

## REGIONAL GREENHOUSE GAS INITIATIVE (RGGI)

**Policy summary:** Massachusetts is one of the 10 Northeast and Mid-Atlantic states participating in a regional effort to limit carbon dioxide emissions from electric generating units in the region<sup>40</sup>. The program, which began in January 2009, establishes a region-wide cap on CO<sub>2</sub> emissions from fossil fuel-fired power plants in the region. The current program design calls for the cap to remain at the initial level for six years (2009 to 2014), and then to decrease at 2.5 percent per year for the next four years, for a total reduction of 10 percent by 2018.

By the end of each three-year compliance period, facilities covered under the program are required to have purchased allowances — a limited authorization to emit one ton of CO<sub>2</sub> — equal to their total emissions; the allowances are then retired so they cannot be used again. Allowances are made available by the states for purchase in quarterly auctions. Massachusetts is investing over 80 percent of its auction proceeds in energy efficiency, with smaller amounts for renewable energy and other consumer benefit programs.

**Clean energy economy impacts:** Over \$120 million in auction proceeds has been invested in energy efficiency projects across the Commonwealth since 2009, creating jobs in the clean energy economy. In addition, the efficiency investments will reduce electricity and fuel costs for property owners, leaving them with savings to be invested elsewhere in the local economy.

**Rationale:** The electric generating sector represents approximately a quarter of total GHG emissions in Massachusetts at present. The RGGI program provides a transparent and stable signal to the electricity sector to plan for a cleaner energy future. In addition, improvements in building energy efficiency reduce the demand for electricity and help keep emissions below the cap, reducing the cost of compliance.

**Policy design:** Recent trends in relative fuel prices, weather, investments in energy efficiency, and the downturn in the economy have resulted in actual total regional emissions much lower than anticipated. The RGGI states, along with broad stakeholder engagement, are currently in the process of a comprehensive program review which will include evaluation of program success, program impacts, additional reductions, imports and emission leakage, and offsets.

**GHG impact:** RGGI has a regional emissions cap, providing for a 10 percent reduction in CO<sub>2</sub> emissions across the 10-state region by 2018, and there is no specific limit on emissions deriving from the power plants in a particular state. Massachusetts' significant policies for electrical energy efficiency and renewable electricity are supported, in part, by proceeds from the RGGI auctions. Therefore, in this Massachusetts-specific analysis, emissions reductions are attributed to all of these programs in combination.

**Other benefits:** By providing incentives for reduced operation of the dirtiest plants and greater operation of cleaner ones, the RGGI program also reduces criteria and hazardous pollutant emissions (NO<sub>x</sub>, SO<sub>2</sub>, mercury, and fine particulate matter). These reductions will have public health and environmental benefits.

<sup>40</sup> The states participating in the RGGI are CT, DE, MA, MD, ME, NH, NJ, NY, RI, VT.

**Costs:** Since funds received from sale of RGGI allowances are largely invested in the state's utility-administered energy efficiency programs, RGGI's costs in fractionally higher electricity prices are offset by reductions in the costs of the efficiency program.

**Experience in other states:** Other states are in the process of developing and implementing similar programs. These efforts include the Western Climate Initiative and the Midwest Climate Accord.

**Legal authority:** Massachusetts RGGI regulations derive from authority under the Green Communities Act.

**Uncertainty:** A range of factors affect emissions from power plants, some under the control of power plants or the state and some not, ranging from weather and relative prices of fuels used to generate electricity to the aggressiveness of the implementation of energy efficiency programs.