Submission to the Federal-Provincial-Territorial Working Groups formed under the Vancouver Declaration on Clean Growth and Climate Change regarding

The potential role for green bonds to accelerate mitigation, adaptation, and innovation goals

August 19, 2016

To the working groups on Clean Technology, Innovation and Jobs; Specific Mitigation Opportunities; and Adaptation and Climate Resilience

Dear working group co-chairs and representatives,

Decarbonizing our economic activity, building a resilient Canada, and accelerating the development and widespread adoption of cleaner technologies and infrastructure are all environmental imperatives and economic opportunities. To be sufficiently fast and prepared to take advantage of these opportunities and to address these imperatives, Canadian actions require two things: 1) strong, ongoing policy support (such as stringent carbon pricing, but including much more) and 2) financing. This submission addresses the latter, and in particular, the role that public policy could play to accelerate the use of one particular financing mechanism: green bonds.

As you know, government funding alone will not support the scale of investment needed to achieve our current economic and environmental goals. Green bonds have the potential to be a key tool to help finance Canada's transition to a low-carbon economy and to meet global, national and local sustainability objectives, by attracting private sector capital from a wide variety of potential investors, both Canadian and international. With a number of major investments required in Canada in the coming years in the areas of climate adaptation (green infrastructure, extreme weather impact management, ecosystem preservation and more), climate mitigation projects (energy efficiency, clean energy and more), infrastructure (water treatment, public transit, buildings and more), and innovation (particularly the adoption of existing technologies),[1] now is the time to understand how green bonds can finance these projects.

Green bonds are structured identically to regular bonds. They are issued by the same types of organizations that offer regular bonds and, as they are usually backed by the balance sheet of

[1] While in theory green bonds can be used for clean innovation and clean tech development, they are generally used to fund projects with predictable returns, such as public transit, infrastructure and energy efficiency projects. As such, their use for clean innovation and clean technology is likely best suited to deployment of existing technologies, or to earlier-stage technologies when bundled together (in order to spread risk across many technologies.)

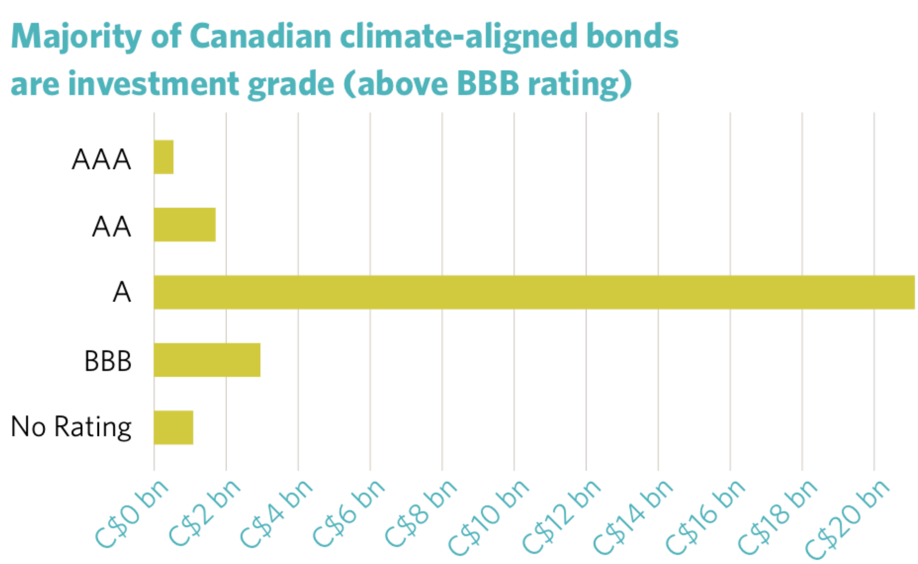
the issuer, are generally highly rated (above BBB), however, they fund projects that have positive environmental and/or climate benefits. The Climate Bonds Initiative (CBI), of which Sustainable Prosperity is a partner, tracks green bonds in 2 ways:

> **Labelled green bonds** are those which are labelled as 'green' by the issuer as 100% of the proceeds of the bond are earmarked for projects or assets with an environmental benefit. These bonds are also broadly aligned with the Climate Bonds Taxonomy.
>
> **Climate-aligned bonds** support projects that are aligned with climate mitigation or adaptation objectives but are not labelled as such by the issuer.

Globally, there are now over $US694bn of bonds financing climate infrastructure of which $118bn are labelled as green and the remaining $576bn are not labelled. This is a $US96bn increase over the same time last year.

In 2015, Canada had a total green bond market of $Cdn29.3bn, of which $Cdn1.3bn represented labelled green bonds. This represented small growth over the previous year. [While the global numbers in the preceding paragraph are from 2015, the upcoming "Bonds and Climate Change: State of the Canadian Market, 2016" report, to be published in Fall 2016 by CBI and Sustainable Prosperity, will present the latest numbers.]

In Canada, the majority of green bonds support clean energy projects, accounting for 61% of bonds outstanding. This is made up primarily of hydro through bonds issued by Hydro Quebec. Transport is the second largest theme, making up 28% of the amount outstanding, due in part to the Province of Ontario's green bond issuances. Other uses include: low carbon buildings and industry, waste and pollution, and agriculture and forestry. As shown below, they are investment grade.



Green bonds offer the same benefits as regular bonds – they are secure, offer returns in line with the issuer's regular bond curve, and are simple to buy and sell. However, there are a number of benefits of a green bond issuance over a regular bond. Green bonds:

1. **Support environmental outcomes** at the same time that they provide returns to investors;
2. **Widen the pool of investors** – green bonds attract traditional investors, but they also act as a discovery tool for new and different investors who are explicitly seeking green bond opportunities (like international development banks and investors with strong corporate social responsibility goals); and
3. **Provide recognition of the environmental reputation** of the issuer (and buyer).

However, while green bond issuance - both labelled green bonds and climate-aligned bonds – is (slowly) growing in Canada, they could be used much more by both public and private parties.

While there has been no lack of demand for Canadian green bonds (issuances to date have been fully subscribed), the growth of the market has been slow in Canada for a number of reasons, including:

1. Lack of familiarity among bond issuers;
2. Slightly higher transactions costs for issuers (particularly first-timer issuers);
3. Low federal and provincial government leadership (with some exceptions), and no municipal green bond activity; and
4. Lack of standards and certifications

However, these four barriers can all be addressed fairly easily. The following section details actions that public policy decision-makers, including you as working group co-chairs and representatives, could consider to help fund the very large number of Canadian climate change, clean innovation and clean/green infrastructure projects that need financing now and in the immediate future, in order to meet mid-century decarbonization goals and to harness economic opportunity.

Public policy actions to accelerate the use of green bonds as a financing tool in Canada

1. <u>Strategic Issuances from Public Entities</u> – Export Development Canada and the Government of Ontario have each issued two green bonds. Investor demand exists for more, and a long pipeline of ready projects needs funding; government issuances help address all four barriers noted above. In other countries, like the US, the municipal green bond market is quite active – federal and provincial governments could also help facilitate the birth of a Canadian municipal green bond market.
2. <u>Populate the pipeline of identified green projects</u> – Using a set or sets of clearly established criteria to vet projects for green investments, and applying this to all infrastructure investments – and even to technology deployment programs such as energy efficiency projects – can help populate the pipeline more quickly and with more projects. It can also lead to spill-over, in which private project proponents adopt similar criteria for their own projects and issuances.

3. Improving the risk-return profile of green bonds through credit enhancement – the US and EU have provided credit enhancement to some green bond projects, reducing *perceived* risk on the part of investors not familiar with green bonds.
4. Tax incentives – other countries have used tax incentives to encourage green bond issuances. Tax credit bonds, tax-exempt bonds and direct subsidy bonds could all be considered.
5. Boosting demand: domestic fund mandates – Governments can show leadership by issuing green bonds to finance projects, or by buying green bonds as part of their own investments. When governments do both, the potential to accelerate market growth is enhanced.
6. Boost demand and convening power: central banks – the market for a still relatively new financial instrument like green bonds can be grown through a simple "matchmaking" in which central banks like the Bank of Canada prepare informational materials about green bonds and/or help bring together market players to increase familiarity with these instruments that may still be seen as new and risky, when in fact they are simply unfamiliar.
7. Market integrity: supporting standards and development – a number of standards for issuances and for second opinion certification have been developed; adopting or adapting some of these standards for government-led issuances would help accelerate the market very quickly. Adopting or adapting the same set of standards and disclosure rules across all provincial, federal and territorial

CANADIAN OPPORTUNITY

1. Strategic issuance from public entities
Demonstrated with the issuance from EDC and Ontario; potential for further federal and provincial government green bonds

2. Strengthening planning and pipeline transparency of green projects
New infrastructure programs introduced by federal and provincial governments can incorporate green criteria into decision-making on future project.

3. Improving the risk-return profile of green bonds: credit enhancement
Canada can follow the lead of the US and EU to provide credit enhancements to green project bonds.

4. Tax incentives
Canada can use tax incentives for its Canada Green Bond. Regional governments can also use tax incentives to encourage more local retail green bonds copying the US system where States provide tax incentives to more than 80% of the USD 3.7 trillion municipal bond market[7].

5. Boosting demand: domestic fund mandates
Governments of all levels can consider purchasing green bonds for their own financing needs (in addition to issuing them).

6. Boosting demand and convening power: central banks
The Bank of Canada could support green bonds by using its convening power to bring together key green bond market participants.

7. Market integrity: supporting standards development
Canada can look to work with other countries and regions to establish its own standards in line with international investor expectations.

governments would be even better. (Ontario has signed as a member of the Green Bonds Principles.)

Undertaking all or some of these actions would accelerate the Canadian green bond market. In addition, other policy actions are possible. Governments could require investor disclosure of green bond holdings on the part of major investors, they could ensure public pension funds or other public investment funds invest in some level of green bonds or, they could issue retail green bonds (only one retail green bond has been issued to date in Canada) so that individual investors can also ensure their bond holdings support environmental objectives.

A key consideration with green bonds is that anyone who can issue a bond can issue a green bond provided transparent and rigorous standards for use of proceeds are met. Market appetite exists for green issuance from all sectors of the economy – even those not traditionally seen as "green" – as long as, through standards and certifications, the issuer can show the proceeds will be used to invest in projects that address climate change risks and support the transition to a clean economy.

Canadian governments, however, have a unique leadership role to play, and taking leadership by growing their issuances (and purchases!) of green bonds will reduce transaction costs, build expertise and experience, provide clarity on standards, and ultimately encourage 1) more private sector issuance in Canada, and 2) more Canadian and international demand for Canadian green bonds, enabling the flow of much-needed financing into Canada.

The global green bond market will continue to see growth. Numerous Paris Accord climate finance commitments will spur international green bond market growth. At COP21, the Green Infrastructure Investment Coalition was created with the intention of inviting governments to participate in a roadshow for green infrastructure investments, which will be attended by investors from around the globe. With the goal of having investments resulting from this roadshow completed by 2020, now is the time to be preparing for major international interest in financing Canada's transition to the low-carbon economy.

These types of international actions, in concert with the growing fossil fuel divestment movement that sees investors looking to reduce the carbon intensity of their investment portfolios, are expected to translate into growth of the green bond market globally. Canada has the opportunity to attract this investment, but the market needs strong leadership now.

Thank you for your consideration of this submission,

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