

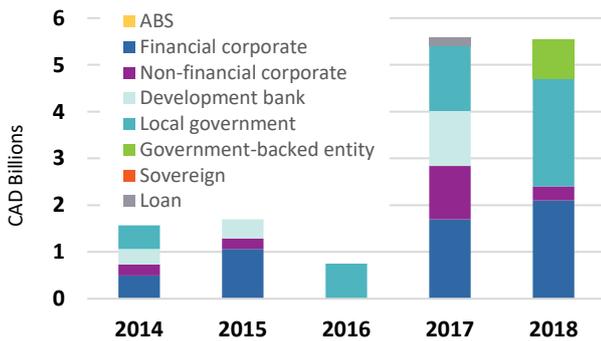


Canada

Green finance state of the market – 2018
February 2019

Cumulative green bond issuance: CAD15.2bn (USD11.9bn), 9th in global country rankings
2018 green bond issuance: CAD5.5bn (2017: CAD5.6bn), 10th in 2018 country rankings
Green bond market growth expected for further renewable energy and public transport projects

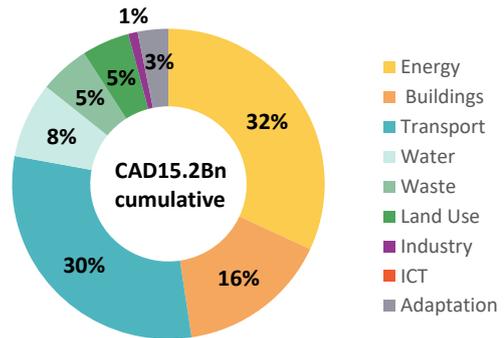
Local governments drove 2018 issuance



In 2018, local governments contributed 42% of issuance. Almost half of that came from the Province of Ontario, which is Canada’s largest issuer with CAD3bn issued since its debut in 2014. City of Toronto entered the market with a CAD300m issue to finance clean public transport infrastructure, while Province of Québec issued two CAD500m green bonds to fund transport projects.

The largest green bond of 2018 was issued by Canada Pension Plan Investment Board (CPPIB). At CAD1.5bn, it helped drive financial corporate issuance to 37% of the annual total (2017: 31%). It is also the first green bond from a pension fund globally.

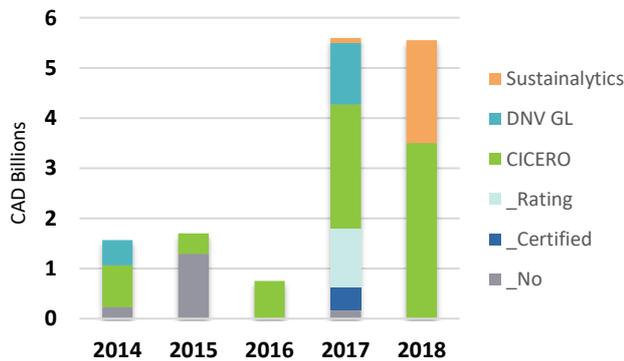
Renewables dominate use of proceeds



Clean energy dominates cumulative proceed allocations at 32%. Half of them come from financial institutions. However, in 2018 significant contributions came from Ontario Power Generation and Brookfield Renewable Partners, for example.

Transport holds the second largest share overall and leads allocations in 2018 at over a third, driven by municipal deals funding sustainable transport. Low carbon buildings also gained significant share in the 2018 mix at 22% (2017: 7%) with allocations from Province of Ontario, CPPIB, insurer Manulife and public transport company TransLink.

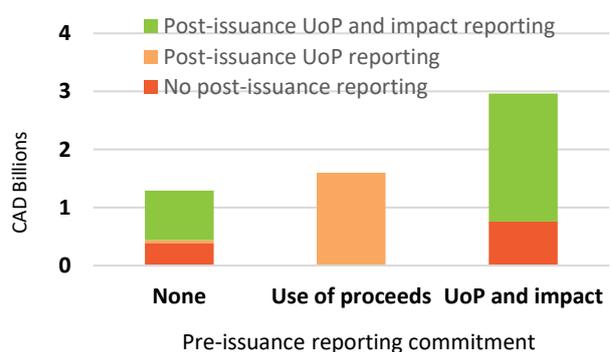
89% of issuance has an external review



The Canadian green bond market has a sound track record of external reviews: 78% of deals by volume benefit from a Second Party Opinion (SPO), 8% from a green bond rating and 3% from Certification under the Climate Bonds Standard. CICERO is the largest SPO provider by both volume and number of deals (52% and 39% respectively), and also dominated 2018 reviews.

Sustainalytics is the sole Approved Verifier for Certified Climate Bonds. Manulife Financial’s SGD500m (CAD472m) green bond from November 2017 was the first and, so far, only Canadian Certified Climate Bond.

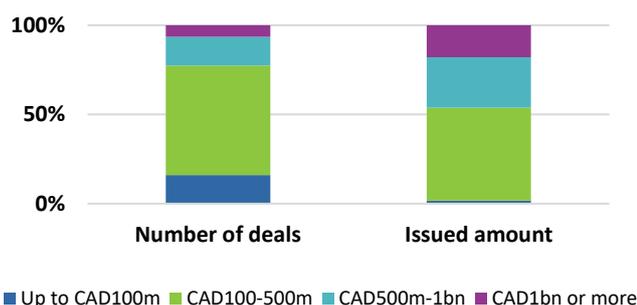
80% of volumes benefit from reporting



Canadian green bond issuers have reported on 77% of deals by number and 80% by volume for bonds issued up to October 2017. Eight bonds out of 13 present both use of proceeds and impact reporting, and account for over half of issuance.

Issuers which committed to report both allocations and impact metrics are in the majority, however one issuer failed to comply with its pre-issuance commitment. Some issuers did not commit to reporting at issuance, but 38% of bonds with no reporting intentions have – in fact – disclosed either proceed allocations (1 bond) or use of proceeds and impact metrics (4 bonds).

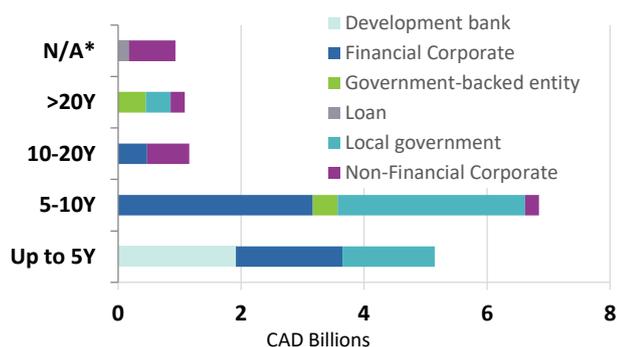
46% of deals are CAD500m or above



CPPIB’s CAD1.5bn green bond is the largest to date in Canada. Deals falling within the CAD100m-500m size bracket are the most frequent both by number of deals (61%) and volume (52%). Medium-sized deals come from all issuer types, with local governments taking up the largest share at 29%.

Financial institutions, including Export Development Canada, TD Bank and Brookfield Asset Management, have issued benchmark deals of CAD500m or above. Province of Ontario is the only sub-national entity to have issued deals within this size bracket.

Most issuers favour tenors up to 10 years



79% of Canadian green bonds have a tenor of less than 10 years: 34% have tenors of up to 5 years and 45% between 5 and 10. Development banks, financial corporates and local governments tend to finance themselves with shorter-term debt.

Corporates, by contrast, mostly issue longer-dated debt of 10 years or above. Tandem Health Partners Partnership’s CAD232m deal from 2014 is the longest dated Canadian green bond so far with a 32-year tenor.

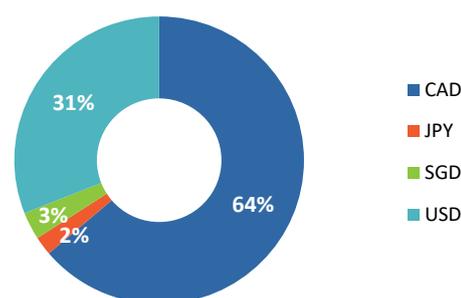
Top 5 underwriters for Canadian GB

Underwriters	Number of deals	Amount (CAD)
RBC	14	2.31bn
TD	13	1.78bn
HSBC	10	1.20bn
CIBC	6	1.10bn
BAML	6	0.76bn

Source: Refinitiv

Three of the Top 5 underwriters of Canadian deals are headquartered in Canada. RBC comes first, accounting for around 21% of underwritten volumes and participation in 14 deals. TD Bank ranks second and is the only commercial bank to have entered the country’s green bond market as an issuer.

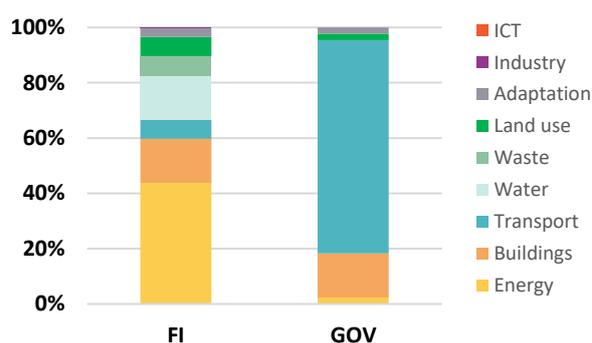
64% of deals are CAD-denominated



CAD-denominated deals prevail at 64% of total issuance. In 2018, all Canadian green bonds were issued in local currency, as opposed to 2017 when CAD-denominated bonds represented 38% of deals and 34% by volume. The second most popular currency is USD, which includes deals from Export Development Canada, TD Bank and Brookfield Asset Management.

Renewable energy company Canadian Solar has issued three JPY-denominated deals to finance projects in Japan. Manulife Financial issued an SGD-denominated Certified Climate Bond to attract SGD investors.

Spotlight: Financial vs government issuers



The largest portion of allocations from financial institutions goes towards energy projects (44%). Buildings and water account for 16% each, with the remaining proceeds earmarked for a variety of sectors. This reflects the nature of commercial banks, non-bank lenders and asset managers which usually own diversified loan and/or project portfolios. On the other hand, local governments use 77% of funding to finance public low carbon transport infrastructure, such as light rail and metro projects.

Top 5 trading venues for Canadian GB

Trading venue	Number of deals	Amount (CAD)
Frankfurt	12	2.66bn
LSE	9	1.86bn
Berlin	8	1.19bn
LuxSE	9	1.14bn
Munich	8	1.05bn

Source: Bloomberg, EIKON. Note: Amount is split equally among venues.

Cumulatively, CAD11bn worth of Canadian green bonds have been listed on a variety of trading venues. This accounts for 73% of total issuance. Frankfurt tops trading venue rankings followed by LSE. Somewhat surprisingly, Bloomberg and Refinitiv EIKON data shows no listings on Canadian exchanges.

Other labelled bonds

Only bonds with at least 95% proceeds dedicated to green projects, which are aligned with the *Climate Bonds Taxonomy* are eligible for inclusion in the CBI green bond database. If more than 5% of proceeds are used for general corporate purposes, working capital, social projects, projects that do not align with the Taxonomy or if there is insufficient information the bond will be classified as excluded.

Two Canadian green labelled deals have been excluded:

- City of Vancouver issued a CAD85m green bond in September 2018. Over 5% of the deal’s proceeds are expected to be allocated to energy efficiency improvements of fossil fuel-based technologies.
- UGE International issued a USD0.7m green debenture in October 2018 to finance working capital, business development and general administrative purposes.

Busy start to 2019

One month into 2019, the Canadian green bond market is already buzzing with activity. Three deals closed in January: a debut CAD500m green bond from Algoquin Power & Utilities Corp, Canadian Solar’s fourth ABS worth JPY6.3bn and Ontario Power Generation’s second deal of CAD500m. Canada Pension Plan Investment Board also returned to market with a EUR1bn green bond at the start of February. There is plenty of scope for other pension funds, asset managers and commercial banks to join the market to finance more diverse portfolios of climate-friendly asset and projects.

Fully-aligned and strongly-aligned companies as potential GB issuers

The climate-aligned universe highlights investment opportunities to finance low-carbon assets and includes:

- bonds from fully-aligned issuers that derive 95% or more of revenues from ‘green’ business lines,
- bonds from strongly-aligned issuers that derive 75-95% of revenue from ‘green’ business lines; and
- labelled green bonds.

Climate-aligned issuers are discovering the value of the green label: several have already entered the green bond market, including Canadian Solar and Ontario Power Generation Inc. However, the green label can be even more powerful for companies looking to transition to low-carbon business lines in signal their sustainability aspirations. Suncor Energy Inc., a top Canadian emitter from the oil and gas sector, generated 1% of its 2017 revenues from ethanol and wind production. Sustainable biofuels are aligned to the Climate Bonds Taxonomy.

Potential green bond issuers

At CAD50.1bn aligned outstanding volume, Canada ranks 7th in country rankings for climate-aligned issuance and 5th among developed countries. Future green bond market entrants could include strongly-aligned energy companies Innergex Renewable Energy Inc and Lower Mattagami Energy LP. Another example is packaging firm Cascades Inc.

Government-backed entities also offer green issuance prospects. Public utility Hydro-Québec is the largest climate-aligned issuer with CAD16.4bn outstanding. Société de transport de Montréal and Toronto Hydro are also existing bond issuers who could raise green debt. Canada Infrastructure Bank (CIB), created in 2017 to co-invest federal funds alongside private capital, has already committed CAD1.28bn to a rail transit project and has CAD10bn tagged for investment in public transport, renewable power, clean water systems and other green infrastructure.

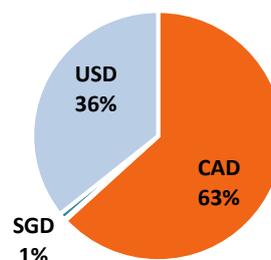
Creating sustainable and climate-resilient public infrastructure is essential to delivering on economic and social goals. Province of Ontario, Province of Québec, City of Toronto and City of Ottawa have already debuted in the market. Further issuance from peers, CIB and/or a green sovereign bond could also contribute to advancing the country’s climate change agenda.

Fully-aligned issuers account for 70% of outstanding climate-aligned volumes



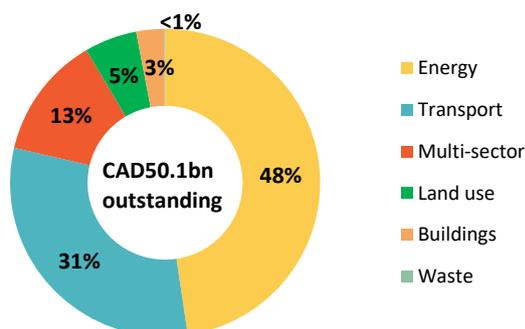
Fully-aligned companies contribute CAD35.5bn, accounting for 70% of the climate-aligned universe. This points to significant scaling opportunities for green bond issuance, which currently makes up around a fifth of outstanding volumes. Strongly-aligned issuers make up 10% of the universe at CAD5.0bn, providing additional vanilla issuance that could switch to green debt. In addition, companies could also issue green loans.

The majority of climate-aligned deals are denominated in hard currency



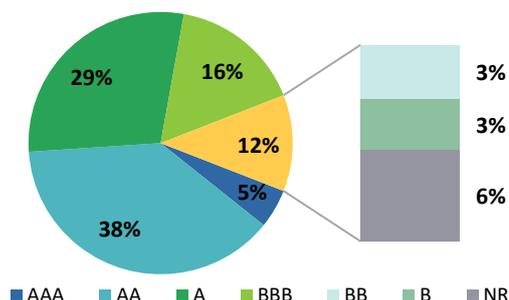
99% of outstanding aligned bonds are denominated in hard currency, with CAD deals representing about two-thirds. USD is the second most popular currency at 36%, likely a reflection of the close connection between the US and Canadian financial markets. Société de transport de Montréal is the only company to have issued deals in EUR.

Energy dominates the CAD50bn climate-aligned universe



Almost half of Canada’s climate-aligned volume comes from the energy sector, with Hydro-Québec accounting for over 70% of the sector’s share. CAD2.3bn worth of the company’s debt will mature in 2019, which could be an opportunity for refinancing with labelled green bonds. On the transport front, fully-aligned freight railway and rail transport companies Canadian National Railway and Canadian Pacific Railway account for 28% of the country’s total. They too could be future green bond issuers.

88% of outstanding climate-aligned bonds are investment grade



The overwhelming majority of outstanding climate-aligned deals are investment grade, which can help attract new investors to the space. Only 6% of issuance is rated BB+ or below, while another 6% is not rated.

AA is the largest rating band at 38%. It includes bonds from fully-aligned issuers Hydro-Québec and Société de transport de Montréal and green bond issuers Province of Québec, City of Ottawa and TD Bank.

Canada green bond policy update

Canada set out its climate strategy in 2016 in the “Pan-Canadian Framework on Clean Growth and Climate Change”. The Framework was developed to achieve decarbonisation across all sectors and to meet the Paris Agreement emissions reduction target of 30% by 2030.

Action point from last report	Action in 2018	Policy considerations for 2019 and beyond
Issuance of sovereign and sub sovereign green bonds	Issuance from local governments has increased, reaching almost CAD5bn. Government-backed entities are also becoming more active: Ontario Power placed its second bond January 2019.	Issuing a sovereign green bond would send a strong signal to the market.
Awareness raising for market development	In spring 2018, Canada established an Expert Panel on Sustainable Finance in order to engage with stakeholders and identify challenges and opportunities to drive investments towards low-carbon infrastructure. An interim report, released in October 2018, provides a snapshot of the Expert Panel’s consultations with various stakeholders. It highlights the financial sector’s role in achieving decarbonisation, as well as the key role of green bonds and loans to incentivise firms to meet their sustainability targets by directly accessing capital markets, taking advantage of investors’ increased appetite for green projects.	Implement the recommendations from the Expert Panel’s Final Report, due in Spring 2019, rapidly. Further, setting-up an institutional platform to follow-up on recommendations from the Expert Panel can be beneficial to provide continuing advice and checks on the programme’s effective implementation.
Investor engagement	Canada Pension Plan Investment Board entered the market in 2018 with a CAD1.5bn bond and became the first pension fund globally to issue a green bond, following up with a EUR1bn bond in early 2019. Insurance company Manulife Financial has also issued green bonds of SGD500m (2017) and CAD600m (2018). The deals provide examples of how institutional asset owners can bundle assets and projects and finance them in the green bond market.	Promote extensive disclosure by pension funds, other asset owners and investors on climate change-related risks to investment portfolios, similar to the ‘Energy Transition Law’ (Rule 174) introduced in France.