

California Cap-and-Trade Program and Québec Cap-and-Trade System November 2023 Joint Auction #37

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) allowances on November 15, 2023. The auction included a Current Auction of 2013, 2014, 2016, 2018, 2020, 2021, 2022, and 2023 vintage allowances and an Advance Auction of 2026 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 2013, 2014, 2016, 2018, 2020, 2021, 2022, and 2023 vintage allowances and for the Advance Auction of 2026 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.

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

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



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 14, 2023. 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 14, 2023, 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 2023 Joint Auction #37

Description of Allowances	Current Auction Vintage 2013-2022	Current Auction Vintage 2023	Current Auction Vintage Total	Advance Auction Vintage 2026
Allowances offered by CA Entity Consignment	-	20,265,928	20,265,928	-
Allowances offered by CARB	1,471,037	29,126,040	30,597,077	6,350,000
Allowances offered by MELCCFP	-	6,754,560	6,754,560	1,227,000
Total Allowances Offered for Sale	1,471,037	56,146,528	57,617,565	7,577,000

Table 2: Allowances Sold in the November 2023 Joint Auction #37

Description of Allowances	Current Auction Vintage 2013-2022	Current Auction Vintage 2023	Current Auction Vintage Total	Advance Auction Vintage 2026
Allowances sold for CA Entity Consignment	-	20,265,928	20,265,928	-
Allowances sold for CARB	1,471,037	29,126,040	30,597,077	6,350,000
Allowances sold for MELCCFP	-	6,754,560	6,754,560	1,227,000
Total Allowances Sold at Auction	1,471,037	56,146,528	57,617,565	7,577,000

Table 3: Summary of 2013 to 2022 Vintage Allowances for Sale in the November 2023 Joint Auction #37

Description of Allowances	Current Auction Vintage 2013	Current Auction Vintage 2014	Current Auction Vintage 2016	Current Auction Vintage 2018	Current Auction Vintage 2020	Current Auction Vintage 2021	Current Auction Vintage 2022
Allowances offered by CARB	79	40	1731	24	57,494	987,155	424,514
Allowances offered by MELCCFP	-	-	-	-	-	-	-
Total Allowances Offered for Sale	79	40	1731	24	57,494	987,155	424,514

Table 4: Summary of 2013 to 2022 Vintage Allowances Sold in the November 2023 Joint Auction #37

Description of Allowances	Current Auction Vintage 2013	Current Auction Vintage 2014	Current Auction Vintage 2016	Current Auction Vintage 2018	Current Auction Vintage 2020	Current Auction Vintage 2021	Current Auction Vintage 2022
Allowances sold for CARB	79	40	1731	24	57,494	987,155	424,514
Allowances sold for MELCCFP	-	-	-	-	-	-	-
Total Allowances Sold at Auction	79	40	1731	24	57,494	987,155	424,514

Table 5: Auction Data for November 2023 Joint Auction #37

Auction Data	Current Auction	Advance Auction
Total Qualified Bids Divided by Total Allowances Available for Sale	1.65	2.27
Proportion of Allowances Purchased by Compliance Entities	80.39%	76.41%
Herfindahl-Hirschman Index	579	749

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 1.3725 CAD to one USD.

Table 6: Qualified Bid Summary Statistics for November 2023 Joint Auction #37

Auction Statistics	Current Auction USD	Current Auction CAD	Advance Auction USD	Advance Auction CAD
Auction Reserve Price	\$22.21	\$30.48	\$22.21	\$30.48
Settlement Price	\$38.73	\$53.16	\$37.40	\$51.33
Maximum Price	\$75.01	\$102.95	\$50.00	\$68.63
Minimum Price	\$22.21	\$30.48	\$22.21	\$30.48
Mean Price	\$39.46	\$54.16	\$35.55	\$48.79
Median Price	\$36.90	\$50.65	\$31.23	\$42.86
Median Allowance Price	\$39.36	\$54.02	\$37.05	\$50.85

List of qualified bidders for the November 2023 Joint Auction #37

A qualified bidder is an entity that completed an auction application, submitted a bid guarantee² 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
QC2466	1067323 Ontario Limited
CA1827	ACT Commodities, Inc.
CA2988	Aetos Capital Opportunities Fund, LP
QC2777	Agropur coopérative
CA1019	Air Liquide Large Industries U.S., LP
CA1561	AltaGas Power Holdings (U.S.), Inc.
CA3235	Amet Partners, LP
CA1259	Anew Climate, LLC
CA3054	BLAM Carbon Fund, LLC
CA3657	BlockCarbon, Inc.
CA1673	Bonneville Power Administration
CA3101	Boston Energy Trading and Marketing, LLC
CA1913	BP Products North America, Inc.
CA2935	Brookdale Receivables, LLC
CA1119	Calpine Energy Services, LP
CA2678	Canadian Imperial Bank of Commerce
CA3214	Carbon Point Partners, LP
CA1830	Cedar Carbon, LLC
CA1075	Chevron U.S.A., Inc.
CA3163	Citadel Energy Marketing, LLC
CA1112	Citigroup Energy, Inc.
CA1732	City of Long Beach, Gas and Oil Department
CA1456	City of Needles
CA1038	City of Palo Alto
CA1016	City of Riverside Public Utilities
CA1344	City of Shasta Lake
CA1166	City of Vernon, Vernon Public Utilities
CA2141	Clean Energy

² 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
CA3288	Clear Power, LLC
QC1524	Compagnie Alpek Polyester Canada
CA1110	Constellation Energy Generation, LLC
QC1901	Coopérative de solidarité Carbone
CA2050	CP Energy Marketing (US), Inc.
CA3473	David Raban
CA3307	DRW Investments, LLC
CA1091	DTE Energy Trading, Inc.
QC3709	Eco-Energy, LLC
QC2448	Elbow River Marketing Ltd.
QC1384	Énergie Valero Inc.
QC2586	ÉNERGIES SONIC INC.
CA1260	Flyers Energy, LLC
QC2711	Formica Canada Inc
CA1081	Foster Poultry Farms
CA3228	Garberville Gas Corporation
QC1750	Gazifère Inc.
QC1764	Gestion Énergie Québec Inc.
CA3339	Gildenbrook, LLC
CA3287	Global Carbon Opportunity (SPV) Fund, LLC
QC2118	Hamel Propane Inc.
QC2501	Harnois Énergies Inc.
CA3311	HP Carbon, LLC
CA1807	Idemitsu Apollo
CA1293	J. Aron & Company, LLC
CA1727	Jaco Oil Company
CA2932	Kcarbon Holdings, LLC
CA1141	Kern Oil & Refining Company
CA3208	Klima Holdings I, LLC
QC3170	KRAFT NORDIC, S.E.C.
CA3046	LCP Carbon, LLC
QC3758	Les Entreprises Rolland Inc.
QC1730	Les Produits Pétroliers Norcan S.E.N.C
CA1233	Liberty Utilities (CalPeco Electric), LLC
CA3121	Liminality Partners, LP
QC2095	MacEwen Petroleum Inc
CA1104	Macquarie Energy, LLC
CA2111	MAG ENERGY SOLUTIONS, Inc.

CITSS Entity ID	Entity Legal Name
CA3264	MARATHON PETROLEUM COMPANY, LP
CA2645	Mercuria Energy America, LLC
CA2887	Merrill Lynch Commodities, Inc.
CA1261	Midstream Energy Partners (USA), LLC
CA1107	Midway Sunset Cogeneration Company
CA3032	Molecule Ventures, LP
CA1239	Morgan Stanley Capital Group, Inc.
CA2232	Musket Corporation
CA3190	Mystic Harbor Partners, LLC
CA1302	Naftex Operating Company
QC2107	NGL Supply Co. Ltd.
CA1191	Northern California Power Agency
CA3237	Northern Trace Capital, LLC
CA1301	Olam West Coast, Inc.
QC3230	Olymel S.E.C.
CA2046	Pacific Gas and Electric Company
CA3165	Pacific Summit Energy, LLC
CA1034	PacifiCorp
CA2106	PBF Energy Western Region, LLC
QC2673	Petro-Francis Inc
CA1410	Petro Diamond, Inc.
CA1279	Phillips 66 Company
CA1595	Pixley Cogen Partners, LLC
CA1003	Plumas-Sierra Rural Electric Cooperative
CA3759	Pothos Carbon Fund I, LP
CA1505	Powerex Corporation
QC1474	Produits Suncor Énergie S.E.N.C.
QC2663	PROPANE PLUS INC
QC1486	Rayonier A.M. Canada société en nom collectif
CA1834	River City Petroleum
CA1774	Robinson Oil Supply & Transport, Inc.
CA1102	Royal Bank of Canada
CA1163	Sacramento Municipal Utility District (SMUD)
CA1085	San Diego Gas & Electric Company
CA1760	San Diego Gas and Electric Company
CA1011	San Joaquin Refining Company, Inc.
CA3207	SARHEN CCA, LP
CA2175	Sempra Gas & Power Marketing, LLC

CITSS Entity ID	Entity Legal Name
CA1251	Shell Energy North America (US), LP
CA1054	Signal Hill Petroleum, Inc.
CA1031	Silicon Valley Power (SVP), City of Santa Clara
QC2781	Sivaco Wire Group 2004 L.P.
CA1029	Southern California Edison Company
CA1170	Southern California Gas Company
CA1674	Southwest Gas Corporation
CA1921	Statkraft US, LLC
QC1873	Superior Gas Liquids Partnership
CA3337	TACenergy, LLC
CA3153	Targa Liquids Marketing and Trade, LLC
CA3267	The Andersons, Inc.
CA3072	Trafigura Trading, LLC
CA2100	Tricor Refining, LLC
CA3368	Triolith Energy Fund, LP
CA1216	Turlock Irrigation District
CA1598	United States Pipe & Foundry Company, LLC
CA1635	Valero Marketing and Supply Company
CA1135	Vitol, Inc.
QC2174	W.O. Stinson & Son Ltd

Explanatory Notes: Qualified Bid Summary Statistics**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., $100 \times 100 = 10,000$).

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 that resulted from the auction, in USD and CAD per metric ton.

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 consigning entities to the Advance Auction.