

Auction Summary

At the fifth auction, held on November 19, 2013, the California Air Resources Board (CARB) once again sold all 16,614,526 current (V13) allowances available for sale. The V13 allowances sold at \$11.48 per allowance, 7% above the floor price of \$10.71. There were 76 qualified bidders and approximately 1.8 times more V13 credits bid on than were sold. For the second auction in a row, the state also sold all 9,560,000 future (V16) allowances available at a settlement price of \$11.10. By selling all current and future allowances, the fifth auction raised over \$136 million for the state, money that will be used to advance the goals of AB 32. A complete [CARB report](#) (PDF) gives more details on the auction results.

EDF Analysis

As was expected by analysts, the fifth auction showed a lower settlement price than in the previous four auctions. This is normal for end of year auctions as many of the covered entities likely purchased the allowances they need to cover their 2013 emissions targets earlier in the year. Still, the complete sale of allowances indicates participants are confident the market is here to stay and are serious about preparing for future compliance obligations. Key takeaways include:

- This auction completes a full year of successful auctions where 100% of V13 current allowances sold with a price above the floor, showing a strong and maturing market.
- For the second auction in a row, 100% of V16 future allowances sold, demonstrating demand and belief in the longevity of the market.
- The settlement price was lower compared to the August auction, but was expected at the last auction of the year and given the transition assistance provided during the first compliance period. However, prices close to the floor suggest that companies can reach compliance at a less cost than previously predicted.
- This auction brings the total state auction proceeds to approximately \$533 million. That money must be invested in projects that reduce climate pollution, and at least 25%, or over \$130 million to date, will provide clean energy opportunities to disadvantaged communities.

EDF will be publishing a one year report in early January 2014, so stay tuned for a complete analysis of the first year of cap-and-trade auctions.

For more information, below are some good reads from EDF's California Dream 2.0 Blog Post:

- [California's Carbon Market Caps off Successful First Year of Auctions](#)
- [One Year Later, Carbon Auctions Thriving in California](#)
- [Court Upholds California's Landmark Cap-and-Trade Program](#)
- [LASER: Turning the climate threat into a story of opportunity for Los Angeles](#)
- [Long-Term Emission Reduction Goal Starts with Post-2020 Policies](#)

CALIFORNIA CAP-AND-TRADE AUCTION

Overview of the Auction

When it happens:

Feb May Aug Nov

California Carbon Allowances (CCAs) are auctioned quarterly – **4 times a year through 2020.**

Who is selling?

The auction is run by the state, but some of the allowances auctioned are owned by the **state** and some are owned by the **utilities** (e.g. PG&E, Southern California Edison, etc.).

What is auctioned?

2 types of allowances are auctioned: **CURRENT YEAR VINTAGE + FUTURE YEAR VINTAGE**

Current year allowances are eligible for use starting in the current year and future year allowances can be banked for later use but may not be used for compliance until their vintage year. Each auction has a minimum allowable bid, or “floor price,” which started at \$10 in 2012 and increases every year by 5% plus the rate of inflation.

Floor Price
2012: \$10.00
2013: \$10.71

Note: A Vintage Year 2013 Allowance is abbreviated as V13. Likewise a Vintage Year 2015 is V15.

Auction Results to Date: Current Allowances (November 2013)

Summary: All of the 81,052,928 allowances available for sale in the first five auctions sold at a price per allowance above the set floor. In all auctions, there were more bids than allowances available for V13, indicating a competitive market. The great majority of bid winners in all auctions were compliance entities.

Current Allowances	Nov'12	Feb'13	May'13	Aug'13	Nov'13
Floor price	\$10.00	\$10.71	\$10.71	\$10.71	\$10.71
Settlement Price	\$10.09	\$13.62	\$14.00	\$12.22	\$11.48
V13 allowances offered (in millions)	23.13	12.92	14.52	13.87	16.61
% purchased	100%	100%	100%	100%	100%

-Average settlement price: \$12.28
-Average bid:allowance ratio = 1.75

Key Takeaways

- The 100% sale of V13 in all auctions point to a strong and viable carbon market with high competition and demand.
- The absence of a price spike indicates that bidders believe they will have lower than expected costs in complying with the carbon cap.
- The small price dip in settlement price during the last two auctions is an indication that regulated companies predict lower costs of compliance than previously expected.
- A lower price in the last auction of the year is normal expected as many covered entities have already purchased allowances to cover their 2013 targets.

Auction Results to Date: Future Allowances (November 2013)

Summary: Interest in the sale of future vintage allowances V15 and V16 has increased over the past five auctions. All future allowances available for sale were purchased during the most recent auction at a settlement price above the set floor price.

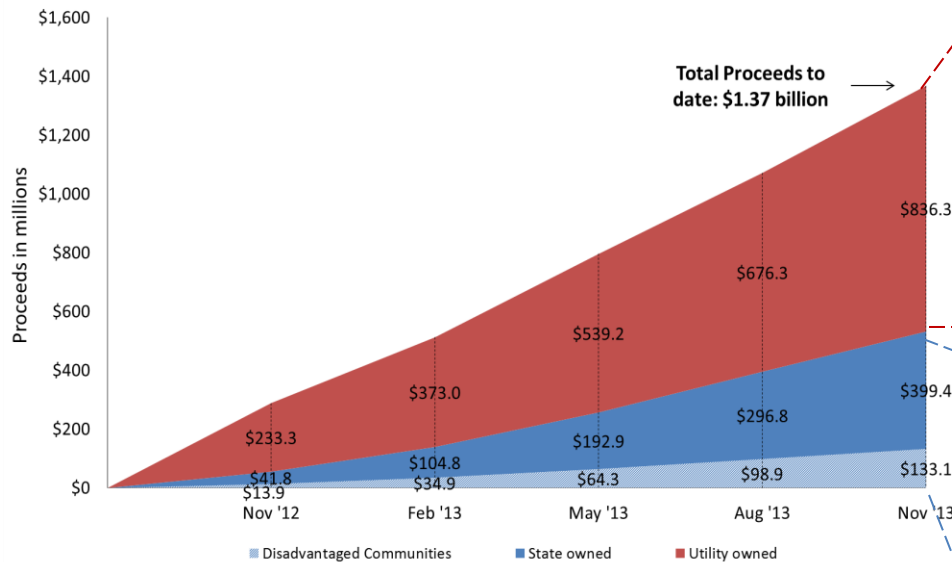
Future Allowances	Nov'12	Feb'13	May'13	Aug'13	Nov'13
Floor price	\$10.00	\$10.71	\$10.71	\$10.71	\$10.71
Settlement price	\$10.00	\$10.71	\$10.71	\$11.10	\$11.10
Allowances offered	39.45	9.56	9.56	9.56	9.56
% allowances purchased	14%	46%	79%	100%	100%

-Average bid:allowance ratio = 0.94

Key Takeaways

- The 100% sale of V16 allowances in the two most recent auctions reflects bidder confidence in ARB's commitment to the longevity of California's maturing carbon market.
- Bidders are preparing to meet their compliance obligations as we approach the first surrender date.

Auction Proceeds for a Clean California



This money gets returned to customers of California's investor-owned electric utilities (PG&E, So Cal Edison & SDG&E) in the following breakdown:

- **\$710,880,060 (85%)** to households
- **\$83632,948 (10%)** to small businesses (demand not more than 20kW in more than three months)
- **\$41,816,474 (5%)** to leakage exposed industries

This money must be dedicated by the state for use to advance the goals of AB 32*. A detailed investment plan is currently developed and will focus on making cost-effective advancements of clean transportation, energy generation, and energy efficiency. At least **25% (\$133,139,495)** must go to benefit disadvantaged communities.

*Amounts listed are from first five auctions only

*Funds raised from 2012 and 2013 auctions are being borrowed by the state and will be paid back in full with interest.

A Look at the Qualified Bidders

Number of Qualified Bidders at Each Auction

Nov '12	Feb '13	May '13	Aug '13	Nov '13
73	91	81	79	76

142 unique qualified bidders

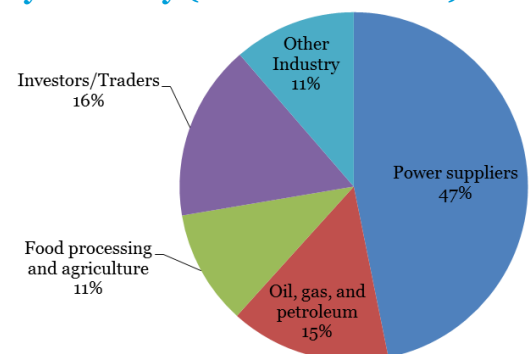
A diverse array of qualified bidders and a low HHI[†] index mean a competitive market and is a sign that there is no concentration of allowances in the hands of a single bidder.

Compliance entities made up

68%

of all qualified bidders

Breakdown of Qualified Bidders by Industry (over all auctions)



[†] The Hirschman-Herfindahl index (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. See official auction results at: <http://www.arb.ca.gov/cc/capandtrade/auction/auction.htm>