
RGGI Inc.



**MARKET MONITOR REPORT
FOR AUCTION 10**

Prepared for:

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

Prepared By:

**POTOMAC
ECONOMICS**

December 3, 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 10

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 10, which was held on December 1, 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 offering of 2009 vintage and 2010 vintage allowances with 38 entities submitting bids to purchase 57 percent of the available supply of allowances. This resulted in a clearing price equal to the reserve price of \$1.86 per ton. Compliance entities or their affiliates purchased 97 percent of the allowances in the auction.

A small number of allowances were auctioned for the second control period (with a 2013 vintage year). Four entities submitted bids to purchase 55 percent of the available supply of allowances, resulting in a clearing price equal to the reserve 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 10 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.

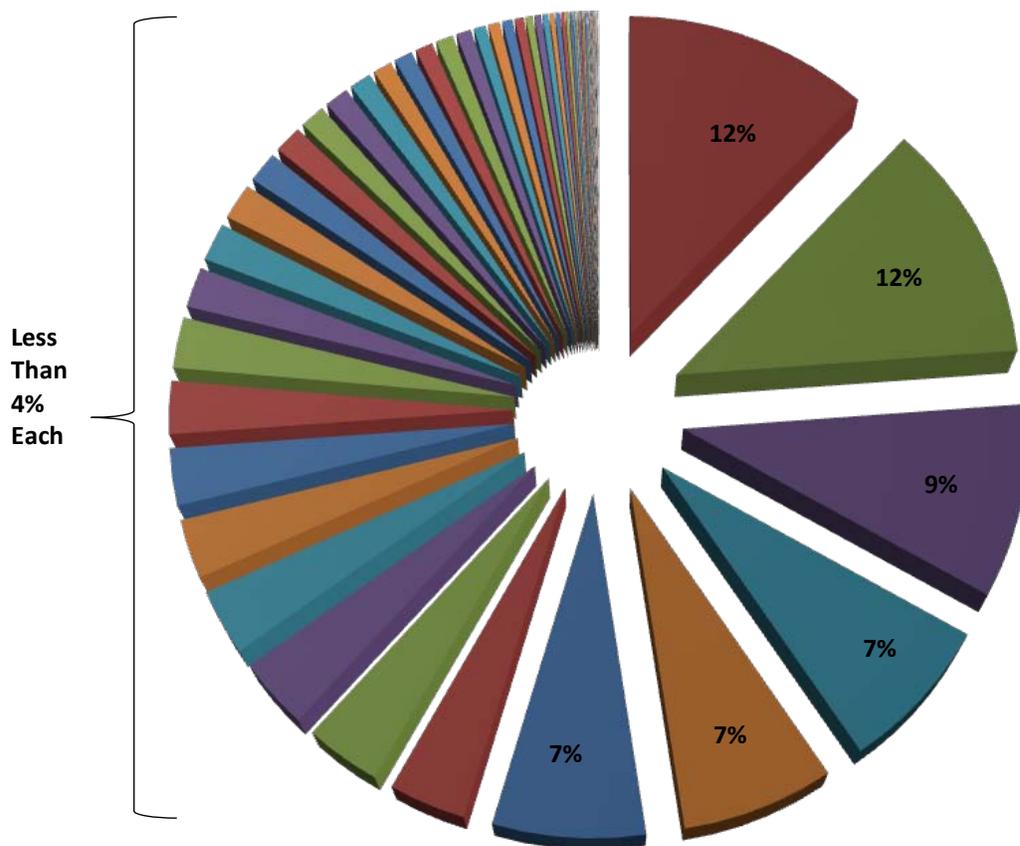
APPENDIX

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 4 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 10

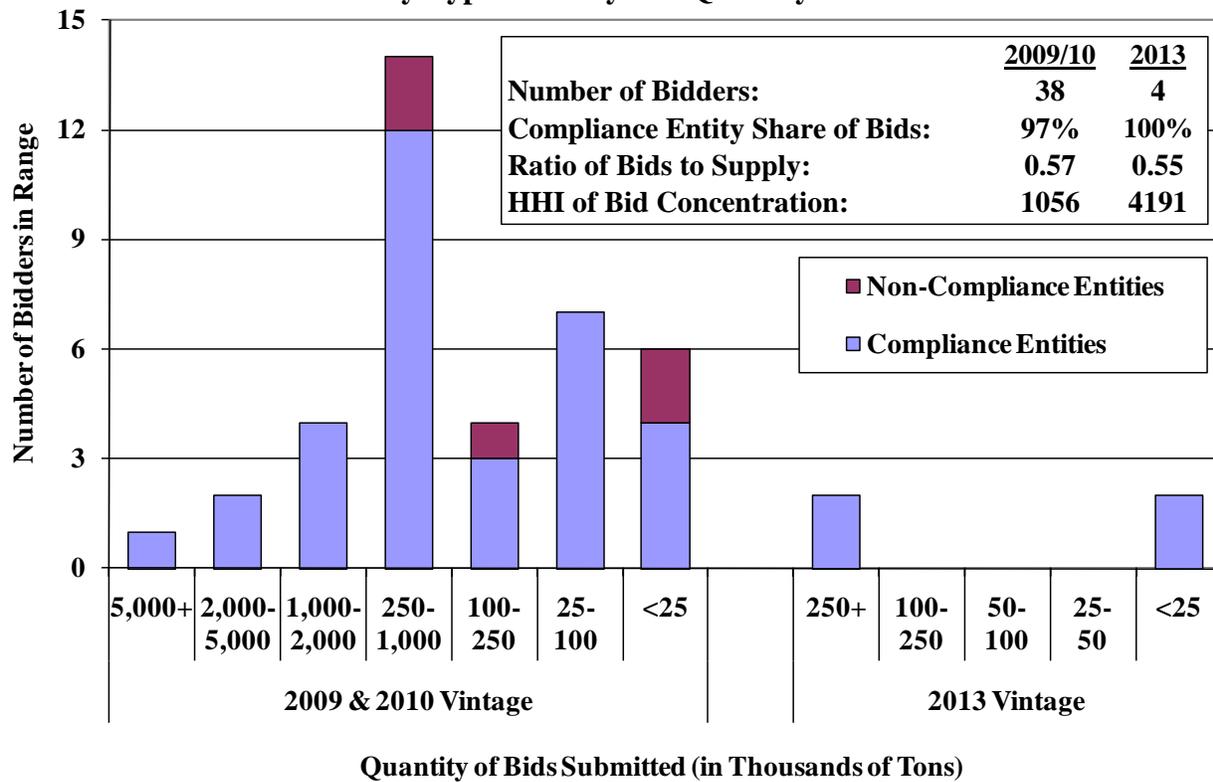
In the offering of 2009 and 2010 vintage allowances, bids were submitted by a large number of compliance entities and several non-compliance entities. A small number of allowances was also auctioned in advance for the 2013 vintage year, with four compliance entities or their affiliates submitting bids. 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 offering of 2009 vintage and 2010 vintage allowances, 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 97 percent of the quantity of allowances for which bids were submitted in the offering of 2009 vintage and 2010 vintage allowances. The quantity of allowances for which bids were submitted decreased to 0.57 times the available supply in Auction 10 from 0.75 times the available supply in Auction 9 and 1.3 times the available supply in Auction 8.

In the 2013 vintage offering, the quantity of allowances for which bids were submitted was 0.55 times the available supply. This decreased from 0.61 times the available supply in Auction 9 and 1.2 times the available supply in Auction 8. All of the bids were submitted by compliance entities in the 2013 vintage offering of Auction 10.

The bid quantities were widely distributed among the 38 bidders in the offering of 2009 vintage and 2010 vintage allowances. The concentration of bids, using the Herfindahl-Hirschman Index (“HHI”), was relatively low at 1056. Fewer entities submitted bids in the 2013 vintage offering, leading the concentration of bids to be substantially higher (4191). 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).

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



C. SUMMARY OF PURCHASES OF ALLOWANCES IN AUCTION 10

In the offering of 2009 vintage and 2010 vintage allowances, awards were widely distributed across 38 bidders with three bidders purchasing two million tons or more, seven bidders purchasing one million tons or more, and 21 bidders purchasing 250,000 tons or more. In the 2013 vintage offering, awards were distributed across four bidders with two bidders purchasing 500,000 tons or more.

Compliance entities or their affiliates purchased 97 percent of the allowances in the offering of 2009 vintage and 2010 vintage allowances and 100 percent of the allowances in the offering of 2013 vintage allowances.

The share of allowances purchased and several other quantities are reported for each of three types of entities:

- *Compliance Entities:* This includes all compliance entities and their affiliates. In this report, affiliated firms are firms that: (i) have a parent-subsidiary relationship with a compliance entity, (ii) are subsidiaries of a parent company that has a large interest in a compliance entity, (iii) have substantial control over the operation of a budget source and/or responsibility for acquiring RGGI allowances to satisfy its compliance obligations.
- *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.

The following statistics summarize the purchases and holdings of allowances by compliance entities and their affiliates under the RGGI program:

- In Auction 10, compliance entities and their affiliates purchased:
 - ✓ 97 percent of the V2009 & V2010 allowances sold, and
 - ✓ 100 percent of the V2013 allowances sold.
- In the first ten RGGI auctions, compliance entities and their affiliates purchased:
 - ✓ 85 percent of the V2009 & V2010 allowances sold,
 - ✓ 96 percent of the V2012 & V2013 allowances sold, and
 - ✓ 85 percent of all allowances sold.
- Compliance entities and their affiliates will hold 95 percent of the allowances in circulation following the settlement of allowances sold in Auction 10.

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 2009 & 2010 Allowances Awarded	Bidder	Number of 2013 Allowances Awarded
Bidder 1	6,451,000	Bidder 1	534,000
Bidder 2	2,645,000	Bidder 2	534,000
Bidder 3	2,213,000	Bidder 3	53,000
Bidder 4	1,609,000	Bidder 4	51,000
Bidder 5	1,344,000		
Bidder 6	1,250,000		
Bidder 7	1,021,000		
Bidder 8	900,000		
Bidder 9	750,000		
Bidder 10	650,000		
Bidder 11	600,000		
Bidder 12	600,000		
Bidder 13	599,000		
Bidder 14	520,000		
Bidder 15	500,000		
Bidder 16	417,000		
Bidder 17	342,000		
Bidder 18	340,000		
Bidder 19	330,000		
Bidder 20	300,000		
Bidder 21	250,000		
Bidder 22	215,000		
Bidder 23	200,000		
Bidder 24	124,000		
Bidder 25	110,000		
Bidder 26	88,000		
Bidder 27	79,000		
Bidder 28	70,000		
Bidder 29	60,000		
Bidder 30	53,000		
Bidder 31	36,000		
Bidder 32	35,000		
Bidder 33	16,000		
Bidder 34	13,000		
Bidder 35	10,000		
Bidder 36	9,000		
Bidder 37	5,000		
Bidder 38	1,000		

D. SUMMARY OF BID PRICES IN AUCTION 10

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 10. The median and mean bid prices are weighted by the quantity of each bid.

	<u>2009 & 2010</u>	<u>2013</u>
Bid Prices:		
Minimum	\$1.86	\$1.86
Maximum	\$10.02	\$2.01
Average (Median)	\$1.90	\$1.91
Average (Mean)	\$2.38	\$1.89
Clearing Prices:	\$1.86	\$1.86

E. NAMES OF POTENTIAL BIDDERS IN AUCTION 10

In accordance with Section 2.8 of the Auction Notice for CO₂ Allowance Auction 10 on December 1, 2010, the Participating States are releasing the names of Potential Bidders in Auction 10. The states defined potential bidders as: “Each Applicant that has been qualified and submitted a complete *Intent to Bid.*” The list of 49 Potential Bidders is as follows:

AES Eastern Energy, LP	Integrus Energy Services, Inc.
Aircraft Services Corporation	J-Power USA Development Co., Ltd.
Algonquin Windsor Locks, LLC	Logan Generating Company, LP
ANP Funding I, LLC	Massachusetts Muni. Wholesale Elec. Co.
Astoria Energy, LLC	Millennium Power Partners, LP
Astoria Generating Company, LP	Mirant Energy Trading, LLC
Barclays Bank PLC	National Grid Gen. dba National Grid
Boston Generating, LLC	New Athens Generating Company, LLC
Brick Power Holding, LLC	NextEra Energy Power Marketing, LLC
Brookfield Energy Marketing Inc.	North American Energy Alliance, LLC
Brooklyn Navy Yard Cogen Partners, LP	NRG Power Marketing, LLC
Caithness Long Island, LLC	Old Dominion Electric Cooperative
Calpine Energy Services, LP	PPL EnergyPlus, LLC
Cargill Power Markets, LLC	PSEG Energy Resources & Trade, LLC
Chambers Cogeneration, LP	Public Service Company of New Hampshire
Consolidated Edison Comp. of NY, Inc.	RBC
Constellation Energy Commodities Group	Rochester Gas and Electric Corporation
Dominion Energy Marketing, Inc.	Selkirk Cogen Partners, LP
Dynegy Marketing and Trade, LLC	Stonyfield Farm
Empire Generating Co., LLC	Sunoco Power Generation, LLC
EquiPower Resources	TAQA Gen X, LLC
H.Q. Energy Services (US) Inc.	The William & Flora Hewlett Foundation
Hawkeye Energy Greenport	Verso Paper Corp.
Hess Corporation (G)	Vitol Inc.
Indeck-Corinth Limited Partnership	