

# Auction Design

## The Regional Greenhouse Gas Initiative

Summer 2008



**Environment  
Northeast**

### The Existing Commitment by the States

The Regional Greenhouse Gas Initiative (RGGI, [www.rggi.org](http://www.rggi.org)) is a groundbreaking cap and trade program that will reduce greenhouse gas emissions approximately 10% from Northeastern power plants by 2019. Collectively, the ten Northeast states that have committed to RGGI (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New Hampshire, New York, Rhode Island and Vermont) are the 7th largest greenhouse gas polluter in the world. RGGI goes into effect January 1, 2009. All of the RGGI states have chosen to auction the vast majority of their allowances.

### Auction Design

The RGGI states have agreed to participate in uniform regional auctions for allowances (or permits to emit one ton of carbon dioxide). The states have decided to hold two auctions prior to the start of RGGI: the first on September 25, 2008 and the second on December 17th, 2008. Auctions will be conducted according to the following design elements:

**Schedule:** Auctions will occur quarterly beginning September 25, 2008.

**Auction Structure:** Allowances initially will be auctioned in a single-round, uniform price, sealed-bid format. The format may change as experience is gained. The minimum lot size will be 1,000 allowances.

**Sale Schedule:** Allowances will be identified by vintages corresponding to the allowance's allocation year. All allowances will be offered for sale prior to the end of a compliance period. In order to promote price discovery through a forward market, up to 50 percent of future allowance vintages will be made available for sale four years in advance of their compliance period (e.g., up to 50% of the 2012 allowances will be available for sale starting in 2009), but only allowances from the current or previous periods can be used in a given compliance period.

**Participation:** The initial auction is open to all eligible participants who can meet qualification requirements, including proof of financial security. In any single auction an entity (an organization and its affiliates and/or agents) may purchase no more than 25 percent of allowances offered for sale.

**Monitoring:** A professional, independent market monitor will oversee auctions and subsequent market activity and report results to RGGI states.

**Reserve Price:** A reserve price of \$1.86 per ton will be used in the first auction. In subsequent auctions the reserve price will be the higher of \$1.86 or 80% of the market price. (Additionally, the reserve price will be adjusted annually beginning in 2009 based on the Consumer Price Index). The reserve price will be known to prospective auction participants prior to each auction.

**Unsold Allowances:** Allowances that do not meet the reserve price will be made available for sale in subsequent auctions. RGGI states will determine in 2012 whether to retire any unsold allowances from the first compliance period, or whether to offer such allowances for sale in the second compliance period.

### Auction Rationale

The distribution of RGGI allowances through an auction is consistent with the 'polluter pays' principle obliging those who discharge wastes into the environment to pay for that privilege.

The logic behind an auction is also financial, as allowances are valuable commodities that can be used for compliance, banked, or sold. Generators in competitive markets recognize the opportunity cost of allowances and include them in prices whether they purchase allowances or receive them free of charge. Prices are then passed on to consumers, and consumers should benefit from this new revenue stream through programs such as energy efficiency that reduce RGGI costs and pave the way to a sustainable energy future. (See ENE background document on the role of Energy Efficiency in a cap and trade system.)

## September 25, 2008 Auction

The inaugural RGGI allowance auction held on September 25<sup>th</sup>, 2008 will offer 2009 allowances from Maine, Vermont, Massachusetts, Rhode Island, Connecticut and Maryland. New Hampshire, New York, New Jersey and Delaware were unable to finalize regulations in time to supply allowances for the September auction. The six participating states comprise 45% of the cap, while the four states withholding allowances comprise 55% of the cap. Each of the six participating states will provide one-sixth (16.67%) of its 2009 allocation at the September auction, one-sixth at the December 17<sup>th</sup> auction, and one-sixth at each of the quarterly auctions in 2009. 2009 allocations and September 25<sup>th</sup> auction supply are listed below in table 1.

Note: New York has finalized regulations and will contribute allowances to the December auction. ENE is also confident that Delaware, New Hampshire, and New Jersey will finalize regulations and participate in the December 2008 or 2009 first quarter auction.

**Table 1: 2009 State Allocations and September 25<sup>th</sup> 2008 Auction Supply**

| State         | September Auction | 2009 Allocation    | Share of RGGI Cap | September Contribution | Potential September Auction Revenue |                     |
|---------------|-------------------|--------------------|-------------------|------------------------|-------------------------------------|---------------------|
|               | (yes/no)          | (short tons)       | (%)               | (short tons)           | @ \$1.86/ton                        | @ \$5.00/ton        |
| Connecticut   | Yes               | 10,695,036         | 5.7%              | 1,372,530              | \$2,552,906                         | \$6,862,650         |
| Delaware      | No                | 7,559,787          | 4.0%              | -                      | -                                   | -                   |
| Maine         | Yes               | 5,984,902          | 3.2%              | 872,506                | \$1,622,861                         | \$4,362,530         |
| Maryland      | Yes               | 37,503,983         | 19.9%             | 5,331,781              | \$9,917,113                         | \$26,658,905        |
| Massachusetts | Yes               | 26,660,204         | 14.2%             | 4,347,543              | \$8,086,430                         | \$21,737,715        |
| New Hampshire | No                | 8,620,460          | 4.6%              | -                      | -                                   | -                   |
| New Jersey    | No                | 22,892,730         | 12.2%             | -                      | -                                   | -                   |
| New York      | No                | 64,310,805         | 34.2%             | -                      | -                                   | -                   |
| Rhode Island  | Yes               | 2,659,239          | 1.4%              | 438,774                | \$816,120                           | \$2,193,870         |
| Vermont       | Yes               | 1,225,830          | 0.7%              | 202,262                | \$376,207                           | \$1,011,310         |
| <b>Total</b>  | <b>6 of 10</b>    | <b>188,112,976</b> | <b>100%</b>       | <b>12,565,387</b>      | <b>\$23,371,620</b>                 | <b>\$62,826,935</b> |



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