California Cap-and-Trade Program and Québec Cap-and-Trade System November 2025 Joint Auction #45

Summary Results Report

Background

The California Air Resources Board (CARB) and Québec's Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP)¹ held a joint auction of greenhouse gas (GHG) allowances² on November 19, 2025. The auction included a Current Auction of 2023, 2024, and 2025 vintage allowances and an Advance Auction of 2028 vintage allowances. The information provided in this report is a balance between the need for program transparency and protection of information about individual qualified bidders' market positions.

Prior to the certification of the auction, CARB and MELCCFP staff and the independent Market Monitor carefully evaluated the bids and determined that the auction process and procedures complied with the requirements of the California and Québec Cap-and-Trade Regulations (the Regulations). As provided below, the Market Monitor made the following determination:

The Market Monitor found that the auction was cleared consistent with the auction clearing rules in the Regulations and appropriate economic logic. The Market Monitor confirmed the clearing price and clearing quantities by qualified bidder for the Current Auction of 2023, 2024, and 2025 vintage allowances and for the Advance Auction of 2028 vintage allowances. The auction algorithm correctly applied requirements of the Regulations covering the bid guarantee. The Market Monitor did not observe any breaches of security or communication protocols.

The Market Monitor recommends that CARB and MELCCFP approve the November Auction results.

² The term "allowance" will be used throughout this document to refer to "allowance" as described in the California Regulation and to "emission unit" as defined in the Québec Regulation.







¹ Ministry of the Environment, the Fight Against Climate Change, Wildlife and Parks

Auction proceeds figures are not shown in this report because of the exchange rate process for determining final auction proceeds in a joint auction. Winning bids are submitted in one of two currencies – U.S. dollars (USD) or Canadian dollars (CAD). After receiving payment from the winning bidders, and using instructions from the linked jurisdictions (California and Québec), the Financial Services Administrator will exchange some amount of currency at then-prevailing market rates prior to transferring the auction proceeds to the jurisdictions.

The Financial Services Administrator will distribute auction proceeds to the jurisdictions after all qualified bidder payments are received. The jurisdictions will receive auction proceeds by December 18, 2025. As provided in the California Cap-and-Trade Regulation, sellers who consigned allowances in this auction will be paid the auction settlement price in USD for every consigned allowance sold. Information regarding jurisdiction-specific auction proceeds will be published after the auction is final.

California must receive auction proceeds only in USD. Québec must receive auction proceeds only in CAD. Thus, the total amount of auction proceeds received by the jurisdictions from the sale of allowances may be higher or lower than the auction settlement price multiplied by allowances sold depending on the prevailing exchange rates in effect at the time of currency exchange prior to the distribution of auction proceeds. Each jurisdiction will separately post information on December 18, 2025, providing the final amount of proceeds transferred.

Auction Results

The first three tables below provide key data and information on the results of the auction. The fourth table provides qualified bid summary statistics from the auction. Please see Explanatory Notes after the list of qualified bidders for descriptions of all summary information.







Table 1: Allowances Offered for Sale in the November 2025 Joint Auction #45

Description of Allowances	Current Auction Vintage 2023	Current Auction Vintage 2024	Current Auction Vintage 2025	Current Auction Vintage Total	Advance Auction Vintage 2028
Allowances Offered by CA Entity Consignment	-	-	21,203,157	21,203,157	-
Allowances Offered by CARB	23,821	103,293	23,741,511	23,868,625	5,682,500
Allowances Offered by MELCCFP Consignment ³	ı	-	77,549	77,549	-
Allowances Offered by MELCCFP	42	-	6,103,932	6,103,974	1,165,250
Total Allowances Offered for Sale	23,863	103,293	51,126,149	51,253,305	6,847,750

³ "Allowances offered by MELCCFP consignment" refers to allowances that would have been distributed to Québec entities without charge but are instead offered for sale at auction pursuant to section 46.8.1 of the Environment Quality Act.







Table 2: Allowances Sold in the November 2025 Joint Auction #45

Description of Allowances	Current Auction Vintage 2023	Current Auction Vintage 2024	Current Auction Vintage 2025	Current Auction Vintage Total	Advance Auction Vintage 2028
Allowances Sold for CA Entity Consignment	-	-	21,203,157	21,203,157	-
Allowances Sold for CARB	23,821	103,293	23,741,511	23,868,625	5,682,500
Allowances Sold for MELCCFP Consignment ³	-	-	77,549	77,549	-
Allowances Sold for MELCCFP	42	-	6,103,932	6,103,974	1,165,250
Total Allowances Sold at Auction	23,863	103,293	51,126,149	51,253,305	6,847,750

Table 3: Auction Data for November 2025 Joint Auction #45

Auction Data	Current Auction	Advance Auction
Total Qualified Bids Divided by Total Allowances Available for Sale	1.10	1.65
Proportion of Allowances Purchased by Compliance Entities	81.64%	62.77%
Herfindahl-Hirschman Index	515	953







Qualified Bid Summary Statistics

All Qualified Bid Summary Statistics are determined in USD including all bids submitted in USD and CAD. The CAD equivalent of the USD Qualified Bid Summary Statistics is based on the Auction Exchange Rate. USD statistics are converted into CAD in whole cents to be able to compare statistics on a common basis. The Auction Exchange Rate for this auction was 1.3997 CAD to one USD.

Table 4: Qualified Bid Summary Statistics for November 2025 Joint Auction #45

Auction Statistics	Current Auction USD	Current Auction CAD	Advance Auction USD	Advance Auction CAD
Auction Reserve Price	\$25.87	\$36.21	\$25.87	\$36.21
Settlement Price	\$28.32	\$39.64	\$29.61	\$41.45
Maximum Price	\$60.47	\$84.64	\$40.00	\$55.99
Minimum Price	\$25.87	\$36.21	\$25.87	\$36.21
Mean Price	\$35.15	\$49.20	\$31.07	\$43.49
Median Price	\$31.95	\$44.72	\$29.21	\$40.89
Median Allowance Price	\$32.81	\$45.92	\$29.96	\$41.94







List of qualified bidders for the November 2025 Joint Auction #45

A qualified bidder is an entity that completed an auction application, submitted a bid guarantee⁴ that was accepted by the Financial Services Administrator, and was approved by CARB or MELCCFP to participate in the auction. Qualified bidders may or may not have participated in the auction.

CITSS Entity ID	Entity Legal Name
CA1827	ACT Commodities, Inc.
QC2777	Agropur coopérative
CA1561	AltaGas Power Holdings (U.S.), Inc.
CA1913	BP Products North America, Inc.
CA3065	Braeswood Carbon Partners, LP
QC2193	Bridgestone Canada Inc.
CA1119	Calpine Energy Services, LP
CA1201	CalPortland Company
CA1075	Chevron U.S.A., Inc.
CA1037	City of Anaheim, Public Utilities Department
CA1732	City of Long Beach, Public Utilities Department
CA1038	City of Palo Alto
CA1344	City of Shasta Lake
CA1166	City of Vernon, Vernon Public Utilities
QC1901	Coopérative de solidarité Carbone
CA2050	CP Energy Marketing (US), Inc.
CA3095	Diameter Master Fund, LP
CA3307	DRW Investments, LLC
CA1091	DTE Energy Trading, Inc.
QC1384	Énergie Valero Inc.
QC2586	ÉNERGIES SONIC INC.
QC1502	Énergir, s.e.c.
CA1499	Five Rings Capital, LLC
QC2711	Formica Canada Inc
CA1081	Foster Poultry Farms
CA3324	Freepoint Commodities, LLC
CA3228	Garberville Gas Corporation
QC3860	Hamel Propane Inc.

⁴ The term "bid guarantee" refers to "bid guarantee" as described in the California Regulation and "financial guarantee" as defined in the Québec Regulation.







CITSS Entity ID	Entity Legal Name
CA1026	Hilmar Cheese Company
QC1359	Hydro-Québec
QC2789	Ifastgroupe 2004 L.P.
CA1293	J. Aron & Company, LLC
CA1727	Jaco Oil Company
CA2932	Kcarbon Holdings, LLC
CA3208	Klima Holdings I, LLC
QC1730	Les Produits Pétroliers Norcan S.E.N.C
CA1233	Liberty Utilities (CalPeco Electric), LLC
CA3121	Liminality Partners, LP
CA3641	LMR Master Fund DD, LLC
QC2095	MacEwen Petroleum Inc
CA1104	Macquarie Energy, LLC
CA3264	MARATHON PETROLEUM COMPANY, LP
CA2645	Mercuria Energy America, LLC
CA2887	Merrill Lynch Commodities, Inc.
CA3270	Metacapital Carbon Fund, LP
CA1239	Morgan Stanley Capital Group, Inc.
CA2232	Musket Corporation
CA1302	Naftex Operating Company
QC2107	NGL Supply Co. Ltd.
CA1191	Northern California Power Agency
CA1046	Pacific Gas and Electric Company
CA2046	Pacific Gas and Electric Company
CA3165	Pacific Summit Energy, LLC
CA1034	PacifiCorp
CA2106	PBF Energy Western Region, LLC
CA1410	Petro Diamond, Inc.
CA1279	Phillips 66 Company
CA3231	Pinnacle Merritt Point Domestic Opportunities, LLC
CA1595	Pixley Cogen Partners, LLC
CA1003	Plumas-Sierra Rural Electric Cooperative
CA1505	Powerex Corporation
CA1834	River City Petroleum
CA1102	Royal Bank of Canada
CA1163	Sacramento Municipal Utility District (SMUD)
CA3848	San Diego Community Power
CA1760	San Diego Gas and Electric Company







CITSS Entity ID	Entity Legal Name
CA1251	Shell Energy North America (US), LP
CA1031	Silicon Valley Power (SVP), City of Santa Clara
QC2781	Sivaco Wire Group 2004 L.P.
CA3310	SmartestEnergy US, LLC
CA1029	Southern California Edison Company
CA1170	Southern California Gas Company
CA1674	Southwest Gas Corporation
CA1921	Statkraft US, LLC
CA3219	Stonehill Institutional Partners, LP
CA3220	Stonehill Pacific, LLC
QC1761	Suncor Energy Marketing Inc.
QC1873	Superior Gas Liquids Partnership
CA3337	TACenergy, LLC
CA2559	The Toronto-Dominion Bank
CA1216	Turlock Irrigation District
CA3182	Uniper Global Commodities North America, LLC
CA1346	United States Gypsum Company
CA1635	Valero Marketing and Supply Company
CA1135	Vitol, Inc.
QC2174	W.O. Stinson & Son Ltd







Explanatory Notes: Qualified Bid Summary Statistics for Current Auction

General Term Explanation

Total Allowances Available for Sale: Total allowances available, by vintage, for

purchase in the Current Auction, including allowances consigned by consigning entities and allowances offered for sale by the State of California and the Province of

Québec.

Total Allowances Sold at Auction: Total allowances purchased, by vintage, in

the Current Auction in metric tons.

Total Qualified Bids Divided by Total

Allowances Available for Sale:

Total number of allowances (all vintages) included in all the qualified bids for the Current Auction allowances (regardless of bid price) divided by the total number of Current Auction allowances available in the

auction.

Proportion of Allowances Purchased by

Compliance Entities:

The total number of Current Auction allowances (by vintage) purchased in the Current Auction by Compliance Entities divided by the total number of Current Auction allowances sold in the Current Auction. A Compliance Entity is a Covered Entity or Opt-in Covered Entity as defined in California's Cap-and-Trade Regulation or an Emitter as defined in Québec's Cap-and-

Trade Regulation.







General Term Explanation

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 Auction allowances (regardless of vintage)

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., 100x100=10,000).

Qualified Bid Price Summary Statistics: Statistics are calculated from all the

qualified bids for the Current Auction allowances (regardless of bid price). All price statistics are shown in USD and CAD.

Qualified Bids: The bids that remain after a qualified

bidder's submitted bids have been

evaluated and reduced to meet all bidding

limitations.

Auction Reserve Price: The minimum acceptable auction bid price

for Current Auction allowances shown in

both USD and CAD per metric ton.

Settlement Price: The Current Auction allowance price, in

USD and CAD per metric ton as

determined by the auction settlement

process, that all successful bidders will pay

for awarded allowances.

Maximum Price: Highest qualified bid price.







General Term Explanation

Minimum Price: Lowest qualified bid price.

Mean Price: Average qualified bid price calculated as

the sum of the qualified bid prices times the bid allowances at each qualified bid price divided by the sum of all qualified bid

allowances.

Median Price: The price per metric ton calculated so that

50% of the qualified bid prices fall above and 50% fall below the median bid price.

Median Allowance Price: The price per metric ton calculated so that

50% of the qualified bid allowances fall above and 50% fall below the median

allowance price.

Auction Exchange Rate (USD to CAD FX

Rate):

The exchange rate in effect for the joint auction that is set the business day prior to the joint auction as the most recently available daily average exchange rate for USD and CAD as published by the Bank of Canada the day before the joint auction.

Advance Auction

The statistics presented in the report for the Advance Auction are computed in the same manner as the statistics computed for the Current Auction. No allowances are consigned by California consigning entities or by MELCCFP to the Advance Auction.





