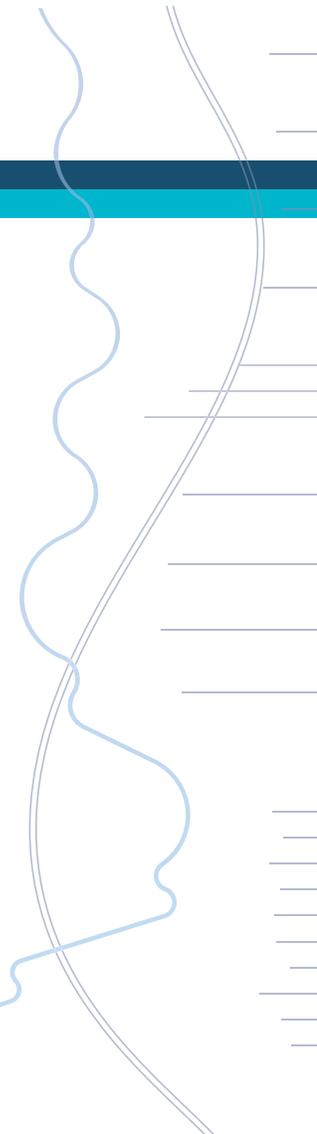




CANADA'S TRANSITION & GREEN TAXONOMY
FOR SUSTAINABLE FINANCE

Sustainable Finance Market Snapshot



Sustainable Finance Market Snapshot

Overview

Global Market: Sustainable Bonds

- **Total:** US\$2.7 trillion
- **2021 issuance:** US\$1.1 trillion (+105% YoY)
- **2021 by label:** Approximately 55% green bonds, 19% social, 16% sustainability, 10% sustainability-linked, 0.4% transition.

Canadian Market: Sustainable Bonds

- **Total:** US\$49 billion
- **2021 issuance:** US\$20 billion (+105% YoY)
- **2021 by label:** Approximately: 67.2% green bonds, 17% sustainability, 12.4% sustainability-linked, 3.4% social.

What are the Categories of Sustainable Debt?

The universe of sustainable debt consists of an evolving realm of financial instruments falling primarily within two debt financing categories: **use-of-proceeds**, and **performance-** or **sustainability-linked debt**. The key difference between these two categories is the way in which the proceeds can be utilized.ⁱ

1. **Use-of-proceeds** finance is any type of bond or loan instrument where proceeds are exclusively made available to finance or re-finance eligible environmental and/or social projects. Many thematic labels have emerged over time, including green bonds/loans, social bonds/loans, as well as sustainability and transition bonds.
2. **Sustainability-linked** finance is any type of bond or loan instrument that aims to incentivise material environmental and/or social achievements by linking the financial terms of the bond or loan to pre-defined entity-level sustainability performance targets (SPTs) measured by key performance indicators (KPI). Unlike the use-of-proceeds model, sustainability-linked debt proceeds can be used for general corporate purposes. This category consists of sustainability-linked loans (SLLs) and sustainability-linked bonds (SLBs).

ⁱ The International Capital Market Association has developed extensive voluntary guidance on use-of-proceeds and sustainability-linked bonds, which can be viewed [here](#). Similar guidance for use-of-proceeds and sustainability-linked loans has been developed by the Loan Market Association, Asia Pacific Loan Market Association, and Loan Syndications & Trading Association, which can be viewed [here](#).

Global Market: 2021 Overview

With sustainable debt issuance exceeding US\$4 trillionⁱⁱ by the end of the year, 2021 was a period of exceptional growth driven by **record-high annual issuance volume of \$1.65 trillion** – an increase of 115% from 2020, and 184% from 2019.

Sustainable bondsⁱⁱⁱ accounted for nearly 70% of the 2021 total and achieved the symbolic, but much anticipated milestone of \$1 trillion in annual issuance for the first time. Green bonds, the oldest and most established bond segment, remained atop the market as issuance of the label doubled to \$621 billion. However, newer labels, including sustainability and sustainability-linked bonds, are gaining momentum, as demonstrated by the green bond label’s declining share of the bond market, which decreased from 90% in 2017 to 55% in 2021.

Meanwhile, after a moderate decline of 10% between 2019 and 2020, **sustainable lending returned to growth in 2021**, with sustainable loans^{iv} accounting for 30% of the annual total. Sustainability-linked loans were responsible for the entirety of this growth, as lending more than tripled to reach \$428 billion. Green loan lending declined by a modest 1% and was the only label to register a decrease in issuance.

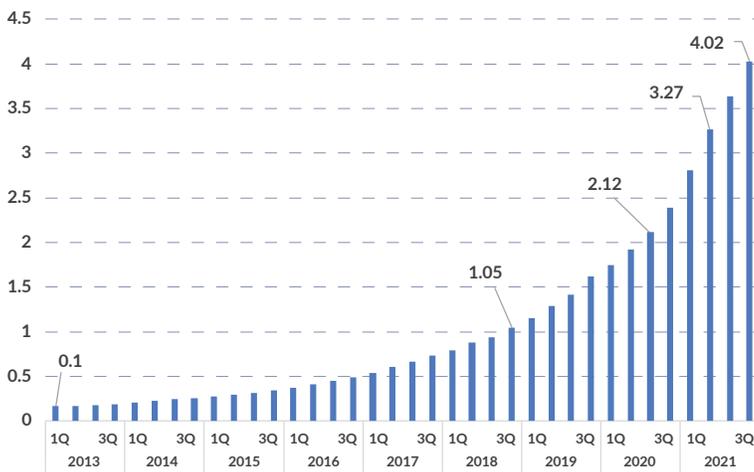


Figure 1: Cumulative sustainable debt issuance (US\$ trillion)
Source: BloombergNEF

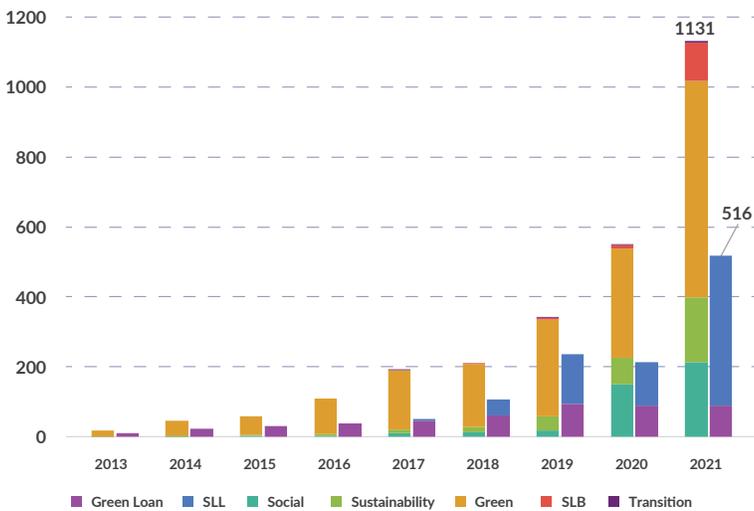


Figure 2: Annual sustainable bond and loan issuance, by label (US\$ billion).
Source: BloombergNEF

ii All figures expressed in US dollars unless otherwise noted.

iii In this report, sustainable bonds refer to green, social, sustainability, transition, and sustainability-linked bonds.

iv In this report, sustainable loans refer to green and sustainability-linked loans.

Sustainable Bonds

- Issuance volume of \$1.1 trillion – more than doubled 2020 issuance. Cumulative issuance totalled \$2.7 trillion.
- Record-high annual issuance across all five thematic bond labels.
- Approx. 55% green bonds, 19% social, 16% sustainability, 10% SLB, 0.4% transition.
- 6,000 debt instruments issued by more than 1,500 issuers.¹

The \$1 trillion milestone arrives amid growth across all thematic bond labels. Most notably, issuance of sustainability-linked bonds, the first of which was issued in 2019 by Italian energy company Enel, was nearly 9x higher than 2020.

Sustainability bond issuance more than doubled, while social bond issuance, which was coming off a huge surge in 2020 amidst the COVID-19 Pandemic, experienced a more modest increase of about 40% during 2021. Transition bonds, which accounted for just under \$5 billion in issuance, have so far enjoyed less clarity than the other use-of-proceeds bonds regarding eligible projects. This lack of certainty is likely a contributing factor to the label's comparatively modest growth.

Notable issuances this year included the European Union's inaugural €12 billion green bond², as well as two sovereign green issuances by the United Kingdom totalling \$22 billion.³ Meanwhile, the Province of Ontario's CAN\$2.75 billion (US\$2.2 billion) green issue in July was the largest green issue by a local authority in 2021.⁴

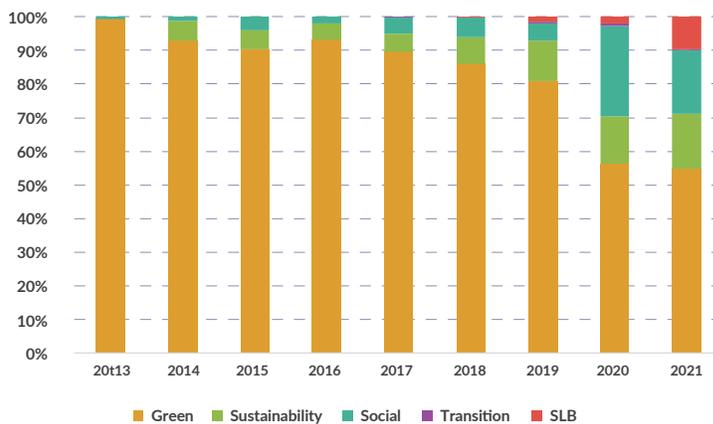


Figure 3: Share of annual issuance volume by label (%). Source: BloombergNEF

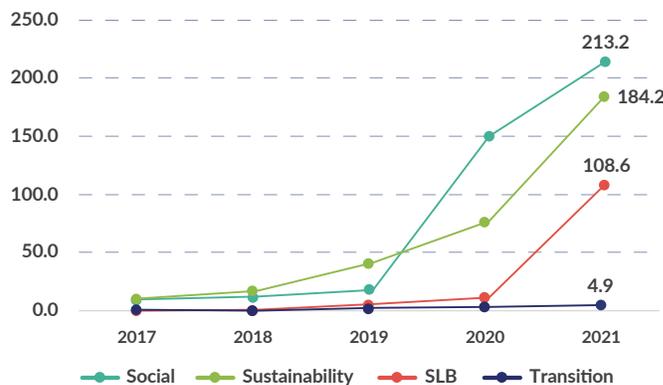


Figure 4: Other bond labels continue to gain momentum (US\$ billion). Source: BloombergNEF

v The EU's inaugural green bond was 11 times oversubscribed, attracting total investor demand of €135 billion. The UK's £10 billion inaugural green sovereign issuance in September attracted investor demand of £100 billion, the highest ever recorded for a UK government bond sale. The bond exhibited a price premium or "greenium" of 2.5bps, saving the Government £28 million over the life of the bond

Canadian Sustainable Bond Market in 2021^{vi}

Growth in sustainable bond issuance by Canadian issuers kept pace with the broader global market as annual issuance reached a **record US\$20 billion** in 2021, just over double the \$9.75 billion issued in 2020. At year-end, cumulative sustainable bond issuance stood at approximately \$49 billion, positioning the Canadian market to surpass \$50 billion in early 2022. There were **32 issuers in 2021**, with eight bringing more than one bond to market. For information on the top five issuers of 2021, see [Table 1](#).

With \$13.4 billion in 2021, green bonds continue to account for the majority of total issuance. However, **the market continues to diversify amid the arrival of the social, sustainability, and sustainability-linked bond labels** in 2018, 2019, and 2021 respectively. The green label's share of the market has declined from 100% in 2017 to 67% in 2021 as a result.

Local governments account for 25% of cumulative issuance volume. The Province of Ontario, which is the largest issuer by far, is joined by the Province of Quebec and the cities of Ottawa, Toronto, and Vancouver. In November, Bruce Power, the operator of Bruce Power Nuclear Generating Station in Ontario, issued a CAN\$500 million bond recognized as the **world's first green bond dedicated to nuclear power**.⁵ In July 2022, Ontario Power Generation issued a \$300 million nuclear green bond, to support a project to refurbish the Darlington nuclear power generating facility.



Figure 5: Share of annual issuance volume by label (%).
Source: BloombergNEF

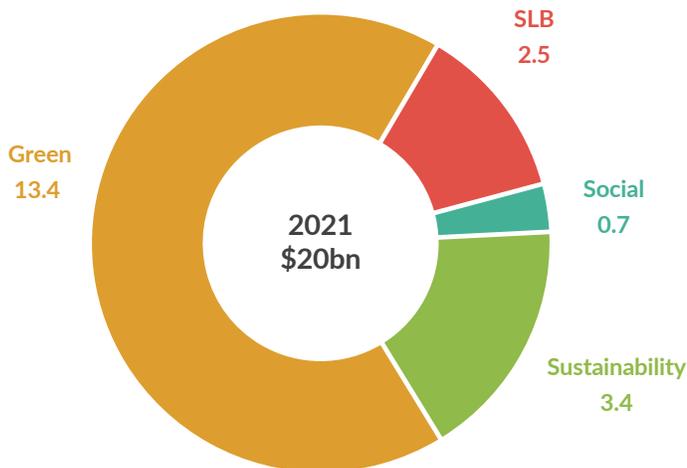
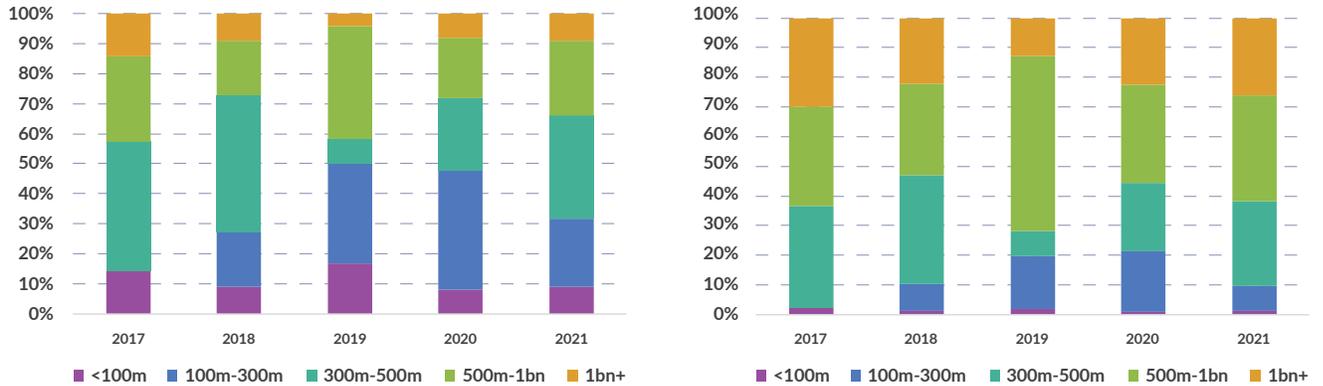


Figure 6: Sustainable bond issuance, 2021 (US\$ billion).
Source: BloombergNEF

^{vi} Due to limited data availability, loans have not been included in the overview of the Canadian market; however, sustainability-linked lending is increasing in Canada.

Cumulatively, 33% of bonds had an issuance size of US\$500 million or more, accounting for \$29.5 billion, or 60% of total issuance. US\$300-500 million is the most common issuance.

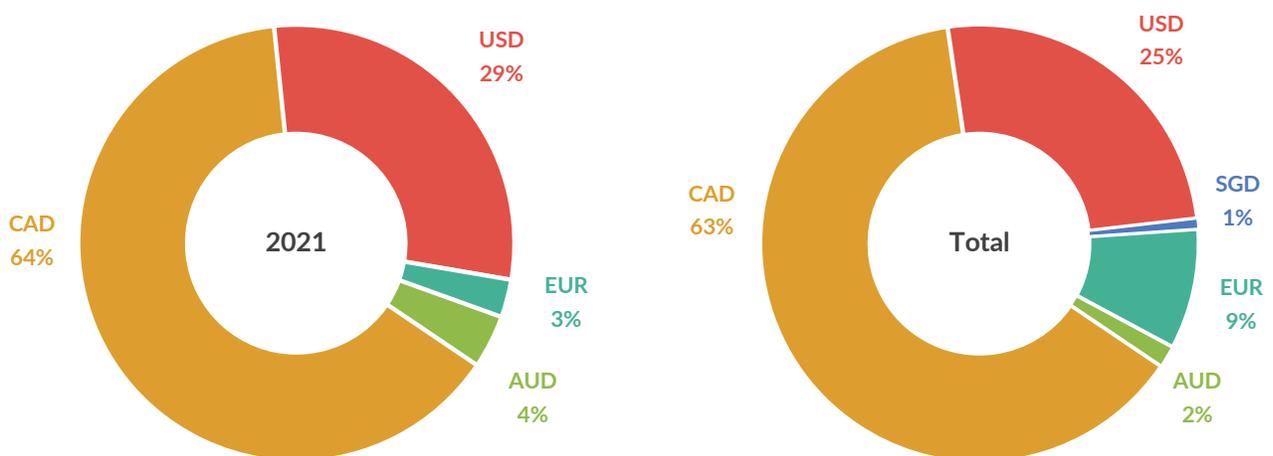
Figure 7: Issuance size by: Share of bonds issued (left) and share of issuance volume (right).
Source: BloombergNEF



The top ten all-time issuers combined for US\$28.7 billion in issuance, or 58% of cumulative issuance volume. All ten entities are repeat issuers, with the Province of Ontario and the National Bank of Canada leading with 10 each. Three have had a presence in the market since its early stages in 2014. Enbridge, a first-time issuer in 2021 with the issuance of two sustainability-linked bonds, is the most recent entrant to the Top 10 list. For more information on top issuers, see [Table 2](#).

Overall, bonds have been issued in five currencies. CAD is the most common issuing currency, accounting for 63% of cumulative issuance volumes. USD is a distant second, followed by the Euro, the Australian dollar, and the Singapore dollar.

Figure 8: Share of issuance volumes by currency.
Source: BloombergNEF



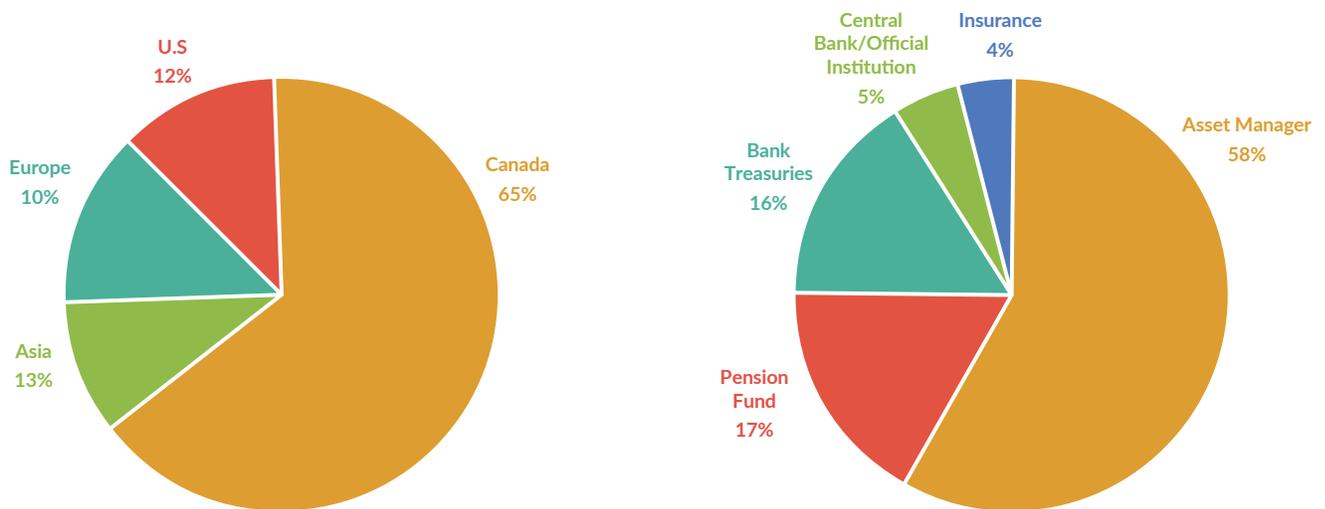
Ontario's Ten Green Issuances

Ontario is the largest issuer of Canadian dollar green bonds. In 2021, the Province issued its 10th and largest green bond to date in the amount of CAN\$2.75 billion (~US\$2.2bn), exceeding CAN\$10 billion in cumulative issuance (~US\$8.4bn).⁶

As of November 2021, 89% of proceeds have been disbursed across 27 projects in clean transportation (75%), energy efficiency & conservation (21%), and adaptation & resilience (3%).^{vi}

The green bond program has played an important financing role in Ontario's mass transit buildout. And with CAN\$148 billion in planned infrastructure investments over the next 10 years, including CAN\$61 billion in transit infrastructure, the Province has signalled its desire to continue the program, with plans to bring multiple green issuances per year.^{vi}

Figure 9: Investor demand by region and type across all ten issuances.^{vi}
Source: Ontario Financing Authority



2022 YTD Highlights

By the beginning of June, **at least^{vii} US\$10.6 billion has been issued** across 13 green, sustainability, and sustainability-linked bonds. This figure is higher than the total issuance in 2020, and more than half of the total issuance in 2021.

The Government of Canada's CAN\$5 billion inaugural sovereign green issuance was the largest green bond issued globally in Q1 2022.⁷ With a final order book of CAN\$11 billion from 98 institutional investors, the bond attracted strong demand.⁸

First-time issuers included OMERS and PSP, with a dual-tranche sustainability bond offering totaling US\$1.1 billion and a CAN\$1 billion green bond respectively. With previous offerings from CPPIB, OTPP, and CDPQ, **Canadian public pension plans have issued a combined US\$9 billion.** This is a unique feature of the Canadian market – as of July 2021, no pension funds outside of Canada had issued green debt.⁹

Provincial and municipal governments account for at least US\$2.3 billion of 2022 issuance so far, after offerings from repeat issuers Ontario (US\$1.3 billion), Quebec (US\$781 million), and the City of Ottawa (US\$155 million).

Other first-time issuers include iA Financial (sustainability) and Tamarack Valley Energy (SLB). Other repeat issuers include QuadReal (green), TELUS (SLB), Manulife (green), and Dream Industrial REIT (green).

^{vii} As of 6-June-2022. Values may not reflect full 2022 YTD issuance volumes.

Table 1: Top five Canadian issuers of 2021

Issuer	# of Deals	Issuance (US\$m)	Share of Volume	Type
Province of Ontario	2	3,186	15.96%	Green
Enbridge*	2	1,860	9.32%	SLB
CDP Financial* (CDPQ)	1	1,000	5.01%	Green
Bank of Nova Scotia	1	1,000	5.01%	Sustainability
Allied Properties REIT*	2	871	4.36%	Green
Totals	8	7,917	39.67%	—

*= First-time issuer. Source: BloombergNEF

Table 2: All-time top issuers as of 31-Dec-2021

Issuer	# of Deals	Issuance (US\$m)	% of Volume	Type
Province of Ontario	10	8,364	16.97%	Green
CPPIB Capital	7	4,637	9.41%	Green
Province of Quebec	6	2,542	5.16%	Green
Toronto-Dominion Bank	4	2,453	4.98%	Green, Sustainability
National Bank of Canada	10	2,441	4.95%	Sustainability
Export Development Canada	5	1,884	3.82%	Green
Enbridge	2	1,860	3.77%	SLB
Ontario Power Generation	4	1,571	3.19%	Green
Bank of Nova Scotia	2	1,500	3.04%	Green, Sustainability
Ontario Teachers' Finance Trust	2	1,453	2.95%	Green
Totals	52	28,706	58.25%	—

Source: BloombergNEF

Endnotes

- 1 Harrison, C., MacGeoch, M., & Michetti, C. (2022). *Sustainable Debt Global State of the Market 2021* (State of the Market). Climate Bonds Initiative. <https://www.climatebonds.net/resources/reports/sustainable-debt-global-state-market-2021>
- 2 European Commission. (2021). *NextGenerationEU: European Commission successfully issues first green bond to finance the sustainable recovery*. European Commission. https://ec.europa.eu/commission/presscorner/detail/en/IP_21_5207
- 3 Stubbington, T. (2021). UK's debut 'green gilt' sale draws blockbuster demand. *Financial Times*. <https://www.ft.com/content/94d604a9-50b9-49f1-b377-a7b6e4083d01>
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- 5 Webb, D. (2021). First ever green bond dedicated to nuclear power. *Responsible Investor*. <https://www.responsible-investor.com/bonds-and-loans-first-ever-green-bond-dedicated-to-nuclear-power/>
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- 8 Thompson, S., & Caridia, A. (2022). *Canada's Inaugural Green Bond*. RBC Capital Markets. https://www.rbccm.com/en/insights/story.page?dcr=templatedata/article/insights/data/2022/03/canadas_inaugural_green_bond
- 9 Jeffries, E. (2021). Hard reality: Why Canada's pensions are blazing a trail in green bond issuance. *Capital Monitor*. <https://capitalmonitor.ai/institution/asset-owners/canadas-pensions-are-world-leaders-in-green-bond-issuance/>