

**California Cap-and-Trade Program,  
Ontario Cap-and-Trade Program, and  
Québec Cap-and-Trade System  
May 2018 Joint Auction #15**

**Summary Results Report**

**Background**

The California Air Resources Board (CARB), Ontario Ministry of the Environment and Climate Change (MOECC), and Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC)<sup>1</sup> held a joint auction of greenhouse gas (GHG) allowances on May 15, 2018. The auction included a Current Auction of 2016 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, MOECC, and MDDELCC 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, Ontario, 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 2016/2018 vintage allowances and for the Advance Auction of 2021 vintage allowances. The auction algorithm correctly applied the 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, MOECC, and MDDELCC 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, Ontario, 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

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<sup>1</sup> Ministry of Sustainable Development, Environment and the Fight against Climate Change.

proceeds by June 11, 2018. 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. Ontario and 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 11, 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 May 2018 Joint Auction #15**

	Current Auction			Advance Auction 2021 Vintage
	2016 Vintage	2018 Vintage	Total Current	
<b>Total Allowances Available for Sale</b>	<b>13,368,884</b>	<b>77,218,854</b>	<b>90,587,738</b>	<b>12,427,950</b>
CA Entity Consignment	-	14,569,443	14,569,443	-
CARB	11,436,180	31,175,277	42,611,457	8,020,000
MOECC	-	23,743,316	23,743,316	3,026,450
MDDELCC	1,932,704	7,730,818	9,663,522	1,381,500
<b>Total Allowances Sold at Auction</b>	<b>13,368,884</b>	<b>77,218,854</b>	<b>90,587,738</b>	<b>6,057,000</b>
CA Entity Consignment	-	14,569,443	14,569,443	-
CARB	11,436,180	31,175,277	42,611,457	3,908,701
MOECC	-	23,743,316	23,743,316	1,474,998
MDDELCC	1,932,704	7,730,818	9,663,522	673,301
Total Qualified Bids Divided by Total Allowances Available for Sale			1.36	0.49
Proportion of Allowances Purchased by Compliance Entities			95.6%	77.7%
Herfindahl-Hirschman Index	668	668		1444

**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 May 2018 Joint Auction #15**

	Current 2016/2018 Vintage		Advance 2021 Vintage	
	USD	CAD	USD	CAD
Auction Reserve Price	\$14.53	\$18.56	\$14.53	\$18.56
Settlement Price	\$14.65	\$18.72	\$14.53	\$18.56
Maximum Price	\$54.27	\$69.33	\$21.91	\$27.99
Minimum Price	\$14.53	\$18.56	\$14.53	\$18.56
Mean Price	\$15.51	\$19.81	\$14.70	\$18.78
Median Price	\$14.66	\$18.73	\$14.62	\$18.68
Median Allowance Price	\$14.85	\$18.97	\$14.58	\$18.63
Auction Exchange Rate (USD to CAD)			1.2775	

**List of qualified bidders for the May 2018 Joint Auction #15**

A qualified bidder is an entity that completed an auction application, submitted a bid guarantee<sup>2</sup> that was accepted by the Financial Services Administrator, and was approved by CARB, MOECC, or MDDELCC to participate in the auction. Qualified bidders may or may not have participated in the auction.

<b>CITSS Entity ID</b>	<b>Entity Legal Name</b>
QC2659	1055585 Ontario Inc
ON2465	1308998 Ontario Ltd.
ON2306	1329606 Ontario Limited
QC2101	1443635 Ontario Inc
ON2147	2089956 Ontario Inc.
CA1185	Aera Energy, LLC
CA1019	Air Liquide Large Industries U.S., LP
CA1561	AltaGas Power Holdings (U.S.), Inc.
CA1913	BP Products North America, Inc.
QC2193	Bridgestone Canada Inc.
CA1108	California Resources Elk Hills, LLC
ON2676	Canadian Pacific Railway Company
ON2532	Centre Lane Trading Limited
CA1075	Chevron U.S.A., Inc.
CA1732	City of Long Beach, Gas and Oil Department
CA1443	City of Los Angeles, Department of Airports
CA1073	City of Roseville
CA1166	City of Vernon, Vernon Public Utilities
QC2631	Compagnie des chemins de fer nationaux du Canada
QC1901	Coopérative de solidarité Carbone
CA2648	CWP Energy, Inc.
CA1417	Direct Energy Business, LLC
ON2509	Econo Petroleum Inc.
ON2414	Elbow River Marketing Ltd
ON2176	Enbridge Gas Distribution Inc.
ON2458	Énergie Valero Inc / Valero Energy Inc
QC1384	Énergie Valero Inc.
QC1502	Énergir, s.e.c.
ON2696	Energy Source Natural Gas Inc.

<sup>2</sup> The term “bid guarantee” refers to “bid guarantee” as described in the California Regulation, “financial guarantee” as defined in the Québec Regulation, and “financial assurance” as described in the Ontario Regulation.

<b>CITSS Entity ID</b>	<b>Entity Legal Name</b>
QC1515	Entreprise Indorama PTA Montréal S.E.C.
ON2329	EPCOR Natural Gas Limited Partnership
CA1110	Exelon Generation Company, LLC
ON2402	Factor Gas Liquids Inc.
ON2253	Federated Co-operatives Limited
CA1260	Flyers Energy, LLC
CA1081	Foster Poultry Farms
QC1750	Gazifère Inc.
QC1764	Gestion Énergie Québec Inc.
ON2162	Goodyear Canada Inc
ON2470	Grant's Transport Limited
ON2330	Great Lakes Greenhouses Inc.
ON2240	Greater Toronto Airports Authority
ON2203	Greenenergy Fuels Canada Inc.
ON2388	Greenfield Energy Centre LP
QC2118	Hamel Propane Inc.
ON2361	Hiram Walker & Sons Ltd.
ON2315	Husky Oil Operations Limited
ON2288	Hydro One Networks Inc.
QC1359	Hydro-Québec
CA1807	Idemitsu Apollo
ON2189	Imperial Oil
ON2210	Ivaco Rolling Mills 2004 L.P.
CA1727	Jaco Oil Company
CA1141	Kern Oil & Refining Company
ON2356	Koch Supply & Trading, LP
ON2504	Larry Penner Enterprises Inc.
QC2501	Le Groupe Harnois Inc
QC1770	Les Pétroles Irving Commercial s.e.n.c
QC1730	Les Produits Pétroliers Norcan S.E.N.C
CA1111	Los Angeles Department of Water & Power
CA1830	Luminus Energy Partners, LLC
ON2439	MacEwen Petroleum Inc.
CA1104	Macquarie Energy, LLC
ON2187	Markham District Energy Incorporated
ON2457	McDougall Energy Inc.
CA2645	Mercuria Energy America, Inc.
CA1107	Midway Sunset Cogeneration Company
ON2449	Mighty Flame Canada Inc.

<b>CITSS Entity ID</b>	<b>Entity Legal Name</b>
CA1239	Morgan Stanley Capital Group, Inc.
CA1302	Naftex Operating Company
ON2324	Nature Fresh Farms Inc.
CA1672	NextEra Energy Marketing, LLC
QC2107	NGL Supply Co. Ltd.
CA1191	Northern California Power Agency
CA1138	NRG Power Marketing, LLC
ON2304	Ontario Power Generation Inc.
CA1046	Pacific Gas and Electric Company
CA2046	Pacific Gas and Electric Company
CA1034	PacifiCorp
CA2106	PBF Energy Western Region, LLC
ON2345	Pembina Infrastructure and Logistics LP
ON2477	Pétrole Léger Inc.
CA1279	Phillips 66 Company
CA1595	Pixley Cogen Partners, LLC
ON2190	Plains Midstream Canada ULC
CA1003	Plumas-Sierra Rural Electric Cooperative
CA1304	Portland General Electric Company
CA1505	Powerex Corporation
ON2348	Primemax Energy Inc.
QC1731	Propane Québec Inc.
CA1204	Rio Tinto Minerals, Inc.
CA1774	Robinson Oil Supply & Transport, Inc.
ON2445	Royal Bank of Canada
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.
CA2175	Sempra Gas & Power Marketing, LLC
CA1366	Seneca Resources Corporation
CA2358	Sentinel Peak Resources California, LLC
CA1251	Shell Energy North America (US), LP
CA1757	Shiralian Enterprises
CA1170	Southern California Gas Company
CA1800	Southern Counties Oil Company, a California Limited Partnership
CA1674	Southwest Gas Corporation
ON2244	St. David's Hydroponics Ltd

<b>CITSS Entity ID</b>	<b>Entity Legal Name</b>
CA1804	Stan Boyett & Son, Inc.
CA1921	Statkraft US, LLC
ON2474	St-Pierre Fuels Inc
ON2151	Suncor Energy Products Partnership
QC1486	TEMBEC
CA1165	Tesoro Refining & Marketing Company, LLC
ON2299	The Corporation of the City of Kingston
ON2381	The Corporation of the City of Kitchener
ON2359	The International Group Inc.
CA1888	The Soco Group, Inc.
CA2100	Tricor Refining, LLC
CA1216	Turlock Irrigation District
ON2165	Union Gas Limited
CA1346	United States Gypsum Company
CA1635	Valero Marketing and Supply Company
CA1135	Vitol, Inc.
ON2514	W. O. Stinson & Son Limited
QC2066	W.R. Grace Canada Corp.
CA1229	Walnut Creek Energy, LLC
CA2056	Wild Goose Storage, LLC

**Explanatory Notes: Qualified Bid Summary Statistics****Current Auction**

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, the Province of Ontario, 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, a Capped Participant as defined in Ontario'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.