

City of Vancouver

## Green Bond Framework

### 1. Vision and Strategy

The City of Vancouver strives to create a great city of communities that cares about our people, our environment, and our opportunities to live, work and prosper.

Our ambitious and achievable Renewable City Strategy goal is to become a city that uses only renewable sources of energy while respecting the principles of sustainability. Striving to use 100% renewable energy provides an opportunity to enhance the City's society, economy and environment. To achieve this, the Strategy targets buildings, transportation and green economic opportunities. It builds on a number of strategies already in place such as the Greenest City 2020 Action Plan, Transportation 2040, Vancouver Economic Action Strategy and Healthy City Strategy.

Target 1: Derive 100% of the energy used in Vancouver from renewable sources before 2050

Target 2: Reduce greenhouse gas emissions by at least 80% below 2007 levels before 2050

The consequences of inaction to reduce fossil fuel use, such as climate change, poor air quality and detrimental health impacts, can be avoided through the adoption of renewable energy.

This Green Bond Framework (the "Framework") represents a further progression in the City's efforts to promote and support our environmental and socially responsible goals and objectives. It aligns with our financing and investment activities to help us continue funding a low-carbon, climate-resilient future.

This Framework applies to Green Bonds issued by the City of Vancouver on or after June 30, 2018. It sets out the guidelines for the City's Green Bond issuances in accordance with the four core components of the International Capital Markets Association's Green Bond Principles: (i) use of proceeds; (ii) process for project evaluation and selection; (iii) management of proceeds; and (iv) reporting.

### 2. Use of Proceeds

The net proceeds of the City's Green Bond<sup>1</sup> issuances will be used to finance or refinance, in part or full, new and/or existing eligible capital projects across the City of Vancouver that meet the Eligibility Criteria (the "Eligible Projects") as outlined in the Eligibility Criteria. Eligible Projects will include projects that have been completed by the City within 36 months preceding the date of the Green Bond issuance.

Eligible Projects are projects identified by the City as capital projects that are or which carry components that are beneficial to the environment, as determined by the City.

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<sup>1</sup> A Green Bond" is a debenture, where the proceeds are allocated towards green projects.

### 3. Eligibility Criteria

Without limitation, capital projects in the following categories will generally be considered eligible but not limited to:

Eligible Category	Description of Projects (include but not limited to the following items)
A. Renewable Energy	<ul style="list-style-type: none"> <li>• Solar power installations including solar thermal, on-site power generation, etc.</li> <li>• Sustainable biomethane (such as landfill biogas recapture), other biofuels, or hydrogen fuel sources</li> </ul>
B. Energy Efficiency	<ul style="list-style-type: none"> <li>• Energy management and reduction systems, such as smart thermostats and energy monitoring systems<sup>2</sup></li> <li>• District energy</li> <li>• Air-source and geo-exchange heating systems</li> <li>• Building energy retrofit projects and building control optimization projects that reduce energy consumption and support the City's Zero Emission Building Plan, BC Hydro Continuous Optimisation program, amongst others.</li> <li>• Equipment to reduce energy consumption including LED building lighting, and efficient heating, ventilating, air conditioning (HVAC)</li> </ul>
C. Green Buildings	<ul style="list-style-type: none"> <li>• New buildings or retrofitted existing buildings that meet regional, national or international third-party environmental certifications, such as LEED Gold / Platinum, Passive House<sup>3</sup> Standards (EnerPhit), Living Building Challenge, or any other similar recognized standards.</li> </ul>
D. Clean Transportation	<ul style="list-style-type: none"> <li>• Supporting infrastructure for electric and hybrid public transit</li> <li>• Electric Vehicle (EV) infrastructure to support EV uptake</li> <li>• Fleet for electric, hybrid, public, rail, non-motorised, multi-modal transportation</li> <li>• Cycling and walking infrastructure</li> </ul>
E. Pollution Prevention and Control	<ul style="list-style-type: none"> <li>• Expansion of organic, wood and demolition waste recycling</li> <li>• Value added products from waste and remanufacturing</li> </ul>
F. Sustainable Water and Wastewater Management	<ul style="list-style-type: none"> <li>• Infrastructure for clean water and water efficiency</li> <li>• Infrastructure for wastewater treatment</li> <li>• Construction or maintenance of water collection and urban drainage infrastructure including storm water management and sewer separation</li> </ul>
G. Environmentally Sustainable Management of Living Natural Resources	<ul style="list-style-type: none"> <li>• Nature conservation that preserve biological diversity, restores and preserves valuable natural habitats and landscapes, such as forests, marshes, creeks, coastal ecosystem, and the ongoing management of such assets.</li> <li>• Promote, restore or preserve biological diversity in urban areas such as parks, green rooftops, and other green spaces.</li> </ul>

<sup>2</sup> Systems which monitor or control natural gas will be excluded.

<sup>3</sup> Passive Houses limit energy consumption and air leakage to achieve deep energy use reductions for heating and cooling.

4. Process for Project Evaluation and Selection

- Finance, Risk and Supply Chain Management Department (FRS) is responsible for evaluating and screening capital projects in consultation with other City departments such as Engineering Services; Planning, Urban Design, and Sustainability; and Real Estate Facilities Management.
- FRS will choose Eligible Projects that meet the prerequisites set out in the Eligibility Criteria which shall comply with the relevant policies of the City of Vancouver, including assessments of the social and environmental risks of a given project.

5. Management of Proceeds

- FRS will be responsible for the allocation of the net proceeds from the issuance of Green Bonds to the relevant and approved Eligible Projects and Assets.
- Net proceeds from each Green Bond will be deposited and recorded separately which tracks the use of and allocation of funds for Eligible Projects.
- In most cases when such projects are underway, proceeds from the Green Bonds issued by the City will be directly applied to the Eligible Projects.
- In the case where projects are delayed, any portion of the net proceeds that have not been allocated can be temporarily held in the account of the City and invested in cash or liquid fixed income instruments in accordance with the Vancouver Charter.
- Payment of principal and interest on any Green Bond issuance will be made from our general or sinking funds and will not be directly linked to the performance of any Eligible Project.

6. Reporting & Disclosure

As long as there are outstanding Green Bonds issued under this Framework, the City will publish through the City’s website updates once a year on:

- Allocation of the proceeds from the Green Bond into Eligible Projects
- Summary of Eligible Projects including updates and status reports
- Where feasible, City’s key performance indicators including, but not limited to:

Eligible Category	Key Performance Indicators
A. Renewable Energy	<ul style="list-style-type: none"> <li>• Biomethane captured (t CH<sub>4</sub>)</li> <li>• GHG emissions reduced/avoided (tCO<sub>2</sub>e)</li> </ul>
B. Energy Efficiency	<ul style="list-style-type: none"> <li>• Energy saved per year (kWh/year)</li> <li>• GHG emissions reduced/avoided (tCO<sub>2</sub>e)</li> <li>• Total tonnes of community CO<sub>2</sub>e emissions from all community buildings</li> </ul>
C. Green Buildings	<ul style="list-style-type: none"> <li>• List of third-party environmental certifications received.</li> </ul>
D. Clean Transportation	<ul style="list-style-type: none"> <li>• Cycling, Walking, and Transit trips (% of modal share)</li> <li>• Bike lanes installed (kms)</li> </ul>
E. Pollution Prevention and Control	<ul style="list-style-type: none"> <li>• Total number of instances of non-compliance to air quality standards</li> <li>• GHG emissions reduced/avoided (tCO<sub>2</sub>e)</li> </ul>

	<ul style="list-style-type: none"> <li>Amount of waste diverted from landfill (tonnes)</li> </ul>
F. Sustainable Water and Wastewater Management	<ul style="list-style-type: none"> <li>Total water consumption per capita</li> <li>Total number of instances of non-compliance to water quality standards</li> </ul>
G. Environmentally Sustainable Management of Living Natural Resources	<ul style="list-style-type: none"> <li>Area of natural assets conserved/protected/restored</li> </ul>