by the rest of the country, by Congress and by European regulators.

The Regional Greenhouse Gas Initiative, or RGGI, will cap emissions for 233 plants. By putting a price on the carbon dioxide they emit, it gives plants a financial incentive to clean themselves up, with the proceeds channeled to energy-saving and renewable energy programs in each state.

The states will set their own limits, with each issuing tradable permits, or allowances, for carbon pollution. On Sept. 25, utilities will start bidding at auction for allowances, which they can later sell — mimicking the so-called cap-and-trade programs that effectively reduced acid rain in the 1990s.

The concept has been praised by environmentalists and state officials. But the emissions cap was based on overestimates of carbon dioxide output, which has dropped sharply from 2005 to 2006 and is on a lower trajectory than anticipated.

So auction demand may be weak at the start, with millions of allowances the states planned to sell not immediately needed. And with the cap on emissions most likely to be higher, at least initially, than the plants' actual carbon-dioxide output, it may be many months before utilities have an incentive to cut pollution.

As traders watched the RGGI dynamic evolve, the already low price of carbon futures fell by about 40 percent in the last three months in this country, according to Evolution Markets, a brokerage firm.

"The supply of allowances is more than what the market needs," said Milo Sjardin, head of the North America division of New Carbon Finance, a research and analysis firm. "Prices are not going to be high, not for the foreseeable future." He also noted that the market was also "not going to produce a lot of emission reductions" as long as the supply of allowances outstrips utilities' need.

The trading of carbon dioxide allowances exists in Europe, and in a small way in this country; some companies have taken part in trading on the Chicago Climate Exchange, which opened in 2003. But the market has been voluntary and participation largely experimental.

Because it makes participation in a pollution-capping scheme mandatory, the Regional Greenhouse Gas Initiative (known as RGGI and pronounced “reggie”) is already spurring more trading in anticipation. Both the Chicago exchange and the New York Mercantile Exchange have recently made it possible to trade future RGGI allowances.

The trading scheme would hold carbon emissions to 188 million tons annually through 2014, and scale them back by 2.5 percent each year through 2018. The cap was set in 2004, based on analysis by energy experts and some pressure from the regulated utilities to keep the ceiling at or above the anticipated emissions. The states planned to issue allowances covering that amount. The cap takes effect Jan. 1, 2009, in New York, New Jersey, Delaware, Maryland and all six New England states — Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

Phil Giudice, the commissioner of the Massachusetts Department of Energy Resources, said, “The 188 million tons estimate was put together a number of years ago from both an analytical aspect and, not surprisingly, a political one.”

But in the end, emissions from the 10 states went down instead of up. After growing from 176.9 million tons in 2002 to 184.5 million tons in 2005, they dropped in 2006, the most recent year for which there is complete data, to 164.5 million tons. Estimated emissions for 2007 are 172.4 million tons, according to Environment Northeast, a research and policy organization.

State officials attribute the regional drop to lower demand because of mild weather, a slowing economy and utilities shifting from higher-carbon fuels to lower-carbon ones like natural gas.

As long as emissions remain below 188 million tons, however, the number of allowances will exceed the companies’ need. The states have set a floor price of $1.86 per ton; allowances will not sell below that level.

If buyers do not snap everything up, leftover allowances will be rolled over to future auctions, which take place quarterly. The next auction is in December. New York, New Jersey, Delaware and New Hampshire, which will not issue allowances in the auction this month, may participate at that time. In addition to power companies, financial institutions, environmentalists and other groups can also bid.

The auction program is intended to hold pollution steady and eventually reduce it through market mechanisms.

A dirtier plant can buy additional allowances in the secondary market, but it may be expensive — or it can just find a way to cut its pollution. Conversely, a cleaner utility can sell its unneeded allowances.

The carbon market follows a three-year-old European experiment, the first of its kind, that provoked widespread criticism, both because it provided windfall profits for industry and because it did little to control heat-trapping emissions. The question now is whether the Northeastern states can avoid those errors.

“Everyone wants to wait and see what really happens, so there will be far less liquidity right now at the first auction than what you would expect going forward,” said Mr. Sjardin of New Carbon Finance.

Currently, allowances in Europe sell for the United States equivalent of about $38 a ton, far more than the roughly $5 a ton that carbon futures sell for here. The heavy reliance on auctions is one thing that distinguishes the RGGI program from its European predecessor. A