



Environmental Index Methodology Guide

ICE NGX Canada Inc.

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ICE NGX Environmental Index Methodology Guide

1. Introduction

This document sets out the methodology for the ICE NGX Environmental Indices.

1.1. Definitions and Interpretation

The following words and phrases when used in this Methodology Guide have the meaning set out below.

“Alberta Emission Performance Credit” or “Alberta EPC” means an emission performance credit generated pursuant to and under the TIER Regulation;

“Alberta Environmental Product” means the products offered for trading and clearing by ICE NGX for physical delivery of an Alberta EPC or Alberta Offset, as applicable, or a specified vintage, all as further described in the CPA;

“Alberta Offset” means an emission offset generated pursuant to and under the TIER Regulation;

“CPA” means the ICE NGX Contracting Party Agreement, which functions as the rulebook for ICE NGX’s exchange and clearinghouse operations, the current version of which is available on the Regulation page of the ICE NGX website (www.ice.com/ngx/regulation);

“Expiry Month” means, in respect of a Physically Settled Environmental Futures Product, the calendar month in which the last trading day for the Physically Settled Environmental Futures Product occurs, and, in other words, is the calendar month prior to the month in which delivery occurs under the Physically Settled Environmental Futures Product;

“ICE NGX Clearing System” has the meaning given to it in the CPA;

“ICE NGX Trading System” has the meaning given to it in the CPA;

“Index Period” has the meaning set out in section 2 of this document;

“Physically Settled Environmental Product” has the meaning ascribed to it in the CPA, and includes an Alberta Environmental Product as defined in this Methodology Guide;

“Subscriber” means anyone who has access to one or more of the Indices;

“Third Party Information” means information of third parties that is licensed to ICE NGX for the development of the Indices;

“TIER Regulation” means the Alberta Technology Innovation and Emissions Reduction Regulation, Alberta Regulation 133/2019, as may be amended from time to time; and

“trading day” means a day that the relevant product is available for trading on the ICE NGX exchange platform.

1.2. Intellectual Property Rights

ICE NGX owns the right, title and interest in and to the following Environmental Indices.

<u>ICE NGX Alberta Environmental Monthly Indices</u>	<u>ICE NGX Alberta Environmental Annual Indices</u>
ICE NGX Alberta EPC Monthly Index	ICE NGX Alberta EPC Annual Index
ICE NGX Alberta Emission Offset Monthly Index	ICE NGX Alberta Emission Offset Annual Index

Third Party Information is provided as part of and in connection with the ICE NGX Environmental Indices and can be used by a Subscriber solely in relation to the Subscriber’s subscription to the ICE NGX Environmental Indices and for no other independent purpose and, without prejudice to the generality of this statement, the Subscriber is prohibited from redistributing the Third Party Information and any information derived there from independently and separately from the ICE NGX Environmental Indices.

2. Methodologies

2.1. ICE NGX Alberta Environmental Monthly Indices

2.1.1. Overview

ICE NGX generates the ICE NGX Alberta EPC Monthly Index for each vintage from the trading activity from the first day of the Expiry Month to the last day of the Expiry

Month in the relevant Alberta Environmental Product for delivery of an Alberta EPC of that vintage.

ICE NGX generates the ICE NGX Alberta Emission Offset Monthly Index for each vintage from the trading activity from the first day of the Expiry Month to the last day of the Expiry Month in the relevant Alberta Environmental Product for delivery of an Alberta Emission Offset of that vintage.

2.1.1.1. Index Data Source

All cleared transaction data for the relevant Alberta Environmental Product in the relevant vintage during the Index Period will be volume-weighted and averaged to create the ICE NGX Alberta Environmental Monthly Index.

2.1.1.2. Index Period and Hours

The ICE NGX Alberta Environmental Monthly Indices will be calculated from the first trading day of the Expiry Month until the last trading day of each Expiry Month for Alberta Environmental Products.

All trades consummated in the relevant Alberta Environmental Product during ICE NGX market hours during the Index Period are included in the Indices.

2.1.1.3. Assumptions

Because the Indices are calculated according to the respective methodology set out in this document and based on all trades executed on or pursuant to the rules of the ICE NGX exchange during the Index Period and Index Hours, no assumptions are made and no extrapolation or interpolation of the Index Data is made.

2.1.1.4. Reference Unit

The ICE NGX Alberta EPC Monthly Index is expressed in CAD/Alberta EPC.

The ICE NGX Alberta Offset Monthly Index is expressed in CAD/Alberta Offset.

2.1.2. Methodology

The ICE NGX Alberta Environmental Monthly Indices are calculated as the volume-weighted average of all on-screen transactions completed on the ICE NGX exchange during the Expiry Month in the relevant Alberta Environmental Product(s) for delivery the month following Expiry.

2.1.3. Methodology Rationale

The intended industry and users of the ICE NGX Alberta Environmental Monthly Indices value the volume weighted average of executed, on-screen trades in the underlying commodity as a reflection of the price of a specified volume of that commodity.

2.1.4. Minimum Volume

The ICE NGX Alberta Environmental Monthly Indices have a minimum volume requirement of 25,000 credits transacted during the Expiry Month in the relevant Alberta Environmental Product(s). If the minimum volume is not met for a particular vintage of Alberta EPCs or Alberta Offsets, ICE NGX will calculate the relevant Index calculated as the simple average of all daily settlement prices during the Expiry Month for the particular vintage of the relevant Alberta Environmental Product(s).

2.2. ICE NGX Alberta Environmental Annual Indices

2.2.1. Overview

ICE NGX generates the ICE NGX Alberta EPC Annual Index for each vintage from the trading activity in each Expiry Month of the relevant Alberta Environmental Product for delivery of an Alberta EPC of that vintage from June 1 of a given year through May 31 of the following year.

ICE NGX generates the ICE NGX Alberta Emission Offset Annual Index for each vintage from the trading activity in each Expiry Month of the relevant Alberta Environmental Product for delivery of an Alberta Emission Offset of that vintage from June 1 of a given year through May 31 of the following year.

2.2.1.1. Index Data Source

All cleared transactional data for the relevant Alberta Environmental Product in the relevant vintage during each Expiry Month of the Index Period will be volume-weighted and averaged to create the ICE NGX Environmental Annual Index.

2.2.1.2. Index Period and Hours

The ICE NGX Environmental Annual Index will be calculated from the 1st day of June of a given year through to inclusive of the 31st day of May in the following calendar year.

All trades in the relevant Alberta Environmental Product(s) consummated during ICE NGX market hours during the Index Period are included in the Indices.

2.2.1.3. Assumptions

Because the Indices are calculated according to the respective methodology set out in this document and based on all trades executed on or pursuant to the rules of the ICE NGX exchange during the Index Period and Index Hours, no assumptions are made and no extrapolation or interpolation of the Index Data is made.

2.2.1.4. Reference Unit

The ICE NGX Alberta EPC Annual Index is expressed in CAD/Alberta EPC.

The ICE NGX Alberta Offset Environmental Index is expressed in CAD/Alberta Offset.

2.2.2. Methodology

The ICE NGX Alberta Environmental Annual Indices are calculated as the volume-weighted average of all on-screen transactions executed in the ICE NGX Trading System in each Expiry Month during the Index Period in the relevant Alberta Environmental Product(s).

2.2.3. Methodology Rationale

The intended industry and users of the ICE NGX Alberta Environmental Annual Indices value the volume weighted average of all executed, on-screen trades in all Expiry Months in a year in the underlying commodity as a reflection of the price of a specified volume of that commodity.

2.2.4. Minimum Volume

The ICE NGX Alberta Environmental Annual Indices have no minimum transacted volume from any Expiry Month during the Index Period. If there is no relevant transaction data from a particular Expiry Month during the Index Period, a null value will be included instead of that Expiry Month in the calculation of the ICE NGX Alberta Environmental Annual Index.

The minimum transacted volume for the June 1-May 31 Index Period is one trade in the relevant Alberta Environmental Product.

If the minimum transacted volume set out above is not met for a particular vintage of Alberta EPCs or Alberta Offsets, ICE NGX will calculate the relevant Annual Index as the simple average of the closing prices for the particular vintage of the relevant Alberta Environmental Product at the end of each Expiry Month during the Index Period.

3. Criteria and Procedures for Determination

3.1. Relative Importance assigned to Criteria used in Determination

Each ICE NGX Alberta Environmental Index is calculated based on transaction data - specifically transaction data from all trades executed in the ICE NGX Trading System during the relevant Index Period. Each trade is given the same importance, subject to the weighted average calculation.

3.2. Input Data

The input data for the ICE NGX Environmental Indices is transaction data from trades executed in the ICE NGX Trading System. Accordingly, there are no “contributors” to the Indices.

3.2.1. Input Data Source

After a trade is matched in the ICE NGX Trading System, a trade file containing the transaction data is automatically generated in near real time and is sent to ICE NGX for consumption by the ICE NGX Clearing System.

3.2.2. How Input Data is Used

The ICE NGX Clearing System consumes the transaction data and calculates the Indices.

3.3. Inclusion of Transaction Data

The input data for the ICE NGX Environmental Indices is transaction data from trades in the relevant Alberta Environmental Product executed in the ICE NGX Trading System and cleared by ICE NGX.

3.3.1. Minimum Quantity of Transaction Data

Because the ICE NGX Environmental Indices are calculated based on all relevant transactions executed in the ICE NGX Trading System during the relevant Index Period, there is no minimum quantity of transaction data.

See Section 2 for discussion of minimum volumes.

3.3.2. Identification and Correction of Errors

Any errors discovered in an ICE NGX Environmental Index on or prior to the date that is 30 days following the determination of the Index will be corrected by ICE NGX. ICE NGX will post a notice to inform users of any correction to the affected Index.

If an error is discovered after the deadline, the Index will not be corrected and will remain as published.

3.3.3. Exclusion of Trades in Error

If ICE NGX determines that a Trade in Error (as defined in the CPA) has occurred on the ICE NGX Trading System, such trades will be cancelled in accordance with the CPA and will be excluded from the calculation of the ICE NGX Environmental Indices.

3.3.4. Exclusion of OTC Transactions

All block trades, brokered trades and other OTC (Over the Counter) transactions submitted to ICE NGX exchange will be excluded from the calculation of the ICE NGX Environmental Indices because of the potential for non-market prices.

3.3.5. Exclusion of Transaction Data

ICE NGX retains the authority to exclude any transaction data from inclusion in the calculation of the Environmental Indices, which appears to be irregular to the then prevailing market prices, during the period of investigation of any such transactions. All transaction data will be included in the calculation on satisfactory resolution of such investigation, provided that ICE NGX resolves such investigation prior to the opening of the ICE NGX Trading System on the next trading day.

ICE NGX may, in its sole discretion, exclude input data including in the following circumstances.

- ICE NGX is aware or reasonably believes there are or may be errors, misstatements or omissions in the input data.
- ICE NGX reasonably believes that including the input data in the Index would be a violation of, or improper in the context of, ICE NGX's regulatory obligations as administrator of the Index.

3.4. Calculation of Averages

3.4.1. Volume Weighted Average

All ICE NGX Environmental Indices utilize volume weighted averages either in the calculation of the Index or as a component of the calculation of the Index. Weighted averages are utilized in an effort to minimize any trading anomalies or distress trading activity that might otherwise distort the data sample.

The volume weighted average price is calculated using the following methodology:

- (a) Multiply the Transaction price by the Transaction quantity for each trade in the source data file.
- (b) Sum the product(s) achieved in step (a).
- (c) Sum the Transaction quantity for each trade in the source data file.
- (d) Divide the sum from step (b) by the sum from step (c).

$$\text{Volume Weighted Average Price} = \frac{\text{Sum (Price x Quantity)}}{\text{Sum (Quantity)}}$$

The weighted average prices are calculated first by automated electronic routines and subsequently cross-checked against a manual calculation for accuracy. Once verified, the weighted average prices are used in the generation of the Indices.

3.4.2. Simple Average

The fallback pricing for the ICE NGX Environmental Annual Indices as the simple average of the closing price of each calendar month during the Index Period.

This simple average price is calculated using the following methodology:

- (a) Obtain the closing price for the particular vintage of the relevant Environmental Product at the end of each calendar month during the Index Period.
- (b) Sum the numbers calculated in volume (a).
- (c) Sum the number of months in the Index Period.
- (d) Divide (b) by (c).

$$\text{Simple Average Price} = \frac{\text{Sum Closing Price at end of each calendar month}}{\text{Sum (Number of Months)}}$$

3.5. Assumptions

Because the Indices are calculated according to the respective methodology set out in this document and based on all trades executed on or pursuant to the rules of the ICE NGX exchange during the relevant Index Period and Index Hours, no assumptions are made and no extrapolation or interpolation of the Index Data is made.

3.6. Expert Judgment

Because the Indices are calculated according to the respective methodology set out in this document and based on all trades executed on or pursuant to the rules of the ICE NGX exchange during the relevant Index Period and Index Hours, there is no exercise of expert judgment in normal course determinations of the ICE NGX Environmental Indices.

4. Complaints, Disclaimers, Limitation of Liability

4.1. ICE NGX Trading System Availability

4.1.1. Individual Users

During the operation of the ICE NGX Trading System, a system that connects several hundred remote users, it is possible that certain individual users may experience connectivity problems from time to time. A loss of accessibility to the ICE NGX Trading System, however, will not prevent individuals from consummating

trades for inclusion in the Indices. In the event that an individual user or an individual group of users cannot access the ICE NGX Trading System to submit orders, ICE NGX is prepared to accept orders via telephone instructions. These orders will be posted by order entry agents internally at ICE NGX based on the instructions provided by the user. Any Transactions that occur which include these orders will also be included in the source data file used to generate the Indices as if the users entered the orders in the normal manner.

4.1.2. Aggregate User Base

The ICE NGX Trading System may experience technological problems that require the temporary halting of trading capability or a temporary shut-down of the ICE NGX Trading System. Both of these situations will make it impossible to continue to build the source data file for the indices in the usual manner as described in this document. While these periods of ICE NGX Trading System downtime have traditionally been infrequent and traditionally quite brief, ICE NGX has developed procedures to ensure that the impact of system outages are not detrimental to the generation of the Indices. These procedures will allow ICE NGX to provide order entry, trading and clearing services manually via telephone instructions and confirmations during any system outages. Trades consummated on the ICE NGX Trading System or via telephone orders during these system outages will be included in the resulting source data file used to generate the Indices. The Transactions will then be entered into the ICE NGX Trading System once it is again available and all problems have been resolved. Any Transactions that were consummated manually during the outage, and therefore included in the source data file, will be published by ICE NGX to ensure transparency.

4.2. Real-Time Price Indicators

ICE NGX may, in its discretion, provide running weighted averages of trading activity (“Real-time Price Indicators”) that will be considered for inclusion in the ICE NGX Environmental Monthly Indices. These running weighted averages are provided as a source of information to assist market participants in making timely and informed decisions. The Real-time Price Indicators should not be construed as the Indices themselves, but rather a representation of the trading activity that will comprise the verified and published Indices.

4.3. Not Fair Market Value

ICE NGX does not make any representation to any person that the Indices derived from market activity on the ICE NGX Trading System represents fair market value or is indicative of fair market value.

4.4. Trading Irregularities

Pursuant to the terms and conditions of the CPA, each Contracting Party has agreed not to engage in any trading irregularities, whether alone or in association with others, that may comprise manipulative activity or activity aimed at manipulation of prices.

4.5. Limitation of Liability

Neither ICE NGX nor its agents, directors, officers and employees shall be liable to any person for any losses, costs or expenses arising from any matter relating to the calculation, methodology of calculation, compilation, or publication of any Index administered by ICE NGX and used for any purpose including the settlement of any transaction. ICE NGX does not make any express or implied warranties in respect of the results which may be achieved through the use of any Index or in respect of the value of any Index at any given time, nor that any settlement prices established are at a fair, proper or correct amount. Neither ICE NGX nor its agents, directors, officers and employees shall, under any circumstances, be liable for errors or deficiencies in the calculation, methodology of calculation or publication of any Index nor shall ICE NGX be obligated to provide notice of, or publish, errors in any Index in any manner.

4.6. Complaint Procedures

Any concerns or complaints regarding ICE NGX Indices can be directed to TO-ICENGX@ice.com or Legal-ICENGX@ice.com.

5. Governance and Review of Methodology

5.1. Internal Review

This Methodology Guide is reviewed at least annually. This review is designed to ensure that each Index determined under this Methodology Guide accurately and reliably represents the value of the underlying interest of the Index for part of the market the Index is intended to represent.

5.2. Changes to Methodology

ICE NGX may make non-significant changes to this Methodology Guide in such manner and with such notice to any person as it may determine in its sole discretion.

For information relating to significant changes, see the ICE NGX Index Consultation Policy, available on the ICE NGX website at www.ice.com/ngx/index.

5.3. Approval of Changes to Methodology

A change to this Methodology must be approved by the ICE NGX President.

5.4. Revision History

Version	Date	Approver	Summary of Changes
1.0	April 1, 2024	Greg Abbott	New document
