

**California Cap-and-Trade Program
and
Québec Cap-and-Trade System
November 2021 Joint Auction #29**

Summary Results Report

Update Issued on December 16, 2021

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 November 17, 2021. The auction included a Current Auction of 2019, 2020, and 2021 vintage allowances and an Advance Auction of 2024 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 2019, 2020, and 2021 vintage allowances and for the Advance Auction of 2024 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 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).

¹ Ministry of the Environment and the Fight against Climate Change



Originally Issued on November 24, 2021/Update Issued on December 16, 2021

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 16, 2021. 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 16, 2021, providing the final amount of proceeds transferred.

Auction Results

The first and second tables below provide key data and information on the results of the auction. The third 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: Auction Results for November 2021 Joint Auction #29*

Description of Allowances	Current Auction Vintage 2019	Current Auction Vintage 2020	Current Auction Vintage 2021	Current Auction Vintage Total	Advance Auction Vintage 2024
Allowances offered by CA Entity Consignment	-	-	22,282,607	22,282,607	-
Allowances offered by CARB	98,073 <u>34,053</u>	7,900,576	29,278,453 <u>29,342,473</u>	37,277,102	7,017,500
Allowances offered by MELCC	-	1,807,701	7,230,807	9,038,508	1,288,750



Description of Allowances	Current Auction Vintage 2019	Current Auction Vintage 2020	Current Auction Vintage 2021	Current Auction Vintage Total	Advance Auction Vintage 2024
Total Allowances Offered for Sale	98,073 <u>34,053</u>	9,708,277	58,791,867 <u>58,855,887</u>	68,598,217	8,306,250
Allowances sold for CA Entity Consignment	-	-	22,282,607	22,282,607	-
Allowances sold for CARB	98,073 <u>34,053</u>	7,900,576	29,278,453 <u>29,342,473</u>	37,277,102	7,017,500
Allowances sold for MELCC	-	1,807,701	7,230,807	9,038,508	1,288,750
Total Allowances Sold at Auction	98,073 <u>34,053</u>	9,708,277	58,791,867 <u>58,855,887</u>	68,598,217	8,306,250

*Underline and strikethrough text indicate changes as of December 16, 2021. The quantities of allowances with vintages 2019 and 2021 reflected in the original Summary Results Report include allowances returned to CARB pursuant to sections 95890 and 95891 of the California Regulation. The quantities of returned vintage 2019 and 2021 allowances were inadvertently transposed in summation of the totals in the Summary Results Report and have been corrected. This correction does not change the total quantity of allowances offered, sold, or awarded in the Current or Advance Auctions, nor does it impact any of the auction data or qualified bid summary statistics contained in the Summary Results Report.

Table 2: Auction Data for November 2021 Joint Auction #29

Auction Data	Current Auction	Advance Auction
Total Qualified Bids Divided by Total Allowances Available for Sale	1.51	1.20
Proportion of Allowances Purchased by Compliance Entities	81.3%	88.1%
Herfindahl-Hirschman Index	482	1690

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 1.2550 CAD to one USD.



Table 3: Qualified Bid Summary Statistics for November 2021 Joint Auction #29

Auction Statistics	Current Auction USD	Current Auction CAD	Advance Auction USD	Advance Auction CAD
Auction Reserve Price	\$17.71	\$22.23	\$17.71	\$22.23
Settlement Price	\$28.26	\$35.47	\$34.01	\$42.68
Maximum Price	\$65.00	\$81.58	\$50.00	\$62.75
Minimum Price	\$17.71	\$22.23	\$17.71	\$22.23
Mean Price	\$33.23	\$41.70	\$37.28	\$46.79
Median Price	\$31.76	\$39.86	\$32.01	\$40.17
Median Allowance Price	\$34.00	\$42.67	\$35.10	\$44.05

List of qualified bidders for the November 2021 Joint Auction #29

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
CA1827	ACT Commodities, Inc.
CA1185	Aera Energy, LLC
QC2777	Agropur coopérative
CA1561	AltaGas Power Holdings (U.S.), Inc.
CA2919	BC Carbon Portfolio, LLC
QC1724	Bell-Gaz Itée
CA2759	Bellus Ventures II, LP
CA3054	BLAM Carbon Fund, LLC
CA3063	BNP Paribas US Wholesale Holdings, Corporation
CA1180	BNSF Railway Company
CA3101	Boston Energy Trading and Marketing, LLC
CA1913	BP Products North America, Inc.
CA2743	California Department of Water Resources
CA1108	California Resources Elk Hills, LLC
CA1119	Calpine Energy Services, LP
CA1201	CalPortland Company
QC2946	Canadian Malartic GP
QC1812	Canadian Royalties inc
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
CA1166	City of Vernon, Vernon Public Utilities
CA2141	Clean Energy
QC1901	Coopérative de solidarité Carbone
CA1091	DTE Energy Trading, Inc.

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
QC2448	Elbow River Marketing Ltd.
QC1384	Énergie Valero Inc.
QC2586	ÉNERGIES SONIC INC.
CA1110	Exelon Generation Company, LLC
QC1489	FibreK s.e.n.c.
CA1260	Flyers Energy, LLC
QC1750	Gazifère Inc.
QC1764	Gestion Énergie Québec Inc.
QC1458	Glencore Canada Corporation
CA2916	Green Trading Capital, LP
QC2118	Hamel Propane Inc.
QC2501	Harnois Énergies Inc.
QC1359	Hydro-Québec
CA1807	Idemitsu Apollo
CA1141	Kern Oil & Refining Company
CA3208	Klima Holdings I, LLC
QC1431	Lantic Inc.
QC1730	Les Produits Pétroliers Norcan 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
QC2095	MacEwen Petroleum Inc
CA1104	Macquarie Energy, LLC
CA2645	Mercuria Energy America, LLC
CA2887	Merrill Lynch Commodities, Inc.
CA1261	Midstream Energy Partners (USA), LLC
CA1239	Morgan Stanley Capital Group, Inc.
CA1302	Naftex Operating Company
QC2806	National Silicates Partnership
CA1672	NextEra Energy Marketing, LLC
QC2107	NGL Supply Co. Ltd.
CA1191	Northern California Power Agency
QC3061	Nutrinor Coopérative
CA2905	PA Carbon I, LLC
CA1046	Pacific Gas and Electric Company
CA2046	Pacific Gas and Electric Company

CITSS Entity ID	Entity Legal Name
CA1034	PacifiCorp
CA1534	Panoche Energy Center, LLC
CA2923	PCAF I, LLC
QC2673	Petro-Francis Inc
CA1410	Petro Diamond, Inc.
QC1706	Pétrolière Impériale
CA1279	Phillips 66 Company
CA2784	Pilot Travel Centers, LLC
CA1595	Pixley Cogen Partners, LLC
CA1003	Plumas-Sierra Rural Electric Cooperative
CA1505	Powerex Corporation
QC1474	Produits Suncor Énergie S.E.N.C.
QC2663	PROPANE PLUS INC
CA3049	Radicle (US), Inc.
QC1960	Révolution VSC LP
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
CA2175	Sempra Gas & Power Marketing, LLC
CA1366	Seneca Resources Corporation
CA1251	Shell Energy North America (US), LP
CA1757	Shiralian Enterprises
CA1054	Signal Hill Petroleum, Inc.
CA1031	Silicon Valley Power (SVP), City of Santa Clara
QC2781	Sivaco Wire Group 2004 L.P.
CA2973	Skyview Finance Company, LLC
CA1029	Southern California Edison Company
CA1170	Southern California Gas Company
CA1800	Southern Counties Oil Company, a California Limited Partnership
CA1674	Southwest Gas Corporation
CA1921	Statkraft US, LLC
QC1873	Superior Gas Liquids Partnership
CA1165	Tesoro Refining & Marketing Company, LLC

CITSS Entity ID	Entity Legal Name
CA3072	Trafigura Trading, LLC
CA3029	Truman Arnold Companies
CA1216	Turlock Irrigation District
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.

