

# **S&P/TSX 60 Fossil Fuel Free Index** *Methodology*

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# Table of Contents

Introduction	3
<b>Index Objective</b>	<b>3</b>
<b>Highlights</b>	<b>3</b>
<b>Index Family</b>	<b>3</b>
<b>Collaboration</b>	<b>3</b>
<b>Supporting Documents</b>	<b>3</b>
Eligibility Criteria and Index Construction	5
<b>Index Universe</b>	<b>5</b>
<b>Constituent Selection</b>	<b>5</b>
<b>Constituent Weighting</b>	<b>5</b>
<b>Index Calculations</b>	<b>5</b>
<b>Environmental Sustainability</b>	<b>5</b>
<b>Multiple Classes of Stock</b>	<b>6</b>
<b>Shares Outstanding</b>	<b>6</b>
Index Maintenance	7
<b>Rebalancing</b>	<b>7</b>
<b>Additions and Deletions</b>	<b>7</b>
<b>Corporate Actions</b>	<b>7</b>
<b>Currency, Currency Hedged, and Risk Control Indices</b>	<b>7</b>
<b>Investable Weight Factor (IWF)</b>	<b>8</b>
<b>Other Adjustments</b>	<b>8</b>
<b>Base Date and History Availability</b>	<b>8</b>
Index Data	9
<b>Calculation Return Types</b>	<b>9</b>
Index Governance	10
<b>Index Committee</b>	<b>10</b>

Index Policy	11
<b>Announcements</b>	<b>11</b>
<b>Pro-forma Files</b>	<b>11</b>
<b>Holiday Schedule</b>	<b>11</b>
<b>Rebalancing</b>	<b>11</b>
<b>Unexpected Exchange Closures</b>	<b>11</b>
<b>Recalculation Policy</b>	<b>11</b>
<b>Real-Time Calculation</b>	<b>12</b>
<b>Contact Information</b>	<b>12</b>
Index Dissemination	13
<b>FTP</b>	<b>13</b>
<b>Web site</b>	<b>13</b>
Appendix	14
<b>Methodology Changes</b>	<b>14</b>
Disclaimer	15

# Introduction

## Index Objective

The S&P/TSX 60 Fossil Fuel Free Index is designed to measure the performance of environmentally sustainable companies in the S&P/TSX 60 that do not own fossil fuel reserves.

## Highlights

The constituents of the index are investable and are members of the S&P/TSX 60. Index constituents are weighted based on float-adjusted market capitalization, with no additional weight capping applied. The index is rebalanced on a quarterly basis.

## Index Family

The S&P/TSX 60 Fossil Fuel Free Index is part of the S&P Global 1200 Fossil Fuel Free Index Series. Other indices in the S&P Global 1200 Fossil Fuel Free Index Series include the following:

1. S&P Global 1200 Fossil Fuel Free Index
2. S&P Asia 50 Fossil Fuel Free Index
3. S&P/ASX All Australian 50 Fossil Fuel Free Index
4. S&P Europe 350 Fossil Fuel Free Index
5. S&P 500 Fossil Fuel Free Index
6. S&P Latin America 40 Fossil Fuel Free Index
7. S&P/TOPIX 150 Fossil Fuel Free Index

For information on any of the indices listed above, please refer to the S&P Global 1200 Fossil Fuel Free Index Series methodology document available at [www.spdji.com](http://www.spdji.com).

## Collaboration

This index is generated and published under agreements between S&P Dow Jones Indices and RobecoSAM.

## 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>

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 and Index Construction

## Index Universe

At each quarterly rebalancing, the index is constructed from the constituents of the S&P/TSX 60.

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

## Constituent Selection

Securities in the S&P/TSX 60 are screened so that the S&P/TSX 60 Fossil Fuel Free Index includes only those companies that do not hold fossil fuel reserves. The exclusion rules are based on any ownership of fossil fuels, including for third party and in-house power generation. With respect to coal, the exclusion relates to thermal coal and does not cover companies which are exclusively engaged in the extraction of metallurgical or coking coal. The research for ownership of fossil fuel reserves is conducted by RobecoSAM across a number of priority sectors including oil & gas, coal & consumable fuels, as well as mining, materials and utilities. Research is based on publicly available information like annual reports and other company publications. The entire universe is reviewed annually. New additions to the S&P/TSX 60 are reviewed for inclusion into the S&P/TSX 60 Fossil Fuel Free Index each quarter, provided they have been added to the S&P/TSX 60 by the S&P/TSX 60 Fossil Fuel Free Index's rebalancing reference dates.

## Constituent Weighting

The index is weighted by float-adjusted market capitalization.

## Index Calculations

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

On any given day, the index value is the quotient of the total float-adjusted market capitalization of the index's constituents and its divisor. Continuity in index values is maintained by adjusting the divisor for all changes in the constituents' share capital after the base date. This includes additions and deletions to the index, rights issues, share buybacks and issuances, and spin-offs. The divisor's time series is, in effect, a chronological summary of all changes affecting the base capital of the index. The divisor is adjusted such that the index value at an instant just prior to a change in base capital equals the index value at an instant immediately following that change.

*For more information on the index calculation methodology, please refer to the Capitalization Weighted Indices section of S&P Dow Jones Indices' Index Mathematics Methodology.*

## Environmental Sustainability

Environmental sustainability assessments are provided by RobecoSAM. RobecoSAM uses RepRisk, a leading provider of business intelligence on environmental, social, and governance risks, for daily filtering, screening and analysis of controversies related to companies within the index.

In cases where risks are presented, RobecoSAM 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 will review constituents that have been flagged by RobecoSAM's MSA to evaluate the potential impact of controversial company activities on the composition of the index.

*For more information on RepRisk, please refer to [www.reprisk.com](http://www.reprisk.com).*

### **Multiple Classes of Stock**

All publicly listed multiple share class lines are eligible for index inclusion, subject to meeting the eligibility criteria. For more information regarding the treatment of multiple share classes, please refer to Approach A within the Multiple Share Classes section of the S&P Dow Jones Indices' Equity Indices Policies & Practices document.

### **Shares Outstanding**

The share count used as inputs in the weighting model, are common shares outstanding. This count is float-adjusted to reflect only shares available to the general market. Specific share counts and float factors are calculated by S&P Dow Jones Indices.

*For float adjustment methodology, please refer to S&P Dow Jones Indices' Float Adjustment Methodology.*

# Index Maintenance

## Rebalancing

The index is rebalanced quarterly after the close of business on the third Friday of March, June, September, and December. The rebalancing reference dates are after the close of the third Friday of February, May, August and November, respectively.

Changes to a constituent's shares and IWF are applied quarterly as part of the rebalancing process.

## Additions and Deletions

**Additions.** Index additions are generally made only during the quarterly rebalancings. Spin-offs, however, may necessitate the addition of the spun-off company to the index. The spun-off company is added to all the indices of which the parent company is a constituent at a zero price at the market close of the day before the ex-date (with no divisor adjustment). If the spun-off company is to remain in the S&P/TSX 60, it subsequently remains in the S&P/TSX 60 Fossil Fuel Free Index. If the spun-off company is removed from the S&P/TSX 60 after at least one day of regular way trading (with a divisor adjustment), the S&P/TSX 60 Fossil Fuel Free Index follows the same treatment.

*For general information on spin-off treatments, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.*

**Deletions.** Index constituents may be removed from the index following a takeover, merger, delisting, bankruptcy, indefinite suspension or if dropped from the S&P/TSX 60. Index deletions are not replaced until the subsequent quarterly rebalancing.

In addition, if a company that is a constituent of both the S&P/TSX 60 and the S&P/TSX 60 Fossil Fuel Free Index acquires another constituent of the S&P/TSX 60 which is currently excluded from the S&P/TSX 60 Fossil Fuel Free Index due to ownership of fossil fuel reserves, the acquirer will be dropped from the S&P/TSX 60 Fossil Fuel Free Index on the action effective date.

A constituent flagged by RobecoSAM's MSA may also be removed if the Index Committee determines that the company in question is no longer eligible for index inclusion.

**RobecoSAM Exclusion Data.** Exclusion data from RobecoSAM is updated annually in April and is applied as part of the June quarterly rebalancing.

## Corporate Actions

The index follows the methodology and maintenance procedures of the S&P/TSX 60 with respect to the treatment of corporate actions. Index additions are generally made only during the quarterly rebalancings.

*For more information on the corporate action treatment of the S&P/TSX 60, please refer to the S&P/TSX Canadian Indices methodology document.*

*For general information on corporate action treatments, please refer to S&P Dow Jones Indices' Equity Indices Policies & Practices document.*

## Currency, Currency Hedged, and Risk Control Indices

The index is calculated in Canadian dollars and U.S. dollars.

WM/Reuters foreign exchange rates are taken daily at 04:00 PM London time and used in the calculation of the index. These mid-market fixings are calculated by the WM Company based on Reuters' data and appear on Reuters pages WMRA.

Additional currency, currency hedged, and risk control versions of the indices may be available. For a list of available currency, currency hedged, and risk control indices, please contact Client Services at [index\\_services@spglobal.com](mailto:index_services@spglobal.com).

For more information on currency, currency hedged, and risk control indices, please refer to S&P Dow Jones Indices' Index Mathematics Methodology.

### **Investable Weight Factor (IWF)**

All issues in the S&P/TSX 60 Fossil Fuel Free Index are assigned a float factor, called an Investable Weight Factor (IWF). The IWF ranges between 0 and 1 and is an adjustment factor that accounts for the publicly available shares of a company.

*Please refer to S&P Dow Jones Indices' Float Adjustment Methodology for further details.*

### **Other Adjustments**

In cases where there is no achievable market price for a stock being deleted, it can be removed at a zero or minimal price at the Index Committee's discretion, in recognition of the constraints faced by investors in trading bankrupt or suspended stocks.

### **Base Date and History Availability**

Index history availability, base date and base value are shown in the table below.

<b>Index</b>	<b>Launch Date</b>	<b>First Value Date</b>	<b>Base Date</b>	<b>Base Value</b>
S&P/TSX 60 Fossil Fuel Free Index	10/05/2015	12/30/2011	12/30/2011	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

The S&P/TSX Canadian indices are maintained by the S&P/TSX Canadian Index Committee. The Index Committee is comprised of four members representing S&P Dow Jones Indices and three members representing the Toronto Stock Exchange (“TSX”). The Index Committee is chaired by a member designated by S&P Dow Jones Indices. Meetings are held monthly, and from time to time, as needed.

The Index Committee is responsible for setting rules and policies for the S&P/TSX Indices, determining the composition of the Indices and administering the methodology. In fulfilling its responsibilities, the Index Committee has full and complete discretion to amend, apply or exempt the application of the methodology and other index policies as circumstances may require, and add, remove or by-pass any security in determining the composition of any of the indices.

The Index Committee may rely on any information or documentation submitted to or gathered by it that the Index Committee believes to be accurate. Where a public document used by the Index Committee is available in both official languages, the Index Committee shall assume that the contents of both versions are identical. The Index Committee reserves the right to reinterpret publicly available information and to make changes to the index based on a new interpretation of that information at its sole and absolute discretion.

Index corrections and changes to index composition are implemented at such time and in such manner, as the Index Committee deems appropriate. The timing of any index change made in response to a correction shall be at the sole and absolute discretion of the Index Committee.

Stock prices, VWAPs, and prices used to calculate QMV shall be prices determined by trading on the TSX. Trading volume shall be determined by trading on the TSX, Aequitas (Lit and Neo), Alpha, CSE (Pure Trading), Lynx, Nasdaq CX2, Nasdaq CX2 and Omega.

S&P Dow Jones Indices considers information about changes to its Canadian 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 document.*

# 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. Press releases are released to major news services.

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 the index rebalances. The pro-forma file is typically provided daily in advance of the rebalancing date and contains all constituents and 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.spdji.com](http://www.spdji.com) for a complete schedule of rebalancing timelines and pro-forma delivery times.*

## Holiday Schedule

The S&P/TSX Canadian 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](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 document.

## Recalculation Policy

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

**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 document.*

**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.spdji.com](http://www.spdji.com).

## **FTP**

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.spdji.com](http://www.spdji.com).*

# Appendix

## Methodology Changes

Methodology changes since January 1, 2015 are as follows:

Change	Effective Date (After Close)	Previous	Methodology Updated
Intra-rebalancing Drop Treatment	09/16/2016	Companies involved in environmental crisis situations are not dropped from the index between rebalancings.	Any constituent raised as an environmental Media and Stakeholder Analysis (MSA) case by RobecoSAM will be brought to the governing Index Committee for possible immediate removal. In the event of removal, the constituent in question would not be eligible for re-entry into the index for one year beginning with the subsequent rebalancing.
Treatment of Spin-offs	10/01/2015	If the spun-off stock is to be added and if an achievable market price is available, it is used; if not, a theoretical price based on the spin-off terms is used. The price is adjusted to the Price of the Parent Company minus (Price of the Spun-off company/Share Exchange Ratio). Index shares change so that the company's weight remains the same as its weight before the spin-off.	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 the spun-off company is to remain in the S&P/TSX 60, it will subsequently remain in the S&P/TSX 60 Fossil Fuel Free Index, provided the parent company is not currently excluded due to ownership of fossil fuel reserves. If the spun-off company is removed from the S&P/TSX 60 after at least one day of regular way trading (with a divisor adjustment), or if the parent company is currently excluded due to ownership of fossil fuel reserves, the S&P/TSX 60 Fossil Fuel Free Index will follow the same treatment.

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