

Fact Sheet 10/23/07

New York's Regional Greenhouse Gas Initiative (RGGI)

What is the Regional Greenhouse Gas Initiative?

The Regional Greenhouse Gas Initiative, or RGGI, is a regional agreement to reduce greenhouse gas emissions from power plants. New York's power plants pump out 25 percent of the principal greenhouse gas (carbon dioxide, or CO₂) emitted each year, making participation in RGGI an important step to protect the environment and meet the significant challenge of climate change.

Under the RGGI agreement, the governors of 10 Northeastern and Mid-Atlantic States have committed to cap and then reduce the amount of CO₂ that power plants are allowed to emit. For the initial six years of the program, the proposed rules will cap CO₂ at current levels. In 2015 and the subsequent three years, the cap will be reduced by 2.5-percent for a cut of 10-percent. When fully implemented, the RGGI program will achieve a 16 percent reduction of emissions from projected business as usual emissions.

RGGI uses a market-based approach called *cap-and-trade*. Sources of CO₂ must hold sufficient CO₂ allowances to cover their total emissions. Allowances can be obtained through purchase or trade.

What harm do greenhouse gases do?

Greenhouse gases in the atmosphere cause the earth to retain heat. These gases are naturally present, but the emissions from burning fossil fuels put higher than normal amounts of CO₂ into the atmosphere. As a result, the earth's temperature also rises higher than its natural level, changing the planet's climate in significant ways.

Overwhelming scientific evidence suggests that a warming climate poses a serious threat to New York's environmental resources and public health. A warmer climate will affect air quality, water quality, fisheries, drinking water supplies, wetlands, forests, wildlife, and agriculture. Severe weather events and rising water levels can cause flooding that will damage communities and infrastructure in floodplains and along coastlines.

How will RGGI help protect the environment?

By capping and reducing CO₂ emissions, the RGGI program will help counter the threat of a warming climate. RGGI will also produce significant public health and environmental benefits, including: improved local air quality; forest preservation; improved agricultural manure handling practices (leading to better water and air quality in rural areas); and a more robust, diverse and clean energy supply.

Why does RGGI focus on power plants?

The burning of fossil fuels for electric generation is a major contributor of CO₂. Because New York's electric power plants represent approximately one-quarter of all the state's CO₂ emissions, reducing emissions from power plants is a necessary part of the solution to climate change.

What mechanisms does RGGI use to reduce carbon emissions?

Capping emissions. States participating in RGGI agreed upon a cap (*regional CO₂ emissions budget*) amounting to approximately 188 million tons of CO₂. That number is the total

amount of CO₂ that power plants in the region were expected to emit in 2009. Beginning in 2015, this cap will be reduced by 2.5 percent each year, for a total reduction of 10 percent by 2019. This phased approach, with initially modest reductions, will provide predictable market signals and regulatory certainty. Electricity generators will be able to plan for and invest in lower-carbon alternatives and avoid dramatic electricity price impacts.

Establishing and distributing allowances. Based primarily on previous emission history, the RGGI states negotiated for shares of the total CO₂ emissions budget. New York, for instance, received 64.3 million tons as its CO₂ emissions budget.

An allowance is permission to emit one ton of CO₂ (accordingly, New York will have 64.3 million allowances). Instead of awarding these allowances directly to electric generators free of cost, the RGGI states agreed to sell a minimum of 25 percent of the allowances, committing the proceeds to consumer benefit and strategic energy projects. As the program has evolved, the RGGI states have decided to sell most of their allowances and provide the revenues for consumer benefit and strategic energy purposes.

Marketing the allowances. The RGGI states will sell their emissions allowances through auctions. After each auction, allowances can be bought and sold on a secondary market. Sources that obtain more allowances than they need – or reduce their CO₂ emissions – will be able to sell their excess allowances, and sources needing additional allowances can obtain them.

Supporting low-carbon solutions. Proceeds from the sale of allowances will fund state programs that promote energy efficiency and projects for clean renewable energy, such as solar and wind power. Selling allowances will enhance the RGGI program’s effectiveness at reducing greenhouse gas emissions.

Using Offsets. An “offset” is a greenhouse gas emissions reduction or sequestration project at a source beyond the electricity sector that can help companies meet their compliance obligations. Examples of offsets include landfill gas recovery and agricultural methane recapture, both projects that would reduce the potent greenhouse gas methane. Electric generators may use approved offsets to comply with up to 3.3 percent of their emissions limitations. Offsets provide significant environmental and/or economic benefits for the generators, as well as flexibility for regulated sources.

How will RGGI be carried out in New York?

Responsibility for implementing RGGI will be shared by three departments of New York State government: the Department of Public Service, the Department of Environmental Conservation (DEC) and the Energy Research and Development Authority (NYSERDA). DEC and NYSERDA are currently engaged in rulemaking to implement RGGI.

DEC’s Role. DEC will establish New York’s CO₂ Budget Trading Program through a new rule (6 NYCRR Part 242) and revisions to an existing rule (6 NYCRR Part 200, General Provisions). Air Facility Permits will be amended to require fossil-fuel power plants larger than 25 MW (plants this size are responsible for approximately 95 percent of electric generation CO₂ emissions) to meet CO₂ budget emissions limits. Monitoring plans that define CO₂ emissions and net energy output monitoring procedures will be incorporated into sources’ operating permits.

NYSERDA’s Role. New York’s regulations provide that almost 100 percent of the emissions allowances will be sold through auction. NYSERDA will administer the auction process. NYSERDA currently administers other complementary energy efficiency and clean energy technology programs.

NYSERDA has proposed a new rule (21 NYCRR Part 507 - CO₂ Allowance Auction Program) that establishes the auction and specifies features for subsequent detailed design, and

also sets up a dedicated account to receive the sale proceeds.

The rule, currently in draft form, stipulates that the auctions must be designed to: achieve fully transparent and efficient pricing of allowances; promote a fluid allowance market (by making entry and trading as easy and low-cost as possible); facilitate participation by all eligible entities; safeguard against market manipulation; be held as frequently as is needed to achieve design objectives; avoid interference with existing allowance markets; align well with wholesale energy and capacity markets, and not act as a barrier to efficient investment in relatively clean existing or new electricity generating sources.

Would it cost consumers less if the state gave, rather than sold, allowances to the electrical generators?

In other pollution reduction programs, power companies are given the allowances for free, the companies then pass through the “market value” of these allowances in their bills to consumers. This means that the cost of electricity to consumers will include as much of the cost of allowances as the law permits generators to add on, whether those allowances are purchased or obtained free of charge. Selling the allowances ensures that their proceeds will benefit the public by funding projects to conserve energy, reduce CO₂ emissions and develop clean technologies.

The decision to sell allowances takes into account the European Union’s experience. The E.U. gave away 90 percent of its allowances, thinking that would ease industry’s compliance cost. However, that mechanism resulted in companies enjoying a windfall; power costs to customers increased to cover the cost of the allowances, but generators did not pay for the allowances. In the U.K. alone, free allowances amounted to a \$1 billion grant to the power industry.

Will RGGI have a price impact? If so, what will it be?

The cost of allowances, like the cost of fuel, will be built into generators’ electricity prices. However, modeling analysis reveals that price impacts will be negligible. Economic modeling projects that RGGI will increase wholesale electricity prices by about 1.6 percent (78 cents per month for a typical residential customer) in 2015 and 2.4 percent (\$1.13 per month for a typical residential customer) in 2021.

Economic models further project that the price per allowance will be \$2/ton in 2009. Though the projections are considered accurate, the proposed regulations include some mechanisms to mitigate the risk of high prices. These mechanisms include expanding the use of offsets, adjusting compliance periods and holding frequent auctions. There is also a “circuit breaker” provision that expands offsets if the price of an allowance rises to \$7/ton.

Did any citizens or businesses participate in the design of this program?

A regional stakeholder group, which included energy industry representatives and non-governmental organizations, met 14 times between 2003 and 2007; during that time, New York held about the same number of state stakeholder meetings. Public comment was solicited and reviewed on a variety of written documents, including draft reports of the RGGI working groups and the model cap-and-trade rule used as a template for the states’ regulations. New York has also invited comments on an advance draft of the proposed regulations.