

# LIMITED CAP-AND-TRADE PROGRAM

Mandatory **CARBON DIOXIDE TRADING SYSTEM** for power producers thrives in 10 northeastern states

A **CARBON DIOXIDE** cap-and-trade program has operated for more than a year in the northeastern U.S., generating \$494 million in 2008 and 2009 for energy-saving projects in the 10 states involved. Many say the auction process has been a success so far, but others caution that it is too soon to call it a viable means to limit emissions of climate-changing gases.

In the program, called the Regional Greenhouse Gas Initiative (RGGI), operators of fossil-fuel-fired electric power plants must buy rights to emit carbon dioxide from an interstate agency. Excess right can be traded or sold on exchanges, but the amount participants can buy each year is capped and gradually ratcheted down.

Operators and participants in the trading program say it works and proves that a national cap-and-trade scheme can function without significantly increasing energy costs. In fact, admirers call RGGI a model for a national cap-and-trade program. However, RGGI has operated only since September 2008 and does not cover emissions from industrial facilities, as is the case under proposed federal legislation.

Moreover, RGGI's goals are modest: a 10% reduction in carbon dioxide from regional power generators by 2018 from the average emissions from 2003 to 2005. Pending cap-and-trade legislation in the Senate calls for a 20% reduction in greenhouse gases from many sources, including chemical makers, by 2020 based on 2005 emission levels (C&EN, Oct. 5, 2009, page 10).

Critics contend that a national cap-and-trade program covering both power plants and industrial facilities could kill jobs and prosperity. "Cap and trade is a standard-of-living killer," says Bob D. McTeer, former Dallas Federal Reserve Bank president and now a distinguished fellow at the National Center for Policy Analysis, a Dallas-based think tank. "Perhaps it will mean a better standard of living down the road. But coun-

tries that adopt it now will be at a disadvantage to those that don't."

Chemical firms acknowledge that they need to lower carbon emissions, but many are concerned that taxes or cap-and-trade programs would increase their operating costs. "The chemical industry, being an energy-intensive industry, faces significant trade exposure," Calvin M. Dooley, president and chief executive officer of the American Chemistry Council, a chemical industry trade group, warned during a December press conference. "We need to have transition time to allow us to respond to what might be a higher price on emissions, as well as the higher price for energy supplies."

ALTHOUGH RGGI hasn't been around long, it has inspired the governments of other states to forge ahead with their own plans to set up carbon trading. These states also plan to cooperate together if the federal government doesn't act. Using RGGI as its model, the Western Climate Initiative, consisting of seven western states and four Canadian provinces, aims for a mandatory cap-and-trade scheme in 2012 covering utilities and large industrial installations.

The Midwestern Greenhouse Gas Reduction Accord, covering six states, hasn't set a date for its trading initiative yet. But it plans an RGGI-like cap-and-trade program covering all major pollution sources, says Douglas P. Scott director, of the Illinois Environmental Protection Agency.

Jonathan E. Schrag, executive director of RGGI, says the auctions "have been a huge success." Power generators, banks, industrial companies, environmental groups, and individuals can register to participate in three-hour Internet auctions for emission

rization to emit 1 ton of carbon dioxide in RGGI states. The states require that power generators hold allowances equivalent to their emissions over a three-year period.

Because of reduced electricity demand during the economic downturn, emission rights sold at RGGI's quarterly auctions and subsequently traded in venues such as the Chicago Climate Futures Exchange have been plentiful and cheap. The price paid at auction for each emission allowance got as high as \$3.50 but was about \$2.00 at the December 2009 auction. Schrag says early studies suggested that emission purchases would raise the average consumer electric bill by about \$1.50 per month based on a carbon price of \$3.00 to \$5.00 per ton.

But even if the economy revs up and emission credits become more expensive, Schrag argues that they will encourage power generators to invest in efficiency programs to generate more power with less fuel. Likewise, customers will conserve and install more fuel-efficient appliances. States, meanwhile, will use money raised at auction to fund fuel-efficiency projects and to aid poor consumers.



Cap and trade, he says, will thus have a "self-regulating" effect.

Many other regulators are also convinced of the self-regulating effect of cap and trade. And even if federal legislation doesn't become a reality, Illinois regulator Scott points out, linking RGGI with the two other multistate greenhouse gas reduction efforts will create a trading area "covering more than 50% of the U.S. population and more than 50% of U.S. greenhouse gas emissions."—MARC REISCH