

# **S&P/TSX ESG Indices** *Methodology*

November 2024

# Table of Contents

Introduction	3
<b>Index Objectives</b>	<b>3</b>
<b>Highlights</b>	<b>3</b>
<b>Partnership</b>	<b>4</b>
<b>Supporting Documents</b>	<b>4</b>
Eligibility Criteria	5
<b>Index Universe</b>	<b>5</b>
<b>General Index Exclusions</b>	<b>5</b>
<b>Exclusions Based on Business Activities</b>	<b>5</b>
<b>Exclusions Based on Sustainalytics' Global Standards Screening</b>	<b>6</b>
<b>Controversies: Media and Stakeholder Analysis Overlay</b>	<b>6</b>
<b>Additional Index Exclusions</b>	<b>7</b>
<b>Exclusions Based on ESG Score</b>	<b>7</b>
<b>Multiple Share Classes and Dual Listed Companies</b>	<b>7</b>
Index Construction	8
<b>Index Calculations</b>	<b>8</b>
<b>S&amp;P/TSX Composite ESG Index</b>	<b>8</b>
<b>S&amp;P/TSX Composite ESG Tilted and S&amp;P/TSX 60 ESG Indices</b>	<b>8</b>
<b>Tilt Scaling Factors</b>	<b>9</b>
<b>S&amp;P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index</b>	<b>9</b>
Index Maintenance	11
<b>Rebalancing</b>	<b>11</b>
<b>Quarterly Eligibility Reviews</b>	<b>11</b>
<b>Quarterly Updates</b>	<b>11</b>
<b>Monthly Dividend Review</b>	<b>11</b>
<b>Additions and Deletions</b>	<b>11</b>
<b>Corporate Actions</b>	<b>12</b>
<b>Currency of Calculation and Additional Index Return Series</b>	<b>12</b>
<b>Base Dates and History Availability</b>	<b>12</b>
Index Data	13
<b>Calculation Return Types</b>	<b>13</b>
Index Governance	14
<b>Index Committee</b>	<b>14</b>

Index Policy	15
<b>Announcements</b>	<b>15</b>
<b>Pro-forma Files</b>	<b>15</b>
<b>Holiday Schedule</b>	<b>15</b>
<b>Rebalancing</b>	<b>15</b>
<b>Unexpected Exchange Closures</b>	<b>15</b>
<b>Recalculation Policy</b>	<b>15</b>
<b>Real-Time Calculation</b>	<b>16</b>
<b>Contact Information</b>	<b>16</b>
Index Dissemination	17
<b>Index Data</b>	<b>17</b>
<b>Web site</b>	<b>17</b>
Appendix A	18
<b>Methodology Changes</b>	<b>18</b>
Appendix B	21
<b>Indices in this Methodology Employing Backward Data Assumption</b>	<b>21</b>
<b>Backward Data Assumption</b>	<b>21</b>
<b>Designated Datasets Subject to Backward Data Assumption</b>	<b>21</b>
<b>Exclusions Based on Missing Coverage</b>	<b>21</b>
<b>Historical Coverage Assessment per Designated Dataset</b>	<b>21</b>
Disclaimer	24
<b>Performance Disclosure/Back-Tested Data</b>	<b>24</b>
<b>Intellectual Property Notices/Disclaimer</b>	<b>25</b>
<b>ESG Indices Disclaimer</b>	<b>27</b>

# Introduction

## Index Objectives

The S&P/TSX ESG Indices measure the performance of Canadian securities meeting the sustainability criteria defined for each index.

**S&P/TSX Composite ESG Index.** The index is designed to be broad-based, maintaining similar overall industry group weights as the underlying S&P/TSX Composite. The index is market capitalization weighted, targeting 75% of the float-adjusted market capitalization (FMC) of each Global Industry Classification Standard (GICS®) Industry Group within the S&P/TSX Composite, using an S&P Global ESG Score as the defining characteristic. The index also applies exclusions based on companies' involvement in specific business activities, performance against the principles of United Nations' Global Compact, and involvement in relevant ESG controversies.

**S&P/TSX Composite ESG Tilted Index.** The index attempts to improve S&P Global ESG Score exposure with respect to the S&P/TSX Composite by overweighting (underweighting) companies with relatively high (low) S&P Global ESG Scores. Index constituents are weighted based on the constituents' weights in the S&P/TSX Composite, tilted such that companies with higher or lower S&P Global ESG scores are over or underweighted ("tilted") while maintaining tilting group neutrality, as described in *Index Construction*. Tilting Groups are the GICS Industry Groups and/or Sectors in the S&P/TSX Composite depending on constituent count and composition.

**S&P/TSX 60 ESG Index.** The index attempts to improve S&P Global ESG Score exposure with respect to the S&P/TSX 60 by overweighting (underweighting) companies with relatively high (low) S&P Global ESG Scores. Index constituents are weighted based on the constituents' weights in the S&P/TSX 60, tilted such that companies with higher or lower S&P Global ESG scores are over or underweighted ("tilted") while maintaining tilting group neutrality, as described in *Index Construction*. Tilting Groups are the GICS Industry Groups and/or Sectors in the S&P/TSX 60 depending on constituent count and composition.

**S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index.** The index is designed to measure the performance of S&P Global ESG Score-screened constituents of the S&P/TSX Canadian Dividend Aristocrats Index (the "Underlying Index") that meet specific ESG Criteria. The index is float market capitalization weighted, subject to a constraint capping single constituent weights at 8% of the total index weight and another to enhance index liquidity.

*For more information on the S&P/TSX Composite and S&P/TSX 60, please refer to the S&P/TSX Canadian Indices Methodology, available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

*For more information on the S&P/TSX Canadian Dividend Aristocrats Index, please refer to the S&P/TSX Canadian Dividend Aristocrats Index Methodology, available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

## Highlights

The indices incorporate S&P Global ESG Scores, built from the S&P Global 'Corporate Sustainability Assessment' (CSA). S&P Global Sustainable<sup>1</sup> calculates these scores and derives them from their 'Corporate Sustainability Assessment' (CSA). A company's CSA score is derived using either company-provided data, publicly available information, or a combination thereof.

*For more information on the CSA process, please refer to <https://www.spglobal.com/esg/csa/>.*

For more information on S&P Global ESG Scores, please refer [here](#).

For the purposes of S&P Global's ESG assessment, companies are assigned to industries defined by S&P Global and the assessment is largely specific to each industry. S&P Global uses GICS as its starting point for determining industry classification. At the industry group and sector levels, the S&P Global Industries match the standard GICS classifications, but some non-standard aggregations are done at the industry level.

For information on S&P Global CSA Industry-GICS Sub-Industry Mapping, please refer [here](#).

**S&P/TSX Composite ESG Tilted Index and S&P/TSX 60 ESG Index.** Weights in these indices are tilted within each GICS industry group (or sector where necessary). This allows similar overall industry group (or sector) weights to be maintained with respect to the parent indices while attempting to improve S&P Global ESG Score exposure with respect to the parent indices by overweighting (underweighting) companies with relatively high (low) S&P Global ESG Scores. The index is scaled by a tilting factor that, when applied to the weighting scheme, provides a specific magnitude of tilting. The scaling factor effectively controls the extent to which companies are overweighted or underweighted compared with the parent indices. The index employs a transparent, rules-based weighting scheme starting from companies' S&P Global ESG scores, which are then re-standardized.

### Partnership

The S&P/TSX Indices are calculated and managed by S&P Dow Jones Indices (S&P DJI) pursuant to an agreement between S&P DJI and The TMX Group Inc. (TMX). TMX is the owner and distributor of the S&P/TSX equity index data.

### Supporting Documents

This methodology is meant to be read in conjunction with supporting documents providing greater detail with respect to the policies, procedures and calculations described herein. References throughout the methodology direct the reader to the relevant supporting document for further information on a specific topic. The list of the main supplemental documents for this methodology and the hyperlinks to those documents is as follows:

Supporting Document	URL
S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology	<a href="#">Equity Indices Policies &amp; Practices</a>
S&P Dow Jones Indices' Index Mathematics Methodology	<a href="#">Index Mathematics Methodology</a>
S&P Dow Jones Indices' Float Adjustment Methodology	<a href="#">Float Adjustment Methodology</a>
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	<a href="#">GICS Methodology</a>

This methodology was created by S&P Dow Jones Indices to achieve the aforementioned objective of measuring the underlying interest of each index governed by this methodology document. Any changes to or deviations from this methodology are made in the sole judgment and discretion of S&P Dow Jones Indices so that the index continues to achieve its objective.

TSX is a trademark of TSX, Inc. and has been licensed for use by S&P Dow Jones Indices.

# Eligibility Criteria

## Index Universe

At each rebalancing, the indices are constructed from the constituents of an underlying index, defined below:

S&P/TSX ESG Index	Underlying Index
S&P/TSX Composite ESG Index	S&P/TSX Composite
S&P/TSX Composite ESG Tilted Index	S&P/TSX Composite
S&P/TSX 60 ESG Index	S&P/TSX 60
S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index	S&P/TSX Canadian Dividend Aristocrats Index

## General Index Exclusions

The General Index Exclusions apply to all indices covered by this methodology.<sup>1</sup>

## Exclusions Based on Business Activities

As of each rebalancing reference date, exclude the following:

- companies without coverage
- companies involved in the following specific business activities, at the relevant level of involvement. Revenue is used as a proxy for all categories.

S&P Global Business Involvement	S&P Global Category of Involvement and Description	S&P DJI Level of Involvement Threshold	S&P DJI Significant Ownership Threshold
Controversial Weapons	<b>Customized Weapons:</b> The screen covers companies involved in the manufacturing of the components of a weapon. These components are intended solely for use in the production and are essential for the functioning of Anti-Personnel Mines, Biological and Chemical Weapons, Blinding Laser Weapons, Cluster Munitions, Depleted Uranium, Incendiary Weapons and Nuclear Weapons.	>0%	≥25%
	<b>Related Products and Services:</b> The screen covers companies that supply products and/or services such as stockpiling and transferring, and sales for Anti-Personnel Mines, Biological and Chemical Weapons, Blinding Laser Weapons, Cluster Munitions, Depleted Uranium, Incendiary Weapons and Nuclear Weapons.	>0%	≥25%
Small Arms	<b>Production of Small Arms Weapons for Civilian Use:</b> The screen covers companies involved in the manufacturing of small arms weapon for civilian use.	>0%	≥25%
	<b>Production of Small Arms Weapons for Non-Civilian Use:</b> The screen covers companies involved in the manufacturing of small arms weapon for non-civilian use.	>0%	≥25%
	<b>Production of Key components:</b> The screen covers companies involved in the manufacturing of key components for assault weapons.	>0%	≥25%
	<b>Retail and Distribution of Small Arms Weapons:</b> The screen covers companies involved in the retail or distribution of small arms weapons for civilian customers.	≥5%	N/A
Military Contracting	<b>Integral Military Weapons:</b> The screen covers companies involved in the manufacturing, assembling, sale and transportation of integral military weapons.	≥10%	N/A

<sup>1</sup> For index history prior to April 2020, the first available product involvement, or UNGC data set for each company, was used and applied historically in cases where data coverage was not available at the time of a given rebalancing.

S&P Global Business Involvement	S&P Global Category of Involvement and Description	S&P DJI Level of Involvement Threshold	S&P DJI Significant Ownership Threshold
	<b>Weapon-related:</b> The screen covers companies involved in the manufacturing and sales of weapon-related products.	≥10%	N/A
Coal	<b>Thermal Coal Mining:</b> The screen covers companies that own/and or operate coal mines that engage in thermal coal mining	≥5%	N/A
Thermal Coal	<b>Generation:</b> The screen covers companies involved in electricity generation using coal power plants.	≥5%	N/A
Oil Sands or Tar Sands	<b>Extraction and/or Production:</b> The screen covers companies involved in the extraction and/or production of fossil fuels from oil sands/tar sands.	≥5%	N/A
Tobacco	<b>Production:</b> The screen covers companies involved in the manufacturing of tobacco.	>0%	≥25%
	<b>Related Products and Services:</b> The screen covers companies that supply essential products/services for the tobacco industry.	≥5%	N/A
	<b>Retail and Distribution:</b> The screen covers companies involved in the retail and/or distribution of tobacco as part of their offerings.	≥5%	N/A

S&P DJI Level of Involvement refers to the company's direct exposure to such products, while Significant Ownership indicates where the company has indirect involvement via some specified level of ownership of a subsidiary company with involvement.

For more information on the S&P Global Business Involvement Screens data set, please refer [here](#).

### Exclusions Based on Sustainalytics' Global Standards Screening

Sustainalytics' Global Standards Screening (GSS) provides an assessment of a company's impact on stakeholders and the extent to which a company causes, contributes, or is linked to violations of international norms and standards. The basis of the GSS assessments is the United Nations (UN) Global Compact (UNGC) Principles. Information regarding related standards is also provided in the screening, including the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights, as well as their underlying conventions. Sustainalytics classifies companies into the following three statuses:

- **Non-Compliant:** classification given to companies that do not act in accordance with the UNGC principles and their associated standards, conventions, and treaties.
- **Watchlist:** classification given to companies that are at risk of violating one or more principles, for which all dimensions for Non-Compliant status could not be established or confirmed.
- **Compliant:** classification given to companies that act in accordance with the UNGC principles and their associated standards, conventions, and treaties.

As of each rebalancing reference date, exclude the following:

- companies without coverage
- companies classified as Non-Compliant

For more information on Sustainalytics, please refer to <http://www.sustainalytics.com/>.

### Controversies: Media and Stakeholder Analysis Overlay

In addition to the above, S&P Global uses RepRisk for daily filtering, screening, and analysis of ESG risk incidents and controversial activities related to companies within the indices.<sup>2</sup> In cases where risks are presented, S&P Global releases a Media and Stakeholder Analysis (MSA), which includes a range of

<sup>2</sup> RepRisk, an ESG data science company, leverages the combination of AI and machine learning with human intelligence to systematically analyze public information in 23 languages and identify material ESG risks. With daily data updates across 100+ ESG risk factors, RepRisk provides consistent, timely, and actionable data for risk management and ESG integration across a company's operations, business relationships, and investments.

issues such as economic crime and corruption, fraud, illegal commercial practices, human rights issues, labor disputes, workplace safety, catastrophic accidents, and environmental disasters.

The Index Committee reviews constituents flagged by S&P Global's MSA to evaluate the potential impact of controversial company activities on the composition of the indices. If the Index Committee decides to remove a company in question, the company is ineligible for re-entry into the index for one full calendar year, beginning with the subsequent rebalancing.

*For more information on RepRisk, please refer to [www.reprisk.com](http://www.reprisk.com). This service is not considered a direct contribution to the index construction process.*

## **Additional Index Exclusions**

**S&P/TSX Composite ESG Index and S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index.** In addition to the General Index Exclusions made to all indices in this methodology, the indices apply additional eligibility criteria based on ESG scores.

### **Exclusions Based on ESG Score**

**S&P/TSX Composite ESG Index.** As of each rebalancing reference date, exclude companies without scores.

Exclude companies with an S&P Global ESG score ranking within the worst 25% of ESG scores from each global GICS Industry Group from the index. The global universe for this categorization is defined as the combined constituents of the S&P Global LargeMidCap<sup>3</sup> and S&P Global 1200 as of the rebalancing reference date.

*For more information on the S&P Global LargeMidCap and S&P Global 1200, please refer to the S&P Global BMI, S&P/IFCI Methodology and S&P Global 1200 Methodology, respectively, available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

**S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index.** Companies must have an S&P Global ESG Score to be eligible. Using the underlying universe, defined as the constituents of the S&P/TSX Canadian Dividend Aristocrats Index which have S&P Global ESG Scores as of the rebalancing date, the methodology defines the S&P Global ESG Score that represents the 25<sup>th</sup> percentile of scores for the entire defined universe as the ESG Score threshold, with constituents' S&P Global ESG scores being required to exceed this threshold for index eligibility.

### **Multiple Share Classes and Dual Listed Companies**

Each company is represented once by the Designated Listing. For more information regarding the treatment of multiple share classes, please refer to Approach A in the Multiple Share Classes section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology. All publicly listed multiple share class lines of a company are assigned and assessed using the same S&P Global ESG.

---

<sup>3</sup> Excluding China A-Shares.

# Index Construction

## Index Calculations

The indices calculate by means of the divisor methodology used in all S&P Dow Jones Indices' equity indices.

*For more information on index calculations, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.*

## S&P/TSX Composite ESG Index

**Constituent Selection.** At each rebalancing, the index selects constituents from the eligible companies as follows:

1. For each GICS Industry Group, companies are selected in decreasing order of S&P Global ESG Score until 65% of the Eligible Universe's float-adjusted market capitalization ("FMC") is reached.
2. For each GICS Industry Group, existing constituents ranked between 65% and 85% are selected to get as close as possible to the target 75% of FMC.
3. If the combined FMC of selected companies is not above the 75% FMC target, companies not already selected from the Eligible Universe may be added in decreasing order of S&P Global ESG Score to get as close as possible to the 75% FMC target. This process ends when the addition of the next eligible company would result in the total FMC of the relevant GICS Industry Group moving further away from the 75% FMC target.

**Constituent Weightings.** Constituents are FMC weighted.

## S&P/TSX Composite ESG Tilted and S&P/TSX 60 ESG Indices

**Constituent Selection.** At each rebalancing, all eligible constituents of the underlying index are selected and form the index.

**Constituent Weightings.** At each rebalancing, the weights of all tilting groups are neutral to their weights in the eligible universe. Constituents' weights in each tilting group are determined using an ESG Tilt Score ( $S_i$ ).

Each ESG Tilt Score ( $S_i$ ) is calculated as follows:

- a. The S&P Global ESG Score for each company is transformed into an ESG z-score ( $Z_i$ ) at the underlying index level by:
  - i. Dividing by 100 and taking the inverse of the normal cumulative distribution function with a mean of zero and a standard deviation of one.
  - ii. The ESG z-score ( $Z_i$ ) for each security is re-standardized using the mean and standard deviation of the available S&P Global ESG z-scores for the unique companies within the index universe before applying exclusions based on business activities and disqualifying UNGC scores.
- b. If a company does not have an S&P Global ESG Score, it will be assigned an ESG z-score ( $Z_i$ ) set as equal to the lowest available ESG z-score value from the companies within its Tilting Group. If no companies have scores within the Tilting Group, the company will be assigned an ESG z-score of zero.

c. The ESG z-score ( $Z_i$ ) for each company is transformed into the ESG Tilt Score ( $S_i$ ) as follows:

- if  $Z_i > 0$ ,  $S_i = 1 + \lambda Z_i$
- if  $Z_i < 0$ ,  $S_i = 1/(1 - \lambda Z_i)$
- if  $Z_i = 0$ ,  $S_i = 1$

Where  $\lambda$  = Tilt Scaling Factor (as defined in the table below).

### Tilt Scaling Factors

S&P ESG Tilted Index	Tilt Scaling Factor
S&P/TSX Composite ESG Tilted Index	1.0
S&P/TSX 60 ESG Index	0.5

The index is Industry Group / Sector Tilted, with the Tilting Groups determined on each rebalancing reference date as follows:

- Where a GICS Sector contains any GICS Industry Group with fewer than two S&P Global ESG Scores available, the GICS Sector is the Tilting Group.
- For the remaining Sectors (if any) where all Industry Groups have at least two S&P Global ESG scores, the Industry Groups each form individual Tilting Groups.

After the Tilting Group(s) are determined as above, the constituent weights are calculated as follows:

1. A Tilting Group's weight in the index is calculated as the sum of eligible constituents' weights in the Tilting Group divided by the sum of all index constituents' weights.

$$Weight_{Tilting\ Group} = \frac{\sum Index\ Weight,\ for\ all\ constituents\ in\ Tilting\ Group}{\sum Index\ Weight,\ for\ all\ index\ constituents}$$

2. Within each Tilting Group, constituents' weights are multiplied by their company ESG Tilt Score ( $S_i$ ). The constituent weights within the Tilting Group are determined by dividing the constituent's tilted weight by the sum of all tilted weights within the Tilting Group.

$$Weight_{Constituent\ in\ Tilting\ Group} = \frac{Constituent\ Index\ Weight * S}{\sum Index\ Weight * S,\ for\ all\ constituents\ in\ Tilting\ Group}$$

3. To ensure Tilting Group neutrality, the final constituent weight in each index is the product of Step 1 and Step 2 above.

$$Weight_{Constituent} = Weight_{Tilting\ Group} * Weight_{Constituent\ in\ Tilting\ Group}$$

### S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index

**Constituent Selection.** At each rebalancing, eligible constituents of the underlying universe as of the rebalancing effective date are selected and form the index.

**Constituent Weightings.** Except for the single constituent weight cap reference date, at each rebalancing reference date constituents are FMC weighted, subject to the following constraints:

- A single constituent weight cap of 8% of the total index weight.
- The minimum initial portfolio size that can be turned over in a single day (based on recent Canadian and U.S. trading volumes) must be equal to or higher than C\$ 100 million.

Basket liquidity capping sets a minimum portfolio size of C\$ 100 million that must be turned over in a single day, based on the historical average value-traded pattern. The maximum weight parameter is the maximum weight of each stock at the rebalancing. The index weights constituents as follows:

1. FMC weight each company, capping single company weights at 8, using a reference date of three days prior to the rebalancing announcement date.

2. Proportionally redistribute any excess weight to uncapped companies.
3. The capping/redistribution process iterates until no stock breaches the 8% cap.
4. Determine a basket liquidity maximum weight (BL) for each company by dividing the C\$ three-month Average Daily Value Traded (ADVT) using Canadian and U.S. volume by the basket liquidity amount (C\$ 100 million). The BL weight is the maximum weight allowed for each stock in the index.
5. Cap all companies at their BL weight.
6. Proportionally redistribute all excess weight to uncapped stocks.
7. The capping/redistribution process iterates until no stock breaches its respective BL maximum weight.

If the basket liquidity rule cannot be satisfied after all possible iterations are completed, one or more of these constraints may be changed to ensure that the constraint is satisfied for all constituents.

# Index Maintenance

## Rebalancing

**S&P/TSX Composite ESG Index, S&P/TSX Composite ESG Tilted Index, and S&P/TSX 60 ESG Index.** The indices rebalance annually, effective after the close of the last business day of April. The rebalancing reference date is the last trading day of March.

**S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index.** The index rebalances annually, effective after the close of the last business day in January. The rebalancing reference date is the last trading day of December.

Each index's reference universe is the composition of the respective underlying index at the open of the upcoming rebalancing date.

## Quarterly Eligibility Reviews

**Business Activities.** The indices review index constituents for ongoing eligibility under the Business Activities criteria and remove, without replacement, all ineligible companies effective after the close of the last business day of January, April, July, and October, using a reference date as of after the close of the last business day of the previous month. The review does not consider or include coverage changes.

**UNGC.** The indices review constituents for ongoing eligibility under the UNGC exclusion criteria and remove, without replacement, all ineligible companies effective after the close of the third Friday of March, June, September, December using a reference date for as of after the close of the last business day of the previous month. The review does not consider or include coverage changes.

## Quarterly Updates

Changes to a constituent's shares and investable weight factor (IWF) due to quarterly updates are effective after the close on the third Friday in March, June, September, and December.

## Monthly Dividend Review

**S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index.** Index constituents are reviewed monthly for ongoing eligibility. For more information regarding the monthly dividend review, please refer to Approach A in the Monthly Review for Ongoing Eligibility in Dividend Focused Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

## Additions and Deletions

**Additions.** Except for spin-offs, no stocks are added to the indices between rebalancings.

### Spin-offs.

- **S&P/TSX Composite ESG Tilted Index and S&P/TSX 60 ESG Index.** Spinoffs from a current index component are added to the index at a zero price with the same AWF as the parent and are evaluated for continued index inclusion at the subsequent rebalancing.
- **S&P/TSX Composite ESG Index.** Spinoffs are added at a zero price prior to the open of the ex-date (with no divisor adjustment) and are removed after at least one day of regular way trading (with a divisor adjustment).

- **S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index.** The spun-off company is added to all the indices of which the parent is a constituent, at a zero price at the market close of the day before the ex-date (with no divisor adjustment). If a spun-off company is determined to be ineligible for continued index inclusion, it is removed after at least one day of regular way trading (with a divisor adjustment).

**General Deletions.** Stocks dropped from an underlying index are removed from the respective S&P/TSX ESG Index simultaneously. Between rebalancings, a stock can be deleted from an index due to corporate events such as mergers, takeovers, delistings, suspensions, spin-offs/demergers, bankruptcies, or as part of the quarterly eligibility review process.

In addition, at the discretion of the Index Committee, a deletion may occur if an MSA is raised.

### Corporate Actions

Except for the S&P TSX Composite ESG Index, for more information on Corporate Actions, please refer to the Non-Market Capitalization Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

**S&P TSX Composite ESG Index.** For more information on Corporate Actions, please refer to the Market Capitalization Indices section of S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

### Currency of Calculation and Additional Index Return Series

The indices calculate in Canadian and U.S. dollars.

WMR foreign exchange rates are taken daily at 4:00 PM London Time and used in the calculation of the indices. These mid-market fixings are calculated by WMR based on LSEG data and appear on LSEG pages.

In addition to the indices detailed in this methodology, additional return series versions of the indices may be available, including, but not limited to the following: currency, currency hedged, decrement, fair value, inverse, leveraged, and risk control versions. For a list of available indices, please refer to the [S&P DJI Methodology & Regulatory Status Database](#).

*For information on various index calculations, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.*

*For the inputs necessary to calculate certain types of indices, including decrement, dynamic hedged, fair value, and risk control indices, please refer to the Parameters documents available at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

### Base Dates and History Availability

Index history availability, base dates, and base values are shown in the table below.

Index	Launch Date	First Value Date	Base Date	Base Value
S&P/TSX Composite ESG Index	07/27/2020	04/30/2015	05/20/2020	15000
S&P/TSX Composite ESG Tilted Index	10/04/2021	04/30/2015	04/30/2015	1000
S&P/TSX 60 ESG Index	07/27/2020	04/30/2010	11/06/2019	1000
S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index	11/28/2022	02/02/2015	02/02/2015	1000

# Index Data

## Calculation Return Types

S&P Dow Jones Indices calculates multiple return types which vary based on the treatment of regular cash dividends. The classification of regular cash dividends is determined by S&P Dow Jones Indices.

- Price Return (PR) versions are calculated without adjustments for regular cash dividends.
- Gross Total Return (TR) versions reinvest regular cash dividends at the close on the ex-date without consideration for withholding taxes.
- Net Total Return (NTR) versions, if available, reinvest regular cash dividends at the close on the ex-date after the deduction of applicable withholding taxes.

In the event there are no regular cash dividends on the ex-date, the daily performance of all three indices will be identical.

For a complete list of indices available, please refer to the daily index levels file (“.SDL”).

*For more information on the classification of regular versus special cash dividends as well as the tax rates used in the calculation of net return, please refer to S&P Dow Jones Indices’ Equity Indices Policies & Practices Methodology.*

*For more information on the calculation of return types, please refer to S&P Dow Jones Indices’ Index Mathematics Methodology.*

# Index Governance

## Index Committee

An Index Committee maintains the indices. The Index Committee meets regularly. At each meeting, the Index Committee reviews pending corporate actions that may affect index constituents, statistics comparing the composition of the index to the market, companies that are being considered as candidates for addition to the index, and any significant market events. In addition, the Index Committee may revise index policy covering rules for selecting companies, treatment of dividends, share counts or other matters.

S&P Dow Jones Indices considers information about changes to its indices and related matters to be potentially market moving and material. Therefore, all Index Committee discussions are confidential.

S&P Dow Jones Indices' Index Committees reserve the right to make exceptions when applying the methodology if the need arises. In any scenario where the treatment differs from the general rules stated in this document or supplemental documents, clients will receive sufficient notice, whenever possible.

In addition to the daily governance of indices and maintenance of index methodologies, at least once within any 12-month period, the Index Committee reviews the methodology to ensure the indices continue to achieve the stated objectives, and that the data and methodology remain effective. In certain instances, S&P Dow Jones Indices may publish a consultation inviting comments from external parties.

*For information on Quality Assurance and Internal Reviews of Methodology, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.*

# Index Policy

## Announcements

Whenever possible, announcements of additions or deletions of stocks or other index adjustments are made five trading days before the adjustments are implemented. In those cases when it is not possible to trade a stock five days after an announcement, the announcement period may be shortened. However, the implementation of an index adjustment is never earlier than the market close of the day following the announcement.

Announcements of additions and deletions for the S&P/TSX Canadian indices are generally made at 5:15 PM Eastern Time.

In addition, TMX Datalinx offers a fee-based subscription to Index Notices. The Index Notices provide the most detailed and comprehensive coverage of index changes. Complete data for index replication (including share counts, tickers and data on index levels and returns) are also available through TMX Datalinx. In order to subscribe, contact TMX Datalinx by phone at +1.416.947.4778 or by email at [marketdata@tmx.com](mailto:marketdata@tmx.com).

## Pro-forma Files

In addition to the corporate events file (.SDE), S&P Dow Jones Indices provides constituent pro-forma files each time indices rebalance. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents as well as their corresponding weights and index shares effective for the upcoming rebalance. Since index shares are assigned based on prices prior to the rebalancing, the actual weight of each stock at the rebalancing differs from these weights due to market movements.

Please visit [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/) for a complete schedule of rebalancing timelines and pro-forma delivery times.

## Holiday Schedule

The indices calculate when the Canadian equity market is open.

A complete holiday schedule for the year is available on the TMX Web site at [www.tmx.com](http://www.tmx.com).

## Rebalancing

The Index Committee may change the date of a given rebalancing for reasons including market holidays occurring on or around the scheduled rebalancing date. Any such change will be announced with proper advance notice where possible.

## Unexpected Exchange Closures

For information on Unexpected Exchange Closures, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

## Recalculation Policy

For information on the recalculation policy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.

## **Real-Time Calculation**

Real-time, intra-day, index calculations are executed for certain S&P/TSX Canadian indices whenever any of their primary exchanges are open. Real-time indices are not restated.

*For information on Calculations and Pricing Disruptions, Expert Judgment and Data Hierarchy, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices Methodology.*

## **Contact Information**

For questions regarding an index, please contact: [index\\_services@spglobal.com](mailto:index_services@spglobal.com).

# Index Dissemination

The TMX Group (TMX) serves as the distributor of both real-time and historical index data. In addition, index levels are available on S&P Dow Jones Indices' Web site at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).

## **Index Data**

Daily constituent and index level data are available from the Toronto Stock Exchange on subscription. Please contact Market Data at 416-947-4778 or, by email, at [marketdata@tmx.com](mailto:marketdata@tmx.com).

*For further information, please refer to the TMX Web site at [www.tmx.com](http://www.tmx.com).*

## **Web site**

*For further information, please refer to S&P Dow Jones Indices' Web site at [www.spglobal.com/spdji/](http://www.spglobal.com/spdji/).*

# Appendix A

## Methodology Changes

Methodology changes since July 27, 2020, are as follows:

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index:  Exclusions Based on Business Activities:  Data Provider	01/31/2025	Sustainalytics provides the data for exclusions based on business activities.	S&P Global provides the data for exclusions based on business activities.
S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index:  ESG Score Data	01/31/2025	The index uses S&P DJI ESG Scores as part of the constituent selection process.	The index uses S&P Global ESG Scores as part of the constituent selection process.
S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index:  Quarterly UNGC Eligibility Review	01/31/2025	Index constituents are reviewed on a quarterly basis for ongoing eligibility under UNGC exclusion criteria. Companies determined to be ineligible are removed from the index, effective after the close of the last business day of July, October, and January. The reference date for this review is the last business day of the previous month.	The indices review index constituents for ongoing eligibility under the UNGC exclusion criteria and remove, without replacement, all ineligible companies effective after the close of the third Friday of March, June, September, December using a reference date for as of after the close of the last business day of the previous month. The review does not consider or include coverage changes.
S&P/TSX Composite ESG Index, S&P/TSX Composite ESG Tilted Index, and S&P/TSX 60 ESG Index:  Exclusions Based on Business Activities:  Data Provider	04/30/2024	Sustainalytics provides the data for exclusions based on business activities.	S&P Global provides the data for exclusions based on business activities.
S&P/TSX Composite ESG Index, S&P/TSX Composite ESG Tilted Index, and S&P/TSX 60 ESG Index:	04/30/2024	The index uses S&P DJI ESG Scores as part of the constituent selection process.	The index uses S&P Global ESG Scores as part of the constituent selection process.

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
ESG Score Data			
S&P/TSX Composite ESG Index, S&P/TSX Composite ESG Tilted Index, and S&P/TSX 60 ESG Index:  Quarterly UNGC Eligibility Review	04/30/2024	Index constituents are reviewed on a quarterly basis for ongoing eligibility under UNGC exclusion criteria. Companies determined to be ineligible are removed from the index, effective after the close of the last business day of July, October, and January. The reference date for this review is the last business day of the previous month.	The indices review index constituents for ongoing eligibility under the UNGC exclusion criteria and remove, without replacement, all ineligible companies effective after the close of the third Friday of March, June, September, December using a reference date for as of after the close of the last business day of the previous month. The review does not consider or include coverage changes
S&P/TSX Composite ESG Index, S&P/TSX Composite ESG Tilted Index, and S&P/TSX 60 ESG Index:  UNGC Exclusions Data Provider Change	04/29/2022	Companies at or below the bottom 5% of the global Arabesque S-Ray <sup>TM</sup> universe by GC Score rank, as at the reference date of the last business day of March, are ineligible.	Companies that are classified as Non-Compliant, according to Sustainalytics GSS are ineligible for index inclusion.
S&P/TSX Composite ESG Index, S&P/TSX Composite ESG Tilted Index, and S&P/TSX 60 ESG Index:  New and revised Exclusions Based on Business Activities	04/29/2022	<ul style="list-style-type: none"> <li>No exclusion was applied for involvement in any Oil Sands, Small Arms or Military Contracting activity.</li> <li>No exclusion was applied for involvement in Controversial Weapons: Non-Tailor Made or Non-Essential.</li> <li>Exclusions were applied for involvement in Tobacco Products: Related Products/Services and Tobacco Products: Retail with a Level of Involvement Threshold of <math>\geq 10\%</math> and a Significant Ownership Threshold of <math>\geq 25\%</math>.</li> </ul>	<ul style="list-style-type: none"> <li>Exclusions are applied for involvement in Oil Sands Extraction with a level of involvement threshold of <math>\geq 5\%</math>, Small Arms: Civilian Customers (Assault Weapons), Small Arms: Civilian Customers (Non-Assault Weapons), Small Arms: Military/Law Enforcement Customers and Small Arms: Key Components at a Level of Involvement Threshold of <math>&gt;0\%</math> and a Significant Ownership Threshold of <math>\geq 25\%</math>, Small Arms: Retail/Distribution (Assault Weapons) and Small Arms: Retail/Distribution (Non-Assault Weapons) at a Level of Involvement Threshold of <math>\geq 5\%</math>, and Military Contracting: Weapons and Military Contracting: Weapon-related products and services at a Level of Involvement Threshold of <math>\geq 10\%</math>.</li> <li>Exclusions are applied for Controversial Weapons: Non-Tailor Made or Non-Essential at a Level of Involvement Threshold of <math>&gt;0\%</math> and a Significant Ownership Threshold of <math>\geq 25\%</math>.</li> <li>Exclusions are applied for Tobacco Products: Related Products/Services and Tobacco Products: Retail at a Level of Involvement Threshold of <math>\geq 5\%</math> and no Significant Ownership Threshold.</li> </ul>
S&P/TSX Composite ESG Index, S&P/TSX Composite ESG	04/29/2022	--	Index constituents are reviewed on a quarterly basis for ongoing eligibility under the Business Activities and UNGC exclusion criteria. Companies

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
Tilted Index, and S&P/TSX 60 ESG Index:  Quarterly Eligibility Review			determined to be ineligible are removed from the index, effective after the close of the last business day of July, October, and January. The reference date for this review is the last business day of the previous month. No constituent will be added to the index as a result of any deletion that may take place.
S&P/TSX Composite ESG Index, S&P/TSX Composite ESG Tilted Index, and S&P/TSX 60 ESG Index:  Index Eligibility for Companies in Relation to Thermal Coal	09/18/2020 <sup>4</sup>	--	Companies must generate less than 5% of their revenue from thermal coal.

<sup>4</sup> Implemented via an extraordinary rebalancing that took effect after the close of September 18, 2020.

# Appendix B

## Indices in this Methodology Employing Backward Data Assumption

S&P/TSX Composite ESG Index

S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index

### Backward Data Assumption

The index employs a “Backward Data Assumption” method for some datapoints used in the derivation of historical index membership prior to the Live Data Effective Date (defined below). The “Backward Data Assumption” method involves applying the earliest available actual live data point for an index constituent to all prior, historical instances of that constituent in the index universe.

Backward Data Assumption affects only the historical, hypothetical constituents of any index back-test. Only actual live data is ever used in live index rebalancings and in the historical rebalancing calculation of an index after its Live Data Effective Date.

*For more information on S&P DJI’s principles and processes for using Backward Data Assumption, please refer to the [FAQ](#).*

### Designated Datasets Subject to Backward Data Assumption

The Backward Data Assumption within the historical back-test, with respect to the indices identified above, applies only to designated datasets and associated time horizons as defined below. For each designated dataset, all historical rebalancing events prior to the Live Data Reference Date listed below are subject to use of the Backward Data Assumption.

Data Provider	Designated Dataset	Live Data Reference Date	Live Data Effective Date
S&P DJI	S&P DJI ESG Score	3/31/2020	5/01/2020
Sustainalytics	Business Activity Exclusions	3/31/2020	5/01/2020
Arabesque	GC Score	3/31/2020	5/01/2020

The Live Data Reference Date refers to the first rebalancing reference date from which only actual live data is used.

The Live Data Effective Date refers to the first date from which index constituents are determined solely on actual live data for each respective dataset.

### Exclusions Based on Missing Coverage

This index excludes companies based on missing coverage with respect to the designated datasets above. However, for rebalancing dates prior to each respective Live Data Reference Date, the eligibility of companies is determined based on the coverage after applying the Backward Data Assumption and is not dictated by actual live data coverage.

### Historical Coverage Assessment per Designated Dataset

**S&P DJI ESG Score Coverage** (with respect to underlying index universe):

**S&P/TSX Composite ESG Index**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2015	248	101	86.2%	211	97.9%
2016	235	113	88.6%	212	98.3%
2017	250	110	87.5%	231	98.8%
2018	249	116	87.7%	236	98.9%
2019	242	117	88.9%	241	100.0%
2020	230	230	100.0%	n/a	n/a

**S&P/TSX Composite ESG Tilted Index**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2015	248	102	87.0%	224	98.6%
2016	235	114	89.1%	220	98.8%
2017	250	111	88.5%	239	99.2%
2018	249	116	87.6%	240	99.2%
2019	242	117	89.2%	241	100.0%
2020	230	230	100.0%	n/a	n/a
2021	229	224	99.8%	n/a	n/a

**S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2015	74	40	49.5%	69	91.8%
2016	76	38	42.4%	72	92.7%
2017	88	54	54.2%	84	93.4%
2018	81	49	53.4%	78	93.4%
2019	83	53	64.8%	83	100%
2020	96	58	59.6%	96	100%
2021	87	84	95.1%	n/a	n/a
2022	94	92	97.1%	n/a	n/a

Arabesque UNGC Coverage (with respect to underlying index universe):

**S&P/TSX Composite ESG Index**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2015	248	246	99.9%	248	100.0%
2016	235	231	99.0%	235	100.0%
2017	250	226	97.5%	249	99.9%
2018	249	238	96.5%	245	99.5%
2019	242	227	96.6%	236	99.5%
2020	230	216	98.7%	n/a	n/a

**S&P/TSX Composite ESG Tilted Index**

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption Index Weight
2015	248	246	99.9%	248	100.0%
2016	235	231	98.9%	235	100.0%
2017	250	226	97.5%	249	99.9%
2018	249	238	96.7%	245	99.5%
2019	242	227	96.6%	236	99.5%
2020	230	216	98.7%	n/a	n/a
2021	229	216	99.2%	n/a	n/a

Sustainalytics Business Activity Exclusions Coverage (with respect to underlying index universe):

### S&P/TSX Composite ESG Index

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data		After Using the Data Assumption	
		Stock Count	Index Weight	Stock Count	Index Weight
2015	248	214	92.8%	241	99.0%
2016	235	209	97.6%	233	99.8%
2017	250	246	99.6%	250	100.0%
2018	249	248	99.7%	249	100.0%
2019	242	237	99.4%	242	100.0%
2020	230	229	99.6%	n/a	n/a

### S&P/TSX Composite ESG Tilted Index

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data		After Using the Data Assumption	
		Stock Count	Index Weight	Stock Count	Index Weight
2015	248	214	92.6%	241	98.9%
2016	235	209	97.4%	233	99.8%
2017	250	246	99.6%	250	100.0%
2018	249	248	99.7%	249	100.0%
2019	242	237	99.4%	242	100.0%
2020	230	229	99.6%	n/a	n/a
2021	229	229	100.0%	n/a	n/a

### S&P/TSX Canadian ESG Dividend Aristocrats FMC Weighted Index

Rebalancing Date	Underlying Index Stock Count	Point-in-Time Data		After Using the Data Assumption	
		Stock Count	Index Weight	Stock Count	Index Weight
2015	74	67	90.1%	74	100%
2016	76	66	88.6%	76	100%
2017	88	82	95.3%	88	100%
2018	81	79	97.1%	81	100%
2019	83	81	97.9%	83	100%
2020	96	95	98.6%	96	100%
2021	87	87	100%	n/a	n/a
2022	94	92	99.4%	n/a	n/a

Coverage for each Sustainability Category of Involvement may differ due to the initiation of coverage for each sub-dataset. Actual live data coverage for each sub-dataset is therefore zero before its respective Coverage Initiation Date provided below:

Sustainability Category of Involvement	Coverage Initiation Date
Controversial Weapons: Tailor-made and Essential	12/31/2012
Controversial Weapons: Significant ownership (Tailor-made and Essential)	12/31/2018
Tobacco: Production	12/31/2012
Tobacco: Related Products/Services	12/31/2012
Tobacco: Retail	12/31/2012
Tobacco: Significant ownership (production)	12/31/2018
Tobacco: Significant ownership (related products/services)	12/31/2018
Tobacco: Significant ownership (retail)	12/31/2018

Any Categories of Involvement used by the methodology not listed in the table above were not subject to any Backward Data Assumption.

# Disclaimer

## Performance Disclosure/Back-Tested Data

Where applicable, S&P Dow Jones Indices and its index-related affiliates (“S&P DJI”) defines various dates to assist our clients by providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index’s Launch Date are considered back-tested. S&P DJI defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company’s public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed “Date of introduction”) is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index’s public release date.

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Information presented prior to an index’s launch date is hypothetical back-tested performance, not actual performance, and is based on the index methodology in effect on the launch date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. In addition, forks have not been factored into the back-test data with respect to the S&P Cryptocurrency Indices. For the S&P Cryptocurrency Top 5 & 10 Equal Weight Indices, the custody element of the methodology was not considered; the back-test history is based on the index constituents that meet the custody element as of the Launch Date. Also, the treatment of corporate actions in back-tested performance may differ from treatment for live indices due to limitations in replicating index management decisions. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate certain ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using “Backward Data Assumption” (or pulling back) of ESG data for the calculation of back-tested historical performance. “Backward Data Assumption” is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as “product involvement”) were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on “Backward Data Assumption” please refer to the FAQ. The

methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used. Index returns shown do not represent the results of actual trading of investable assets/securities. S&P DJI maintains the index and calculates the index levels and performance shown or discussed but does not manage any assets.

Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

### **Intellectual Property Notices/Disclaimer**

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, iTraxx, iBoxx, ABX, ADBI, CDX, CMBX, MBX, MCDX, PRIMEX, HHPI, and SOVX are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P DJI does not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P DJI is impersonal and not tailored to the needs of any person, entity, or group of persons. S&P DJI receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P DJI does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P DJI makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P DJI is not an investment advisor, commodity trading advisor, fiduciary, "promoter" (as defined in the Investment Company Act of 1940, as amended) or "expert" as enumerated within 15 U.S.C. § 77k(a), and S&P DJI makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P DJI is not a tax advisor. Inclusion of a security, commodity, crypto currency, or other asset within an index is not a recommendation by S&P DJI to buy, sell, or hold such security, commodity, crypto currency, or other asset, nor is it considered to be investment or trading advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse engineered, reproduced, or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P DJI. The Content shall not be used for any unlawful or unauthorized purposes. S&P DJI and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness, or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of

the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN “AS IS” “WHERE IS” BASIS. S&P DOW JONES INDICES PARTIES DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT’S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special, or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related information and other analyses, including ratings, research and valuations are generally provided by licensors and/or affiliates of S&P Dow Jones Indices, including but not limited to S&P Global’s other divisions such as S&P Global Market Intelligence. Any credit-related information and other related analyses and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. Any opinion, analyses and rating acknowledgement decisions are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Dow Jones Indices does not assume any obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P DJI does not act as a fiduciary or an investment advisor. While S&P DJI has obtained information from sources it believes to be reliable, S&P DJI does not perform an audit or undertake independent verification of any information it receives. S&P DJI reserves the right to vary or discontinue any index at any time for regulatory or other reasons. Various factors, including external factors beyond S&P DJI’s control might necessitate material changes to indices.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Global Ratings reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Global Ratings, disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof. Affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC, including S&P Global Ratings, reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Global Ratings are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription), and may be distributed through other means, including via S&P Global Ratings publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).

S&P Global keeps certain activities of its various divisions and business units separate from each other to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions, and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate, or otherwise address.

Some indices use the Global Industry Classification Standard (GICS®), which was developed by, and is the exclusive property and a trademark of, S&P Global and MSCI. Neither MSCI, S&P DJI nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability, or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P DJI, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

S&P Dow Jones Indices products are governed by the terms and conditions of the agreements under which they may be provided. A license is required from S&P Dow Jones Indices to display, create derivative works of and/or distribute any product or service that uses, is based upon and/or refers to any S&P Dow Jones Indices and/or index data.

### **ESG Indices Disclaimer**

S&P DJI provides indices that seek to select, exclude, and/or weight index constituents based on, but not limited to, certain environmental, social or governance (ESG) indicators, or a combination of those indicators, including the following: environmental indicators (including the efficient use of natural resources, the production of waste, greenhouse gas emissions, or impact on biodiversity); social indicators (such as, inequality and investment in human capital); governance indicators (such as sound management structures, employee relations, remuneration of staff, tax compliance, respect for human rights, anti-corruption and anti-bribery matters), specific sustainability or values-related company involvement indicators (for example, production/distribution of controversial weapons, tobacco products, or thermal coal), or controversies monitoring (including research of media outlets to identify companies involved in ESG-related incidents).

S&P DJI ESG indices use ESG metrics and scores in the selection and/or weighting of index constituents. ESG scores or ratings seek to measure or evaluate a company's, or an asset's, performance with respect to environmental, social and corporate governance issues.

The ESG scores, ratings, and other data used in S&P DJI ESG indices is supplied directly or indirectly by third parties (note these parties can be independent affiliates of S&P Global or unaffiliated entities) so an S&P DJI ESG index's ability to reflect ESG factors depends on these third parties' data accuracy and availability.

ESG scores, ratings, and other data may be reported (meaning that the data is provided as disclosed by companies, or an asset, or as made publicly available), modelled (meaning that the data is derived using a proprietary modelling process with only proxies used in the creation of the data), or reported and modelled (meaning that the data is either a mix of reported and modelled data or is derived from the vendor using reported data /information in a proprietary scoring or determination process).

ESG scores, ratings, and other data, whether from an external and/or internal source, is based on a qualitative and judgmental assessment, especially in the absence of well-defined market standards, and due to the existence of multiple approaches and methodologies to assess ESG factors and considerations. An element of subjectivity and discretion is therefore inherent in any ESG score, rating, or other data and different ESG scoring, rating, and/or data sources may use different ESG assessment or estimation methodologies. Different persons (including ESG data ratings, or scoring providers, index administrators or users) may arrive at different conclusions regarding the sustainability or impact of a particular company, asset, or index.

Where an index uses ESG scores, ratings or other data supplied directly or indirectly by third parties, S&P DJI does not accept responsibility for the accuracy or completeness of such ESG scores, ratings, or data.

No single clear, definitive test or framework (legal, regulatory, or otherwise) exists to determine 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. In the absence of well-defined market standards and due to the existence of multitude approaches, the exercise of judgment is necessary. Accordingly, different persons may classify the same investment, product and/or strategy differently regarding 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives. Furthermore, the legal and/or market position on what constitutes an 'ESG', 'sustainable', 'good governance', 'no adverse environmental, social and/or other impacts', or other equivalently labelled objectives may change over time, especially as further regulatory or industry rules and guidance are issued and the ESG sustainable finance framework becomes more sophisticated.

Prospective users of an S&P DJI ESG Index are encouraged to read the relevant index methodology and related disclosures carefully to determine whether the index is suitable for their potential use case or investment objective.