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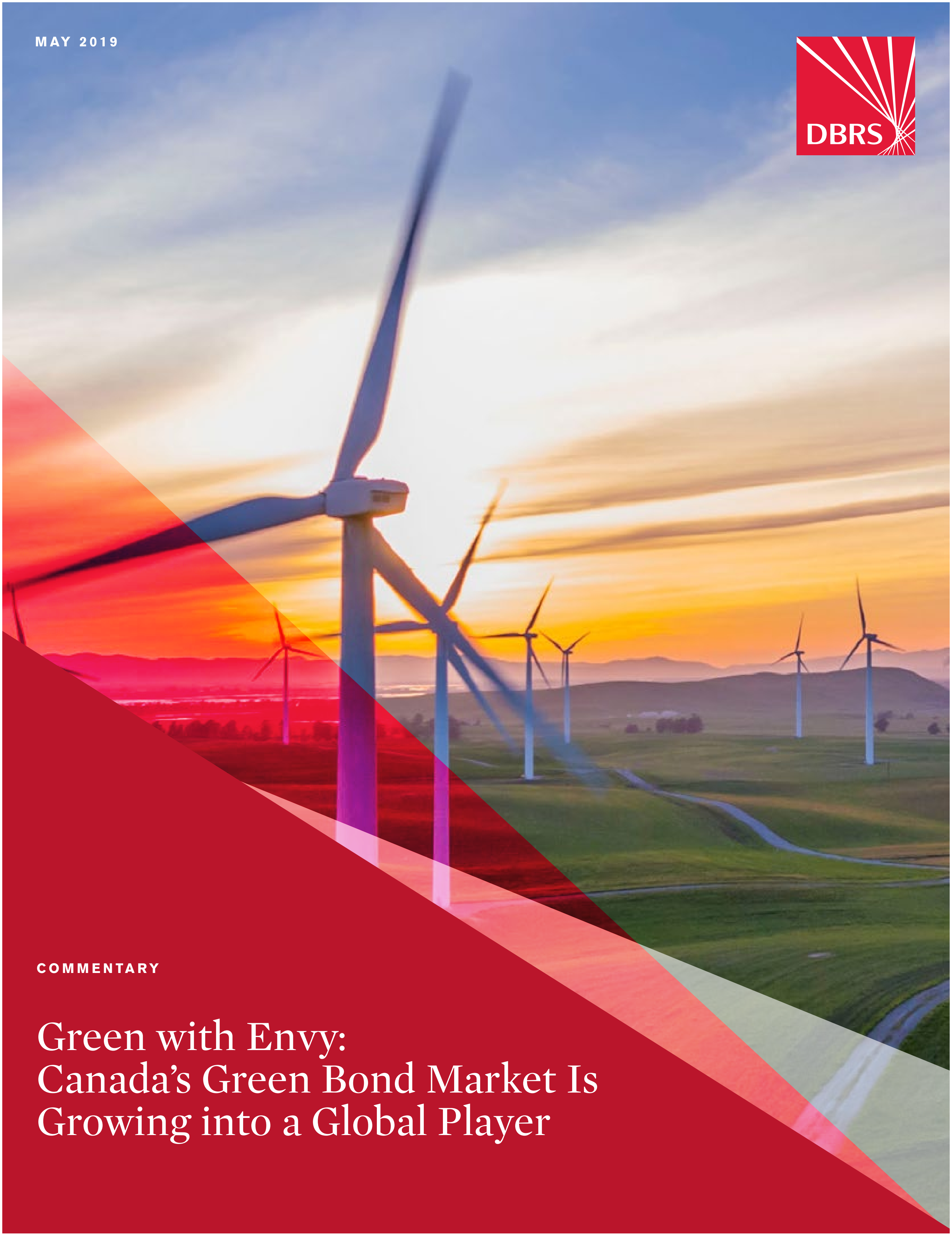

COMMENTARY

Green with Envy: Canada's Green Bond Market Is Growing into a Global Player

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Introduction

Addressing climate change requires strategic thinking, public- and private-sector coordination and global cooperation. As part of the global strategy to reduce greenhouse gas (GHG) emissions, Canada, along with most countries, adopted the 2015 Paris Agreement and has committed to reducing its GHG emissions through policy (e.g., carbon tax), regulatory measures and support for clean technologies and innovation. As policies and attitudes toward climate change shift, many mainstream investors are seeing the potential economic opportunities of a clean or low-GHG economy, and a growing number are looking to invest in projects or businesses meeting certain environmental, social and governance (ESG) investment standards. One way the markets have responded to climate change is green bonds, which are bonds designated specifically to fund projects that benefit the environment, including renewable energy and energy efficiency; pollution prevention; forestry, fishery and agricultural sustainability; and other projects designed to reduce GHG emissions. Green bonds are generally asset-linked and backed by the issuer's entire balance sheet.

Canada is still a small player in the global green bond market, but its role as an issuer is growing steadily. Investors with specific ESG mandates find Canadian green bonds attractive, and there remains significant opportunity for further issuance, especially from the private sector. DBRS expects that as global climate change initiatives strengthen, and the push toward environmental sustainability increases, the Canadian green bond market will continue to thrive. In this commentary, DBRS gives an overview of the green bond market, discusses global trends and provides an outlook for the Canadian green bond market.

The Green Bond Market: Overview

The green bond market is still relatively young, having launched in 2007 with issuance from the European Investment Bank and the World Bank. Since then, the bonds have become increasingly popular, with a record global issuance of $183.2 billion in 2018[1] (including the newer financing product — **green loans** — totalling $6.6 billion) and $37.9 billion already in 2019 (including $0.2 billion in green loans) as of March 19, 2019. Though the market was initially dominated by supranational development banks, the class of green bond issuers has expanded significantly since 2007.

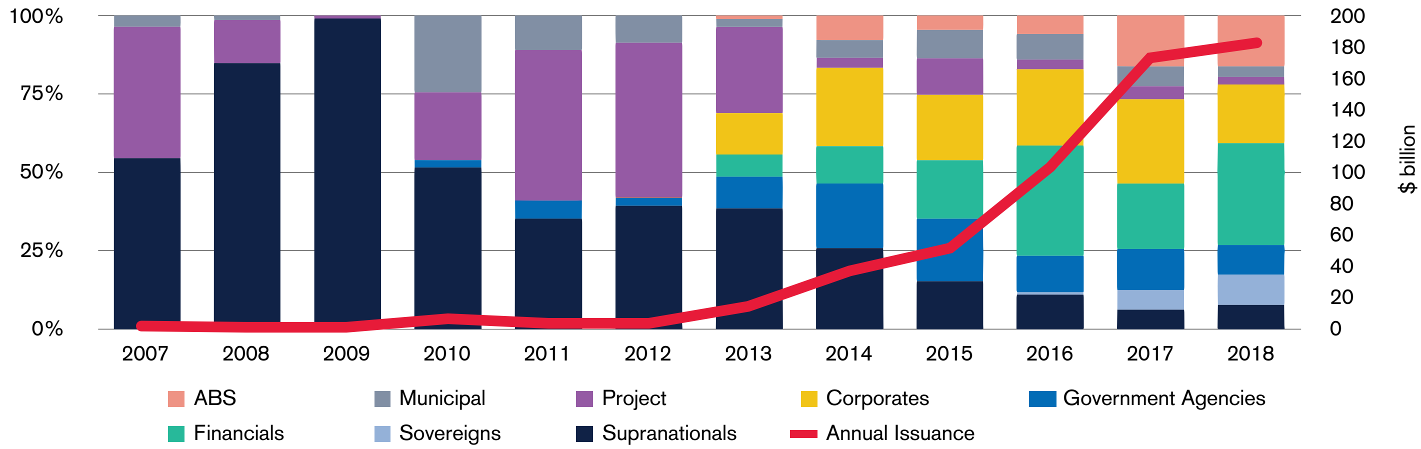
International development banks remain among the world's largest green bond issuers, but strong institutional investor demand has allowed for a broadening base of issuers to enter the market, including private- and public-sector institutions as well as issuers from emerging markets. Exhibit 1 illustrates the green bond market share by issuer type over the past decade. DBRS notes the increase in asset-backed securities, corporate and financial issuance over time compared with a marked decrease in supranational and project finance issuance.

Loans can be green, too!

Like green bonds, green loans are a newer financing product adhering to a voluntary set of principles, whose proceeds must be used entirely to fund approved green projects. Green Loan Principles (GLPs) were issued in 2018 by the Loan Market Association in the United Kingdom to ensure that any green loan is used for eligible green projects. The list of projects that qualify is based on the International Capital Market Association's (ICMA) list that defines Green Bonds. Green loans vary in that their individual loan tranches may be labelled green separate from the actual loan so long as the green tranche meets the criteria set forth in the GLPs. This means that it is possible for there to be a green tranche of a non-green loan. Under the GLPs, a green-labelled loan should highlight the environmental qualities of the underlying debt transaction while outlining the risks and opportunities of investing in environmental sustainability or climate change mitigation. This is essential, especially for investors with specific ESG mandates. Green loans make up a very small percentage of the overall green market, representing just under 2% of total green issuance since their introduction; however, the loans are increasing in popularity as more investors demand customized ESG products.

1. This represents approximately 2.8% of the global total annual issuance of bonds in 2018, which was $6.59 trillion (Source: Dealogic, DCM Highlights: Full Year 2018).

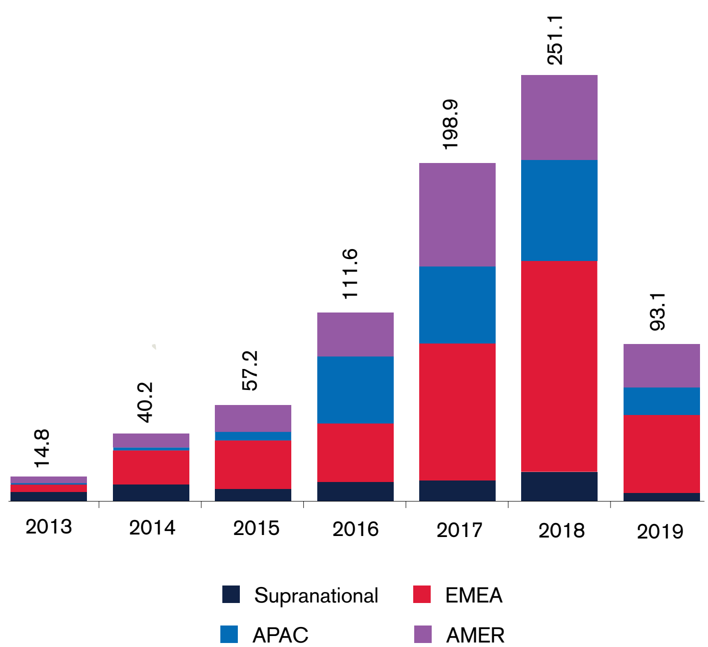
Exhibit 1: Global Green Bond Market Share by Issuer Type with Annual Issuance (USD)



Source: Bloomberg NEF Green Bonds Tool.

While total issuance in 2018 remained strong, there was a notable dip in Q3 2018 when volumes dropped 23% overall year over year (YOY). This was the result of a significant decrease in green bond issuance (down nearly 48% YOY in the third quarter) from corporate, sovereign and financial issuers, particularly from the Americas, which had only issued approximately $43.2 billion in green bonds and loans by YE2018 compared with approximately $58.5 billion at YE2017. Despite the significant drop in Q3 2018, total issuance in 2018 still increased by approximately 11% YOY from 2017 because of increased issuance from Europe, the Middle East and Africa region (EMEA; an approximate 25% increase) and the Asia-Pacific region (APAC; an approximate 12% increase overall with particular strength from financial issuances), which offset declines from government-sponsored enterprises and corporate issuers (see Exhibit 2). China has seen tremendous growth with issuance increasing to $34 billion in 2016 from $1 billion in 2015. In each of 2017 and 2018, China issued more than $30 billion in green bonds. DBRS notes, however, that China's green bond principles include "clean coal" as an acceptable green use of proceeds, a policy that global institutional investors and international certification bodies, such as the Climate Bond Initiative (CBI),[2] tend to disagree with.

Exhibit 2: Green Bond Issuance by Region (USD billions)



Note: Data for 2019 is as of April 26, 2019.
Source: Bloomberg New Energy Finance (NEF) Green Bonds Tool.

As the global attitude toward climate change shifts, DBRS expects green bonds to continue growing in popularity as mainstream investors look for environmentally friendly investment opportunities.

2. CBI is an investor-focused, not-for-profit organization working to mobilize the international bond capital market for climate change solutions. Its major funders include the Swiss government, Bloomberg Philanthropies, National Australia Bank, the Rockefeller Foundation, the Bank of America Corporation (rated A (high) with a Stable trend by DBRS) and HSBC Holdings plc (rated AA (low) with a Stable trend by DBRS).

What makes a bond green?

To avoid so-called "greenwashing" (the practice of using unsubstantiated or misleading claims to market a product or business as environmentally friendly), the ICMA began overseeing the Green Bond Principles (GBP) in 2014, updating them periodically via consultation with members and observers of the principles. The GBPs act as guidelines for labelling a bond "green."

Green Bond Principles*

Use of proceeds | Process for project evaluation and selection | Management of proceeds | Reporting

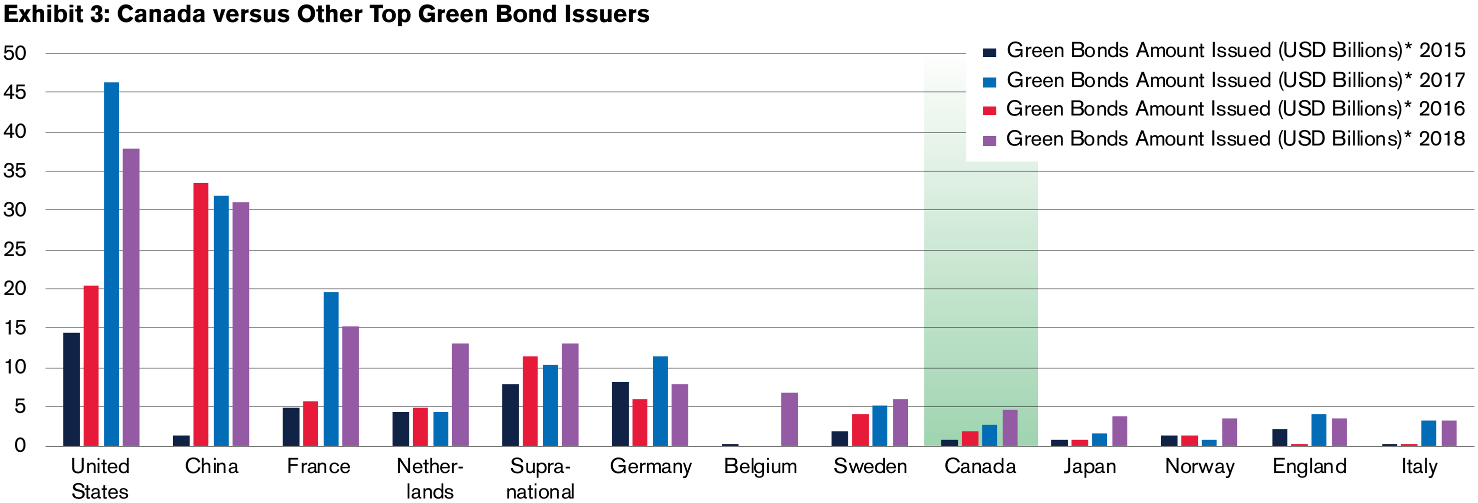
* Please see the full ICMA report for a detailed explanation of each principle.

The GBP guidelines call for transparency, accuracy and integrity in the information shared by issuers with stakeholders. GBPs are designed to guide issuers on the key components necessary to launch a credible green bond, and they help ensure that the information investors need to determine the environmental impact of their investments is available and clear. The guidelines also provide a measure of validity in standardizing the definition of "green" and specifically exclude certain projects.

Canadian Green Bond Market Outlook

Canada has a noteworthy green bond market, although it is still a relatively small player compared with leading issuers (i.e., the United States, China and France). Among global green bond markets, including emerging markets, Canada ranks ninth overall with approximately $4.5 billion (approximately CAD 5.9 billion) of green bonds issued in 2018 and nearly $3 billion (approximately CAD 4.0 billion) already issued this year as of the end of March 2019. Cumulatively, Canada has issued more than $11.5 billion in green bonds (CAD 15.2 billion) as of February 2019. Exhibit 3 shows the top 13 green bond issuers, ranked by 2018 issuance, including supranationals, which led the green bond market at one time. As Exhibit 3 demonstrates, Canada's green bond issuance has increased steadily over the last four years. For 2019, DBRS expects Canada to solidly surpass its 2018 record.

Exhibit 3: Canada versus Other Top Green Bond Issuers



* Does not include green bond loans, which are still small relative to green bonds.
Source: DBRS using data from Bloomberg NEF.

The Province of Ontario (Ontario; rated AA (low) with a Stable trend by DBRS) is currently the largest issuer of Canadian dollar-denominated green bonds, with four issuances totalling $2.3 billion (approximately CAD 3.05 billion) overall. Proceeds from its bonds issuance largely go toward transit and energy efficiency projects.[3]

Another key player that may soon surpass Ontario in the Canadian green bond market is the Canada Pension Plan Investment Board (CPPIB; rated AAA with a Stable trend by DBRS), whose wholly owned subsidiary and principal funding vehicle, CPPIB Capital Inc. (CPPIB Capital; rated AAA with a Stable trend by DBRS), issued its first euro-denominated green bond earlier this year. Proceeds from the EUR 1.0 billion, ten-year fixed-rate notes will be used to invest in renewable energy projects, water and wastewater management as well as certified green real estate. CPPIB has also stated that this issuance will help to broaden its investor base. This follows another significant green bond issuance in June 2018 when CPPIB Capital issued approximately $1.1 billion (CAD 1.5 billion) in green bonds.

Notable 2018 Canadian Green Bond Issuances (CAD)

CPPIB Capital Inc.	ten-year	$1.5 billion
Province of Ontario	seven-year	$1.0 billion
Manulife Financial Corporation	ten-year	$600 million*
Province of Québec	five-year	$500 million
Ontario Power Generation	30-year	$450 million*
South Coast British Columbia Transportation Authority (Translink)	ten-year	$400 million*
Brookfield Renewable Partners L.P.	ten-year	$300 million
City of Toronto	30-year	$300 million*
City of Vancouver	ten-year	$85 million*

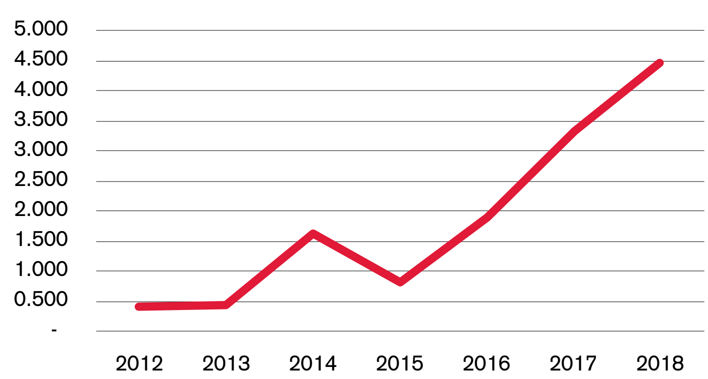
* Inaugural green bond issuance.

Notable 2019 Canadian Green Bond Issuances (CAD)

Ontario Power Generation	30-year	$550 million
Algonquin Power & Utilities Corp.	ten-year	$300 million*
CPPIB Capital Inc.	ten-year	$1.5 billion (EUR 1 billion)
Province of Québec	five-year	$800 million
Royal Bank of Canada	five-year	$750 million (EUR 500 million)*

Green bond issuances in Canada for 2019 totalled approximately CAD 3.2 billion (USD 2.4 billion) as of March 27, 2019. With the late-April 2019 euro bond issuance from the Royal Bank of Canada (RBC; rated AA with a Positive trend by DBRS), the new total is approximately CAD 4.0 billion – (approximately USD 3.0 billion) almost the same as 2018's full-year issuances – with eight months left in 2019 (please see Exhibit 4).

Exhibit 4: Canada Green Bond and Loan Issuances (USD billions)



Source: DBRS using data from Bloomberg NEF.

3. Ontario Financing Authority.

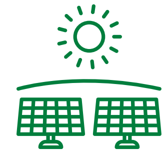
Potential for growth

Although the Canadian green bond market has grown markedly over the past three years, there is still a fair amount of growth potential. Canada's green bonds are attractive to international and domestic investors because they often trade at a premium to standard bonds on the secondary market as a result of their scarcity (higher demand than supply) and generally shorter terms to maturity as well as the involvement of dealer syndicates.

Canadian issuance is currently led by the public sector, particularly Ontario and Québec, along with a growing number of municipalities. Public-sector issuance is expected to continue in line with Canada's commitment to the Paris Agreement and other global climate change mitigation plans. Ontario recently indicated it plans to sell more green bonds in 2019, as a flat yield curve provides the province with an advantage to issue more 30-year debt, given the decline in yields for the longer tenor.[4] Moreover, for highly motivated investors seeking green investments, the United States' withdrawal from the Paris Agreement may make Canada's green bond offering an attractive alternative.

There is also room for growth from the corporate sector in Canada, which has yet to make as significant an impact on the green bond market as it has elsewhere. DBRS expects that this will change as the green bond market matures and as more corporations seek green-project funding from investors committed to environmental sustainability. This is especially apparent in the number of large financial institutions such as RBC, the Toronto-Dominion Bank (rated AA with a Positive trend by DBRS) and Sun Life Financial Inc. (rated "A" with a Stable trend by DBRS), which have each recently developed verified sustainability frameworks for green bond issuance that align with or address the ICMA's GBPs. The respective frameworks provide a measure of transparency for the issuers in terms of how their green bond criteria are defined and give comfort to investors who are assured that their investments and any proceeds thereof are not being greenwashed.

Setting the standards



It is important to note that while the GBPs are handy for issuers developing green financial products, following the principles is still entirely voluntary, as there is currently no single authority governing the green designation process and no accepted global labelling standard. The market certainly needs to standardize green bonds globally, and there are some efforts to do so, at least regionally speaking.

The European Union is in the midst of developing a European green bond standard based on current market practices and the existing GBPs. Similar to the Climate Bond Standards, to be labelled green under the European framework, a bond first needs to satisfy third-party verification by an accredited external reviewer, among other requirements. The proposed standards are a way to increase the financial flow to green projects and allow investors to more easily assess a bond's environmental integrity. While the European standards are expected to be available to international participants, it is currently unclear how non-European issuers can qualify for the European green bond designations and, again, adhering to the standards will remain voluntary for issuers.

4. The yield on the Government of Canada 30-year bond has dropped to about 2.0% from almost 2.6% in October 2018.

It's not easy being green

The GBPs were launched by a consortium of investment banks in January 2014 and, since then, have been overseen by the ICMA. There are now approximately 124 members and observer members, including the CBI, which was instrumental in the development of the GBPs. The CBI's mandate is to mobilize the global bond market for climate change solutions. As part of guiding investors toward products that support maximized carbon reduction and environmentally sustainable activities, the CBI developed a Climate Bonds Taxonomy, which clearly identifies the assets and projects that facilitate a low-carbon economy and GHG emissions reduction targets set out in the Paris Agreement.[5] The taxonomy clarifies which projects meet the GBP criteria, therefore making them eligible for Climate Bond Certification, and which projects do not; this is potentially problematic for Canada's corporate green bond market.

Canada's economy relies largely on its energy production and resource-extraction industries, which are typically carbon intensive (Heavy Industry). Canada's Heavy Industry is making efforts to transition to more sustainable, less-carbon-intensive practices. Part of the industry's strategy includes developing Clean Transition Bonds (CTBs), which are meant to be a green financial product that recognizes transitional activities to reduce carbon or improve energy efficiency. Qualifying projects for an oil and gas company might include the development of electric-vehicle fuelling infrastructure or activities that reduce emissions intensity in oil refining, for example.[6] Groups backing CTB development as a green financial tool believe that targeted investments will significantly help Canada meet its climate change objectives, with one study suggesting an annual market opportunity of USD 1.5 trillion by 2030 from a wide range of bitumen-derived sustainable commodities.[7] Based on its Climate Bonds Taxonomy, however, the CBI fundamentally disagrees with defining CTBs as acceptable green financial products because it explicitly excludes most fossil fuel activities from consideration. This makes Climate Bond Certification for CTBs more challenging, at least in the near to medium term. Despite investor appetite for green investments overall, it is uncertain how the market will respond to CTBs offered as green investments.

To conclude, while there is ample room for green bond growth in Canada, especially from the corporate sector, DBRS notes that transitional projects accepted as green by the global investment industry would further boost Canada's green bond issuances.

Related Documents

- European Sovereigns – Growing the Green Bond Market
- DBRS Illustrative Insights: European Sovereign Green Bonds
- DBRS: European Banks Going Greener by the Day
- DBRS Illustrative Insights: Green Bond Issuance by European Banks

5. Climate Bonds Initiative: Climate Bonds Taxonomy.
6. Corporate Knights and the Council for Clean Capitalism: https://www.corporateknights.com/wp-content/uploads/2018/11/Clean-Transition-Project-Categories-Draft.pdf.
7. Corporate Knights: https://www.corporateknights.com/channels/climate-and-carbon/clean-transition-bonds-unlock-1t-oil-sands-opportunities-15403846/.