August 2014 California Auction Analysis

Auction Eight Summary
Since the start of California’s cap-and-trade program, the California Air Resources Board (CARB) has held eight quarterly auctions. The results of these auctions show that California has a strong carbon market with a fully functioning auction mechanism through which companies can acquire the allowances they need. The most recent auction took place on August 18, 2014 and the results once again demonstrate that this program is charging ahead. All 22.5 million V14 allowances that were offered were purchased at $11.50 per allowance, 16 cents above the floor price of $11.34. In the advance auction for V17 allowances, 70% of the offered allowances were purchased at the floor price, an uptick from the 44% sold in the previous auction. While this was consistent with expectations that the advanced auction would not sell out, this level of demand for 2017 credits, which can only be used for compliance starting in 2017, is promising for the future of the program. These results are especially encouraging given the recent push from oil companies to delay regulation of transportation fuels under the program. There were 71 qualified bidders in this auction, eight of which had never registered for an auction before. In total, this auction raised $98.7 million for the state, all of which must be invested for projects to further the goals of AB 32 and create additional greenhouse gas reductions. A complete CARB report (PDF) gives more details on the auction results.

In-depth EDF Analysis
These auction results reflect continued strength and stability in spite of recent and unsuccessful efforts to delay the regulation of transportation fuels as part of the program:

- Complete sale of all current allowances offered is an indication that companies are taking a price on carbon seriously and are successfully using the auctions as a way to purchase allowances for compliance. Bids for 3.1 million more 2014 vintage allowances were placed than could be filled, indicating healthy competition in the market.

- The price at which current allowances were sold in this auction was nearly the same as in the previous three auctions. This stability in price reflects greater comfort and familiarity among auction participants. Stability is important for businesses that need to plan ahead.

- The volume of current vintage credits offered for sale in this auction was greater than in any other auction of this year. This is because more utility-owned allowances were turned over to CARB to be sold in this auction.

- The level of demand for 2017 vintage allowances three years prior to their eligibility for use is a positive signal of confidence in the longevity of the program.

- This auction brings the total state auction proceeds to just over $833 million. That money must be invested in projects that reduce climate pollution, and at least 25%, or over $208 million to date, will be directed to disadvantaged communities. Over $1.3 billion has been garnered from the sale of investor-owned utility allowances since the program’s start, which must be spent to the benefit of ratepayers.

This was the last California-only auction before joint auctions with Quebec begin November 2014. A practice joint auction was held the first week of August to give stakeholders the opportunity to familiarize themselves with the bidding process and give the regulatory agencies the chance to make sure their systems are working correctly. The regulatory agencies in California and Quebec report that the practice auction went smoothly, paving the way for real joint auctions to begin.

For more information, below are posts from EDF’s California Dream 2.0 Blog:

- Results stay Steady in California’s Last Solo Auction Despite Calls for Fuels Delay
- Transportation Diversification is Key to Fixing California’s Gas Price and Pollution Woes
- Practice Makes Perfect for California and Quebec Joint Auctions

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Auction Overview

When do auctions happen?
California Carbon Allowances (CCAs) are auctioned quarterly, every FEB, MAY, AUG, AND NOV.

Who is selling and who is buying?
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.). Any person or company can bid at these auctions if they submit the proper paperwork and a bid guarantee.

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 year they are auctioned and future year allowances can be banked for later use, but may not be used for compliance until their vintage year. For example, in 2014, the two types of allowances sold are 2014 and 2017 vintage year allowances. 2017 vintage year allowances can only be used for compliance in 2017.

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.

Note: A 2014 vintage allowance is abbreviated as V14. Likewise a 2017 vintage allowance is V17.

Auction Update (Aug ’14): Sale of Current Year Vintage Allowances

Results

- Every current year vintage allowance offered for sale in all auctions thus far, both utility-owned and state-owned, has been purchased.
- Prices for current vintage allowances held steady from the last auction in May 2014.
- More current allowances were sold in this auction than the first two of this year due to the fact that the utilities gave more allowances to CARB for sale in this auction.

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<tbody>
<tr>
<td>Floor price</td>
<td>$10.00/$10.71</td>
<td>$11.34</td>
<td>$11.34</td>
<td>$11.34</td>
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<tr>
<td>Settlement price</td>
<td>$12.00*</td>
<td>$11.48</td>
<td>$11.50</td>
<td>$11.50</td>
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<tr>
<td># allowances offered (in millions)</td>
<td>81.05</td>
<td>19.54</td>
<td>16.95</td>
<td>22.47</td>
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<tr>
<td>% purchased</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td># of bids: # offered ratio</td>
<td>1.67</td>
<td>1.27</td>
<td>1.46</td>
<td>1.14</td>
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*This is the volume-weighted average across all five auctions in 2012 and 2013.

Key Takeaways

- Complete sale of current allowances at prices above the floor indicates California companies are confident in the integrity and strength of the program and are using the auctions to fulfill their compliance obligations.
- Prices have stabilized in the most recent auctions, reflecting an increased comfort and familiarity with the program among market participants.

Results

- 70% of the future vintage year allowances offered were sold at the floor price of $11.34.

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<tr>
<td>Settlement price</td>
<td>$10.81*</td>
<td>$11.38</td>
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<td># allowances offered</td>
<td>77.7</td>
<td>9.26</td>
<td>9.26</td>
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<tr>
<td>(in millions)</td>
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<td>% purchased</td>
<td>47.2%</td>
<td>100%</td>
<td>44%</td>
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<td># of bids: # offered</td>
<td>0.64</td>
<td>1.11</td>
<td>0.44</td>
<td>0.70</td>
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<tr>
<td>ratio</td>
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*This is the volume-weighted average across all five auctions in 2012 and 2013.

Key Takeaway

- The allowances sold in this advance auction can only be used for compliance beginning in 2017. While it was not expected that all V17 allowances would be sold in this auction given the limitation on their usage, the high level of demand that was seen in this auction is a promising indicator of a strong future ahead for the program.

Auction Update (Aug ‘14): Qualified Bidders

Results

<table>
<thead>
<tr>
<th># of bidders registered</th>
<th>2012/2013</th>
<th>Feb ‘14</th>
<th>May ‘14</th>
<th>Aug ‘14</th>
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<tbody>
<tr>
<td>80*</td>
<td></td>
<td>71</td>
<td>74</td>
<td>71</td>
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*This is the average across all five auctions in 2012 and 2013.

- Across the eight auctions so far, 157 entities have registered for at least one auction.
- 36 entities have registered for seven of the past eight auctions and 22 of these have registered for all eight.

Key Takeaways

- Companies from all sectors covered by the regulation have registered for these auctions, reflecting diversity in participation and indicating that all sectors are planning their compliance strategies. Power suppliers represent the largest portion, consistent with their portion of the covered emissions.
- A core group of companies are consistently requesting access to the auction process.

Auction Update (Aug ‘14): Proceeds

Results

- The sale of state-owned allowances has raised $833 million to date. All of this must be invested in projects that will create additional greenhouse gas reductions. At least 25% ($208 million) must go to projects that benefit disadvantaged communities.
- The sale of investor-owned utility allowances has raised over $1.3 billion, which must be returned to ratepayers. 85% of this ($1.1 billion) will go back to households.

Key Takeaway

- These auctions have raised a significant amount of revenue to be invested in projects that will further the impacts of the program and reduce pollution in California communities. Smart investment will be crucial in achieving California’s climate goals at the lowest cost.