

# The Functioning of California's Cap-and-Trade Program



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# Facts and Figures

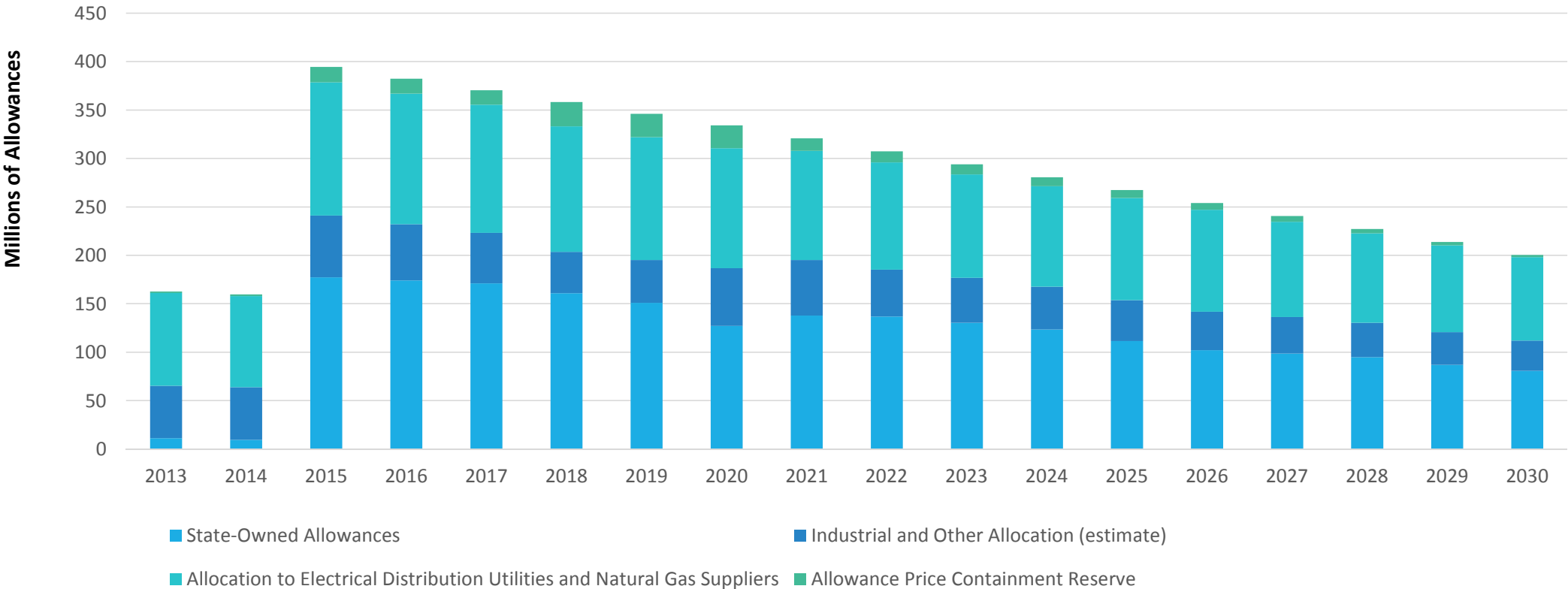
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- ~350 covered entities in the Cap-and-Trade Program
- 25 auctions held to-date (17 joint-auctions)
- > 760 million compliance instruments in private accounts (~\$11.8 billion in value)
- > \$11 billion placed in Greenhouse Gas Reduction Fund
- Carbon price is being incorporated into compliance, investment decisions, and electricity market

Cap-and-Trade establishes a declining cap across energy, transportation and industrial sectors.

2013-2030 Allowance Budgets



# Options for Acquiring Allowances

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- Quarterly allowance auctions
- Allowance Price Containment Reserve sales
- Secondary market

# Quarterly Allowance Auctions



## Auction Notice

California Cap-and-Trade Program and  
 Québec Cap-and-Trade System  
 Joint Auction of Greenhouse Gas Allowances  
 On August 20, 2019  
 Issued on June 21, 2019

Table 1: Allowances Offered for Sale

Auction	Number of Allowances
Current Auction	66,289,515
Advance Auction	9,038,000

2019 Annual Auction Reserve Prices

Auction	CA Annual Auction Reserve Price (USD)	QC Annual Auction Reserve Price (CAD)
Current Auction	\$15.62	\$15.31
Advance Auction	\$15.62	\$15.31

Auction Name	Total Current Vintage Allowances Offered	Total Current Vintage Allowances Sold	Current Auction Settlement Price	Total Future Vintage Allowances Offered	Total Future Vintage Allowances Sold	Advance Auction Settlement Price
May 2019 Joint Auction #19	66,321,122	66,321,122	\$17.45	9,038,000	9,038,000	\$17.40
February 2019 Joint Auction #18	80,847,404	80,847,404	\$15.73	9,038,000	5,983,000	\$15.62
November 2018 Joint Auction #17	78,825,717	78,825,717	\$15.31	9,401,500	9,401,500	\$15.33
August 2018 Joint Auction #16	79,421,265	79,421,265	\$15.05	9,401,500	9,401,500	\$14.90

### Auction Eligibility

All entities eligible to participate in an auction under the California Cap-and-Trade Program or Québec Cap-and-Trade System are eligible to participate in a joint auction. California covered entities, opt-in covered entities, and voluntarily associated entities (CA entities) are eligible to participate in a joint auction. Québec emitters and participants (QC entities) are eligible to participate in a joint auction.

An entity<sup>4</sup> must be registered under the California Cap-and-Trade Program or Québec Cap-and-Trade System and have a CITSS General Holding Account that has not been suspended or revoked<sup>5</sup> to be eligible for approval to participate in an auction.

# Reserve Sales



- Allowance Price Containment Reserve (APCR) allowances were set aside at the start of the Program and come from within the cap.

**Table 1: 2019 Reserve Tier Prices and Allowances Currently in Reserve**

<b>Reserve Tier</b>	<b>Tier Prices</b>	<b>Number of Reserve Allowances<sup>1</sup></b>
Tier 1	\$58.34 per allowance	13,537,000
Tier 2	\$65.65 per allowance	13,537,000
Tier 3	\$72.93 per allowance	34,428,247

- California offers sales of allowances from the APCR in any quarter that the Current Auction held in the preceding quarter resulted in a settlement price greater than or equal to 60% of the lowest Reserve Tier Price
- No Reserve Sales have been held

# Secondary Market



- Allowances are sold on the InterContinental Exchange (ICE)
  - Settled physically by registering the transaction in CITSS (Compliance Instrument Tracking System Service)

## DAILY PRICE MOVEMENT

### ***InterContinental Exchange :***

**Current Vintage:** V19 Jul19 \$17.41 (0.02); V19 Sep19 \$17.54 (0.05); V19 Dec19 \$17.69 (0.02)

**Other Vintages:** V21 Dec19 \$17.68 (0.02); V22 Dec19 \$17.63 (0.02)

*\*Price change from 07/23/2019- 07/24/2019 (\*All prices in USD)*

- Over-The-Counter Trading
  - Bilateral transactions that occur directly between two parties
  - Settled physically by registering the transaction in CITSS

# Transferring Instruments

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- Transaction agreement
  - Transfer of control of an allowance or CARB offset credit from one entity to another immediately or at a later date
    - Transaction registered in CITSS
      - Requires CITSS transfer between seller and buyer
      - Requires approval from CARB Executive Officer
      - Serial numbers of instruments will be moved into the buyer's account
      - Buyer and seller do not observe the serial numbers of transferred instruments
- Entities may buy, hold, and sell compliance instruments issued by either jurisdictions



# Key Actors in the Carbon Market



- List of all entities registered in CITSS updated each quarter

**Compliance Instrument Tracking System Service  
Registrants Report  
June 28, 2019**

This report lists the entities that have registered in the Compliance Instrument Tracking System Service (CITSS) and have active accounts as of noon the business day previous to the date listed above. There may be account changes that are in progress such as facility retirements and change of facility ownership that are not yet reflected in the report. The "Legal Name" is the entity's legal name as entered by the registrant. If a voluntary entity is an individual, the individual's name is listed as the "Legal Name." The "Entity ID" is the unique identification number for each entity. "Entity Type" is the status of the entity as a covered entity, a previously covered entity or a voluntary (general) participant in the Cap-and-Trade Program. "Mandatory Reporting GHG ID(s)" is the reporting ID of the facilities subject to the Mandatory Greenhouse Gas Reporting Regulation that are associated with the entity. This list contains entities registered in CITSS pursuant to California's Cap-and-Trade Regulation and does not include entities registered in a linked jurisdiction's program.

**This report is updated on the last business day of each calendar quarter.**

- <https://ww3.arb.ca.gov/cc/capandtrade/citssregistrants.pdf>

# Covered Entities



## 1.4 Who Will Have to Comply with the Cap-and-Trade Program?

Starting in 2012, major GHG-emitting sources, such as electricity generation (including imports), and large stationary sources (e.g., refineries, cement production facilities, oil and gas production facilities, glass manufacturing facilities, and food processing plants) that emit more than 25,000 MTCO<sub>2</sub>e per year will have to comply with the Cap-and-Trade Program. The program expands in 2015 to include fuel distributors (natural gas and propane fuel providers and transportation fuel providers) to address emissions from transportation fuels, and from combustion of other fossil fuels not directly covered at large sources in the program's initial phase. Additional information, including a preliminary list of the covered entities, can be found in Chapter 2 and at [http://www.arb.ca.gov/cc/capandtrade/covered\\_entities\\_list.pdf](http://www.arb.ca.gov/cc/capandtrade/covered_entities_list.pdf).

### o I Determine if My Company Needs to Comply with Cap-and-Trade

Most facilities within the specified sectors mentioned above that emit GHGs will have to comply with the Cap-and-Trade Program and/or the Mandatory Reporting Regulation. Some facilities will be required to report their annual emissions but not have to surrender compliance instruments. This is determined by the type of energy or industrial sector and the facility's annual GHG emissions. For example, most industries that emit 10,000 or greater metric tons of CO<sub>2</sub>e are required to report their GHGs whereas, the subset of industrial facilities with annual emissions equal to or greater than 25,000 metric tons of CO<sub>2</sub>e are required to comply with the Cap-and-Trade Program. To determine if your facility is subject to both or either regulation, please refer to the detailed description in Chapter 2.

# Voluntary Participants in the Cap-and-Trade Program



Type of Voluntary Participant	Qualification Criteria	Examples
Opt-in Covered Entity	<ul style="list-style-type: none"> <li>• Not classified as a covered entity</li> <li>• Entity within a sector subject to the Cap-and-Trade Program, with annual GHG emissions below the inclusion threshold</li> <li>• Has not had a holding account revoked</li> </ul>	<ul style="list-style-type: none"> <li>• Cement, glass, iron, petroleum, paper manufacturing facilities, or energy providers emitting less than 25,000 MTCO<sub>2e</sub> of GHG emissions annually</li> </ul>
Voluntarily Associated Entity	<ul style="list-style-type: none"> <li>• Not classified as a covered entity or an opt-in covered entity</li> <li>• Intends to purchase, hold, sell, retire or clear allowances or ARB offset credits</li> <li>• Has not had a holding account revoked</li> </ul>	<ul style="list-style-type: none"> <li>• Non-covered entities seeking to purchase, hold, sell, or retire allowances or ARB offset credits</li> <li>• Registered offset and early action offset project operators</li> <li>• Derivatives clearing organizations*</li> </ul>
Other Registered Participants	<ul style="list-style-type: none"> <li>• Do not intend to hold allowances or ARB offset credits</li> </ul>	<ul style="list-style-type: none"> <li>• Accredited offset verifiers</li> </ul>

# Additional Resources

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**California Air Resources Board:** <https://www.arb.ca.gov/homepage.htm>

**AB 32 Scoping Plan:** <https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>

**Cap-and-Trade Program:** <https://www.arb.ca.gov/cc/capandtrade/capandtrade.htm>

**Compliance Offset Program:** <https://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm>

**International Tropical Forest Standard:**

<https://www.arb.ca.gov/cc/ghgsectors/tropicalforests.htm>

**WCI Linkage:** <https://www.arb.ca.gov/cc/capandtrade/linkage/linkage.htm>