

S&P/TSX ESG Indices *Methodology*

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Introduction

Index Objectives

The S&P/TSX ESG Indices measure the performance of Canadian securities meeting the sustainability criteria defined for each index, while taking into account the industry group weights of their underlying indices.

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 DJI 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 DJI ESG Score exposure with respect to the S&P/TSX Composite by overweighting (underweighting) companies with relatively high (low) S&P DJI 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 DJI 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 DJI ESG Score exposure with respect to the S&P/TSX 60 by overweighting (underweighting) companies with relatively high (low) S&P DJI 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 DJI 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.

The weights in the S&P/TSX Composite ESG Tilted and S&P/TSX 60 ESG 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 DJI ESG Score exposure with respect to the parent indices by overweighting (underweighting) companies with relatively high (low) S&P DJI 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 DJI ESG scores, which are then re-standardized.

For more information on the S&P/TSX Composite and S&P/TSX 60 indices, please refer to the S&P/TSX Canadian Indices Methodology at www.spglobal/spdji.com.

Highlights

The indices incorporate S&P DJI ESG Scores, built from the S&P Global 'Corporate Sustainability Assessment' (CSA). A company's S&P DJI ESG score may either be calculated from data received directly by a company completing the comprehensive assessment (together with supporting documents), or – in the absence of this – by using publicly available information. S&P Global uses the CSA results to then calculate the S&P DJI ESG Scores that are used in the index methodology.

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

For more information on S&P DJI ESG Scores, please refer to the S&P DJI ESG Score Methodology, available at

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 see [here](#).

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. S&P DJI is the owner of the S&P DJI ESG Scores referenced below.

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	Equity Indices Policies & Practices
S&P Dow Jones Indices' Index Mathematics Methodology	Index Mathematics Methodology
S&P Dow Jones Indices' Float Adjustment Methodology	Float Adjustment Methodology
S&P Dow Jones Indices' Global Industry Classification Standard (GICS) Methodology	GICS Methodology
S&P DJI ESG Score Methodology	S&P DJI ESG Score Methodology

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.

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

General Index Exclusions

The General Index Exclusions apply to all indices covered by this methodology.¹

Exclusions Based on Business Activities

As of each rebalancing reference date, companies with the following specific business activities, as determined by Sustainalytics, are excluded from the eligible universe:

Sustainalytics Product Involvement	Sustainalytics Category of Involvement and Description	Sustainalytics Involvement Proxy	S&P DJI Level of Involvement Threshold	S&P DJI Significant Ownership Threshold
Controversial Weapons	Tailor Made and Essential: The company is involved in the core weapon system, or components/services of the core weapon system that are considered tailor-made and essential for the lethal use of the weapon.	NA	>0%	≥25%
	Non-Tailor Made or Non-Essential: The company provides components/services for the core weapon system which are either not considered tailor-made or not essential to the lethal use of the weapon.		>0%	≥25%
Thermal Coal	Extraction: The company extracts thermal coal.	Revenue	≥5%	N/A
	Generation: The company generates electricity from thermal coal.		≥5%	N/A
Tobacco Products	Production: The company manufactures tobacco products.	Revenue	>0%	≥25%
	Related Products/Services: The company supplies to tobacco-related products/services.		≥5%	N/A
	Retail: The company derives revenues from the distribution and/or retail sale of tobacco products.		≥5%	N/A
Oil Sands	Extraction: The company extracts oil sands.	Revenue	≥5%	N/A

¹ 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.

Sustainalytics Product Involvement	Sustainalytics Category of Involvement and Description	Sustainalytics Involvement Proxy	S&P DJI Level of Involvement Threshold	S&P DJI Significant Ownership Threshold
Small Arms	Civilian customers (assault weapons): The company manufactures and sells assault weapons to civilian customers.	Revenue	>0%	≥25%
	Civilian customers (non-assault weapons): The company manufactures and sells small arms (non-assault weapons) to civilian customers.		>0%	≥25%
	Military/law enforcement customers: The company manufactures and sells small arms to military/law enforcement.		>0%	≥25%
	Key components: The company manufactures and sells key components of small arms.		>0%	≥25%
	Retail/Distribution (assault weapons): The company is involved in the retail and/or distribution of assault weapons.		≥5%	N/A
	Retail/distribution (non-assault weapons): The company is involved in the retail and/or distribution of small arms (non-assault weapons).		≥5%	N/A
Military Contracting	Weapons: The company manufactures military weapon systems and/or integral, tailor-made components or these weapons.	Revenue	≥10%	N/A
	Weapon-related products and services: The company provides tailor-made products and/or services that support military weapons.		≥10%	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.

Companies without Sustainalytics coverage are ineligible for index inclusion until they receive such coverage.

Exclusions Based on the United Nations Global Compact (UNGC)

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 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, companies classified as Non-Compliant, according to Sustainalytics, are ineligible for index inclusion.

Companies without Sustainalytics coverage are ineligible for index inclusion until they receive such coverage.

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, a leading data science company, for daily filtering, screening, and analysis of ESG risk incidents and controversial activities related to companies within the indices.²

In cases where risks are presented, S&P Global releases a Media and Stakeholder Analysis (MSA), which includes a range of 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, that 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. This service is not considered a direct contribution to the index construction process.

Additional Index Exclusions

S&P/TSX Composite ESG Index. In addition to the General Index Exclusions made to all indices in this methodology, the index applies additional eligibility criteria based on ESG scores.

Exclusions Based on ESG Score

Using a global universe, defined as the combined constituents of the S&P Global LargeMidCap and S&P Global 1200 as of the rebalancing reference date, the methodology defines the S&P DJI ESG scores that represents the 25th percentile of scores for each global GICS Industry Group. These scores are used as GICS Industry Group-specific ESG score thresholds, with constituents' S&P DJI ESG scores being required to exceed their respective threshold for index eligibility.

For more information on the S&P Global LargeMidCap index, please refer to the S&P Global BMI, S&P/IFCI Methodology at www.spglobal/spdji.com. For more information on the S&P Global 1200 index, please refer to the S&P Global 1200 Methodology at www.spglobal/spdji.com.

Index Rebalancings Before and After April 2020. For index rebalancings before April 2020, if no ESG score was available for a company for the respective year, the ESG score for the nearest (forward-looking) methodology year available was used. For index rebalancings after April 2020, if a company does not have an S&P DJI ESG score, it is excluded from the S&P/TSX Composite ESG Index.

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 DJI ESG score.

For more information on exclusions based on ESG score, please refer to the S&P ESG Index Series Methodology.

² 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.

Index Construction

Index Calculations

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

For more information on the index calculation methodology, please refer to both the Market Capitalization Weighted Indices and the Non-Market Capitalization Weighted Indices sections of the S&P Dow Jones Indices' Index Mathematics Methodology.

S&P/TSX Composite ESG Index

Constituent Selection. The selection of index constituents from the Eligible Universe is done as follows:

1. For each GICS Industry Group, companies are selected in decreasing order of S&P DJI 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 DJI 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 DJI 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 DJI 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 DJI 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 λ = 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 DJI 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 DJI 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 is 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.

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

Index Maintenance

Rebalancing

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. The reference universe for the indices is the composition of the underlying index, at the open of the upcoming rebalancing effective date.

Quarterly Eligibility Review

Index constituents are reviewed on a quarterly basis for ongoing eligibility under the Business Activities and 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. No constituent will be added to the index as a result of any deletion that may take place.

Quarterly Updates

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

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).

Deletions. If a stock is dropped from the underlying index, it is also removed from the relevant 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

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.

WM/Refinitiv 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 the WM Company based on Refinitiv data and appear on Refinitiv pages WMRA.

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/spdji.com.

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

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 S&P Dow Jones Indices 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 05:15 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.

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/spdji.com for a complete schedule of rebalancing timelines and pro-forma delivery times.

Holiday Schedule

The indices are calculated 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.

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.

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/spdji.com.

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.

For further information, please refer to the TMX Web site at www.tmx.com.

Web site

For further information, please refer to S&P Dow Jones Indices' Web site at www.spglobal/spdji.com.

Appendix I

Methodology Changes

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

Change	Effective Date (After Close)	Methodology	
		Previous	Updated
Exclusions based on the United Nations Global Compact (UNGC): Data Provider Change	04/29/2022	Companies at or below the bottom 5% of the global Arabesque S-Ray™ 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 Global Standards Screening are ineligible for index inclusion.
Exclusions Based on Business Activities: New and Revised Exclusions	04/29/2022	<ul style="list-style-type: none"> No exclusion was applied for involvement in any Oil Sands, Small Arms or Military Contracting activity. No exclusion was applied for involvement in Controversial Weapons: Non-Tailor Made or Non-Essential. Exclusions were applied for involvement in Tobacco Products: Related Products/Services and Tobacco Products: Retail with a Level of Involvement Threshold of $\geq 10\%$ and a Significant Ownership Threshold of $\geq 25\%$. 	<ul style="list-style-type: none"> Exclusions are applied for involvement in Oil Sands Extraction with a level of involvement threshold of $\geq 5\%$, 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 $>0\%$ and a Significant Ownership Threshold of $\geq 25\%$, Small Arms: Retail/Distribution (Assault Weapons) and Small Arms: Retail/Distribution (Non-Assault Weapons) at a Level of Involvement Threshold of $\geq 5\%$, and Military Contracting: Weapons and Military Contracting: Weapon-related products and services at a Level of Involvement Threshold of $\geq 10\%$. Exclusions are applied for Controversial Weapons: Non-Tailor Made or Non-Essential at a Level of Involvement Threshold of $>0\%$ and a Significant Ownership Threshold of $\geq 25\%$. Exclusions are applied for Tobacco Products: Related Products/Services and Tobacco Products: Retail at a Level of Involvement Threshold of $\geq 5\%$ and no Significant Ownership Threshold.
Quarterly Eligibility Review	04/29/2022	--	Index constituents are reviewed on a quarterly basis for ongoing eligibility under the Business Activities and 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. No constituent will be added to the index as a result of any deletion that may take place.
Index Eligibility for Companies in Relation to Thermal Coal	09/18/2020 ³	--	Companies must generate less than 5% of their revenue from thermal coal.

³ This change will be implemented via an extraordinary rebalancing, which will take effect after the close of September 18, 2020.

Appendix II

Indices in this Methodology Employing Backward Data Assumption

S&P/TSX Composite ESG 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

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 Stock Count	Point-in-Time Data Index Weight	After Using the Data Assumption Stock Count	After Using the Data Assumption 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

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

S&P Dow Jones Indices defines various dates to assist our clients in 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 Dow Jones Indices 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. 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.

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