

California Air Resources Board Quarterly Auction 1

The Air Resources Board (ARB) held its first auction of greenhouse gas allowances (GHG) on November 14, 2012. The auction included a Current Auction of 2013 vintage allowances and an Advance Auction of 2015 vintage allowances. Below are key data and information on the results of the auction.

Current Auction of 2013 Vintage Allowances

Total 2013 Allowances Available for Sale:	23,126,110
Total 2013 Allowances Sold at Auction:	23,126,110
Total Submitted Bids Divided by	
Total 2013 Allowances Available for Sale:	3.10
Auction Reserve Price:	\$10.00
Settlement Price Per Allowance:	\$10.09
Allowances Purchased by Compliance Entities:	97.0%
Bid Price Summary Statistics	
Maximum Price:	\$91.13
Minimum Price:	\$10.00
Mean Price:	\$13.75
Median Price:	\$12.96
Herfindahl–Hirschman Index ¹ :	1133

Advance Auction of 2015 Vintage Allowances

Total 2015 Allowances Available for Sale:	39,450,000
Total 2015 Allowances Sold at Auction:	5,576,000
Total Submitted Bids Divided by	
Total 2015 Allowances Available for Sale:	0.14
Auction Reserve Price:	\$10.00
Settlement Price Per Allowance:	\$10.00
Allowances Purchased by Compliance Entities:	91.0%
Bid Price Summary Statistics	
Maximum Price:	\$17.25
Minimum Price:	\$10.00
Mean Price:	\$11.07
Median Price:	\$10.59
Herfindahl–Hirschman Index:	1485

¹ Please see Explanatory Notes after the list of Qualified Bidders for descriptions of all summary information.

List of Qualified Bidders for the Current Auction of 2013 Vintage Allowances and the Advance Auction of 2015 Vintage Allowances

A Qualified Bidder is an entity that registered for the auction, submitted an acceptable bid guarantee, and was approved by ARB to participate in the auction.

Aera Energy LLC
Air Liquide Large Industries U.S. LP
Berry Petroleum Company
BP Energy Company
California Department of Water Resources
California Institute of Technology
California Pacific Electric Company, LLC
California Steel Industries, Inc.
Calpine Energy Services, L.P.
Cardinal Cogen, Inc.
CE2 Carbon Capital LLC
Chevron U.S.A. Inc.
CI Power Cogeneration Plant
ConAgra Foods Packaged Foods LLC
Constellation Energy Commodities Group, Inc.
CP Energy Marketing (US) Inc.
DTE Carbon, LLC
EDF Trading North America, LLC
Element Markets, LLC
Exxon Mobil Corporation
Flyers Energy, LLC
GenOn Energy Management, LLC
Hilmar Cheese Company
J. G. Boswell Company
Kern Oil & Refining Co,
Kings River Conservation District
La Paloma Generating Company, LLC.
Lassen Municipal Utility District
Leprino Foods Company
Lockheed Martin Space Systems
Los Angeles Department of Water & Power
Luminus Energy Partners QP, LP
Macquarie Energy LLC
Modesto Irrigation District
Morgan Stanley Capital Group Inc.
Noble Americas Gas & Power Corp.

Northern California Power Agency (1)
Northern California Power Agency (2)
NRG Power Marketing LLC
Occidental Power Services, Inc.
Oildale Energy LLC
OLS Energy - Chino
Pacific Coast Producers
Pacific Gas and Electric Company
PacifiCorp
Phillips 66 Company
Pilkington North America, Inc.
Plumas-Sierra Rural Electric Cooperative
Power and Water Resources Pooling Authority
PPG Industries, Inc.
Redding Electric Utility
Regents of the University of California
Ripon Cogeneration LLC.
Riverside Cement Company
Royal Bank of Canada
Sacramento Municipal Utility District (SMUD)
San Diego Gas & Electric Company
San Joaquin Refining Company, Inc.
Saputo Cheese USA Inc.
Sempra Generation
Shell Energy North America (US), L.P.
Signal Hill Petroleum, Inc.
Silicon Valley Power (SVP), City of Santa Clara
Southern California Edison Company
Tesoro Refining and Marketing Company
The Morning Star Packing Company
TransAlta Energy Marketing (U.S.) Inc.
Turlock Irrigation District
Twin Eagle Resource Management, LLC
Ultramar, Inc.
Valero Refining Company-California, Benicia Refinery and Asphalt Plant
Vitol Inc.
William Bolthouse Farms Inc.

Explanatory Notes

Current Auction of 2013 Vintage Allowances

Total 2013 Allowances Available for Sale:	Total 2013 vintage allowances available for purchase in the auction in metric tons, including allowances consigned by Electric Distribution Utilities and allowances sold by the State of California. For the November 2012 auction, the only 2013 vintage allowances for sale are those consigned by the Electric Distribution Utilities.
Total 2013 Allowances Sold at Auction:	Total 2013 vintage allowances purchased in the auction in metric tons.
Total Submitted Bids Divided by Total 2013 Allowances Available for Sale:	Total number of allowances included in all the submitted bids for the current vintage (regardless of bid price) divided by the total number of current vintage allowances available in the auction.
Auction Reserve Price:	The minimum acceptable auction bid price for current vintage allowances in dollars per metric ton.
Settlement Price Per Allowance:	The current vintage allowance price that resulted from the auction, in dollars per metric ton.
Allowances Won by Compliance Entities:	The total number of current vintage allowances purchased in the auction by compliance entities divided by the total number of current vintage allowances sold in the auction. A Compliance Entity is a Covered Entity or Opt-in Covered Entity as defined in the Cap-and-Trade Regulation.
Bid Price Summary Statistics	Statistics are calculated from all the submitted bids for the current vintage (regardless of bid price).
Maximum Price:	Highest submitted bid
Minimum Price:	Lowest submitted bid
Mean Price:	Average submitted bid calculated as the sum of the bid price times the bid quantity of each submitted bid divided by the sum of the bid quantities across all submitted bids.
Median Price:	The price per metric ton calculated so that 50% of the allowances in the submitted bids fall above and below the median value.

Herfindahl–Hirschman Index (HHI):

The HHI is a measure of the concentration of allowances purchased by winning bidders relative to the total sale of current vintage allowances in the auction. The percentage of allowances purchased by each winning bidder is squared and then summed across all winning bidders. The HHI can range up to 10,000, representing 100% of the current vintage allowances purchased by a single bidder (i.e., $100 \times 100 = 10,000$).

Advance Auction of 2015 Vintage Allowances

The data for the future vintage allowance auction are computed in the same manner as computed for the current vintage allowance auction. No allowances are consigned to the future vintage auction.