

**California Cap-and-Trade Program
and
Québec Cap-and-Trade System
May 2022 Joint Auction #31**

Summary Results Report

Background

The California Air Resources Board (CARB) and Québec's ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC)¹ held a joint auction of greenhouse gas (GHG) allowances on May 18, 2022. The auction included a Current Auction of 2016, 2020, and 2022 vintage allowances and an Advance Auction of 2025 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 MELCC 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 2016, 2020, and 2022 vintage allowances and for the Advance Auction of 2025 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 MELCC approve the May 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 jurisdictions (California and Québec), the Financial Services Administrator will exchange

¹ Ministry of the Environment and the Fight against Climate Change



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 June 16, 2022. 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 June 16, 2022, 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 May 2022 Joint Auction #31

Description of Allowances	Current Auction Vintage 2016	Current Auction Vintage 2020	Current Auction Vintage 2022	Current Auction Vintage Total	Advance Auction Vintage 2025
Allowances offered by CA Entity Consignment	-	-	20,508,139	20,508,139	-
Allowances offered by CARB	-	-	29,417,528	29,417,528	6,685,000
Allowances offered by MELCC	71	1,278,608	7,126,954	8,405,633	1,257,750
Total Allowances Offered for Sale	71	1,278,608	57,052,621	58,331,300	7,942,750

Table 2: Allowances Sold in the May 2022 Joint Auction #31

Description of Allowances	Current Auction Vintage 2016	Current Auction Vintage 2020	Current Auction Vintage 2022	Current Auction Vintage Total	Advance Auction Vintage 2025
Allowances sold for CA Entity Consignment	-	-	20,508,139	20,508,139	-
Allowances sold for CARB	-	-	29,417,528	29,417,528	6,685,000
Allowances sold for MELCC	71	1,278,608	7,126,954	8,405,633	1,257,750
Total Allowances Sold at Auction	71	1,278,608	57,052,621	58,331,300	7,942,750

Table 3: Auction Data for May 2022 Joint Auction #31

Auction Data	Current Auction	Advance Auction
Total Qualified Bids Divided by Total Allowances Available for Sale	1.62	2.40
Proportion of Allowances Purchased by Compliance Entities	87.7%	85.7
Herfindahl-Hirschman Index	615	1622

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 1.2834 CAD to one USD.

Table 4: Qualified Bid Summary Statistics for May 2022 Joint Auction #31

Auction Statistics	Current Auction USD	Current Auction CAD	Advance Auction USD	Advance Auction CAD
Auction Reserve Price	\$19.70	\$25.28	\$19.70	\$25.28
Settlement Price	\$30.85	\$39.59	\$28.13	\$36.10
Maximum Price	\$60.06	\$77.08	\$40.01	\$51.35
Minimum Price	\$19.70	\$25.28	\$19.70	\$25.28
Mean Price	\$32.96	\$42.30	\$26.58	\$34.11
Median Price	\$29.20	\$37.48	\$23.99	\$30.79
Median Allowance Price	\$31.66	\$40.63	\$27.65	\$35.49

List of qualified bidders for the May 2022 Joint Auction #31

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 MELCC to participate in the auction. Qualified bidders may or may not have participated in the auction.

CITSS Entity ID	Entity Legal Name
CA3185	AC Carbon, LP
CA1185	Aera Energy, LLC
CA1019	Air Liquide Large Industries U.S., LP
CA1561	AltaGas Power Holdings (U.S.), Inc.
CA3249	Atreaus Family, LLC
CA2919	BC Carbon Portfolio, LLC
QC1724	Bell-Gaz Itée
CA3036	Blackstone Alternative Multi-Strategy Sub Fund IV, LLC
CA3054	BLAM Carbon Fund, LLC
CA3063	BNP Paribas US Wholesale Holdings, Corporation
QC2959	Bombardier inc.
CA1913	BP Products North America, Inc.
CA3065	Braeswood Carbon Partners, LP
QC2193	Bridgestone Canada Inc.
CA2743	California Department of Water Resources
CA1119	Calpine Energy Services, LP
CA1201	CalPortland Company
CA3214	Carbon Point Partners, LP
QC1525	CEPSA CHIMIE BÉCANCOUR INC.
QC1491	CGC Inc.
CA1075	Chevron U.S.A., Inc.
CA1112	Citigroup Energy, Inc.
CA1037	City of Anaheim, Public Utilities Department
CA1732	City of Long Beach, Gas and Oil Department
CA1038	City of Palo Alto
CA1016	City of Riverside Public Utilities
CA1344	City of Shasta Lake
CA1166	City of Vernon, Vernon Public Utilities

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
CA1408	ClimeCo Corporation
QC1524	Compagnie Selenis Canada
CA2050	CP Energy Marketing (US), Inc.
CA3139	CRBN California Carbon Fund, LP
CA2063	DRW Commodities, LLC
CA1091	DTE Energy Trading, Inc.
QC2448	Elbow River Marketing Ltd.
CA1259	Element Markets, LLC
QC1384	Énergie Valero Inc.
QC2586	ÉNERGIES SONIC INC.
QC1502	Énergir, s.e.c.
CA1110	Exelon Generation Company, LLC
CA1260	Flyers Energy, LLC
QC2711	Formica Canada Inc
CA1081	Foster Poultry Farms
QC1750	Gazifère Inc.
QC1764	Gestion Énergie Québec Inc.
CA2916	Green Trading Capital, LP
QC2118	Hamel Propane Inc.
QC2501	Harnois Énergies Inc.
QC1359	Hydro-Québec
CA1807	Idemitsu Apollo
QC2789	Ifastgroupe 2004 L.P.
CA1293	J. Aron & Company, LLC
CA1727	Jaco Oil Company
CA2932	Kcarbon Holdings, LLC
CA1141	Kern Oil & Refining Company
CA3208	Klima Holdings I, LLC
CA3046	LCP Carbon, LLC
QC1770	Les Pétroles Irving Commercial s.e.n.c
CA1233	Liberty Utilities (CalPeco Electric), LLC
CA3121	Liminality Partners, LP
CA1111	Los Angeles Department of Water & Power
CA2553	Luminus EC, LP
CA1830	Luminus Energy Partners, LLC
CA1104	Macquarie Energy, LLC
CA2645	Mercuria Energy America, LLC

CITSS Entity ID	Entity Legal Name
CA2887	Merrill Lynch Commodities, Inc.
CA1261	Midstream Energy Partners (USA), LLC
CA1239	Morgan Stanley Capital Group, Inc.
CA2232	Musket Corporation
CA3190	Mystic Harbor Partners, LLC
CA1302	Naftex Operating Company
QC2761	Nexans Canada inc.
CA1672	NextEra Energy Marketing, LLC
QC2107	NGL Supply Co. Ltd.
CA1191	Northern California Power Agency
CA3237	Northern Trace Capital, LLC
QC3061	Nutrinor Coopérative
CA1301	Olam West Coast, Inc.
CA2905	PA Carbon I, LLC
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
QC2673	Petro-Francis Inc
CA1410	Petro Diamond, Inc.
QC1706	Pétrolière Impériale
CA1279	Phillips 66 Company
CA1595	Pixley Cogen Partners, LLC
QC1713	Plant-E Corp
CA1003	Plumas-Sierra Rural Electric Cooperative
CA1505	Powerex Corporation
QC1474	Produits Suncor Énergie S.E.N.C.
CA3049	Radicle (US), Inc.
CA1834	River City Petroleum
CA1774	Robinson Oil Supply & Transport, Inc.
CA1102	Royal Bank of Canada
CA1163	Sacramento Municipal Utility District (SMUD)
CA1760	San Diego Gas and Electric Company
QC2744	Sanimax ACI Inc.
CA3207	SARHEN CCA, LP
CA3238	Sarkis Environmental Fund, LLC
CA2175	Sempra Gas & Power Marketing, LLC

CITSS Entity ID	Entity Legal Name
CA1251	Shell Energy North America (US), LP
CA1757	Shiralian Enterprises
CA1031	Silicon Valley Power (SVP), City of Santa Clara
QC2781	Sivaco Wire Group 2004 L.P.
CA3201	Skyview Finance Company 2, LLC
CA1029	Southern California Edison Company
CA1170	Southern California Gas Company
CA1674	Southwest Gas Corporation
CA3280	SRV Associates I, LLC
CA1921	Statkraft US, LLC
QC1873	Superior Gas Liquids Partnership
CA1172	Surprise Valley Electrification Corporation
CA1165	Tesoro Refining & Marketing Company, LLC
CA3072	Trafigura Trading, LLC
QC1467	TransCanada Energy Ltd.
QC1377	TransCanada PipeLines Limited
CA1216	Turlock Irrigation District
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**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.

