

California Cap-and-Trade Program and Québec Cap-and-Trade System November 2014 Joint Auction #1

Summary Results Report

Background

The California Air Resources Board (ARB) and Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC)¹ held the first joint auction of greenhouse gas allowances (GHG) on November 25, 2014. The auction included a Current Auction of 2014 vintage allowances and an Advance Auction of 2017 vintage allowances. The information provided in this report is a balance between the need for program transparency and protection of individual auction participants' market positions.

Prior to the certification of the auction, ARB and MDDELCC staff and the 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. 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 regulation and appropriate economic logic. The Market Monitor confirmed the clearing price and clearing quantities by participant for the auction for 2014 vintage allowances and for the auction for 2017 vintage allowances. The Auction Administrator (AA) reported that the 2014 auction clearing price is \$12.10 per allowance, with 23,070,987 total 2014 vintage allowances sold. The AA reported that the 2017 auction clearing price is \$11.86 per allowance with 10,787,000 total 2017 allowances sold. The Market Monitor confirmed the 2014 and 2017 auction clearing prices. The Market Monitor confirmed the cleared quantities assigned to individual participants by the AA were consistent with the regulation logic. The total volumes cleared are correct. The auction algorithm correctly applied the regulation requirements covering the bid guarantee. The tie breaker logic was needed in this auction. The Market Monitor did not observe any breaches of security or communication protocols. The Market Monitor recommends that ARB and MDDELCC approve the November Auction results.

Unlike in past California-specific and Québec-specific auctions, 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 based on instructions from California and

¹ Ministry of Sustainable Development, Environment and the Fight against Climate Change.

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. Proceeds to the jurisdictions are paid after all bidder payments are received, which is 28 days after the bid window closes. 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. Jurisdiction proceeds information will be published after the auction is final.

California must receive auction proceeds only in USD and Québec must receive auction proceeds only in CAD. Thus, the total amount of auction proceeds received by California and by Québec from the sale of state- and province-owned allowances may vary (upwards or downwards) depending on the prevailing exchange rates in effect at the time of distribution of auction proceeds. A Post Joint Auction Public Proceeds Report will be issued subsequent to this report providing the final amount of proceeds transferred.

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Québec Cap-and-Trade System
November 2014 Joint Auction #1**

The California Air Resources Board (ARB) and Québec's ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) held the first joint auction of greenhouse gas allowances (GHG) on November 25, 2014. The auction included a Current Auction of 2014 vintage allowances and an Advance Auction of 2017 vintage allowances. Below are key data and information on the results of the auction. Please see Explanatory Notes after the list of Qualified Bidders for descriptions of all summary information.

Qualified Bid Summary Statistics

Current Auction of 2014 Vintage Allowances

Total 2014 Allowances Available for Sale:	23,070,987
Total 2014 Allowances Sold at Auction:	23,070,987
Total Qualified Bids Divided by	
Total 2014 Allowances Available for Sale:	1.73

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.

Auction Exchange Rate (USD to CAD):	1.1305	
Auction Reserve Price:	\$11.34 USD	\$12.82 CAD
Settlement Price Per Allowance:	\$12.10 USD	\$13.68 CAD
Bid Price Summary Statistics		
Maximum Price:	\$42.39 USD	\$47.92 CAD
Minimum Price:	\$11.34 USD	\$12.82 CAD
Mean Price:	\$13.14 USD	\$14.86 CAD
Median Bid Price:	\$12.00 USD	\$13.57 CAD
Median Allowance Price:	\$12.15 USD	\$13.74 CAD
Allowances Purchased by Compliance Entities:	97.6%	
Hirschman-Herfindahl Index:	627	

Advance Auction of 2017 Vintage Allowances

Total 2017 Allowances Available for Sale:	10,787,000
Total 2017 Allowances Sold at Auction:	10,787,000
Total Qualified Bids Divided by	
Total 2017 Allowances Available for Sale:	1.92

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.

Auction Exchange Rate (USD to CAD):	1.1305	
Auction Reserve Price:	\$11.34 USD	\$12.82 CAD
Settlement Price Per Allowance:	\$11.86 USD	\$13.41 CAD
Bid Price Summary Statistics		
Maximum Price:	\$44.00 USD	\$49.74 CAD
Minimum Price:	\$11.34 USD	\$12.82 CAD
Mean Price:	\$12.17 USD	\$13.76 CAD
Median Bid Price:	\$11.86 USD	\$13.41 CAD
Median Allowance Price:	\$11.86 USD	\$13.41 CAD
Allowances Purchased by Compliance Entities:	85.2%	
Hirschman-Herfindahl Index:	1183	

List of Qualified Bidders for the Current Auction of 2014 Vintage Allowances and the Advance Auction of 2017 Vintage Allowances

A Qualified Bidder is an entity that completed an auction application or confirmed an intent to bid for the auction, submitted an acceptable bid guarantee, and was approved by ARB and MDDELCC to participate in the auction.

Aera Energy, LLC
AltaGas Power Holdings (U.S.) Inc.
BNSF Railway Company
BP Energy Company
California Dairies Inc.
California Department of Water Resources
California Resources Elk Hills, LLC
Calpine Energy Services, LP
CalPortland Company
Cargill Power Markets, LLC
City of Anaheim, Public Utilities Department
City of Azusa
City of Cerritos
City of Shasta Lake
City of Vernon, Vernon Gas & Electric
CP Energy Marketing (US) Inc.
CPV Sentinel, LLC
EDF Trading North America, LLC
Énergie Valero Inc.
Exelon Generation Company, LLC
Exxon Mobil Corporation
Foster Poultry Farms
Freeport-McMoRan Oil & Gas, LLC
Fresno Cogeneration Partners, LP
Gestion Énergie Québec Inc.
Gila River Power, LLC
Goal Line, LP
Grace Canada Inc.
High Desert Power Project, LLC
Hydro-Québec
IPC (USA) Inc.
J. Aron & Company
Jaco Oil Company
KES Kingsburg, LP
Kildair Service Ltée
Kimberly-Clark Worldwide Inc.
Kings River Conservation District
La Cie Matériaux de Construction BP Canada
Lafarge Canada Inc.

Les Pétroles Irving Commercial S.E.N.C.
Les Produits Pétroliers Norcan S.E.N.C.
Liberty Utilities (CalPeco Electric), LLC
Los Angeles Department of Water & Power
Luminus Energy Partners QP, LP
Macquarie Energy, LLC
Mark McDivitt
Mines Wabush
Morgan Stanley Capital Group Inc.
Naftex Operating Company
Newalta Corporation
Noble Americas Gas & Power Corp.
Northern California Power Agency
NRG Power Marketing, LLC
Oildale Energy, LLC
Pacific Ethanol Stockton, LLC
Pacific Gas and Electric Company
PacifiCorp
Petro Diamond Incorporated
Pétrolière Impériale
Phillips 66 Company
Plumas-Sierra Rural Electric Cooperative
Portland General Electric Company
Produits Suncor Énergie S.E.N.C.
Propane Québec Inc.
Rio Tinto Alcan Inc.
Robinson Oil Supply & Transport Inc.
Royal Bank of Canada
Sacramento Municipal Utility District (SMUD)
San Diego Gas & Electric Company
Sempra Generation
Signal Hill Petroleum Inc.
Silicon Valley Power (SVP), City of Santa Clara
Société en commandite Gaz Métro
Société en commandite Revenu Noranda
Southern California Edison Company
Southern California Gas Company
TEMBEC
The Bank of Nova Scotia
Turlock Irrigation District
United States Pipe & Foundry Co., LLC
Vitol Inc.
Walnut Creek Energy, LLC
Yuba City Cogeneration Partners, LP

**Explanatory Notes: Qualified Bid Summary Statistics
Current Auction of 2014 Vintage Allowances**

Total 2014 Allowances Available for Sale:	Total 2014 vintage allowances available for purchase in the auction in metric tons, including allowances consigned by consigning entities and allowances sold by the State of California and the Province of Québec.
Total 2014 Allowances Sold at Auction:	Total 2014 vintage allowances purchased in the auction in metric tons.
Total Qualified Bids Divided by Total 2014 Allowances Available for Sale:	Total number of allowances included in all the qualified bids for the current vintage (regardless of bid price) divided by the total number of current vintage allowances available in the auction.
Auction Exchange Rate (USD to CAD):	The most recently available noon daily buying rate for U.S. and Canadian dollars as published by the Bank of Canada the day before the auction.
Auction Reserve Price:	The minimum acceptable auction bid price for current vintage allowances shown in both U.S. and Canadian dollars per metric ton.
Settlement Price Per Allowance:	The current vintage allowance price that resulted from the auction, in U.S. and Canadian dollars per metric ton.
Allowances Won by Compliance Entities:	The total number of current vintage allowances purchased in the auction by compliance entities divided by the total number of current vintage allowances sold in the auction. A Compliance Entity is a Covered Entity or Opt-in Covered Entity as defined in the Cap-and-Trade Regulation or an Emitter as defined in Québec's Cap-and-Trade Regulation.
Bid Price Summary Statistics	Statistics are calculated from all the qualified bids for the current vintage (regardless of bid price). All price statistics are shown in both U.S. and Canadian dollars.
Maximum Price:	Highest submitted bid
Minimum Price:	Lowest submitted bid

Mean Price:	Average qualified bid calculated as the sum of the bid price times the bid quantity of each qualified bid divided by the sum of the bid quantities across all qualified bids.
Median Bid Price:	The price per metric ton calculated so that 50% of the qualified bids fall above and below the median bid price.
Median Allowance Price:	The price per metric ton calculated so that 50% of the quantity of allowances in the qualified bids fall above and below that price median value.
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 vintage allowances 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., $100 \times 100 = 10,000$).

Advance Auction of 2017 Vintage Allowances

The data for the future vintage allowance auction are computed in the same manner as computed for the current vintage allowance auction. No allowances are consigned to the future vintage auction.