

Summary Results Report

Nova Scotia Cap-and-Trade Program
Auction of Emission Allowances

Updated on December 7, 2022

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Detailed Auction Requirements and Instructions
Nova Scotia Cap-and-Trade Program
Auction of Emission Allowances
Summary Results Report
Department of Environment and Climate Change
December 2022

ISBN: 978-1-77448-424-1

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Dec 7th Auction of Emission Allowances

Summary Results Report

Background

Nova Scotia Environment and Climate Change held the December 2022 Auction of Emission Allowances on December 7th, 2022. The auction included 2021 vintage allowances. The information in this report provides program transparency while also maintaining the confidentiality of individual auction participants' market positions.

Prior to the certification of the auction, Nova Scotia Environment and Climate Change and the independent Market Monitor carefully evaluated the bids and determined that the auction process and procedures complied with the requirements of the *Cap-and-Trade Program Regulations* (the Regulations). As provided below, the Market Monitor made the following determination:

The Market Monitor found the auction results to be competitive, based on the data available at the time of the auction. The Market Monitor did not find evidence of market manipulation, based on the data available at the time of the auction. 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 bidders for the Current Auction of 2021 current vintage allowances. The auction algorithm correctly applied requirements of the Regulations covering the bid guarantee, purchase limit and holding limits.

Auction proceeds figures are not shown in this document. The Financial Services Administrator will distribute auction proceeds to Nova Scotia Environment and Climate Change after all qualified bidder payments are received. Nova Scotia will receive auction proceeds by Jan 3rd, 2023. Information regarding auction proceeds will also be published after the auction is finalized.

Auction Results

The first and the 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 the December 2022 Auction

Description of Allowances	Allowances Offered
Allowances offered by Nova Scotia Environment and Climate Change	686,000
Allowances offered by entity consignment	0
Total allowances offered	686,000
Description of Allowances	Allowances Offered
Allowances sold for Nova Scotia Environment and Climate Change	686,000
Allowances sold for entity consignment	0
Total allowances sold	686,000

Table 2: Auction data for the December 2022 Auction

Auction Data Description	Auction Data
Total Qualified Bids Divided by Total Allowances Available for Sale	1.11
Herfindahl-Hirschman Index	2579

Table 3: Qualified Bid Summary Statistics for the December 2022 Auction

Auction Statistic Description	Auction Statistic
Auction Reserve Price	\$22.92
Settlement Price	\$28.25
Maximum Bid Price	\$100.00
Minimum Bid Price	\$22.92
Mean Bid Price	\$47.16
Median Bid Price	\$31.55
Median Allowance Price	\$50.00

List of qualified bidders for the December 2022 Auction

A qualified bidder is an entity that completed an auction application, submitted a financial guarantee that was accepted by the Financial Services Administrator, and was approved by Nova Scotia Environment and Climate Change to participate in the auction. Qualified bidders may or may not have participated in the auction.

Table 4: Qualified Bidders for the Dec 2022 Auction

CITSS Entity ID	Entity Legal Name
NS3378-3744	Irving Oil Limited
NS2881-3338	Imperial Oil
NS2870-3361	Valero Energy Inc.
NS2859-3352	Suncor Energy Products Partnership
NS2869-3335	Heritage Gas Limited
NS2880-3320	Nova Scotia Power Incorporated
NS2873-3358	Superior Plus LP
NS2955-3441	Maritimes & Northeast Pipeline Limited Partn
NS2882-3355	Lafarge Canada Inc.
NS2892-3344	Elbow River Marketing Ltd.
NS2894-3372	Irving Oil Marketing G.P.
NS2860-3341	Plains Midstream Canada ULC
NS2865-3364	Canadian Enterprise Gas Products, ULC.

Explanatory Notes: Qualified Bid Summary Statistics

General Term	Explanation
Total Allowances Available for Sale:	Total allowances available, by vintage, for purchase in the auction, including allowances offered by Nova Scotia Environment and Climate Change and consigned by consigning entities.
Total Allowances Sold at Auction:	Total allowances purchased at the auction.
Total Qualified Bids Divided by Total Allowances Available for Sale:	Total number of emission allowances included in all the qualified bids for the auction divided by the total number of emission allowances available in the auction.
Herfindahl–Hirschman Index (HHI):	The HHI is a measure of the concentration of allowances purchased by winning bidders relative to the total sale of emission allowances in the auction. The percentage of emission 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 emission allowances purchased by a single bidder (i.e., $100 \times 100 = 10,000$).
Qualified Bid Summary Statistics:	Statistics are calculated from all the qualified bids for the auction.
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 emission allowances.
Settlement Price:	The emission allowance price that resulted from the auction.
Maximum Bid Price:	Highest qualified bid price.
Minimum Bid Price:	Lowest qualified bid price.
Mean Bid 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 Bid Price:	The price per emission allowance calculated so that 50% of the qualified bid prices fall above and 50% fall below the median bid price.

General Term**Explanation**

Median Allowance Price:

The price per emission allowances calculated so that 50% of the qualified bid allowances fall above and 50% fall below the median allowance price.