
RGGI Inc.



**MARKET MONITOR REPORT
FOR AUCTION 8**

Prepared for:

RGGI, Inc., on behalf of the RGGI Participating States

Prepared By:

**POTOMAC
ECONOMICS**

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The Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort by participating states to reduce emissions of carbon dioxide (CO₂), a greenhouse gas that causes global warming.

RGGI, Inc. is a non-profit corporation created to provide technical and administrative services to the CO₂ Budget Trading Programs of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

MARKET MONITOR REPORT FOR AUCTION 8

As the Market Monitor for the RGGI CO₂ allowance market, Potomac Economics monitors the conduct of market participants in the auctions and in the secondary market to identify indications of market manipulation or collusion. We also review the administration of the auctions by World Energy Solutions. This report summarizes our findings regarding RGGI Auction 8, which was held on June 9, 2010.

We observed the auction as it occurred and have completed our review and analysis of its results. Based on our review of bids in the auction, we find no material evidence of collusion or manipulation by bidders.

A large number of bidders participated in the 2010 vintage offering with 43 entities submitting bids to purchase 1.3 times the available supply of allowances, resulting in a clearing price of \$1.88 per ton. The quantity of allowances for which bids were submitted (over 54 million) decreased from the previous auction. Compliance entities or their affiliates purchased the majority (92 percent) of the allowances in the auction.

A small number of allowances were auctioned for the second control period (with a 2013 vintage year). All of the 2013 vintage allowances were sold, with ten entities submitting bids to purchase 1.2 times the available supply of allowances, resulting in a clearing price of \$1.86 per ton. Compliance entities or their affiliates purchased 100 percent of the allowances in the 2013 vintage offering.

Based on our review of the administration of the market, we found that:

- The auction was administered in a fair and transparent manner in accordance with the noticed auction procedures and limitations.
- The auction results were consistent with the market rules and the bids received.
- Sensitive information was treated appropriately by the auction administrator.
- There were no indications of hardware or software problems, communications issues, security breaches, or other problems with the auction platform.

In summary, the results of our monitoring of RGGI Auction 8 raise no material concerns regarding the auction process, barriers to participation in the auction, or the competitiveness of the auction results. The appendix provides additional information about the market for RGGI CO₂ allowances and outcomes of the auction.

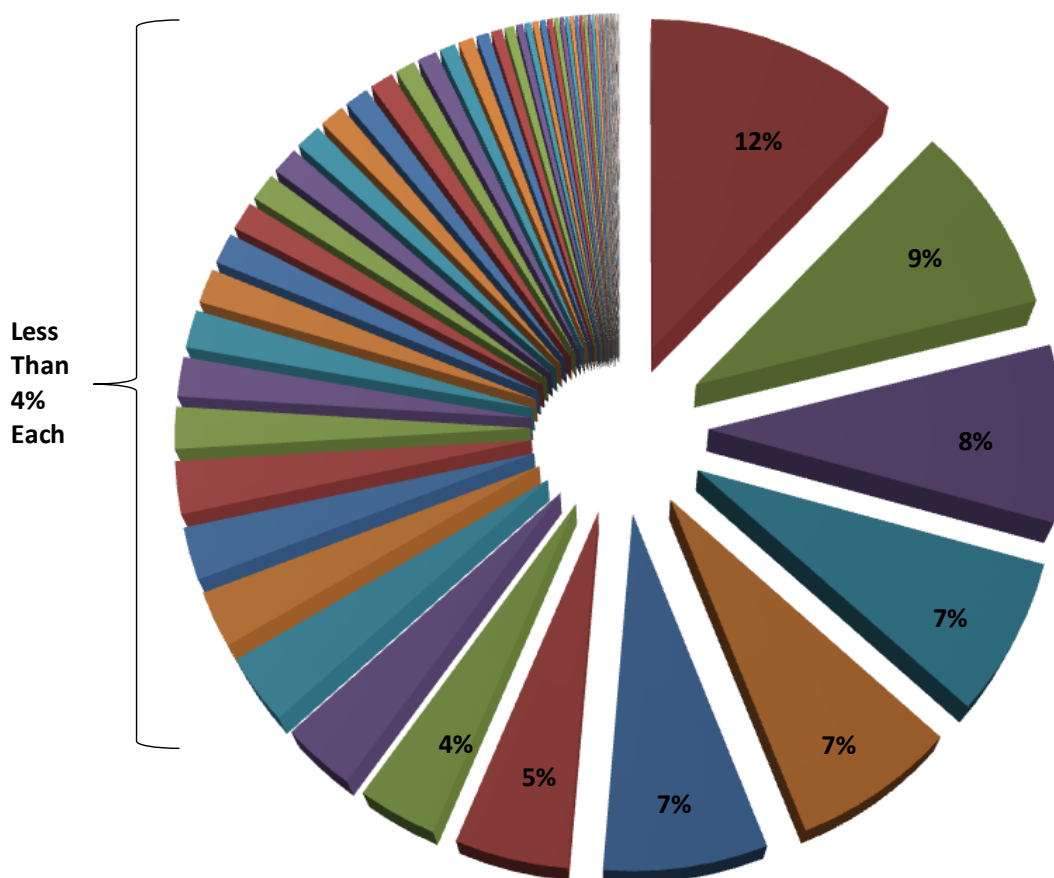
APPENDIX

A. DISPERSION OF PROJECTED DEMAND

The wide dispersion of projected demand for RGGI allowances across compliance entities facilitates the competitive performance of the auction.

The following figure shows the relative shares of projected demand for RGGI allowances by compliance entity. The largest compliance entity represents only 12 percent of the total projected demand for allowances. Almost half of the projected demand is composed of entities that each account for less than 6 percent of the total demand. Participation by a large number of entities facilitates the competitive performance of the auction.

Figure 1: Projected Demand for RGGI Allowances Shares by Compliance Entity



B. DISPERSION OF BIDS IN AUCTION 8

In the 2010 vintage offering, bids were submitted by a large number of entities, and the bids were widely dispersed across both compliance entities and non-compliance entities. These are both positive indicators regarding the competitiveness of the auction.

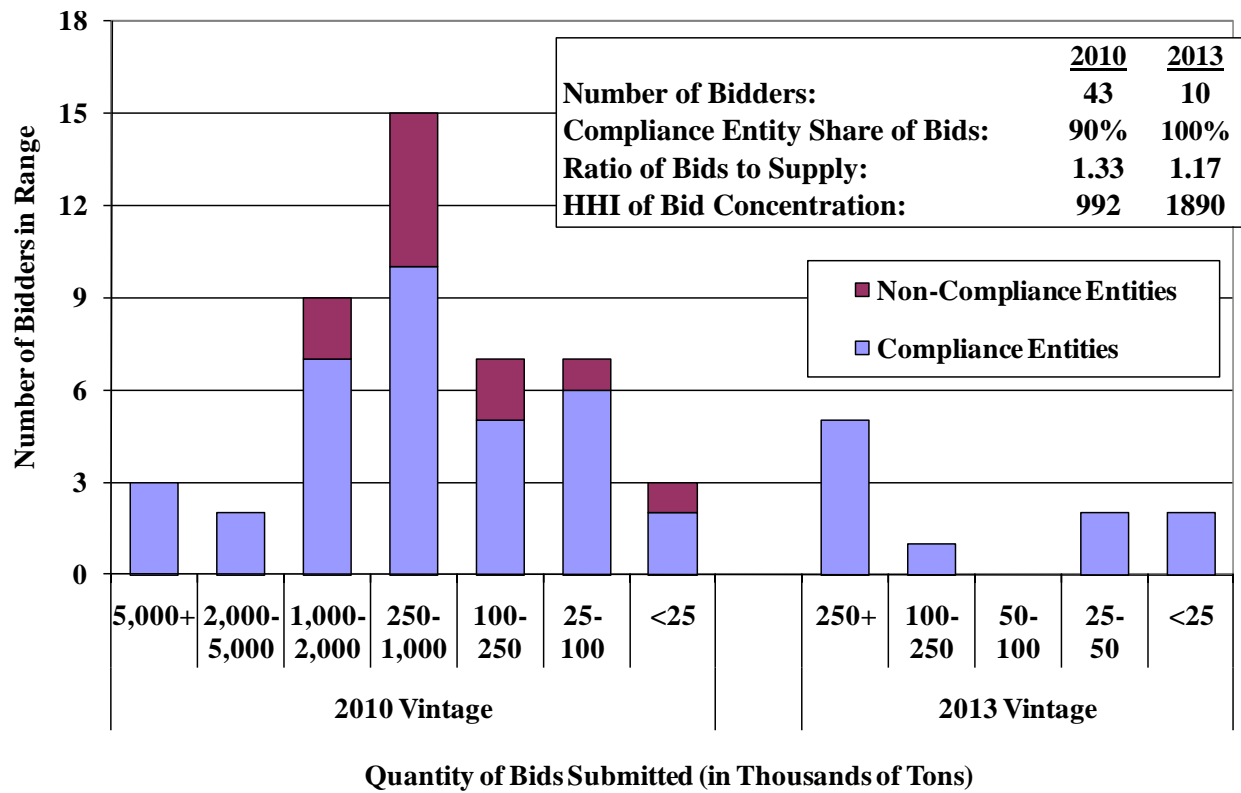
A small number of allowances were also auctioned in advance for the 2013 vintage year, with ten compliance entities or their affiliates submitting bids. In our review of the bids and the qualification process, we found no material evidence of anti-competitive conduct or significant barriers to participation.

The following figure summarizes the quantities of allowances for which bids were submitted in the two offerings. In the 2010 vintage offering, all of the bidders that submitted bids for a large quantity of allowances (e.g., at least 2 million tons or 5 percent of the available supply) were compliance entities or their affiliates. Overall, compliance entities accounted for 90 percent of the quantity of allowances for which bids were submitted in the 2010 vintage offering. The quantity of allowances for which bids were submitted decreased from 2.3 times the available supply in Auction 7 to 1.3 times the available supply in Auction 8.

In the 2013 vintage offering, the quantity of allowances for which bids were submitted was 1.2 times the available supply. All of the bids were submitted by compliance entities in the 2013 vintage offering.

The bid quantities were widely distributed among the 43 bidders in the 2010 vintage offering. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), was low at 992 in the 2010 vintage offering. Fewer entities submitted bids in the 2013 vintage offering, leading the concentration of bids to be substantially higher (1890). The HHI is a standard measure of concentration calculated by squaring each entity’s share and then summing the squares across all entities (hence, the index ranges from 0 to 10,000). In this report, firms that are involved in the management of a budget source may be categorized as compliance entities even if they do not have stock ownership in the source.

Figure 2: Quantity of Bids Submitted by Entity
By Type of Entity and Quantity Bid



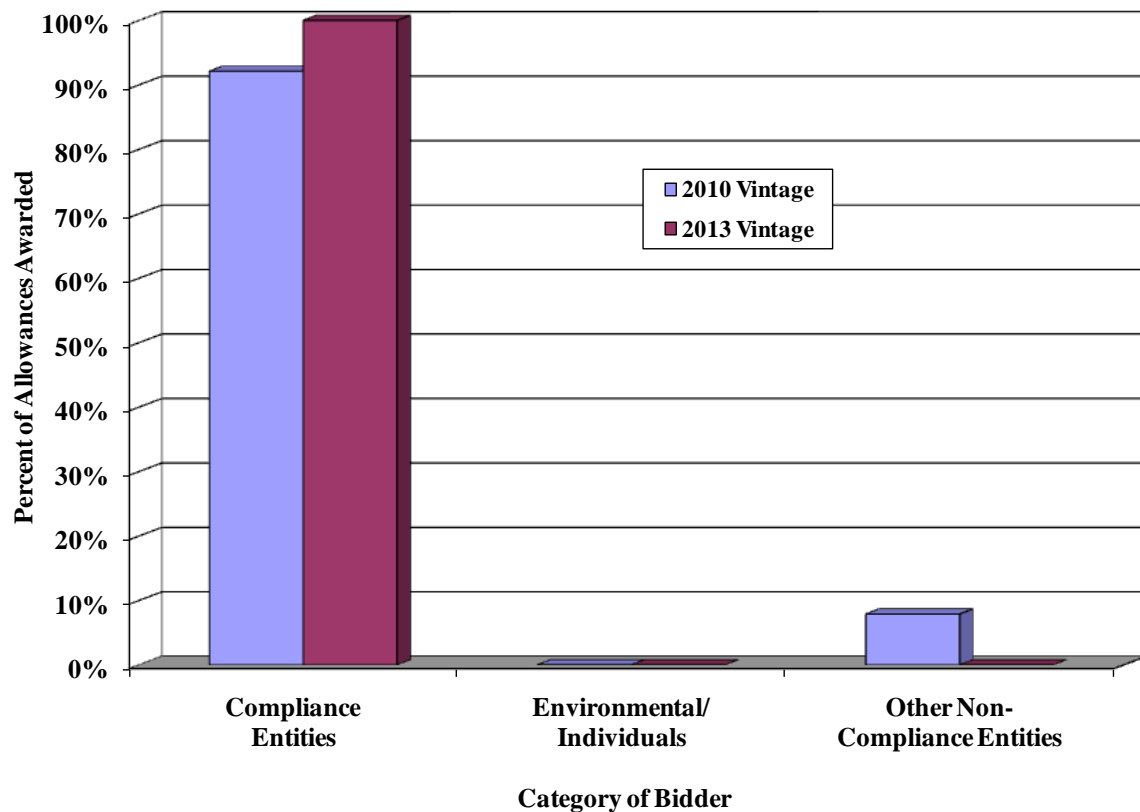
C. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 8

In the 2010 vintage offering, awards were widely distributed across 42 bidders with 5 bidders purchasing two million tons or more, 11 bidders purchasing one million tons or more, and 24 bidders purchasing 250,000 tons or more. In the 2013 vintage offering, awards were distributed across ten bidders with four bidders purchasing 300,000 tons or more.

The following figure shows the quantity of allowances purchased in the auction by each of three types of entities:

- *Compliance Entities:* This includes all compliance entities and their affiliates.
- *Environmental/Individuals:* This includes non-compliance entities describing themselves as “Environmental Groups” or “Individual Person” in their qualification application.
- *Other Non-Compliance Entities:* This includes all other non-compliance entities.

**Figure 3: Quantity of Allowances Awarded
By Type of Entity**



The following table shows the quantity of allowances purchased by each bidder. The identity of each bidder is masked, and the bidders are ranked according to the amount of allowances awarded, from largest to smallest.

Table 1: Quantity of Allowances Awarded by Bidder

Number of 2010		Number of 2013	
Bidder	Allowances Awarded	Bidder	Allowances Awarded
Bidder 1	7,500,000	Bidder 1	534,000
Bidder 2	7,150,000	Bidder 2	534,000
Bidder 3	4,383,585	Bidder 3	475,000
Bidder 4	2,500,000	Bidder 4	300,000
Bidder 5	2,397,000	Bidder 5	177,993
Bidder 6	1,500,000	Bidder 6	53,000
Bidder 7	1,450,000	Bidder 7	25,000
Bidder 8	1,450,000	Bidder 8	25,000
Bidder 9	1,400,000	Bidder 9	13,000
Bidder 10	1,250,000	Bidder 10	1,000
Bidder 11	1,052,000		
Bidder 12	966,000		
Bidder 13	800,000		
Bidder 14	795,000		
Bidder 15	791,000		
Bidder 16	630,000		
Bidder 17	550,000		
Bidder 18	500,000		
Bidder 19	500,000		
Bidder 20	476,000		
Bidder 21	400,000		
Bidder 22	370,000		
Bidder 23	307,000		
Bidder 24	260,000		
Bidder 25	240,000		
Bidder 26	200,000		
Bidder 27	200,000		
Bidder 28	175,000		
Bidder 29	100,000		
Bidder 30	75,000		
Bidder 31	61,000		
Bidder 32	47,000		
Bidder 33	38,000		
Bidder 34	32,000		
Bidder 35	29,000		
Bidder 36	25,000		
Bidder 37	24,000		
Bidder 38	20,000		
Bidder 39	20,000		
Bidder 40	15,000		
Bidder 41	4,000		
Bidder 42	3,000		

D. SUMMARY OF BID PRICES IN AUCTION 8

The distribution of bid prices submitted in the auction indicates that the demand for allowances was relatively elastic, which is a signal that the results were competitive.

The following table reports several statistics regarding the bid prices for bids submitted in Auction 8. The median and mean bid prices are weighted by the quantity of each bid.

	<u>2010</u>	<u>2013</u>
Bid Prices:		
Minimum	\$1.86	\$1.86
Maximum	\$4.00	\$2.02
Average (Median)	\$2.00	\$1.89
Average (Mean)	\$2.01	\$1.89
Clearing Prices:	\$1.88	\$1.86

E. NAMES OF POTENTIAL BIDDERS IN AUCTION 8

In accordance with Section 2.8 of the Auction Notice for CO₂ Allowance Auction 8 on June 9, 2010, the Participating States are releasing the names of Potential Bidders in Auction 8. The states defined potential bidders as: “Each Applicant that has been qualified and submitted a complete *Intent to Bid*.” The list of 53 Potential Bidders is as follows:

AES Eastern Energy, LP	Lake Road Generating Company, L.P
Aircraft Services Corporation	Louis Dreyfus Energy Services, LP
ANP Funding I, LLC	Macquarie Energy, LLC
Astoria Generating Company, LP	Massachusetts Muni. Wholesale Elec. Co.
Barclays Bank PLC	Merrill Lynch Commodities, Inc.
Boston Generating, LLC	Millennium Power Partners, LP
Brick Power Holding, LLC	Mirant Energy Trading, LLC
Bridgeport Energy, LLC	Morgan Stanley Capital Group, Inc.
Brooklyn Navy Yard Cogen Partners, LP	National Grid Gen. dba National Grid
Caithness Long Island, LLC	New Athens Generating Company, LLC
Calpine Energy Services, LP	NextEra Energy Power Marketing, LLC
Castleton Power, LLC	North American Energy Alliance, LLC
Conectiv Energy Supply, Inc.	NRG Power Marketing, LLC
Conn. Municipal Electric Energy Coop.	Old Dominion Electric Cooperative
ConocoPhillips Company	Power Authority of the State of New York
Consolidated Edison Comp. of NY, Inc.	PPL EnergyPlus, LLC
Constellation Energy Commodities Group	PSEG Energy Resources & Trade, LLC
CP Energy Marketing (US) Inc.	Public Service Company of New Hampshire
Delaware Municipal Electric Corp.	RBC
Dominion Energy Marketing, Inc.	Rochester Gas and Electric Corporation
DTE Carbon, LLC	Selkirk Cogen Partners, LP
Dynegy Marketing and Trade, LLC	TAQA Gen X, LLC
E.ON Energy Trading SE	TransCanada Power Marketing, Ltd.
GDF SUEZ Energy Marketing NA, Inc.	Verso Paper Corp.
H.Q. Energy Services (US) Inc.	Village of Freeport
Hess Corporation (G)	Vitol Inc.
J-Power USA Development Co., Ltd.	