

**California Cap-and-Trade Program,
and
Québec Cap-and-Trade System
November 2018 Joint Auction #17**

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 14, 2018. The auction included a Current Auction of 2016, 2017, and 2018 vintage allowances and an Advance Auction of 2021 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 2016/2017/2018 vintage allowances and for the Advance Auction of 2021 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 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 13, 2018. As provided in the California Cap-and-Trade

¹ Ministry of Environment and the Fight against Climate Change.

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 13, 2018, providing the final amount of proceeds transferred.

Auction Results

The first table below provides key data and information on the results of the auction. The second 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 2018 Joint Auction #17

	Current			Current Vintage	Advance Vintage
	2016 Vintage	2017 Vintage	2018 Vintage		
Total Allowances Available for Sale	10,867,536	4,900,132	63,058,049	78,825,717	9,401,500
CA Entity Consignment	-	-	24,089,230	24,089,230	-
CARB	8,934,832	4,900,132	31,238,001	45,072,965	8,020,000
MELCC	1,932,704	-	7,730,818	9,663,522	1,381,500
Total Allowances Sold at Auction	10,867,536	4,900,132	63,058,049	78,825,717	9,401,500
CA Entity Consignment	-	-	24,089,230	24,089,230	-
CARB	8,934,832	4,900,132	31,238,001	45,072,965	8,020,000
MELCC	1,932,704	-	7,730,818	9,663,522	1,381,500
Total Qualified Bids Divided by Total Allowances Available for Sale				1.17	1.42
Proportion of Allowances Purchased by Compliance Entities				95.1%	79.8%
Herfindahl-Hirschman Index				721	1799

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.

Table 2: Qualified Bid Summary Statistics for November 2018 Joint Auction #17

	Current 2016/2017/2018 Vintage		Advance 2021 Vintage	
	USD	CAD	USD	CAD
Auction Reserve Price	\$14.53	\$19.24	\$14.53	\$19.24
Settlement Price	\$15.31	\$20.27	\$15.33	\$20.30
Maximum Price	\$54.27	\$71.86	\$22.99	\$30.44
Minimum Price	\$14.53	\$19.24	\$14.53	\$19.24
Mean Price	\$16.02	\$21.21	\$15.46	\$20.47
Median Price	\$15.43	\$20.43	\$15.26	\$20.21
Median Allowance Price	\$15.60	\$20.66	\$15.45	\$20.46
Auction Exchange Rate (USD to CAD)				1.3241

List of qualified bidders for the November 2018 Joint Auction #17

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
CA1368	Abatement Capital, LLC
CA1185	Aera Energy, LLC
QC2777	Agropur coopérative
CA1019	Air Liquide Large Industries U.S., LP
CA1561	AltaGas Power Holdings (U.S.), Inc.
QC1724	Bell-Gaz Itée
CA2759	Bellus Ventures II, LP
CA1913	BP Products North America, Inc.
CA2743	California Department of Water Resources
QC2580	Chauffage Benwell Fuels Ltd.
CA1075	Chevron U.S.A., Inc.
CA1037	City of Anaheim, Public Utilities Department
CA1732	City of Long Beach, Gas and Oil Department
CA1443	City of Los Angeles, Department of Airports
CA1166	City of Vernon, Vernon Public Utilities
QC1524	Compagnie Selenis Canada
QC1901	Coopérative de solidarité Carbone
CA2050	CP Energy Marketing (US), Inc.
CA1091	DTE Energy Trading, Inc.
QC2448	Elbow River Marketing Ltd.
QC2159	Énergie LGP Inc.
QC1384	Énergie Valero Inc.
QC1515	Entreprise Indorama PTA Montréal S.E.C.
CA2085	Escondido Energy Center, LLC
CA1110	Exelon Generation Company, LLC
QC1750	Gazifère Inc.
QC1764	Gestion Énergie Québec Inc.
CA1917	Greenleaf Energy Unit 1, LLC
CA1918	Greenleaf Energy Unit 2, LLC
QC2118	Hamel Propane 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
CA2113	Hartree Partners, LP
QC1359	Hydro-Québec
CA1807	Idemitsu Apollo
CA1727	Jaco Oil Company
CA1141	Kern Oil & Refining Company
QC1431	Lantic Inc.
QC1730	Les Produits Pétroliers Norcan S.E.N.C
CA1233	Liberty Utilities (CalPeco Electric), LLC
CA1830	Luminus Energy Partners, LLC
CA1104	Macquarie Energy, LLC
CA2645	Mercuria Energy America, Inc.
CA1107	Midway Sunset Cogeneration Company
CA1239	Morgan Stanley Capital Group, Inc.
CA1302	Naftex Operating Company
CA1672	NextEra Energy Marketing, LLC
QC2107	NGL Supply Co. Ltd.
CA1191	Northern California Power Agency
CA1138	NRG Power Marketing, LLC
CA1046	Pacific Gas and Electric Company
CA2046	Pacific Gas and Electric Company
CA1039	Pasadena Water & Power
CA2106	PBF Energy Western Region, LLC
CA1410	Petro Diamond, Inc.
QC2673	Petro-Francis Inc
CA1279	Phillips 66 Company
CA1321	Pittsburg Power Company
CA1595	Pixley Cogen Partners, LLC
CA1003	Plumas-Sierra Rural Electric Cooperative
CA1304	Portland General Electric Company
CA1505	Powerex Corporation
QC1474	Produits Suncor Énergie S.E.N.C.
QC1486	Rayonier A.M. Canada société en nom collectif
CA1204	Rio Tinto Minerals, Inc.
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 and Electric Company

CITSS Entity ID	Entity Legal Name
CA1760	San Diego Gas and Electric Company
CA2175	Sempra Gas & Power Marketing, LLC
CA1366	Seneca Resources Corporation
CA1251	Shell Energy North America (US), LP
CA1757	Shiralian Enterprises
CA1029	Southern California Edison Company
CA1170	Southern California Gas Company
CA1800	Southern Counties Oil Company, a California Limited Partnership
CA1674	Southwest Gas Corporation
CA1804	Stan Boyett & Son, Inc.
CA1921	Statkraft US, LLC
CA1165	Tesoro Refining & Marketing Company, LLC
CA1888	The Soco Group, Inc.
CA1635	Valero Marketing and Supply Company
CA1135	Vitol, Inc.
QC2174	W.O. Stinson & Son Ltd

Explanatory Notes: Qualified Bid Summary Statistics

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.
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.
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.

