Index Insights | Sustainable Investment – Investment Solutions

Canada Ex Fossil Fuels Bond Index Series

Providing investors with tools to calibrate fossil fuels exposure in their portfolios

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Overview

As investors increasingly look to address carbon-related risks in their portfolios, it is critical that they have access to the right tools. Specifically, there are several ways investors can manage fossil fuels exposure in their portfolios, which includes explicit divestment, tilting, optimization and shifting assets towards companies that are developing greener solutions.

This paper introduces the FTSE Canada Ex Fossil Fuels Bond Index Series, which is the first-of-its-kind in the Canadian fixed income market. It is designed to track the performance of constituents of the FTSE Canada Universe Bond Index after the exclusion of companies, whose revenue and/or reserve exposure to fossil fuels exceeds a set threshold. This paper also discusses the opportunities in the Canadian green bond market, where investors can deploy capital to green growth opportunities and achieve impacts.

Contents

Canada's fossil fuels industry and the low carbon transition

Fossil fuels are important to Canada's industry and economy, and its abundant oil, natural gas, and coal resources place it among the world's most important fossil fuels producers. The country ranks third on oil reserves (surpassed only by Saudi Arabia and Venezuela) and it is the world's fourth largest crude oil exporter.[1] Currently, its oil and gas industry also presents the country's largest source of emissions, representing 27% of the national total.[2]

Canada is exposed to both challenges and opportunities in the transition to a low carbon economy, as the financial and regulatory risks facing fossil fuels-dependent sectors of the economy are increasing. According to the International Energy Agency (IEA), a transition to net zero by 2050 could result in a sharp decline in fossil fuels demand, which would fall from almost four-fifths of the total energy supply today to slightly over one-fifth by 2050[3], creating risks of write-downs or devaluation of fossil fuels assets.

In line with its international commitments under the Paris Agreement, the Canadian government has implemented a variety of policy initiatives and incentives to cut emissions and reduce the country's reliance on fossil fuels, including carbon taxes and measures to encourage the adoption of low carbon technologies.[4]

In June 2019, the government-appointed Expert Panel on Sustainable Finance laid out recommendations for the most impactful and actionable areas for sustainable finance in Canada. This included identifying opportunities in expanding Canada's green fixed income market and setting a global standard for transition-oriented financing.[5] It also encouraged Canadian index providers to create indices of domestic green and transition-linked fixed income products to scale investment. The Canadian Standards Association (CSA) has also started to develop a 'Transition Finance Taxonomy' as part of a National Standard of Canada for Transition Finance.

Managing fossil fuels exposure in investment portfolios

Amid growing concerns about climate change and carbon in investor portfolios, many asset owners and asset managers are looking to reduce or calibrate their exposure to fossil fuels and carbon intensive assets and seeking to reorient their investments away from businesses whose products and services contribute to rising GHG emissions.

However, based on various investment beliefs and ethical positions, investors have adopted different strategies. These range from underweighting assets based on their carbon intensity or fossil fuels reserves (so-called tilting approaches), to making exposure to carbon intensive assets contingent transition efforts of companies, for example, by leveraging Transition Pathway Initiative's (TPIs) analysis of how the most carbon exposed/intensive public companies are managing the climate transition.[6]

[1] Government of Canada, Fossil fuels.
[2] Environment and Climate Change Canada, National Inventory Report:1990-2020 Greenhouse Gas Sources and Sinks in Canada.
[3] IEA, Net Zero by 2050 - A Roadmap for the Global Energy Sector.
[4] Government of Canada, Crude Oil Industry Overview.
[5] Expert Panel on Sustainable Finance, Final Report of the Expert Panel on Sustainable Finance: Mobilizing Finance for Sustainable Growth.
[6] FTSE Russell, FTSE TPI Climate Transition Index | FTSE Russell.

Although the most common practice is to exclude securities linked to fossil fuels from investment portfolios (sometimes referred to as 'divestment'), there is a variety of considerations and practices that may lead to different exclusion approaches (summarised in Exhibit 1). For example, some investors focus their exclusions relatively narrowly on companies that produce the most carbon-intensive fossil fuels (such as coal or tar sands). In contrast, others apply fossil fuels exclusions much more broadly (e.g., including conventional oil and gas production) or may even include value chains such as dedicated transport infrastructure (such as pipelines), oilfield services companies or refineries. Similarly, some investors apply exclusions based on *any* exposure, while others may prefer to apply a materiality threshold (e.g., by defining a minimum revenue exposure to an excluded activity before excluding a security).

Exhibit 1. Different types of fossil fuels exclusions

		Approaches		
		BAU	**Partial**	**Full**
Considerations	**Type of fossil fuels**	No exclusions	Some, but not all types of fossil fuels (e.g., only coal & tar sands)	All types of fossil fuels, including, but not limited to, thermal coal, petroleum, natural gas, oil shales, tar sands, etc.
	Industry value chain	No exclusions	Some parts of the value chain (e.g., only exploration & production)	The full value chain, including the exploration, production, transportation and utilisation of fossil fuels
	Asset classes	No exclusions	Select asset classes (e.g., only applied to equities)	All types of asset classes, including, but not limited to, shares, commingled mutual funds containing shares, corporate bonds or other assets classes
	Exposure	No exclusions	May not exclude parent and/or subsidiaries, or only apply above certain revenue thresholds	Parent and/or subsidiaries of a company that is involved in these activities are also excluded

When it comes to fixed income, there are additional considerations for investors in identifying the links between a bond-issuing vehicle and its parent corporates, mapping entities within corporate issuer trees and finding a sustainability dataset that is best fitted to the universe of securities, enabling granularity, stability and comprehensiveness.

Introducing an ex-fossil fuels fixed income index series in Canada

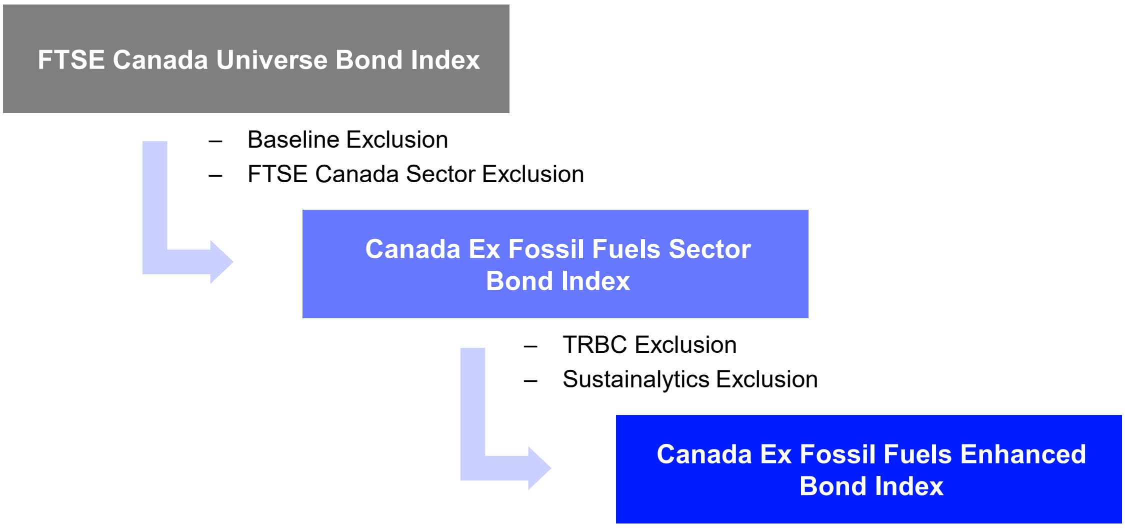
Some investors may determine that investing in specific business activities, conduct or products is unacceptable. However, they may nevertheless want to gain exposure to the broader market or asset class represented by the index. In these cases, investors have the option to exclude the specific instruments linked to these activities from an index.

To support investors' decisions on calibrating exposures to fossil fuels, we have designed the FTSE Canada Ex Fossil Fuels Bond Index Series, which introduces threshold-based approaches in phases (including FTSE Canada Universe Ex Fossil Fuels Sector Bond Index and FTSE Canada Universe Ex Fossil Fuels Enhanced Bond Index) to identify and screen issuers.

We started from the premise that there is no single right way to approach the fossil fuels exclusion challenge in fixed income. By introducing layered approaches, the index series brings greater consistency across fixed income and provides investors with a choice of tools to calibrate exposure in their portfolios.[7] The Canada Ex Fossil Fuels Enhanced Bond Index serves as a comprehensive solution which not only removes fossil fuels exposure across different sector classification systems, but also along value chains. Along the journey of layered approaches, strategies aimed at different levels of exclusion are also available. For example, the Canada Ex Fossil Fuels Sector Bond Index serves as the starting point of the journey, intending to facilitate investors to move away from issuers and bonds with the highest exposure to fossil fuels and the highest transition risks.

[7] Methodology: FTSE_Canada_Ex_Fossil_Fuels_Bond_Index_Series_Ground_Rules.pdf (ftserussell.com).

Exhibit 2. Phases of exclusions in the FTSE Canada Ex Fossil Fuels Bond Index Series



Canada Ex Fossil Fuels Sector Bond Index

The goal of this phase is not to remove any type of fossil fuels exposure, but instead to screen out those sectors that are most closely associated with fossil fuel industries. It serves as a starting point of the decarbonisation and transition journey.

FTSE Russell's Baseline Exclusions

In accordance with FTSE Russell's Baseline Exclusions Consultation,[8] the index additionally excludes companies involved in tobacco production, controversial weapons, thermal coal extraction and those companies violating the United Nations Global Compact (UNGC)[9] principles through controversial conduct.

Exhibit 3. FTSE Russell's Baseline Exclusions

[8] FTSE Russell, Minimum Exclusions for Sustainable Investment Indices.

[9] The UNGC supports companies wishing to do business responsibly by aligning their strategies and operations with Ten Principles on human rights, labor, environment and anti-corruption. It also takes strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals, with an emphasis on collaboration and innovation.

FTSE Canada Sector Classification Schema Exclusion[10]

In addition to the FTSE Russell Baseline Exclusions, issuers in four industry sub-sectors defined by the FTSE Canada Sector Classification schema are excluded due to the most direct exposure to fossil fuels. These include:

– Energy - Distribution
– Energy - Exploration
– Energy - Integrated
– Energy - Pipelines

Examples of companies falling into the above sectors include dedicated gas and oil pipelines operators, refinery sites, crude oil and natural gas producers.

In terms of the energy generation, while Canada has an abundance of oil and natural gas, other sources such as hydro power, nuclear power, wind, solar and geothermal energy are also common for electricity generation. This has been reflected in the types of corporates being captured by the Energy – Generation subsector in the FTSE Canada Sector Classification schema. For example, apart from the 'pure play' renewable energy companies that have been included, most of the other electricity generation companies falling into the Energy – Generation classification also tend to use a mix of renewable and conventional energy sources, rather than solely relying on fossil fuels. With the consideration that the Canada Ex Fossil Fuels Sector Bond Index serves as a starting point in the fossil fuels screening journey, issuers in the Energy – Generation are not excluded at this stage.

Canada Ex Fossil Fuels Enhanced Bond Index

The FTSE Canada Ex Fossil Fuels Enhanced Bond Index serves as an enhanced solution to remove fossil fuels exposure across different sector classification systems, as well as along value chains. Specifically, in addition to baseline exclusions and exclusions based on the Canada Sector Classification schema, issuers belonging to fossil fuels-related sectors in The Refinitiv Business Classifications (TRBC), and those that are identified by Sustainalytics as having direct involvement or significant ownership in fossil fuels, are also omitted.

TRBC Exclusion[11]

Issuers in the following five TRBC sectors that show exposure related to fossil fuels are excluded.

– Industry Group – Coal
– Industry Group – Oil & Gas
– Industry Group – Oil & Gas Refining and Marketing
– Activity – Fossil Fuel Electric Utilities
– Activity – Fossil Fuel IPPs

[10] See details in Appendix A of FTSE_Canada_Ex_Fossil_Fuels_Bond_Index_Series_Ground_Rules.pdf (ftserussell.com).
[11] The Refinitiv Business Classification (TRBC) is a global, comprehensive, industry classification system owned and operated by LSEG Data & Analytics. See details in Appendix C: Fossil Fuel Exclusions Description of the FTSE Canada Ex Fossil Fuels Bond Index Series Methodology.

Sustainalytics exclusion[12]

Issuers that have exposure in the following revenue categories are also excluded.

– Oil & Gas

– Oil Sands

– Arctic Oil & Gas Exploration

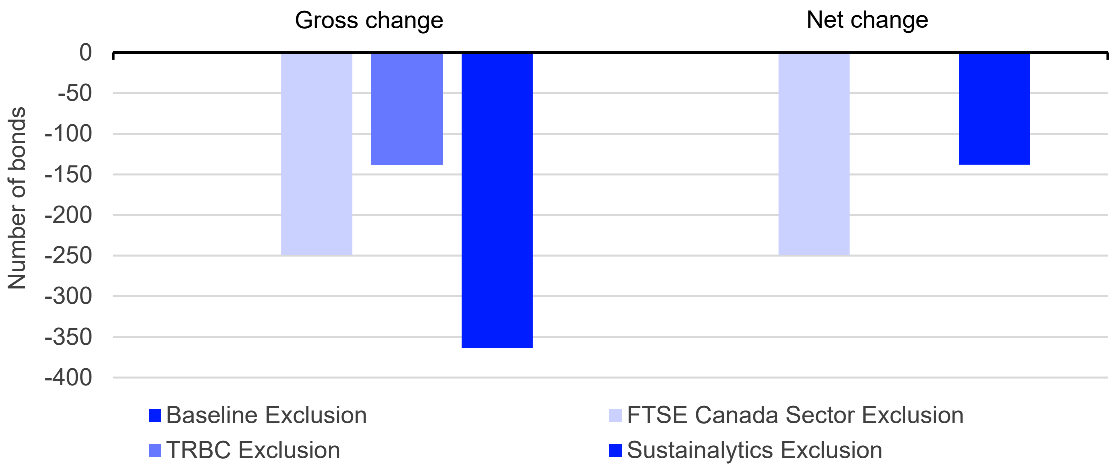
– Shale Energy

– Thermal Coal

The Sustainalytics exclusion applies to issuers that have direct involvement in the above activities (i.e., have greater than 0% of revenues) and those that have 10% and above ownership of these companies.

Exhibit 4 illustrates the impact of each exclusion step on the number of bonds in the FTSE Canada Universe Bond Index. The columns on the left show the number of bonds excluded by each approach, while the columns on the right show the net change in consecutive steps. For example, although 138 bonds are identified as fossil fuels-related by TRBC (as reflected in the gross change columns), all of them have already been removed by the FTSE Canada Sector exclusion. Therefore, the net impact of TRBC exclusion on the universe is zero. Similarly, based on Sustainalytics data, 364 bonds have exposure to relevant fossil fuel revenue categories, but 226 of which have been excluded by the previous approaches. Exhibit 5 gives more details on the net impact on number of bonds, number of issuers and the market value after each exclusion step.

Exhibit 4. The impact of exclusions on the number of bonds in the FTSE Canada Universe Bond Index



Data source: FTSE Russell, cut-off date is 31 May 2022.

Exhibit 5. Net change of each exclusion step

	Number of bonds	Number of issuers	Total market value ($bn)
FTSE Canada Universe Bond Index	**1628**	**347**	**1857**
Baseline Exclusion	-2	-1	-1.4
FTSE Canada Sector Exclusion	-249	-38	-91.09
Canada Ex Fossil Fuels Sector Bond Index	**1377**	**308**	**1765**
TRBC	0	0	0
Sustainalytics Exclusion	-138	-50	-76.03

[12] Sustainalytics data is used in the FTSE Canada Universe Ex Fossil Fuel Bond Index Series to verify bond issuers' product involvement. See details in Appendix C: Fossil Fuel Exclusions Description of the FTSE Canada Ex Fossil Fuels Bond Index Series Methodology.

	Number of bonds	Number of issuers	Total market value ($bn)
Canada Ex Fossil Fuels Enhanced Bond Index	**1239**	**258**	**1689**

Data source: FTSE Russell, cut-off date is 31 May 2022.

This layered approach takes a conservative view to identify and exclude bond issuers in fossil fuels-related activities across the chain through direct involvement and company ownership, benefiting the overall design.

Opportunities: reinvesting in Canadian green bonds

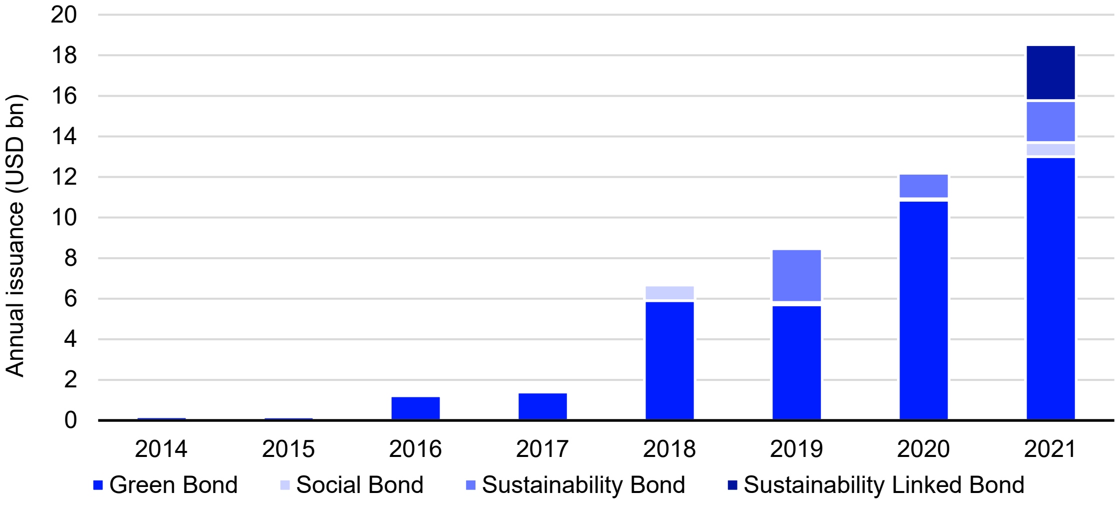
Paralleling the decisions on calibrating their exposure to fossil fuels, investors can seek out opportunities in areas related to green growth and broader sustainability topics. Canada's net-zero transition presents opportunities in green economy investment, and Canada's green revenue-weighted investable market cap of listed companies already ranks seventh globally[13]. For fixed income investors, some of these investment opportunities are accessible through Canada's overall impact bonds (green, social and sustainability bonds) market.

In particular, the fast-growing green bond market presents opportunities for investors to deploy the freed-up capital following the fossil fuel exclusion decisions, and to support Canada's transition to net zero. Approaches to accessing the Canadian green bond market include the special treatment of green bonds in various indices and/or the track of a dedicated Canada green bond index.

Overview of Canada's impact bond market

Since the first green bond issuance in 2014, 48 Canadian issuers have tapped the market with a total of 97 impact bonds – themed in green, social, sustainability or sustainability-linked as of the end of 2021. The cumulative Canadian impact bonds issuance stood at USD 45.3 billion by the end of 2021, placing Canada in the 14th place in the global ranking. Green bonds account for 84% of the overall with USD 38.4 billion cumulative issuance.

Exhibit 6. The evolution of Canadian impact bonds



Source: LSEG Data & Analytics, cut-off date is December 31, 2021.

[13] Investing in the green economy | FTSE Russell.

Sovereign green bond issuance could drive further growth in the Canadian green bond market

In March 2022, Canada issued its inaugural sovereign green bond. The CAD 5 billion issuance let Canada join France, Germany, Italy and the UK to become the fifth sovereign green bond issuer among the G7.

The issuance intends to finance a comprehensive range of projects in nine categories defined by the International Capital Market Association's (ICMA) Green Bond Principles (GBP). The project selection criteria followed some of the most stringent practices in the market. For example, under the Renewable Energy category, large scale hydropower projects must meet a minimum 5W/m2 power density threshold, or a maximum of 100g CO2e/kWh lifecycle emission if operational prior to 2020. Geothermal projects will also be limited to those with direct emissions below 100gCO2e/kWh. The proposed proceeds use in other power generation projects such as offshore wind, tidal, and wave energy also align with Canada's transition plan aimed at reducing reliance on fossil fuels.

Canada's sovereign green bond saw robust demand from environmentally and socially responsible investors, who represented a majority of buyers (72%), as well as from international investors, who made up over 45% of the investor base. The final order book of over CAD 11 billion set a record high for a Canadian dollar green bond offering[14]. As seen in other countries, sovereign green bonds can provide benchmark pricing and stimulate liquidity. We expect to see Canada's sovereign issuance will have a demonstration effect for local issuers and drive further growth in the green bond market.

Tapping green opportunities through Canadian green bonds

The cornerstone of a green bond is the dedicated use of proceeds for eligible green projects, and issuers are required by various international or regional market guidelines to disclose clear climate and/or environmental benefits of these projects. This provides additional transparency for investors to identify and assess green bonds that could help them achieve impacts in certain areas.

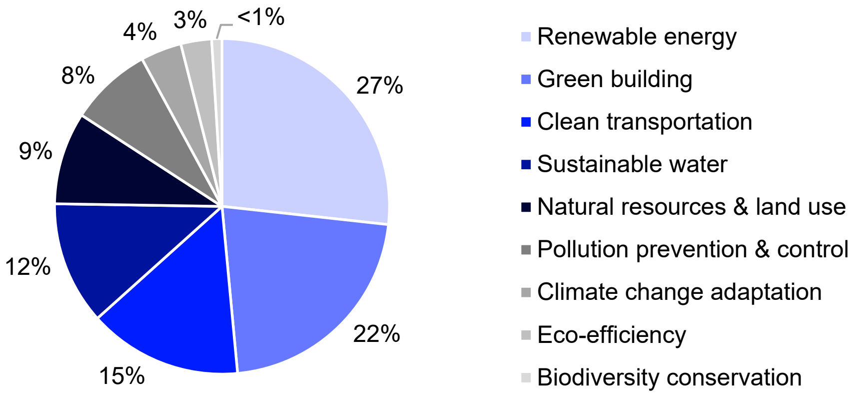
Canadian green bonds have shown diversified proceeds allocation[15], with the presence of nine categories aligning with ICMA Green Bond Principles. Renewable energy is the largest sector (27%), followed by green building (22%) and clean transportation (15%).

It is worth noting that the proportion of climate change adaptation and resilience-related proceeds allocation of Canadian green bonds is higher than the global average. In addition to the dedicated finance in water resilience, natural resources, land use, and biodiversity conservation projects, Canadian issuers also have a strong focus on buildings resilience. Examples of such include the redesigning, retrofitting and upgrading of buildings and infrastructure to mitigate the negative impact of climate change and build resilience for extreme weather events. This echoes the recommendation in the Recommendations delivered by the Expert Panel on Sustainable Finance[16] that green fixed income instrument can be used to upscale the financing required to implement essential plans for resilient infrastructure and building retrofits.

Through the investment in eligible Canadian green bonds that follow the stringent guidelines and taxonomies, investors can facilitate longer-term impacts on the transition to a resilient and sustainable future.

[14] Canada issues inaugural green bond - Canada.ca.
[15] Note on methodology: since not every issuer discloses the specific amount or percentage of proceeds allocation, the approximate amount in each category is therefore calculated by dividing the par value by the number of categories disclosed.
[16] Government of Canada, Final Report of the Expert Panel on Sustainable Finance.

Exhibit 7. The use of proceeds of Canadian green bonds



Source: LSEG Data & Analytics, cut-off date is December 31, 2021.

FTSE Canada Green Impact Bond Index Series

The FTSE Canada Green Impact Bond Index Series provides a solution for investors to get access to Canada's overall green bond market. It has been designed to represent the performance of investment-grade, high-yield and Maple (CAD-denominated) green debt issued by Canadian governments, government agencies, and corporations. The index includes green bonds, whose use of proceeds are specifically earmarked for projects that have climate and/or environmental benefit and are in line with the Climate Bonds Standards or Climate Bonds Taxonomy. By leveraging the Climate Bonds Initiative's green bond screening, which represents one of the most stringent requirements on the market, the FTSE Canada Green Impact Bond Index Series helps investors identify eligible green bonds and align their portfolios towards improved climate and environmental outcomes.

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