

The Regional Greenhouse Gas Initiative

A Summary of the Model Rule and Memorandum of Understanding



**Environment
Northeast**

The Regional Greenhouse Gas Initiative (RGGI, pronounced “Reggie”) is a market-based cap and trade program designed to reduce carbon dioxide emissions (CO₂)—a greenhouse gas that causes global warming—from electric power plants in the Northeastern and Mid-Atlantic states. RGGI could become the model for a national program that seeks to reduce the nation’s collective contribution to global warming. This document summarizes key issues in the goals and design of RGGI, as outlined in the Memorandum of Understanding (MOU) signed by the Governors of the participating states. It also summarizes the final RGGI Model Rule, which the states are using as a foundation for their rulemakings or legislation to implement RGGI.



Background

On December 20, 2005, after a two-year design process that included extensive stakeholder and expert input, and detailed and comprehensive technical analyses by the states, the governors of seven states (Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont) signed a Memorandum of Understanding (MOU) to move forward with the implementation of RGGI in their states (see <http://www.rggi.org/agreement.htm>). In January and February 2007, the Governors of Massachusetts and Rhode Island agreed to rejoin the RGGI process. In April 2007, Maryland also joined RGGI.

As laid out in the MOU, the participating RGGI states issued a final “Model Rule” on August 15, 2006 see (<http://rggi.org/modelrule.htm>). The individual states will now use the Model Rule as a foundation for proceeding with state rulemakings or legislation. In some states, legislative approval may be needed before rulemaking can begin; in other states, rulemaking can commence immediately even if legislative approval of those rules must occur prior to actual implementation. Each state has until December 31, 2008 to write its implementing regulations or laws. Most elements of the program design must be kept consistent among the states to allow for a common tradable set of emissions allowances. States have some flexibility, however, in the allocation of allowances and with a few other elements (see last page of this document).

RGGI’s Basic Design:

RGGI will be launched on January 1, 2009 as a regional CO₂ trading program. RGGI will regulate electric generating plants that have a nameplate capacity of 25 megawatts and where fossil fuel (coal, natural gas, or oil) comprises 50% or more of the annual heat input on a

BTU basis if they commenced operation before January 1, 2005 or where fossil fuel comprises 5% or more of the annual heat input if they commenced operation after January 1, 2005.

RGGI is designed to initially stabilize CO₂ levels between 2019 and 2014 and then reduce them by 10% by 2018.

Individual facilities must obtain and own the same number of permits, or allowances, as they have tons of emissions. Each permit or allocation equals one ton of CO₂. Permits will likely be sold in one regional auction formed by the participating states. If a facility has extra CO₂ permits, it can also sell its excess permits to facilities needing more permits to cover their emissions.

State and Regional Cap Levels:

Under the MOU, each state has been assigned a specific number of tons of emissions based on a variety of metrics. The initial state CO₂ cap or their portion of the regional total between 2009 and 2014 is:

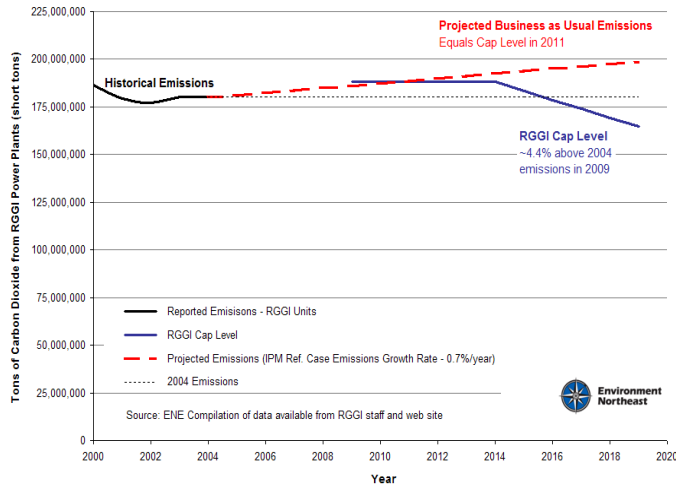
Connecticut:	10,695,036 short tons
Delaware:	7,559,787 short tons
Maine:	5,984,902 short tons
New Hampshire:	8,620,460 short tons
New Jersey:	22,892,730 short tons
New York:	64,310,805 short tons
Vermont:	1,225,830 short tons
Massachusetts:	26,660,204 short tons
Rhode Island:	2,659,239 short tons
Maryland:	37,503,983 short tons

Total Region Cap: 188,112,976 short tons

The RGGI program is designed to stabilize CO₂ levels between 2009 and 2014 and then reduce CO₂ emissions

2.5% per year starting in 2015 so that by 2018, each state's emissions budget will be 10% below its initial annual CO₂ allocation for a total reduction of approximately 18.8 million short tons. Since RGGI is a regional program, allowances can be traded anywhere within the RGGI region.

The states have agreed that a three-year period will be used to determine compliance with emissions allowances. The three-year compliance period will allow weather-related “spikes” in emissions to be averaged out over a longer time.



Historical and Projected Emissions and RGGI Cap Level

Offsets:

RGGI provides some flexibility to electric-generators by allowing plant owners to use pollution “offsets” —an off-system emissions reduction project that compensates for increased emissions at sources included under the cap. The portion of a plant's emissions that can be accounted for using offsets is limited to 3.3% of their total emissions.

Offsets are initially limited to five types of projects:

- 1) Landfill gas (methane) capture/burning. Landfills are applicable if they are not subject to the New Source Performance Standards for municipal solid waste facilities;
- 2) Sulfur hexafluoride (SF₆) capture/recycling from equipment within the electric transmission and distribution system;
- 3) Sequestration of carbon from afforestation (tree planting). Projects will be managed under widely accepted environmentally sustainable forestry practices. Rules for calculating carbon stored in soil, above and below tree biomass, and in dead organic matter are provided in detail in the Model Rule. Projects will have to create a conservation easement for the property that requires long-term management of the forest and carbon stocks.

- 4) Reduction or avoidance of CO₂ emissions due to end-use (commercial and residential) natural gas, propane, and heating oil energy efficiency. Performance standards for calculating energy efficiency from boilers, furnaces and other appliances are laid out in the Model Rule; and
- 5) Avoided methane emissions from agricultural manure management operations. Farms must have less than 4,000 cows or swine. The offset project must also be in a state where market penetration for anaerobic digester projects is less than 5%.

Afforestation projects will have a maximum allocation period of 60 years (three 20-year periods) while other offset projects will have a maximum allocation period of 20 years (two 10-year periods).

Since the RGGI program regulates the grid connected electric power system, no grid-connected electricity projects will qualify as they are subject to the capped system. This means electric energy efficiency, renewable energy generation, nuclear updates, power plant efficiency improvements, and activities that reduce electricity demand, or increase clean electricity output, that fall within the RGGI electric system will NOT qualify as an offset.

Since relatively cheap reductions outside the cap can be substituted for more expensive reductions under the cap, offsets have the potential to reduce costs and expand the incentives associated with an emissions trading system. Each offset category has specific pre-determined project protocols and standards to ensure actual emissions reductions. In order to ensure that an offset is equivalent or equal to an on-system emissions reduction it must be *real, surplus (additional), verifiable, permanent, and enforceable*. The performance based protocols for each offset type are designed to ensure that these requirements are met.

The geographic location of offsets is limited to the RGGI states, US states that have a cap and trade program for CO₂, or states outside the RGGI region that have signed an MOU regarding offsets with the RGGI state. To ensure that offset projects are meeting the projected emissions reductions, Regulatory agencies in states that have signed the offset MOU are responsible for performing audits on offset projects and reporting violations to RGGI states.

Trigger Levels and Safety Valves:

The “offset trigger” levels within the RGGI Model Rule give additional price certainty to the program by allowing sources to cover 5% of their emissions using offsets if the average regional allowance price equals or exceeds \$7 per ton of CO₂ (in 2005 dollars) for a 12 month rolling period. In addition, there is a “safely valve” that would be triggered if the allowance price reaches \$10 (in 2005 dollars

(as adjusted by CPI) plus 2% per year starting in 2006) which increase the percentage of offsets that a source could use to 10% and the geographic limit would expand to include allowances or credits from international trading programs. In addition, at a \$10 allowance price the compliance period would be extended by an additional year for a 12 month rolling average (after the first 14 months). If either the offset or safety valve triggers occurs, the trigger is reset at the end of the compliance period when prices have dropped below the threshold trigger value.

The banking of allowances, offset allowances and early reduction credits will be allowed without limitation.

Reporting & Compliance

The Model Rule also sets up stringent emissions monitoring, reporting and verification requirements to ensure that the program will be successful. A source will be penalized if it is not able to cover its excess emissions at the end of the compliance period. If this occurs, the state's Regulatory Agency will deduct three times the number of the source's excess emissions from its compliance account. A source that falls out of compliance will not be able to use offsets to reduce its excess emissions.

Development of a RGGI Regional Organization

The RGGI states have also agreed to create and maintain a Regional Organization (RO) to help facilitate the on-going administration of the program. The board of directors of the RO will consist of the RGGI state energy and environmental agency heads, or their designees. The RO will serve an advisory role to the participating states.

Allocation of Allowances

Each state will auction allowances or distribute the emissions allowances to programs or sources as it deems appropriate. The allocation of allowances has been left to the state's discretion but, at a minimum, 25% of the allocations must be auctioned or allocated to programs to be used for a "consumer benefit or strategic energy purpose," (i.e. to support energy efficiency, renewable energy, innovative energy technologies or consumer rebates). Some states such as New York, Massachusetts,

Connecticut, Rhode Island and Vermont have stated that they will auction 100% of their allowances after minor set-asides for issues such as combined heat and power (CHP), long-term contracts, and retirement of credits to support voluntary renewable energy. Other states have not yet decided if they will have more than the minimum 25% allowance allocations. These decisions will be finalized during each state's RGGI rulemaking. In addition, each state needs to determine which agency will auction the allowances, the type of auction that will occur, and how funds collected from the consumer benefit allocation will be distributed.

Optional Elements

The Model Rule also has several optional sections which each state will have to decide whether or not to include in their specific rulemaking process. They include:

- Exemptions for industrial units that sell less than 10% of their output to the grid. If an industrial unit is exempted from RGGI, the tons attributable to that source in a state's initial inventory shall be removed and the state cap reduced by that amount.
- The Model Rule has an optional set-aside for voluntary renewable purchases. For each control period, states can set aside some carbon credits and retire them at a set rate when it is verified that voluntary renewable energy purchases were made. Retiring these credits will help support the voluntary renewable market and will ensure that these programs can continue to claim a reduction in carbon emissions.

RGGI Stakeholder Group

Environment Northeast is part of the 24 member Stakeholder Group which was selected by the RGGI states to represent electric generator, environmental, consumer, and other affected interests in the Northeast and Mid-Atlantic regions. Since RGGI's inception, the Stakeholder Group has been working closely with the RGGI Staff Working Group comprised of about 15 representatives from state environmental and energy-related agencies to design the RGGI program.



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Environment Northeast is a nonprofit research and advocacy organization focusing on the Northeastern United States and Eastern Canada. Our mission is to address large-scale environmental challenges that threaten regional ecosystems, human health, or the management of significant natural resources. We use policy analysis, collaborative problem solving, and advocacy to advance the environmental and economic sustainability of the region.