
RGGI Inc.



**MARKET MONITOR REPORT
FOR AUCTION 7**

Prepared for:

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

Prepared By:

**POTOMAC
ECONOMICS**

March 12, 2010

This report was prepared by Potomac Economics (the contractor) in the course of performing work contracted for and sponsored by RGGI, Inc. on behalf of the RGGI Participating States (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont). The opinions expressed in this report do not necessarily reflect those of RGGI, Inc. or any of the Participating States, and reference to any specific product, service, process, or method does not constitute an implied or expressed recommendation or endorsement of it. Further, RGGI, Inc., the Participating States, and the contractor make no warranties or representations, expressed or implied, as to the fitness for particular purpose or merchantability of any product, apparatus, or service, or the usefulness, completeness, or accuracy of any processes, methods, or other information contained, described, disclosed, or referred to in this report. RGGI, Inc., the Participating States, and the contractor make no representation that the use of any product, apparatus, process, method, or other information will not infringe privately owned rights and will assume no liability for any loss, injury, or damage resulting from, or occurring in connection with, the use of information contained, described, disclosed, or referred to in this report.

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 7

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 7, which was held on March 10, 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.

Participation in the 2010 vintage offering was robust with 51 separate entities submitting bids to purchase 2.3 times the available supply of allowances, resulting in a clearing price of \$2.07 per ton. Compliance entities or their affiliates purchased 85 percent of the allowances in the auction.

A small number of allowances were auctioned for the second control period (with a 2013 vintage year). 98 percent of the 2013 vintage allowances were sold, with nine entities submitting bids to purchase 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 auction, 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 7 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.

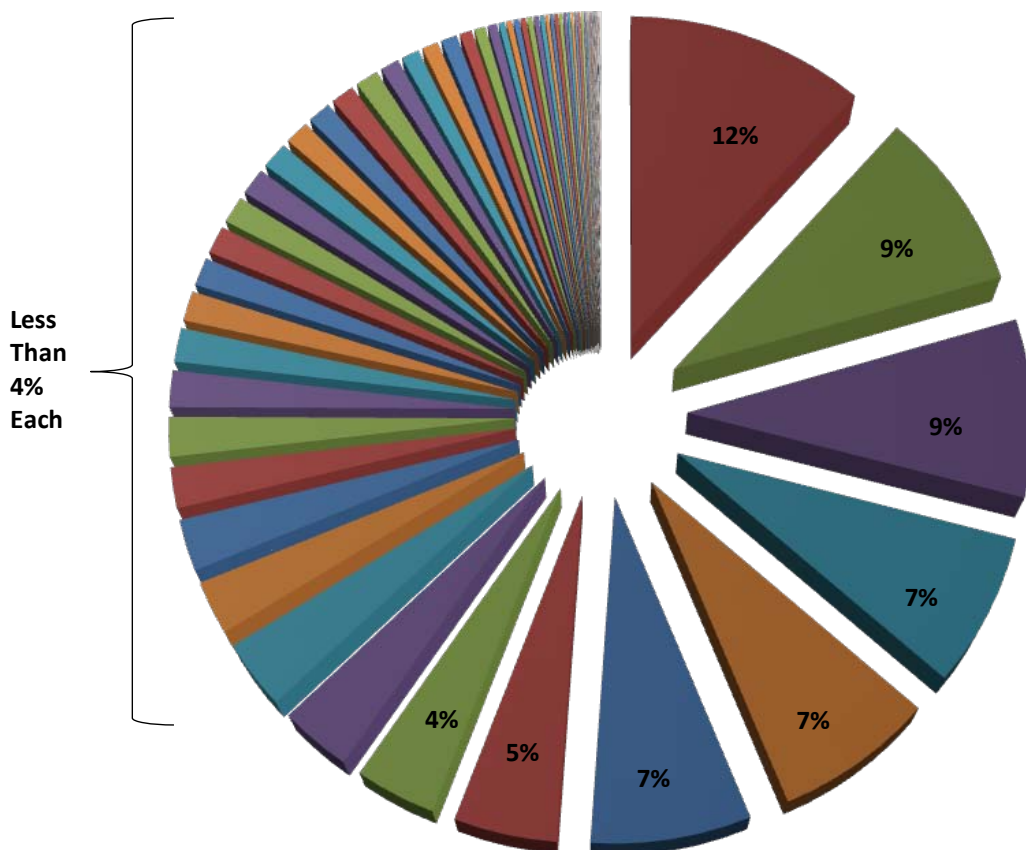
APPENDIX

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 7

In the 2010 vintage offering, bids were submitted for a large quantity of allowances relative to the available supply, 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.

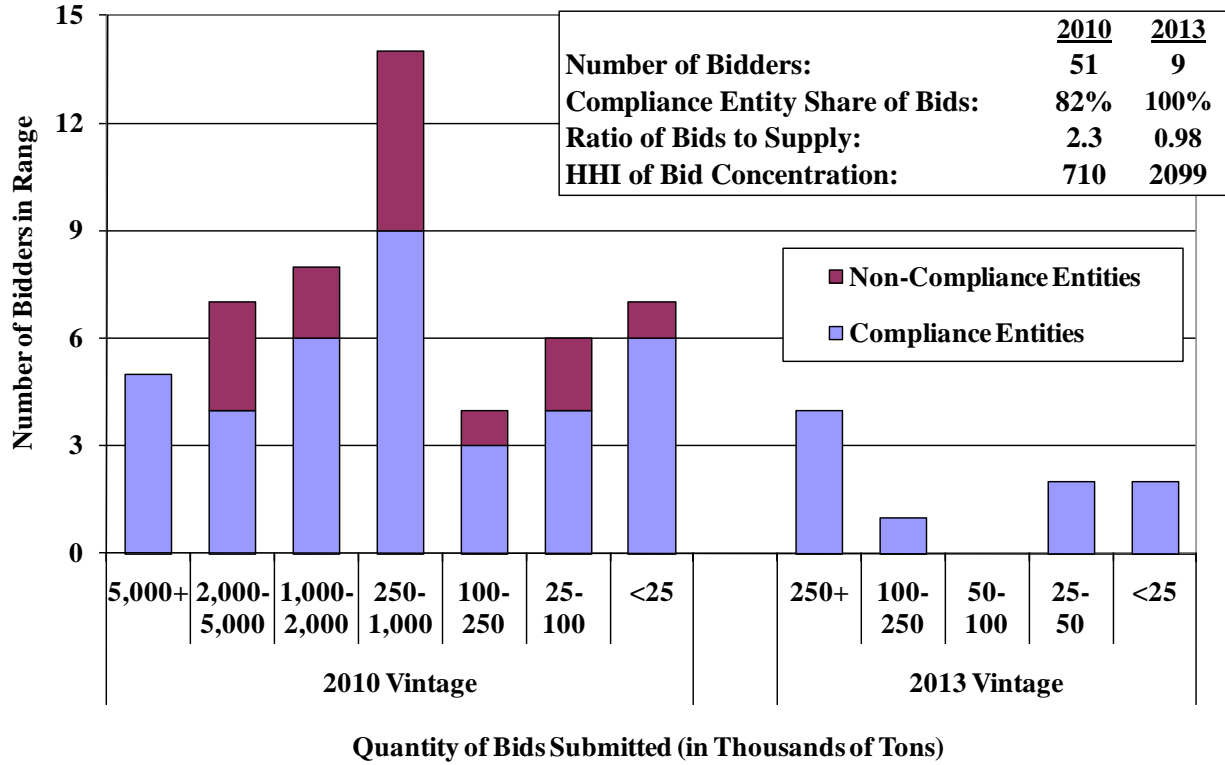
A small number of allowances were also auctioned in advance for the 2013 vintage year, with nine compliance entities or their affiliates submitting bids to purchase 98 percent of the available supply of allowances. In our review of the bids and the qualification process, we found no material evidence 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, most of the bidders that submitted bids for a large quantity of allowances (e.g., at least 2 million tons which is 5 percent of the available supply) were compliance entities (or their affiliates). Overall, compliance entities accounted for 82 percent of the quantity of allowances for which bids were submitted in the 2010 vintage offering. Relative to the available supply of allowances, the quantity of allowances for which bids were submitted was slightly smaller than in the previous four auctions. However, the absolute quantity of allowances for which bids were submitted (over 90 million) was higher than in the previous four auctions.

In the 2013 vintage offering, the quantity of allowances for which bids were submitted by compliance entities increased 31 percent from Auction 6. No non-compliance entities participated in the 2012 and 2013 vintage offerings of Auction 5, Auction 6, and Auction 7.

In addition to demand exceeding supply by 2.3 to 1, the bid quantities were widely distributed among the 51 bidders in the 2010 vintage offering. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), was very low at 710 in the 2010 vintage offering. Fewer entities submitted bids in the 2013 vintage offering, leading the concentration of bids to be substantially higher (2099). 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



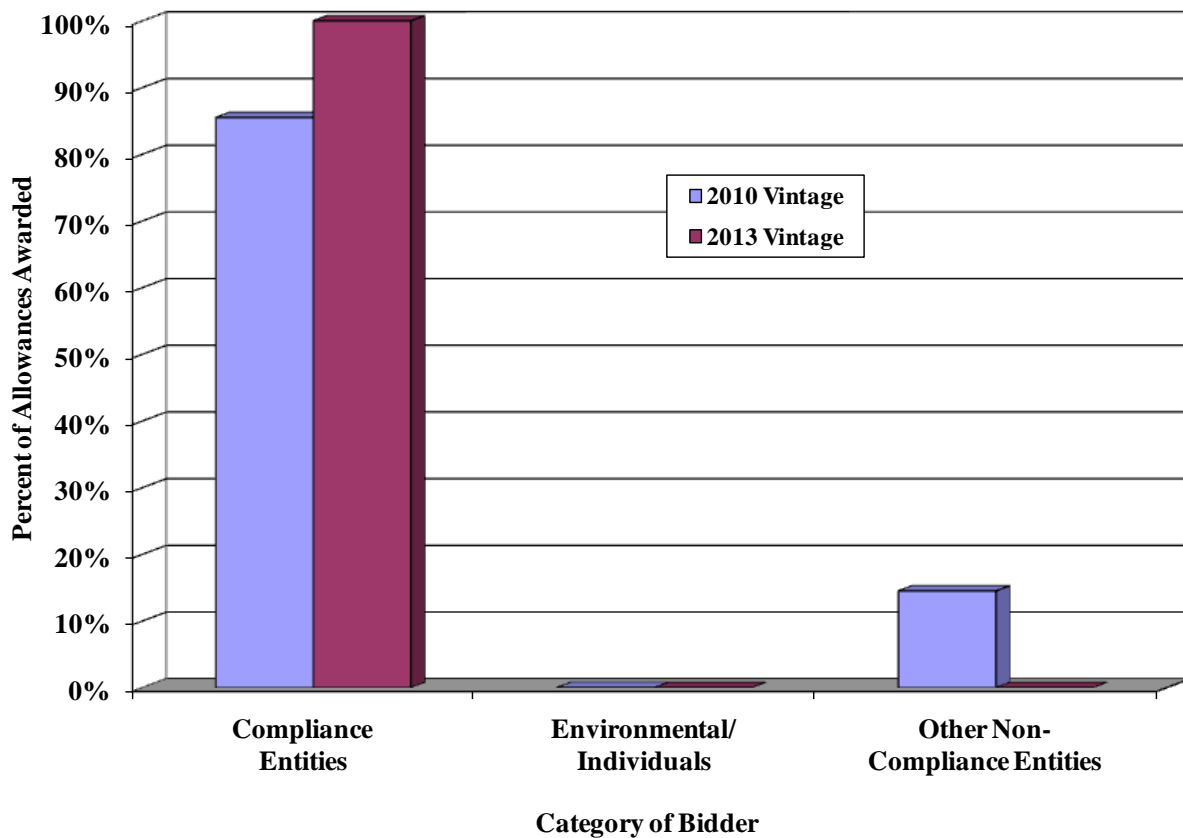
C. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 7

In the 2010 vintage offering, awards were widely distributed across 40 bidders with seven bidders purchasing two million tons or more, eleven 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 nine bidders with five bidders purchasing 200,000 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

Bidder	Number of 2010 Allowances Awarded	Bidder	Number of 2013 Allowances Awarded
Bidder 1	7,000,000	Bidder 1	534,000
Bidder 2	5,000,000	Bidder 2	534,000
Bidder 3	5,000,000	Bidder 3	484,000
Bidder 4	2,941,408	Bidder 4	267,000
Bidder 5	2,650,000	Bidder 5	200,000
Bidder 6	2,250,000	Bidder 6	26,000
Bidder 7	2,150,000	Bidder 7	25,000
Bidder 8	1,425,000	Bidder 8	20,000
Bidder 9	1,300,000	Bidder 9	1,000
Bidder 10	1,300,000		
Bidder 11	1,300,000		
Bidder 12	975,000		
Bidder 13	775,000		
Bidder 14	704,000		
Bidder 15	700,000		
Bidder 16	700,000		
Bidder 17	600,000		
Bidder 18	600,000		
Bidder 19	500,000		
Bidder 20	400,000		
Bidder 21	300,000		
Bidder 22	289,000		
Bidder 23	274,000		
Bidder 24	260,000		
Bidder 25	200,000		
Bidder 26	200,000		
Bidder 27	200,000		
Bidder 28	188,000		
Bidder 29	115,000		
Bidder 30	85,000		
Bidder 31	58,000		
Bidder 32	50,000		
Bidder 33	40,000		
Bidder 34	39,000		
Bidder 35	15,000		
Bidder 36	10,000		
Bidder 37	10,000		
Bidder 38	5,000		
Bidder 39	2,000		
Bidder 40	2,000		

D. SUMMARY OF BID PRICES IN AUCTION 7

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 7. 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	\$5.00	\$2.06
Average (Median)	\$2.06	\$1.90
Average (Mean)	\$2.07	\$1.94
Clearing Prices:	\$2.07	\$1.86

E. NAMES OF POTENTIAL BIDDERS IN AUCTION 7

In accordance with Section 2.8 of the Auction Notice for CO₂ Allowance Auction 7 on March 10, 2010, the Participating States are releasing the names of Potential Bidders in Auction 7. The states defined potential bidders as: “Each Applicant that has been qualified and submitted a complete *Intent to Bid*.” The list of 61 Potential Bidders is as follows:

Adirondack Council Inc.	Koch Supply & Trading, LP
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 Energy, LLC	Massachusetts Muni. Wholesale Elec. Co.
Astoria Generating Company, LP	Merrill Lynch Commodities, Inc.
Barclays Bank PLC	Milford Power Company, LLC
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	ORBEO
Consolidated Edison Comp. of NY, Inc.	Power Authority of the State of New York
Constellation Energy Commodities Group	PPL EnergyPlus, LLC
Dominion Energy Marketing, Inc.	PSEG Energy Resources & Trade, LLC
DTE Carbon, LLC	Public Service Company of New Hampshire
Dynegy Marketing and Trade, LLC	RBC
GDF SUEZ Energy Marketing NA, Inc.	Rochester Gas and Electric Corporation
Granite Ridge Energy, LLC	Selkirk Cogen Partners, LP
H.Q. Energy Services (US) Inc.	Sempra Energy Trading, LLC
Hess Corporation (G)	Statkraft Markets GmbH
Indeck-Corinth Limited Partnership	TAQA Gen X, LLC
Indeck-Oswego Limited Partnership	TransCanada Power Marketing, Ltd.
Indeck-Yerkes Limited Partnership	Verso Paper Corp.
Integrus Energy Services, Inc.	Vitol Inc.
J-Power USA Development Co., Ltd.	