INVESTMENT INDUSTRY ASSOCIATION OF CANADA
ASSOCIATION CANADIENNE DU COMMERCE DES VALEURS MOBILIÈRES

Opportunities in the Canadian Green Bond Market v4.0

February 2020

PREFACE

The purpose of this position paper is to highlight developments in the Green Bond market, both globally and in Canada, to identify financing structures and practices and stimulate thinking on common approaches to promote a more vigorous market. The paper outlines some of the important characteristics of Green Bond issuance in 2019 and brings forward recommendations for a more uniform financing structure and common use of proceeds in Canada.

Notably, an effort continues to be made to look beyond 2019 to suggest ways to encourage Green Bond issuer partnerships and investment projects financed by the proceeds of these partnerships. A more developed Green Bond market would provide an alternative structure to finance infrastructure projects across Canada. Green Bond financings, issued by public and/or private entities, have the potential to reduce financing costs, given receptive and strong investor demand, driving and encouraging environmentally supportive projects and economic growth.

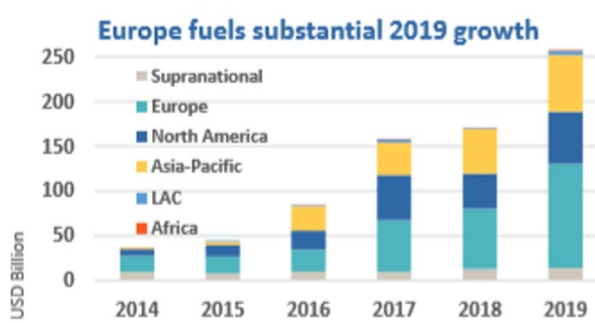
There are three main categories of Green Bonds: bonds with green use of proceeds, project development bonds, and securitization bonds (see Appendix A). In Canada, bonds with green use of proceeds are the most common form. Of note, there is a further categorization by the Climate Bonds Initiative (CBI)—a recognized leader in Green Bond financial information— which separates deals into certified greens, labelled greens that meet CBI criteria, and labelled greens that do not meet CBI criteria.

GLOBAL MARKET BACKGROUND

In 2019, there were approximately 1788 Green Bond issues totaling USD 254.9 billion, with issuance surging 51% over 2018, according to statistics compiled by the CBI (see figure 1a), re-establishing a strong growth trend that was interrupted by a modest increase in 2018. Green Bonds are defined on the basis that 100% of the proceeds are used to finance projects or a mix of assets that conform to the 'Climate Bonds' definition. It is also notable that sustainability and social bonds issuance has also shown strong growth. In 2019 sustainability bond issuance was approximately USD 65 billion up over 300% of 2018 totals.

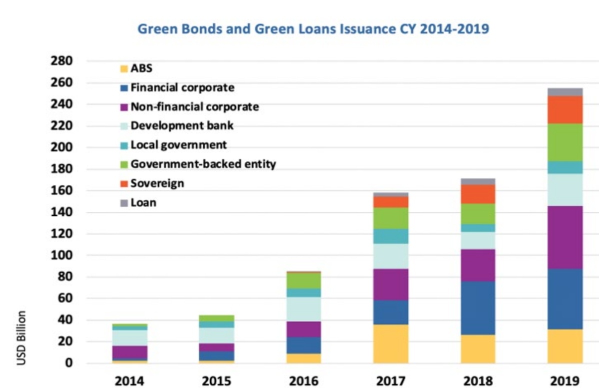
As illustrated in figures 1a and 1b, the supply of Green Bonds comes from a broad base of issuers located primarily in Europe, North America and Asia, with Europe continuing to dominate issuance. In 2019, there were 496 different issuers active in the marketplace, with 250 new issuers. As shown in figure 2, Green Bond issuance takes place in many different countries and currencies, with issuance in 2019 accounting for a relatively large share of current outstandings.

FIGURE 1A



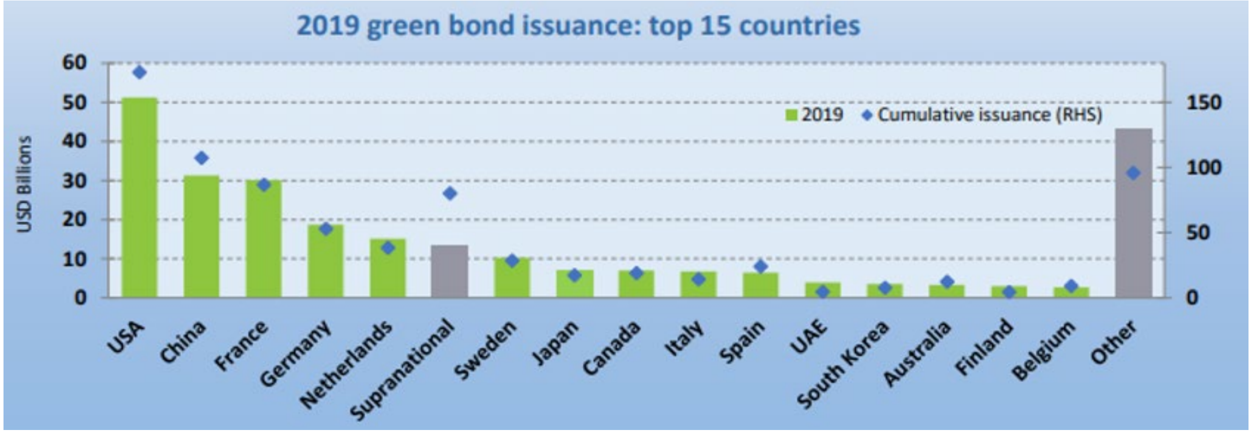
Source: CBI

FIGURE 1B



Source: CBI. Data as of December 31, 2019

FIGURE 2



Source: CBI

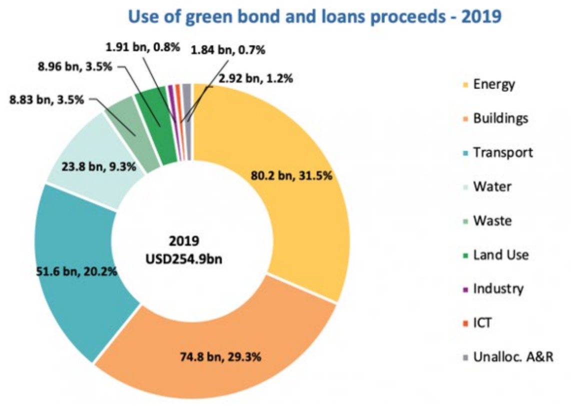
International development banks have been present in the Green Bond space since the first offering by the European Investment Bank in 2007 and are among the world's largest Green Bond issuers. It should be noted that international development banks have also become investors in recent years. However, issuance by other parties, including government entities, corporations and financial institutions, has grown rapidly over recent years in response to strong institutional investor demand.

Ultimately, the issuance of Green Bonds depends on local market conditions, including borrowing rates, market liquidity, investor appetite, regulatory factors and the priority placed on socially responsible investing. Globally, the issuance of Green Bonds encompasses a myriad of factors that are unique to each marketplace with an overarching basic premise.

GLOBALLY - INVESTMENT IN RENEWABLE ENERGY LEADS THE WAY

Globally, in 2019, as can be seen in figure 3, project investment in renewable energy and low carbon buildings still accounted for the largest share of Green Bond funds. It is worth noting however, that other uses such as transport and water accounted for a combined 29% use of proceeds. In the future, it is expected that a wider range of projects will be financed. Waste, Land Use, and Adaptation investments may increase as clearer mandates are articulated and championed for projects in these areas.

FIGURE 3



Source: CBI

THE CANADIAN GREEN BOND MARKET BACKDROP

As shown in figure 2, Canada has a material presence in Green Bond issuance, but is still a relatively small player compared to China, the United States and the larger European issuers.

Several Canadian issuers placed their Green Bonds in international markets, but in the last few years domestic investors have continued to be the main purchases and continue to be very receptive to Canadian Green Bond supply. Some of these investors have signed onto the UN's Principles for Responsible Investment (PRI) as well as establishing their own responsible investing guidelines.

TABLE 1

THE LARGEST CANADIAN ISSUERS (DOMESTIC AND INTERNATIONAL PLACEMENTS) BY AMOUNT IN MILLIONS(?), 2019

Issuer	Years	Amount (in millions)
• Ivanhoe Cambridge II Inc.	5 year	300 CAD
• CPPIB Capital Inc.	1 year	500 USD
• South Coast British Columbia Transportation Authority	31 year	200 CAD
• Mobilinx Hurontario GP	19.5 year	125 CAD
• Mobilinx Hurontario GP	24.5 year	140 CAD
• City of Toronto Canada	20 year	200 CAD
• Brookfield Renewable Partners ULC	10 year	300 CAD
• Brookfield Renewable Partners ULC	30 year	300 CAD
• Export Development Canada	5 year	500 CAD
• The Bank of Nova Scotia	3.5 year	500 USD
• Royal Bank of Canada	5 year	500 EUR
• Province of Quebec	5 year	800 CAD
• CPP Investment Board	10 year	1000 EUR
• Algonquin Power Co.	10 year	300 CAD
• Ontario Power Generation	30 year	500 CAD

Source: Bloomberg

Municipal issuers with state credit have been regular green issuers in the U.S. market for many years, but it has only been in the last several years that the City of Ottawa, the City of Toronto and the City of Vancouver have entered the Green Bond market. In Canada, until recently, Green Bonds have largely been issued by the public sector, unlike in other international markets where many issues originate in the corporate sector. As can be seen above, in 2019, Canadian issuance is now from a much broader spectrum of issuers. Historically, another feature of the Canadian market is the shorter maturities of most issues compared to the average term of Green Bonds in other global markets; this too is beginning to change. The term to maturity on domestically-placed issues is likely to continue to lengthen over time.

COMPELLING FEATURES OF CANADIAN GREEN BOND ISSUANCE:

- Attracts investors with green mandates who may not be investors in conventional bonds.
- Could potentially attract more international investors than conventional bonds.
- Encourages the development of environmentally progressive projects in Canada.
- Usually priced in line with the borrower's normal bond curve, but have often traded at a premium to standard bonds in secondary trading, likely due to their scarce nature.
- Secondary investor demand has the potential to expand as involvement of dealer syndicates provides a backstop of liquidity for investors.
- Green Bond programs and their related underwriting, marketing and communication materials, support awareness of climate issues. There is the potential to increase investor goodwill towards issuers seen to be supporting green initiatives.

As the Canadian Green Bond market matures, more investors are likely to participate in this market. This will also support market liquidity for established names in the marketplace. Most of Canada's Green Bond supply has come from issuers who base their programs on the International Capital Market Association (ICMA) Green Bond Principles and have independent reviews from organizations such as Sustainalytics and the Centre for International Climate and Environmental Research Oslo (Cicero). This trend is expected to continue.

CURRENT AND PROSPECTIVE CANADIAN GREEN BOND ISSUERS

Provinces, other than Ontario and Quebec, and various municipalities, are assessing the Green Bond market in order to finance offerings for environmentally sustainable projects. Canadian corporations and pension funds are also entering the domestic market as issuers, as they have in other countries. This should continue to evolve and accelerate given the positive investor reception towards mandates, and competitive pricing of Green Bonds.

CANADIAN ISSUERS AND MARKET DYNAMICS IN 2019 AND BEYOND

As table 1 above shows, in 2019, there was a good mix of issuance between financial and corporate firms and government entities. There was also a mix of currencies used, consisting of issues in CAD, USD, and EUR. Of note was a EUR 1 billion CPPIB deal early in 2019, the second issuance by this pension fund which remains the only Canadian pension fund to issue a Green Bond to date.

The Province of Ontario continues to lead all other issuers in domestic Green Bond issuance, but other issuers are closing the gap. Currently, Green Bond issuance for Ontario and Quebec accounts for less than 3% of their overall provincial funding. It is expected this percentage share will remain roughly the same in 2020. As well, funding requirements for Ontario's and Quebec's green supplies will not have any effect on maintaining sizable, liquid conventional bond benchmarks, and there is scope for a higher market share for Green Bonds as the market deepens.

Moreover, there would appear to be the opportunity for greater corporate and municipal issuance as socially responsible investor interest remains high. While the Green Bond market still trades at a slight premium, it is unclear if and how greater supply will affect this premium in secondary markets. The following issues bear watching over the next few years:

- Will the current premium to the issuers conventional yield curve stay in place with the expanded issuance of Green Bonds?
- Will environmentally responsible issuers with an overall commitment to green issues have a significant influence over pricing?
- Will electoral changes at the municipal, provincial and federal levels materially impact government support towards Green Bond financing and investment plans?

CONCLUSION AND NEXT STEPS

In 2019, the Canadian Green Bond market and Green Bond issuance in the global market continued to expand rapidly as the world moved to reduce carbon emissions. Canadian debt capital markets will continue to increase their focus on the green market sector as the increase in socially and environmentally related projects are funded by mainstream investors committed to sustainable projects. The sector has already gained traction as a broader base of issuers and investors have entered the marketplace.

Government commitment to the Green Bond market reflects its support to environmentally sustainable projects. Canadians can take comfort in the government's support for existing and new projects. Many provincial governments have taken important steps to recognize the importance of climate change issues by implementing carbon taxes, cap and trade and other initiatives, however there has been pushback by several provinces. Ontario and Quebec continue to be leaders in Green Bond issuance and have shown a strong commitment to Green Bond initiatives; they have recently been joined by other municipal, pension and corporate entities in the Green Bond space.

NEXT STEPS:

- The IIAC will continue to work with its Debt Markets Committee and Debt Syndicate Working Group and solicit input from buy-side institutions (including the Canadian Bond Investors' Association) and the Bank of Canada to further outline a voluntary process for building a more liquid domestic market for Green Bonds.

- After a successful inaugural Green Bond Conference on October 1, 2019, the IIAC will again work with the Debt Markets Committee to host its second annual half-day Green Bond Conference in October 2020.

Appendix A

RECOMMENDATIONS:

STANDARDS AND GUIDELINES RECOMMENDATIONS

- Rely on ICMA's Green Bond Principles.
- Second Party Opinion/Rating and independent reviews from organizations such as Sustainalytics and Cicero (recommend annual renewal).
- The International Organization for Standardization (ISO) has approved the development of an international Green Bond standard (ISO 14030, Green Bonds) that many believe could improve investor appetite for Green Bonds and will be published in 2020.

GREEN BOND ISSUER RECOMMENDATIONS

- Define the motivators for issuers of Green Bonds:
  - -Attracting additional investors
  - -Corporate image and goodwill
  - -Similar cost of issuance
- Quantify the potential cost effectiveness of issuing Green Bonds versus standard debt instruments.
- Outline the positive public image that Green Bond issuance can attract.
- Show how Green Bond issuance can attract investors that a non-green issue would otherwise would not entice.
- Update market precedents, emerging global best practices and regulatory standards/guidelines.

GREEN BOND INVESTOR RECOMMENDATIONS

- Show how Green Bond investments fit within a broader ESG/SRI strategy.
- Outline mandates/product development to support investment in Green Bonds and sustainable financing.
- Engage issuers on ESG scores/ratings, sustainability strategy and ESG risk management.
- Define how Green Bonds perform in relation to non-green issues from a given investor.
- Outline how a Green Bond curve may develop over time in Canada as it has begun to in other more developed Green Bond markets, especially in Europe.
- Address the concern around lack of secondary market liquidity.

RECOMMENDATIONS FOR VARIOUS LEVELS OF GOVERNMENT

- Encourage discussion of emerging global policy developments – municipal, provincial and federal governments can all have a role to play.
- Identify policy that is receptive to sustainable environmental technologies.
- Explore possible credit guarantees and other credit enhancements that could help lower issuance cost and attract additional investors.
- Identify infrastructure projects that could benefit from Green Bond issuance.

Appendix B

CATEGORIES OF GREEN BONDS

1. BONDS WITH GREEN USE OF PROCEEDS

These bonds are similar to general obligation bonds except that all the funds are directed towards green projects. The funds are deposited in a sub-portfolio and invested in short- term instruments until they are allocated to approved projects. Repayment is not linked to the projects, and investors have recourse to the issuer.

2. PROJECT DEVELOPMENT BONDS

The proceeds of project bonds fund a special purpose vehicle (SPV) that owns a single project or a group of qualifying green projects. Repayment and risk is linked to the projects, and investors only have recourse to the projects themselves.

3. SECURITIZATION BONDS

The bond is collateralized by a pool of loans that are issued to fund a number of green projects.

Appendix C

CANADIAN INFRASTRUCTURE

Canada, along with many countries, is focusing on infrastructure spending to meet the challenges resulting from climate change, population growth and sub-optimal economic growth.

The new Canada Infrastructure Bank (CIB) is a federal initiative that seeks to assist long-term sustainable growth. It is a federal government priority and one that could be greatly assisted by green financing in Canada.

The CIB works in partnership with provincial, territorial, municipal and Indigenous groups to invest in infrastructure projects. The CIB will use federal backing to assist private sector and institutional investment to create revenue-generating infrastructure projects. By partnering with the private sector, the CIB will help fund projects in an efficient manner.

The Canada Infrastructure Bank will invest $35 billion from the federal government (out of the Consolidated Revenue Fund) into infrastructure projects. Fifteen billion is sourced from the over $180 billion dollar 'Investing in Canada' infrastructure plan, including:

- $5 billion for public transit systems
- $5 billion for trade and transportation corridors; and,
- $5 billion for green infrastructure projects, including those that reduce greenhouse gas emissions, deliver clean air and safe water systems, and promote renewable power.[1]

PRIVATE - PUBLIC PARTNERSHIP OPPORTUNITIES

Municipal, provincial and federal governments have a role to play in the Green Bond market by creating policies to support green technologies, issuing Green Bonds at lower interest rates and providing guarantees and tax incentives. In addition, synergies can be developed through creating partnerships with the private sector as outlined below:

- Public-Private Partnerships (PPPs) bring together a larger set of skills and allocate a portion of the risks and responsibilities amongst the members of the group.
- PPPs allow government entities to gain the expertise of private industry and access funding for the delivery of public projects. In some cases, government funding may not have been readily available and as a result, certain projects would potentially be delayed or cancelled.
- Current Green Bond and climate bond issues represent less than 1% of the global total bond market. Sustainable projects will fund significant access to capital through Green Bond financings, particularly if secured through PPPs. Moreover, an increase in Canadian-denominated issues would provide additional diversification opportunities for international Green Bond investors.

1 Canada Infrastructure Bank

Appendix D

CLIMATE BOND TAXONOMY

The voluntary nature of the Green Bond verification and certification process currently results in a somewhat fragmented global market for Green Bonds. The fact that, at the present time, there is no standard systematic classification of Green Bonds and no definitions for what constitutes a 'Green Bond', 'climate-aligned', or a 'sustainable project or investment', is hindering growth. There has recently been an effort to develop market standards and certifications. Development of these standards will increase the credibility of investments and open up the willingness of a greater pool of issuers and investors.

Fixed income products that are issued as Green Bonds on reputable stock exchanges, such as the LuxSE, All German SE, Euronext, LSEG, SGX and HKEX are required to be labeled green and certified by a recognized agency. This independent third-party has to confirm the green characteristics of the bond issue. This green certification, along with regular reporting of the use of proceeds, gives investors confidence that their investment is targeted towards sustainable ventures.

As the Green Bond market has grown and matured, the issue has arisen as to which organizations are best positioned to issue green labels. There has always been the concern that a third-party that is reviewing and ultimately certifying and labeling an investment as 'green' may not be requiring the appropriate set of characteristics, and is in fact 'greenwashing' largely conventional bonds.

There needs to be consistency and transparency in establishing green labels to avoid the risk that, in an effort to secure business, green labeling organizations will reduce standards (lower the bar) and these lower standards will become the norm.

Work has been undertaken by several firms to outline eligible green project categories; they are listed below in no specific order and include, but are not limited to:

- Renewable energy
- Energy efficiency
- Pollution prevention and control
- Environmentally sustainable management of living natural resources and land use
- Terrestrial and aquatic biodiversity conservation
- Clean transportation
- Sustainable water and wastewater management
- Climate change adaptation
- Eco-efficient and/or circular economy adapted products, production technologies and processes
- Green buildings which meet regional, national or internationally recognized standards or certifications.[2]

While the ICMA's Green Bond Principles' "purpose is not to take a position on which green technologies, standards, claims and declarations are optimal for environmentally sustainable benefits, it is noteworthy that there are several current international and national initiatives to produce taxonomies, as well as to provide mapping between them to ensure comparability. This may give further guidance to Green Bond issuers as to what may be considered green and eligible by investors. These taxonomies are currently at various stages of development".[3]

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2 ICMA Issuers and other stakeholders can refer to examples through links listed on the Resource Centre https://www.icmagroup.org

3 ICMA https://www.icmagroup.org