California Cap-and-Trade Program, and Québec Cap-and-Trade System November 2019 Joint Auction #21

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 November 19, 2019. The auction included a Current Auction of 2013, 2014, 2015, 2016, 2017, 2018, and 2019 vintage allowances and an Advance Auction of 2022 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 2013/2014/2015/2016/2017/2018/2019 (current) vintage allowances and for the Advance Auction of 2022 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). After receiving payment from the winning bidders, and using instructions from the linked

¹ Ministry of the Environment and the Fight against Climate Change







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, 2019. 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, 2019, providing the final amount of proceeds transferred.

Auction Results

The 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.

Description of Allowances	Current Auction Vintage 2013-2018	Current Auction Vintage 2019	Current Auction Vintage Total	Advance Auction Vintage 2022
Allowances offered by CA Entity Consignment	-	21,996,805	21,996,805	-
Allowances offered by CARB	787,032	35,076,844	35,863,876	7,687,500
Allowances offered by MELCC	1,914,996	7,659,984	9,574,980	1,350,500
Total Allowances Offered for Sale	2,702,028	64,733,633	67,435,661	9,038,000

Table 1: Auction	n Results fo	r November	2019 Joint	Auction #21







Description of Allowances	Current Auction Vintage 2013-2018	Current Auction Vintage 2019	Current Auction Vintage Total	Advance Auction Vintage 2022
Allowances sold for CA Entity Consignment	-	21,996,805	21,996,805	-
Allowances sold for CARB	787,032	35,076,844	35,863,876	7,687,500
Allowances sold for MELCC	1,914,996	7,659,984	9,574,980	1,350,500
Total Allowances Sold at Auction	2,702,028	64,733,633	67,435,661	9,038,000

Table 2: Summary of 2013 to 2018 Vintage Allowances for November 2019 JointAuction #21

Description of Allowances	Current Auction Vintage 2013	Current Auction Vintage 2014	Current Auction Vintage 2015	Current Auction Vintage 2016	Current Auction Vintage 2017	Current Auction Vintage 2018
Allowances offered by CARB	80,026	416,086	212,730	5,382	23,348	49,460
Allowances offered by MELCC	-	-	-	1,736,736	178,260	-
Total Allowances Offered for Sale	80,026	416,086	212,730	1,742,118	201,608	49,460
Allowances sold for CARB	80,026	416,086	212,730	5,382	23,348	49,460
Allowances sold for MELCC	-	-	-	1,736,736	178,260	-
Total Allowances Sold at Auction	80,026	416,086	212,730	1,742,118	201,608	49,460







Auction Data	Current Auction	Advance Auction
Total Qualified Bids Divided by Total Allowances	1.28	1.10
Available for Sale		
Proportion of Allowances Purchased by Compliance	92.6%	79.5%
Entities		
Herfindahl-Hirschman Index	815	1551

Table 3: Auction Data for November 2019 Joint Auction #21

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 1.3214 (USD to CAD).

Table 4: Qualified Bid Summary Statistics for November 2019 Joint Auction #21

Auction Statistics	Current Auction USD	Current Auction CAD	Advance Auction USD	Advance Auction CAD
Auction Reserve Price	\$15.62	\$20.64	\$15.62	\$20.64
Settlement Price	\$17.00	\$22.46	\$16.80	\$22.20
Maximum Price	\$34.22	\$45.22	\$20.15	\$26.63
Minimum Price	\$15.62	\$20.64	\$15.62	\$20.64
Mean Price	\$17.66	\$23.34	\$17.25	\$22.79
Median Price	\$17.05	\$22.53	\$16.91	\$22.34
Median Allowance Price	\$17.20	\$22.73	\$17.16	\$22.68







List of qualified bidders for the November 2019 Joint Auction #21

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
QC2594	A&L Pinard Inc
CA1185	Aera Energy, LLC
CA1561	AltaGas Power Holdings (U.S.), Inc.
QC1724	Bell-Gaz Itée
CA2759	Bellus Ventures II, LP
CA1913	BP Products North America, Inc.
CA2971	Brian Anast
CA1119	Calpine Energy Services, LP
QC2580	Chauffage Benwell Fuels Ltd.
CA1075	Chevron U.S.A., Inc.
CA1288	City of Cerritos
CA1732	City of Long Beach, Gas and Oil Department
CA1038	City of Palo Alto
CA1166	City of Vernon, Vernon Public Utilities
QC1901	Coopérative de solidarité Carbone
CA2050	CP Energy Marketing (US), Inc.
QC1578	DIAGEO CANADA INC.
CA1091	DTE Energy Trading, Inc.
CA2809	ECP Opportunity Fund II, LLC
QC2448	Elbow River Marketing Ltd.
QC2159	Énergie LGP Inc.
QC1384	Énergie Valero Inc.
CA2085	Escondido Energy Center, LLC
CA1110	Exelon Generation Company, LLC
QC1489	Fibrek s.e.n.c.
CA1260	Flyers Energy, LLC
QC2711	Formica Canada Inc
QC1750	Gazifère 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
QC1764	Gestion Énergie Québec Inc.
CA2916	Green Trading Capital, LP
CA1918	Greenleaf Energy Unit 2, LLC
QC2118	Hamel Propane Inc.
CA2902	Harspring Environmental, LP
QC1359	Hydro-Québec
CA1807	Idemitsu Apollo
QC2789	Ifastgroupe 2004 L.P.
CA1727	Jaco Oil Company
CA2932	Kcarbon Holdings, LLC
CA1141	Kern Oil & Refining Co,
CA2944	Kiva Energy, Inc.
QC1431	Lantic Inc.
QC1730	Les Produits Pétroliers Norcan S.E.N.C
CA1233	Liberty Utilities (CalPeco Electric), LLC
CA2553	Luminus EC, LP
CA1830	Luminus Energy Partners, LLC
QC2095	MacEwen Petroleum Inc
CA1104	Macquarie Energy, LLC
CA2645	Mercuria Energy America, Inc.
CA1107	Midway Sunset Cogeneration Company
CA1239	Morgan Stanley Capital Group, Inc.
CA1302	Naftex Operating Company
QC2107	NGL Supply Co. Ltd.
CA1191	Northern California Power Agency
CA1138	NRG Power Marketing, LLC
CA2905	PA Carbon I, LLC
CA1046	Pacific Gas and Electric Company
CA2046	Pacific Gas and Electric Company
CA1034	PacifiCorp
CA1534	Panoche Energy Center, LLC
CA2106	PBF Energy Western Region, LLC
CA1410	Petro Diamond, Inc.
QC2673	Petro-Francis Inc
CA1279	Phillips 66 Company
CA1595	Pixley Cogen Partners, LLC
CA1003	Plumas-Sierra Rural Electric Cooperative
CA1505	Powerex Corporation







CITSS Entity ID	Entity Legal Name
QC1474	Produits Suncor Énergie S.E.N.C.
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
CA2175	Sempra Gas & Power Marketing, LLC
CA1366	Seneca Resources Corporation
CA1251	Shell Energy North America (US), L.P.
CA1757	Shiralian Enterprises
CA1031	Silicon Valley Power (SVP), City of Santa Clara
QC2781	Sivaco Wire Group 2004, LP
CA1029	Southern California Edison Company
CA1170	Southern California Gas Company
CA1674	Southwest Gas Corporation
CA1921	Statkraft US, LLC
QC1873	Superior Gas Liquids Partnership
CA1165	Tesoro Refining & Marketing Company, LLC
CA1662	The Metropolitan Water District of Southern California
CA1195	TransAlta Energy Marketing (U.S.), Inc.
CA1216	Turlock Irrigation District
CA1635	Valero Marketing and Supply Company
CA1135	Vitol, Inc.
QC2174	W.O. Stinson & Son Ltd
CA2056	Wild Goose Storage, LLC







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., 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 that resulted from the auction, in USD and CAD per metric ton.
Maximum Price:	Highest qualified bid price.







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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 F Rate):	X 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.





