

AB 32 Cap-and-Trade Auctions Frequently Asked Questions March 2014

Katie Hsia-Kiung, Research Fellow, khsia@edf.org, (415)-293-6070
Emily Reyna, Senior Project Manager, ereyna@edf.org, (415) 293-6068

On November 14, 2012, California successfully held the first carbon auction of its landmark greenhouse gas cap-and-trade program. The state will continue conducting tightly controlled auctions for greenhouse gas (GHG) allowances every quarter through 2020. Compliance obligations under the program began on January 1, 2013, with the first carbon allowances to be surrendered by regulated entities in November of 2014. For more information, please contact the authors of this FAQ or visit the [California Air Resources Board \(CARB\) website](#).

Auction basics

Q. Why is California auctioning allowances?

A. Cap and trade is a tool for achieving California's emission reduction targets. At the start of the program, approximately 90% of California carbon allowances (CCAs) are given away for free to companies; the remainder is auctioned. Auctioning CCAs sends a price signal on the value of those emissions and guarantees that all regulated entities, large and small, have access to allowances on an equal footing, reducing the risk that the market becomes dominated by a few players. Furthermore, auctioning CCAs generates proceeds the state can use to achieve further policy goals (such as reducing climate change impacts on disadvantaged communities) that may not be achieved if all allowances are given away for free.

California Auction Fast Facts

Schedule of Auctions: Auctions are held quarterly through 2020, every February, May, August, and November.

Auction format: Single-round, sealed-bid, uniform-price.

Minimum sale price: \$11.34 per allowance in 2014, with allowances sold in lots of 1,000.

Auction Proceeds: Must further the goals of AB 32. Overall, at least 25% are required to be used in ways that benefit disadvantaged communities.

Q. Who can participate in the auction and why participate?

A. Compliance (regulated) and non-compliance entities, as well as individuals, can participate in the auction as long as they register 30 days prior to the auction, meet the financial regulatory requirements, and post bid guarantees. Approved offset registries, verification bodies, and offset verifiers are not allowed to hold allowances and thus are not eligible to participate.¹ Non-compliance entities can only purchase up to 4% of the available allowances being auctioned.

A regulated entity might choose to participate in a quarterly auction if it anticipates needing CCAs to cover its emissions and believes that purchasing them through the auction will be less costly than reducing its emissions. A non-regulated entity may decide to participate if it foresees future regulation. For example, a company that falls just below the emissions threshold one year could become regulated in a future year if it increases production or loses efficiency. Other non-covered entities, such as brokers, non-profits, or individuals, may wish to participate in order to purchase, sell, or voluntarily retire allowances.

Q. How often do auctions take place?

A. Auctions take place quarterly through 2020. Specifically, they occur on the 12th business day of the second month of each quarter, every February, May, August, and November.ⁱⁱ

Q. What exactly is sold at these auctions?

A. Two types of allowances are sold at each auction: current year vintage and future year vintage. Current year vintage allowances can be used for compliance starting the same year they are auctioned. Future year vintage allowances can only be used for compliance starting in their vintage year, which is typically three years after the year in which they are auctioned. For example, during the four auctions held in 2013, 2016 vintage allowances were auctioned, which can only be used for compliance starting in 2016. Current and future vintages may also be used for compliance in the years following their vintage.

Q. Why are future vintage year allowances sold? Can entities bank credits?

A. Allowances for future years are sold to ensure that entities with long planning horizons have the opportunity to secure compliance with the regulation early into the program. Selling future allowances at quarterly auctions helps prevent a bidder from “shocking” the market with an unexpected large jump in demand for allowances. In addition to selling future allowances, the program rules also allow entities to buy and hold emission allowances until they are needed for future compliance obligations. Holding limits on the number of allowances an entity can retain prevent allowance hoarding or market manipulation.

Q. What portion of California allowances are offered for sale at auction?

A. Over the lifetime of the program, the percent of total allowances auctioned starts at approximately 10% and increases in the second and third compliance periods (2015-2017 and 2018-2020, respectively), with the rest given for free. CARB has contracted with experts to analyze whether additional free allowances are needed to prevent emissions leakage, and will update the regulation as needed. 100% of the allowances distributed to Investor Owned Utilities (IOU) are auctioned with proceeds used to benefit ratepayers. Auctioning of Publicly Owned Utility (POU) allowances is determined by individual POU governing bodies.

Auction Rules

Q. What is the auction format?

A. The allowance auctions are conducted using a *single-round, sealed-bid, uniform-price* format. Bids are submitted electronically using a secure internet-based auction platform. This is the same auction format used by the [Regional Greenhouse Gas Initiative \(RGGI\)](#) cap-and-trade program in the Northeastern U.S. Under this format, bidders may not communicate with one another, but may submit multiple confidential bids for a specific quantity of allowances at specific whole U.S. dollar amounts. Each bidder receives the quantity of allowances specified in their winning bids at the uniform settlement price. Allowances are bid and sold in lots of 1,000 units (tons).

Q. How is the final price per each allowance determined by the auction?

A. Participants submit confidential bids for a specific amount of allowances at a specific price. The highest bidder in the auction is sold their requested number of allowances first and so on until there are no more allowances. Regardless of original bids, all winning bidders pay the same price (the settlement price), which is determined by the value of the lowest winning bid. There is a minimum allowable bid, which in 2014 is \$11.34 and which increases by 5% plus the rate of inflation every year.

Q. What is the California reserve sale and how does it work?

- A. Six weeks after every quarterly auction, a reserve sale is scheduled to be held by CARB. At these reserve auctions, allowances are sold from the Allowance Price Containment Reserve (APCR). The APCR is composed of allowances that are held back from auction each year – 1% for 2013-2014, 4% for 2015-2017, and 7% for 2018-2020. These allowances are offered at three different price tiers in equal volumes – in 2014, allowances will become available at \$42.38, \$47.68 and \$52.98 (these prices also increasing by 5% annually plus the rate of inflation). By offering additional allowances at these set prices, the APCR provides protection against prices rising higher than these pre-established prices. CARB only holds reserve auctions if a company expresses interest by submitting an application for participation. To date, no reserve auctions have been held, as allowance prices at auction have not nearly approached the first tier price.

Auction safeguards

Q. What has CARB done to ensure the integrity of the auction?

- A. CARB has taken several steps to ensure proper oversight and security to prevent gaming and illegal market manipulation. The program requires (1) secure program registration; (2) enforced holding and purchase limits; and (3) a centralized allowance tracking system where all compliance instruments, allowances or offset credits exist.ⁱⁱⁱ

CARB has also contracted with an independent Market Monitor, Monitoring Analytics, LLC to monitor, detect and report any issues related to the auctions, reserve sales, and secondary markets. [Monitoring Analytics](#) also operates oversight for the PJM electricity market in the Northeast. CARB and the Market Monitor will review all auction results and financial settlements will not be processed until CARB has certified the auction results. In this role, the Market Monitor acts as a watchdog over the program as a whole. Any questionable behavior is subject to further investigation and prosecution by state enforcement officials. As a result of this close market monitoring, a handful of bidding violations were identified in February 2014, resulting in a total of \$165,000 in fines. This money goes to the Air Pollution Control Fund, which is administered by the California Legislature.

Q. What types of market simulations have been conducted?

- A. CARB has engaged the University of California and other private consultants to perform market simulations. These market simulations are responsible for creating models and running experiments based on the market structure and market rules of California's program. These activities are used to identify opportunities for program improvement, including identification of market rules that might lead to market disruptions or inefficiencies.^{iv}

After the auctions

Q. What auction results are publicly available?

- A. Auction results are available to the public in a report that includes, among other metrics (1) the auction settlement price, (2) a list of qualified bidders, (3) the number of allowances sold at auction, (4) the ratio of total quantity of allowances bid to total allowances available for sale, and (5) the total percent of allowances purchased by compliance entities. Once CARB has certified the auction, results are posted to both the [ARB website](#) and the [WCI Auction Platform website](#).^v

Q. If a compliance entity does not win any bids, how else can allowances be obtained?

- A. Compliance entities can obtain allowances through future quarterly auctions or reserve sales held by CARB. Alternatively, entities can buy allowances from other entities that are selling excess, through

the robust secondary market that has developed, or through purchasing approved offsets. No more than 8% of an entity's compliance obligation can be met with offsets.

Q. What will happen to the money that is raised through the auction?

- A. All proceeds from the auction of non-utility allowances are deposited in the GHG Reduction Fund. According to legislation, including the state budget, [AB 1532](#), and [SB 535](#), proceeds from this fund must be invested to further the goals of AB 32, funding solutions that allow California to reduce pollution, increase clean energy generation, keep energy prices down, and lessen the impacts of global warming. At least twenty-five percent of proceeds must be used in ways that benefit disadvantaged communities, which are disproportionately affected by climate pollution.

In January 2014, Governor Jerry Brown submitted his proposed budget, which included his plan for the investment of cap-and-trade proceeds. According to this proposal, the majority of the proceeds will go to developing sustainable communities and low carbon transportation. The rest will go to energy efficiency projects, clean energy projects, natural resource preservation, and waste diversion. The budget proposal also allocates more than the required twenty-five percent to projects that benefit disadvantaged communities. The Legislature is currently reviewing the proposal and will be finalized in July of 2014.

Q. What is the best resource for additional information on the auction?

- A. The Auction Platform allows the public to view and download auction results, see the auctions calendar and other resources. It is available at <https://www.wci-auction.org>. General information about the program can be found at the Air Resources Board Climate Change Program web site at: <http://www.arb.ca.gov/cc/cc.htm>.

Auction Observations

Q. How have the auctions gone in the program's first year?

- A. The results from the quarterly auctions thus far demonstrate that California has created a strong, viable, and enduring carbon market. All current vintage year allowances offered at auction were purchased, indicating that California businesses are engaging in the market and preparing themselves to comply with the regulation. In addition, complete sale of future vintage allowances in recent auctions demonstrates that participants are confident in the longevity of California's carbon market and believe the market will be actively trading until at least the year 2017.

From a breakdown of the bidders that have registered at each auction, it is clear that the participant pool is diverse, with every regulated sector represented. The number of qualified bidders has increased with every auction and a core group of 24 companies have registered to participate in all auctions so far. As of early 2014, the auctions raised the state approximately \$633 million, which must be invested in projects to further reduce California's GHG emissions. For the latest EDF auction analysis visit <http://www.edf.org/california-cap-and-trade-updates>.

Environmental Defense Fund's role - EDF's role in the auction is focused solely on the successful implementation of California's cap-and-trade program. EDF is committed to understanding and communicating information about the auction process to ensure it runs seamlessly and effectively.

ⁱ CARB, 2012 Auction Notice Attachment A, available at <http://www.arb.ca.gov/cc/capandtrade/auction/auction.htm>

ⁱⁱ 17 California Code of Regulations §95910

ⁱⁱⁱ CARB, Market and Oversight Factsheet, available at http://www.arb.ca.gov/cc/capandtrade/market_oversight.pdf

^{iv} CARB, 2012, available at <http://www.arb.ca.gov/cc/capandtrade/simulationgroup/simulationgroup.htm>

^v <http://www.arb.ca.gov/cc/capandtrade/auction/auction.htm> and <https://www.wci-auction.org/>