

S&P
INDICES

S&P/TSX CLEAN TECHNOLOGY INDEX

INDEX METHODOLOGY



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Introduction

The S&P/TSX Clean Technology Index measures the performance of companies listed on the TSX whose core business is in the development and deployment of green technologies. It includes common stock and income trust units, and is calculated in real-time.

Clean Technology companies are drawn from those companies within the TSX investable universe of public companies whose activities provide value-added solutions to environmental problems. Jantzi Sustainalytics screens TSX listed securities according to a methodology which first evaluates companies for inclusion based on involvement in and strategic commitment to five environmental themes:

1. Renewable Energy – Production and Distribution (e.g. renewable energy developers and independent power producers);
2. Renewable Energy – Manufacturing and Technologies (e.g. equipment and components for the renewable energy industry);
3. Energy Efficiency (e.g. industrial automation and controls; and energy-efficient equipment);
4. Waste Reduction and Water Management (e.g. providing potable water, source reduction and in-process recycling);
5. Low Impact Materials and Products (e.g. organic foods).

For details regarding the Clean Technology classification system developed by Jantzi, please refer to Appendix III

Partnership

The S&P/TSX Clean Technology Index is calculated and managed by Standard & Poor's. TMX Group Inc. (TSX) is the owner and distributor of all S&P/TSX equity index data. Jantzi Sustainalytics provides the classification scheme and screens the universe of eligible securities. Jantzi Sustainalytics is one of the world's leading providers of ESG (environmental, social and governance) research and analysis.

Related Indices

Standard & Poor's calculates related Canadian indices, listed below, which are covered in separate methodology documents.

- S&P/TSX Composite
- S&P/TSX 60

- S&P/TSX Completion Index
- S&P/TSX Equity Indices
- S&P/TSX Income Trust Indices
- S&P/TSX Capped Sector Indices
- S&P/TSX Venture Composite

Eligibility Criteria

Eligibility Criteria are reviewed annually to ensure consistency with market conditions.

For a list of defined terms used in this document, please refer to Appendix IV.

Eligibility Factors

Clean Technology Classification. To be eligible for inclusion in the S&P/TSX Clean Technology Index, a security must be classified as a clean technology company according to the clean technology classification system used to screen all securities listed on the TSX. Stocks are classified by Jantzi according to criteria which include five key thematic areas: 1) Renewable Energy – Production and Distribution, 2) Renewable Energy – Manufacturing and Technologies, 3) Energy Efficiency, 4) Waste Reduction and Water Management, and 5) Low Impact Materials and Products.

For details regarding Clean Technology classification system developed by Jantzi, please refer to Appendix III.

Market Capitalization. To be eligible for inclusion in the S&P/TSX Clean Technology Index, the security must be greater than or equal to C\$ 100 million in quoted (float-adjusted) market value (QMV), based on the volume weighted average price (VWAP), over the last three trading days of the month-end prior to the Annual Review.

For details regarding float-adjustment methodology, please refer to Appendix I.

Liquidity. Based on available public information, a security must meet the following criteria to be considered eligible for index inclusion.

- The float-adjusted turnover ratio, as measured by comparing the 12-month trading volume relative to the current float shares, must be at least 0.20. For the purpose of this calculation, the float shares of an issuer that has more than one class of listed common shares will be combined. The volume will be based on the volume of the eligible class.

Refer to the Index Construction section for additional information on the treatment of multiple classes of a security.

Domicile. Issuers of Index Securities must be incorporated, established in the case of income trusts, or formed in the case of limited partnerships, under Canadian federal, provincial, or territorial jurisdictions and listed on the TSX.

Eligible Securities. Securities issued by mutual fund corporations, preferred shares, exchangeable shares, warrants, installment receipts and other securities deemed inappropriate by the Committee, from time to time, are not eligible for inclusion in the index. Installment receipts are not eligible for inclusion in the index, but can be used in lieu of common share trading history. Securities that are “paper-clipped” combinations of equity and debt, and which can be separated by holders, will not be eligible. “Stapled” securities, in which a combination of securities trade as one and cannot be broken apart, will be eligible for inclusion. (Income Deposit Securities [IDS], Enhanced Income Securities [EIS] and Income participating Securities [IPS] are paper-clipped and, therefore, are ineligible.)

To be included in the Eligible Securities Pool, securities must be listed on the TSX for at least 12 full calendar months as of the month-end prior to the applicable Annual Review.

Shares Outstanding. The shares counted for index calculation are issued and outstanding shares of a security (rounded to the nearest thousand). This count is float-adjusted to reflect only shares available to the public.

Capping. The relative weight of any single index constituent is capped at 10%.

For the Capping Methodology, please refer to Appendix II.

For details regarding float-adjustment methodology, please refer to Appendix I.

Timing of Changes

Additions. Additions to the S&P/TSX Clean Technology Index are generally only made as part of the Annual Review.

Deletions. A security will be removed from the index at the first practical date following the Committee’s determination that a corporate action has been successful. The target announcement period will be two-to-five business days, but exceptions may apply due to unexpected corporate activity.

Index Construction

Approaches

The S&P/TSX Clean Technology Index is designed to be representative of the Canadian Clean Technology market.

Index Calculations

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.

Multiple Classes of Stock

In the event that a company has more than one class of common shares listed on the TSX, the float shares of each class will be combined for the purpose of determining index inclusion. For index calculation, Standard & Poor's will use the price of the largest class, as determined by QMV, and the total number of float-adjusted shares of all listed classes (rounded to the nearest thousand).

In the case of securities that have constrained shares (foreign ownership constraints on a particular class of shares), the calculation of float shares will be based on the total issued and outstanding shares of all classes, not on each class separately.

Index Maintenance

Rebalancing

The index will be reviewed annually, to be effective on the third Friday in September, and all Index Securities that, in the opinion of the Committee, do not meet the Eligibility Criteria will be removed. Securities to be added, if any, will also be selected using the Eligibility Criteria.

1. Securities under consideration for addition to or deletion from the index will be assessed by the Committee on the basis of the 12-month data ending August of each year, with respect to trading on the TSX. Publicly available information which pertains to shares outstanding (rounded to the nearest thousand) and Investable Weight Factor's (IWF), up to and including the last business day of August will be considered in the Annual Review.

For details regarding Investable Weight Factors (IWF), please refer to Float Adjustment in Appendix I.

2. Securities that the Committee determines meet the Eligibility Criteria will be added to the Index at the Annual Review.
3. Index Securities that the Committee determines fail to meet Eligibility Criteria will be removed from the Index at the Annual Review. A press release will be issued to the market within the first 10 business days of September, announcing the additions and deletions as well as the new float shares for index calculation.

Frequency. Rebalancings occur annually in September. Intra-year changes are made on an as needed basis. Changes occur in response to corporate actions and market developments. The target announcement period will be two-to-five business days, but exceptions may apply due to unexpected corporate activity.

Share Updates. At the Quarterly Share Update, there will be a complete share update for the index (in March, June, September, and December). This update includes all cumulative changes to shares outstanding of all Index Securities. Changes to control block positions will only take place at the annual rebalancing, unless there is change in the S&P/TSX Composite or S&P/TSX Small Cap constituent which is also a constituent of the S&P/TSX Clean Technology, in which cases these changes will flow through to the S&P/TSX Clean Technology Index constituents immediately. Outstanding shares will be rounded to the nearest thousand.

If a company is added to the S&P/TSX Composite or the S&P/TSX SmallCap Index, its IWF and shares outstanding are subject to review at the time of the addition to the more senior index. Such changes may flow through to the S&P/TSX Clean Technology Index.

For details regarding Investable Weight Factors (IWF), please refer to Float Adjustment in Appendix I.

Corporate Actions

Refer to the S&P/TSX Composite methodology document for treatment of corporate actions. These same procedures will be applied to the S&P/TSX Clean Technology Index.

Currency of Calculation

The S&P/TSX Clean Technology Index is calculated in Canadian dollars. Calculation in other currencies and hedged calculations are available from Standard & Poor's on a custom basis.

Base Date

The base date for the S&P/TSX Clean Technology Index is March 24, 2010 and the base level is 100.

Other Adjustments

Refer to the S&P/TSX Composite methodology document for treatment of Other Adjustments. These same procedures will be applied to the S&P/TSX Clean Technology Index.

Index Data

Total Return Indices

A total return index series is calculated for the S&P/TSX Clean Technology Index as well as the price return series.

The total return calculation includes stock dividends paid in kind, stock dividends paid with the securities of an issuer other than the issuer declaring such dividend, rights distributions, and cash distributions less than 4% of the underlying stock price based on the last traded board lot.

A dollar value is calculated for the distribution to be used in the total return index calculation.

Index Governance

Index Committee

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

The Committee is responsible for setting rules and policies for the S&P/TSX Clean Technology Index, determining the composition of the Indices and administering the methodology. In fulfilling its responsibilities, the 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 Committee may rely on any information or documentation submitted to or gathered by it that the Committee believes to be accurate. Where a public document used by the Committee is available in both official languages, the Committee may assume that the contents of both versions are identical. The 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.

In using trading data to determine any matter relating to the S&P/TSX Clean Technology Index, including index composition and calculations, the Committee will rely solely on data resulting from trading on the TSX.

Index corrections and changes to index composition will be implemented at such time and in such manner, as the 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 Committee.

Standard & Poor’s 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.

Advisory Panel

Standard & Poor's maintains an Index Advisory Panel to provide advice to the Index Committee, to Standard & Poor's and to the TSX on index related matters. The Panel meets at the request of the Index Committee to discuss matters related to the use of equity indices in Canada; typically the Panel meets annually. The Index Committee designates members of the Advisory Panel to provide representation of major financial market entities including leading institutional investors, investment banks, brokerage firms and others with an interest in the development of the equity markets in Canada. Meetings of the Advisory Panel are not open to the public or the press; however, the proceedings are not confidential and members are free to discuss them publicly.

Index Policy

Announcements

Announcements of additions to and deletions from the S&P/TSX Clean Technology Index are generally made at 05:15 PM U.S. Eastern Time. Press releases are posted on the Web site, www.indices.standardandpoors.com, and are released to major news services.

In addition, TSX 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 TSX Datalinx. In order to subscribe, contact TSX Datalinx at 416-947-4452 or marketdata@tsxdatalinx.com.

Holiday Schedule

The S&P/TSX Clean Technology Index is calculated when the Canadian equity market is open.

A complete holiday schedule for the year is available on the TSX Web site at www.tsx.com.

Unscheduled Market Closures

In situations where the TSX is forced to close early due to unforeseen events, such as computer or electric power failures, weather conditions or other events, Standard & Poor's will calculate the closing price of the indices based on (1) the closing prices published by the exchange, or (2) if no closing price is available, the last regular trade reported for each security before the exchange closed. If the exchange fails to open due to unforeseen circumstances, the index will use the prior day's closing prices or Standard & Poor's may determine not to publish the index for that day.

Index Dissemination

The Toronto Stock Exchange (TSX) serves as the distributor of both real-time and historical index data. In addition, index levels are available on Standard & Poor's Web site at www.indices.standardandpoors.com, through major quote vendors (see codes below), through numerous investment oriented Web sites and various print and electronic media.

Tickers

	Bloomberg	Reuters
S&P/TSX Clean Technology	TXCT	.GSPTXCT
S&P/TSX Clean Technology Total Return Index	TXCTAR	.TRGSPTXCT

Appendix I

Float Adjustment

Goals. Under float adjustment, the share counts used in calculating the indices reflect only those shares that are available to investors, rather than all of a company's outstanding shares. Float adjustment excludes shares closely held by control groups, other publicly traded companies or government agencies.

With a float-adjusted index, the value of the index reflects the value available in the public markets. Further, reducing the relative investment index investors have in stocks with limited float – stocks that typically are less liquid – should lower the cost of index investing.

Rules. The goal is to distinguish strategic shareholders (whose holdings depend on concerns such as maintaining control rather than the economic fortunes of the company) from those holders whose investments depend on the stock's price and their evaluation of the company's future prospects. Shareholders concerned with control of a company include board members, founders and owners of large blocks of stock. Likewise, holdings of stock in one corporation by another corporation are normally for control, not investment, purposes. While government holdings are unusual, normally government holdings are not investments made because a stock is expected to appreciate or the government entity is managing its excess funds through equity investments.

Share owners acting as investors will consider changes in the stock's price, earnings or the company's operations as possible reasons to buy or sell the stock. They hold the stock because they expect it to appreciate in value and believe the stock offers better risk and return opportunities than other investments. Further, a sharp rise or fall in the stock's price could be a reason to adjust their positions. Mutual funds, pension plans and other institutional investors are usually in this category. The fact that an institutional investor has held a block of shares for several years is not evidence that the block is being held for control, rather than investment, reasons.

Standard & Poor's defines three groups of shareholders whose holdings are presumed to be for control and which are, therefore, subject to float adjustment. Within each group, the holdings are totaled. In cases where holdings in a group exceed 10% of the outstanding shares of a company, the holdings of that group are excluded from the float-adjusted count of shares used in index calculations.

The three groups are:

1. Holdings by other publicly traded corporations, venture capital firms, private equity firms, strategic partners or leveraged buy-out groups.
2. Holdings by government entities, including all levels of government in Canada or foreign countries.
3. Holdings by current or former officers and directors of the company, founders of the company, or family trusts of officers, directors or founders. Second, holdings of trusts, foundations, pension funds, employee stock ownership plans or other investment vehicles associated with and controlled by the company.

It is also useful to identify holders that are considered to be investors and not strategic holders. Mutual funds, investment advisory firms, pension funds or foundations not associated with the company and investment funds in insurance companies are part of float. At times data will show that these investors hold positions for several years with virtually no change. This is not evidence that the holding is not for investment purposes; rather it merely suggests that the portfolio manager continues to see the stock as a good investment. Further, when the stock is held in an index fund, one would not expect to see substantial changes in the holdings.

A company's annual report or proxy may include listings of some equity-like securities that are not included in total shares outstanding and need not be considered in calculating available float. These include treasury stock, stock options, restricted shares, equity participation units, warrants, preferred stock, convertible stock and rights.

In a few cases, a company's ultimate shareholders may be beneficiaries of a trust which holds their stock. (Examples usually include cases in which shares were distributed as part of the initial public offering.) If the trust beneficiaries can buy and sell the stock without any difficulty or significant additional expenses beyond typical brokerage fees, the shares in a trust are part of the available float. If the shares in a trust cannot be sold, the shares would not be counted as part of the available float.

Investable Weight Factors (IWF)

For each stock an IWF is calculated:

$$IWF = (\text{available float shares})/(\text{total shares outstanding}) \quad (1)$$

where available float shares is defined as total shares outstanding less shares held in one or more of the three groups listed above, where the group holdings exceed 10% of the outstanding shares.

The float-adjusted index is calculated:

$$Index = \frac{\sum_j (P_j S_j IWF_j)}{Divisor} \quad (2)$$

Where P_j is the price of stock j , S_j is the total shares outstanding of stock j and IWF_j is the investable weight factor. The divisor is the index divisor.

Appendix II

Capping Methodology

1. Criteria for capping an Index Security:

Any constituent whose Relative Weight exceeds 10% on the Quarterly Valuation Date will be capped at 10%. This cap will be put in place by reducing the number of trust units or shares in float-adjusted shares outstanding until it results in a Relative Weight equal to 10% of the relevant index. The decision to impose a maximum weight restriction on any capped index will be subject to the sole and absolute discretion of the Index Committee.

2. Maintenance for Capped Constituents:

- a. Any capped Index Security whose Relative Weight is below 10% on the Quarterly Valuation Date will have its float-adjusted units or shares increased until either the security is at full float or the Relative Weight reaches 10% of the total index QMV, whichever comes first.
- b. Any capped Index Security whose Relative Weight is above 10% of the index QMV after the close of the market on the Quarterly Valuation Date will have its float-adjusted trust units or shares decreased until the Relative Weight reaches 10% of the total index QMV.
- c. Cap adjustments resulting from 2a or 2b will be effective after the close of trading on the Quarterly Update Effective Date. The Investable Weight Factor will be determined by using closing unit or share prices and outstanding trust units or shares after the close of trading on the Quarterly Valuation Date.

Appendix III

Clean Technology Classification System

The information herein has been obtained from sources that Jantzi Research Inc. believes to be reliable however Jantzi-Sustainalytics does not guarantee its accuracy or completeness.

The Context for a Clean Technology Index

Global trends associated with population demographics, economic growth of both developed and developing countries, and climate change, will have long-lasting implications for capital markets. In the long-term, these global trends will continue to drive a robust economic demand for the basic necessities of life (including water, energy, food and other natural resources), raw materials and consumer goods. Associated with these global trends is overwhelming evidence that continued rapid economic expansion, based on traditional production patterns, will negatively impact global environmental quality. Consequently, over the long-term, the business environment will shift to favor those companies that will contribute to the transition toward an environmentally sustainable economy.

As such, there is a need for an approach to investing that focuses on companies that can provide goods or services to rapidly expanding global markets, which either reduce or do not materially increase the throughput pressures on already strained ecological systems. For companies, this means focusing on reducing or eliminating the negative ecological impacts of their operations, while at the same time improving the productive and responsible use of natural resources

Pragmatically, companies can achieve these goals by focusing their resources on innovation, efficiency, and on reducing their ecological impact. When you apply these criteria to the sectors most likely to be impacted by the aforementioned global trends, five key thematic areas emerge as the most likely to provide solutions to global environmental challenges: 1) Renewable Energy – Production and Distribution, 2) Renewable Energy – Manufacturing and Technologies, 3) Energy Efficiency, 4) Waste Reduction and Water Management, 5) Low impact materials and products

Index Construction

The TSX/S&P Clean Technology Index measures the performance of companies in Canada (listed on the TSX) whose core business is in the development and deployment of green technologies. The following steps identify potential candidates for the Clean Technology Index.

Identify Index Universe. Clean Technology companies are drawn from those companies within the TSX investable universe of public companies whose activities provide value-added solutions to environmental problems. The index construction methodology first evaluates companies for inclusion based on involvement in and strategic commitment to five environmental themes:

1. Renewable Energy – Production and Distribution (e.g. renewable energy developers and independent power producers);
2. Renewable Energy – Manufacturing and Technologies (e.g. equipment and components for the renewable energy);
3. Energy Efficiency (e.g. industrial automation and controls; and energy-efficient equipment);
4. Waste Reduction and Water Management (e.g. providing potable water, source reduction and in-process recycling);
5. Low Impact Materials and Products (e.g. organic foods).

Jantzi-Sustainalytics company selections are then approved by the S&P Index Committee.

Conduct “Pure Play” Analysis. To qualify for addition to the Clean Technology Index, a candidate must meet the above-mentioned thematic eligibility criteria and have pure-play involvement in a specific theme, as described in the theme definitions. A company is considered to have pure-play involvement in a theme, if either of the two conditions is met.

- 50% or more of the company’s revenue is derived from products and services from one or more of the above themes.
- 50% or more of the company’s net income is generated by products or services from one or more of the above themes.

For example, a company that earns 100% of its revenue from the production of solar cells would have pure-play involvement in the Renewable Energy theme. The themes are not mutually exclusive, so a company’s pure-play involvement may come from multiple themes. For example, a company that earns 40% of its revenue from solar cells and another 45% from water purification equipment would qualify for inclusion in the Clean Technology Index.

Apply S&P’s liquidity and float-adjustment methodology. The S&P liquidity screen is applied to the float-adjusted market capitalization of companies identified in the previous two steps.

Thematic Sectors

Renewable Energy – Production and Distribution. Thematic Research on renewable energy is focused on identifying pure-play companies whose revenues primarily come from the production and delivery of renewable energy and renewable fuels. These include companies whose main lines of business proactively addresses the growing global demand for energy while avoiding or mitigating the environmental hazards and supply limitations of conventional fuels.

Sample Business Activities

Development and Generation of Renewable Energy	Renewable energy developers and independent power producers of wind, solar, geothermal, wave/tidal, run-of-river or small-scale hydro, as well as distributed energy, district heating, cogeneration and combined heat and power. Renewable energy utilities and retailers, as well as suppliers of specialized products and services to the above companies.
Renewable Fuels	Companies that supply the fuels, and infrastructure for the production and distribution of cleaner hybrid fuels, “liquefied natural gas” (LNG), “compressed natural gas” (CNG); and hydrogen. Companies that supply bio-fuels produced from biomass; agricultural and food waste; and by-products, including biogas from methane and landfill gas

Renewable Energy – Manufacturing and Technologies. Thematic Research on energy efficiency is focused on identifying pure-play companies whose revenue primarily comes from supplying specialized products and services renewable power companies.

Sample Business Activities

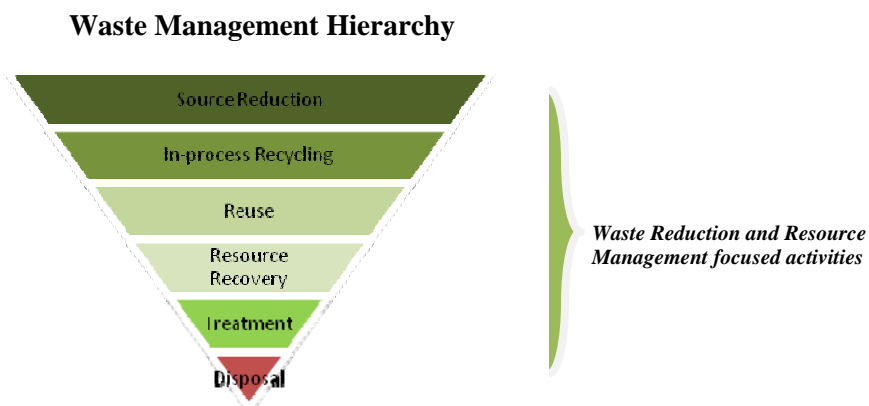
Generation Equipment	Companies that design, develop, manufacture, distribute or install equipment and components for the renewable energy sector, (including bearings, gearboxes, blades, towers, wafers, cells, etc.); and companies that supply specialist materials into the renewable energy value chain. This also includes technologies used for the processing or production of bio-derived fuels/energy.
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Energy Efficiency. Thematic Research on energy efficiency is focused on identifying pure-play companies whose revenue primarily comes from products and services that proactively address the growing global demand for energy, while minimizing impacts to the environment. The theme is primarily focused on companies that promote effective power management, energy conservation, storage and energy efficiency.

Sample Business Activities

Building energy efficiency	Companies that design, develop, manufacture, distribute or install energy efficient products and services for use in residential, commercial and municipal buildings. Products include integrated buildings control systems, insulation materials, energy efficient lighting, efficient heating, ventilation and air-conditioning equipment.
Transportation energy efficiency	Companies that design, develop, manufacture, distribute or apply technology to deliver improved efficiency in the transportation sector (including automotive, heavy duty, rail and aerospace). This includes higher efficiency conventional engines and powertrain technologies, and new vehicle technology (such as natural gas engines, hybrids and electric vehicles, including specialist batteries)
Industrial energy efficiency	Technologies and systems that promote efficiency in industrial operations (e.g. industrial turbines, motors, and engines); industrial automation and controls; and energy-efficient equipment and appliances
Power management	Companies that design, develop, manufacture, distribute or install equipment and services which enhance the efficiency of operation of the electrical power network. This includes advanced meters, distributed generation, “smart grid” technologies, high efficiency power generation, transmission and distribution technologies, and technologies for advanced energy storage and backup power.

Waste Reduction and Water Management. Thematic Research on waste reduction and resource management is focused on identifying pure-play companies whose product and service offerings support pollution prevention, waste reduction, or recycling as a means of alleviating the burden of unsustainable levels of waste generation on the environment. These include companies offering products and services concentrated within the upstream activities of the Waste Management Hierarchy, specifically source reduction, in-process recycling, reuse, resource recovery, and treatment. Disposal services are not included in the index.



Conventional waste management and disposal, involving waste collection and haulage to landfill disposal sites, is not included in this group.

Water Management. Thematic Research on water management is focused on identifying pure-play companies whose revenue is primarily derived from products and services that attempt to resolve water scarcity and quality issues. These companies employ clean technologies to address water scarcity and quality issues. The regulated activity of using conventional technology and infrastructure for water distribution (i.e. water utilities) is not included in this group.

Sample Business Activities

Pollution Prevention & Control	Source reduction and in-process recycling, including air pollution monitoring and control equipment (e.g. scrubbers, filters, dust collectors and chemical conservation).
Integrated Waste Management	Companies providing integrated waste management solutions to maximize the value extracted from waste streams through reuse, recycling, and energy recovery
Waste Treatment & Remediation	Waste treatment and environmental remediation, including land treatment and brownfield cleanup, soil washing, chemical oxidation, bioremediation.
Water Infrastructure	Infrastructure and engineering companies engaged in developing new or repairing existing water and sanitation systems. Companies that supply products (including specialty pipes, pumps, valves, actuators, hydrants and meters) and services that enhance water infrastructure systems.
Water Utilities (treatment)	Companies that operate water treatment and supply infrastructure, providing potable water or wastewater and sewage services
Water Treatment & Purification	Companies that design, develop, manufacture, distribute and/or install technologies or facilities for the separation and purification of water to meet environmental standards. This includes membranes, ultra-violet, desalination, filtration, ion exchange, and biological treatment.
Water Resource Management & Water Efficiency	Technologies and products that reduce, reuse, or recycle water as a means of conservation, including smart metering devices and controls, low-flow equipment, rainwater/greywater harvesting systems.

Low Impact Technologies, Materials and Products.

Sample Business Activities

Organic foods and low impact agriculture	<p>Organic soil amendments and mechanized maintenance of soil and nutrients. Companies that focus on seed diversification and production through biological modification of waste products into carbon storage and nitrogen fertilizer.</p> <p>Low impact aquaculture transforms seafood protein, aquaculture chain intensive food stuffs, without imperiling the natural aquatic environment. Aquaculture also offers new crop harvesting such as algae (non-food bio-fuel feedstock), and seaweed (protein and carbon sequestration).</p> <p>Non-petroleum sourced bio-solids fertilizer, source separated nitrogen as well as sulfur by-product transformation from refinery gas scrubbing.</p>
Low impact forestry	FSC based products, lake timber salvaging, renewable timber products (bamboo).
Low impact materials	<p>Companies that generate a majority of their revenues from the sale of products where more than 50% of the inputs are salvaged material, scrap metal, recycled precious metals, recycled post consumer paper, etc. In addition, companies that generate a majority of their revenue from products which have a reduced impact because inputs usage has decreased by 50% through efficiency or innovative designs.</p>
Commodity Salvage & Recycling	Salvage, use, reuse, and recycling of post-consumer waste products and commodities, including paper, metal, glass, plastic, and organic waste.

Thematic Research

Jantzi-Sustainalytics has a dedicated Thematic Research Manager who oversees the research process and conducts specialized research on Index constituents and environmental issues. Dedicated Jantzi-Sustainalytics research analysts are responsible for conducting continuous maintenance research for the S&P/TSX Clean Technology Index, which includes identifying and proposing potential candidates as well as monitoring current constituents to ensure Index eligibility. Jantzi-Sustainalytics' research and selection process for index constituents is based on information collected from a wide variety of sources. These sources are culled continuously to identify Index candidates prior to Committee review.

Information sources include:

- Jantzi-Sustainalytics' research database, covering more than 4,000 global companies,
- Company sources (e.g. Web sites, annual reports, analyst presentations)
- Regulatory filings,
- Energy, renewable energy, energy efficiency, clean technology, water, sustainable building and recycling and pollution prevention Web sites,
- Industry sources (e.g. trade associations, professional journals),
- Public policy sources,
- Governmental databases,
- Non-governmental organizations and nonprofit groups,
- Media searches of more than 9,000 global sources,
- Consultants and other market participants.

Jantzi-Sustainalytics evaluates theme-related revenues and investments, the portion of a company's business driven by the relevant theme activity and the environmental impact of the business activity. For some companies such as utilities and energy companies, these numbers are routinely available but for many others, they are not. Jantzi-Sustainalytics seeks this information in its direct communication with companies if it is not available from company publications or third-party sources. Data is standardized for comparative analysis whenever possible.

The research supports four critical elements of Index management:

1. **Qualification.** Determining which companies meet the standards to be considered eligible for pure-play involvement.
2. **Scanning.** Monitoring a pool of candidate companies for future addition to the Index.
3. **Selection.** Choosing constituents from the universe of qualified companies that satisfy the environmental and financial criteria of the Index.
4. **Monitoring.** Tracking Index holdings to ensure that they continue to meet the criteria for inclusion.

Appendix IV

Defined Terms

1. “Annual Review” refers to an annual rebalancing of the index, which occurs in the month of September. Additions to and deletions from the index are made at this time. In addition, outstanding shares and investable weight factors are adjusted as per the Quarterly Share Update. These updates are announced at the same time as the Quarterly Review additions and deletions. All additions, deletions are effective after the close of trading on the third Friday of September.
2. “Eligible Securities” are securities that pass the Eligibility Criteria.
3. “Eligible Securities Pool” means those securities that are eligible for inclusion in the S&P/TSX Clean Technology Index.
4. “Index Securities” means those securities comprising the Index.
5. “Relative Weight” of an index constituent is that constituent’s percentage of the total index QMV; $Relative\ Weight = 100 * (Constituent\ QMV/Index\ QMV)$.
6. “QMV” means quoted market value, being the value determined by multiplying the number of float-adjusted shares of a security by the price of one such share.
7. “Quarterly Share Update” refers to a quarterly share update of the index, which occurs in the months of March, June, September and December. This update includes all cumulative changes to shares outstanding and investable weight factors during the quarter. Publicly available information up to and including the effective date of the Quarterly Share Update will be included. All share changes are effective after the close of trading on the third Friday of the Quarterly Share Update month. Outstanding shares are rounded to the nearest thousand.

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