

Second-Party Opinion

City of Toronto Green Debenture

Evaluation Summary

Sustainalytics is of the opinion that the City of Toronto Green Debenture is credible and impactful, and aligns with the four pillars of the Green Bond Principles 2017. Additionally, Sustainalytics views the City of Toronto’s green debenture positively. Some of its key strengths are that:



USE OF PROCEEDS The eligible categories for the use of proceeds are aligned with those recognized by the Green Bond Principles, and have clear positive environmental impacts.



PROJECT EVALUATION / SELECTION The City of Toronto's Corporate Finance Division works in collaboration with its Environment and Energy Division along with other relevant internal stakeholder groups to select and evaluate projects for the green debenture. This is in line with market practice.



MANAGEMENT OF PROCEEDS The City of Toronto's disclosure and processes to manage and track proceeds are in line with market practice.



REPORTING The City of Toronto commits to allocation and impact reporting at a program level on an annual basis, which is in line with market practice.

Evaluation date	March 16, 2018
Issuer Location	Toronto, Canada

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Introduction

City of Toronto (the “City”) is the most populous city in Canada and one of the largest in North America, with a population of approximately 2,700,000¹. The City of Toronto has undertaken an ambitious goal of reducing greenhouse gas (GHG) emissions by 80% by 2050. To help realize its low-carbon future, the City of Toronto has developed a Green Debenture Framework under which it is considering issuing multiple green debentures with use the proceeds used to finance or refinance, in whole or in part, new and/or existing environmentally beneficial projects in general related to climate change mitigation and adaptation, GHG emissions reduction, waste management, and pollution prevention and control. The City’s first green debenture issuance will largely be focused on funding projects related to sustainable clean transportation, such as investments in core and supporting infrastructure for electric, hybrid, and public transportation systems. [The Green Debenture Framework](#) has been published in a separate document.

The Framework defines eligibility criteria in eight areas:

1. Renewable Energy;
2. Energy Efficiency;
3. Pollution Prevention and Control;
4. Sustainable Clean Transportation;
5. Sustainable Water and Waste Water Management;
6. Climate Change Adaptation and Resilience;
7. Eco-Efficient and/or Circular Economy Principles Integration;
8. Green Buildings;

The City of Toronto engaged Sustainalytics to review their Green Debenture Framework and provide a second-party opinion on its environmental credentials and the framework’s alignment with the Green Bond Principles 2017 (the “GBP”), as administered by the International Capital Market Association (the “ICMA”).

As part of this engagement, Sustainalytics held conversations with various members of the City of Toronto’s authorities to understand the environmental impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the City of Toronto’s Green Debenture Framework. Sustainalytics also reviewed relevant public documents and non-public information. Following this engagement between the City of Toronto and Sustainalytics, some elements of the Green Debenture Framework were clarified to ensure an alignment with the level of disclosure expected by ICMA’s Green Bond Principles 2017.

This document contains Sustainalytics’ opinion of the City of Toronto’s Green Debenture Framework and should be read in conjunction with that framework.

¹ Toronto population count, Statistics Canada, 2016 Census of Population, <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3520005&Geo2=CD&Code2=3520&Data=Count&SearchText=toronto&SearchType=Begins&SearchPR=01&B1=All&TABID=1>, accessed February 2018;

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the City of Toronto's Green Debenture

Summary

Sustainalytics is of the opinion that the City of Toronto's Green Debenture is credible and impactful and aligns with the four pillars of the Green Bond Principles 2017. Additionally, Sustainalytics views the City of Toronto's green debenture positively. Some of its key strengths are that:

- All green Eligible Project categories for the use of proceeds are recognized by the Green Bond Principles 2017 as project categories with clear environmental benefits, and Sustainalytics views these categories as having a positive impact (for additional information on impact see Section 3).
- With respect to climate change adaptation, Sustainalytics has reviewed internal City documents that confirm that the City has conducted a study to identify risks posed by climate change. The study specifically identifies flooding, drought, wind storms and heat due to extreme weather events as risks to city infrastructure and vulnerable residents. Sustainalytics is of the opinion that basing the adaptation eligibility criterion on specific risk studies strengthens the impact of the use of proceeds, as it establishes a clear case that the adaptation infrastructure is being funded as a direct response to climate change risks.
- The City of Toronto's Green Buildings eligibility criterion is based on: (i) third-party certification standards such as LEED, and (ii) local program schemes such as the Toronto Green Standard (TGS). Sustainalytics has conducted an evaluation of the certifications, and considers them in line with market practice, viewing such certification standards as having a positive impact (see Appendix 1 for additional details on the certification schemes). Furthermore, a commitment to adhere to the Gold or Platinum LEED levels demonstrates best practice.
- The City of Toronto's Corporate Finance Division (CFD) has the responsibility of evaluating and selecting projects funded by bond proceeds based on the defined eligibility criteria. As a part of the selection process the CFD consults with internal stakeholders, such as Environment & Energy, City Planning, Solid Waste Management and Toronto Water as required. This is aligned with market practice.
- The City of Toronto's disclosure and process with respect to management of proceeds are in line with market practice.
- The CFD, in partnership with relevant City divisions, will collect the reporting metrics and provide an annual newsletter on its website, covering both funding allocation and impact reporting. The City has committed to reporting on KPIs such as installed renewable energy generation capacity (MW), GHG emissions reduced/avoided (tCO₂e), waste recovery and landfill diversion rate (%), bike lanes installed (km), and number of eligible buildings that received third party-verified green building certifications. This is in line with market practice.

Alignment with Green Bond Principles 2017:

Sustainalytics has determined that the City of Toronto Green Debenture Framework aligns with the Green Bond Principles 2017. For detailed information please refer to Appendix 2: Green Bond Programme External Review Form.

Section 2: Sustainability Mandate of the City of Toronto

Sustainalytics has reviewed the City's environmental mandate and commitments, including its climate action plan, TransformTO², and its Strategic Actions 2013-2018. Sustainalytics is of the view that the City is committed to supporting environmentally sustainable development, while also reducing its negative impact on climate change. In the City of Toronto's TransformTO climate action plan, the City recognizes the importance of reducing GHG emissions and the role of municipalities in addressing climate change. Specifically, the City's action plan underpins four objectives: (1) reduce the greenhouse gas emissions from homes and buildings; (2) improve the use of renewable and low-carbon energy; (3) promote the use of low-carbon consuming vehicles; (4) divert waste from landfills.

² City of Toronto TransformTO, <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/transformto/>

The City's commitment to transition into a low-carbon city is also reflected in its Strategic Actions 2013-2018³. Three of the City's Strategic Actions for 2013-2018 reflect its commitment to environmental sustainability and reducing its impact on climate change:

- **Develop a Long-term Transportation Plan and Policies:** The City aims to review and refine existing transportation policies in order to develop an integrated framework for movement in the City that promotes walking, cycling, and taking transit;
- **Develop a Long-term Solid Waste Management Strategy:** The City aims to review and evaluate new and emerging techniques and technologies that maximize the lifespan of the Green Lane Landfill and assess expansion or acquisition of landfills and alternative disposal options;
- **Support Environmental Sustainability:** The City aims to develop integrated business plans and implementation strategies in order to push environmental and energy objectives within the City's jurisdiction over the next five years;

Overall, Sustainalytics believes that the City of Toronto is well-positioned to issue green debentures and that such issuances under its Green Debenture Framework will align with, and positively contribute to, the City of Toronto's environmental mandate and commitment to resilience.

Well positioned to address common environmental and social risks associated with the projects

Sustainalytics recognizes that there are environmental and social risks associated with infrastructure projects, such as worker health and safety, the disruption of eco-systems and biodiversity loss, and the need for community approval, among others. The City of Toronto follows the province of Ontario's environmental regulations and complies with all policies and guidelines to mitigate environmental and social risks associated with its projects. In addition, the City of Toronto has laws, regulations, and policies in place to address these risks (for example, the Ontario Human Rights Code⁴, the City of Toronto Act⁵, Safe Drinking Water Act⁶, and the Ontario Drinking Water Quality Standards⁷). Overall, Sustainalytics is confident that the City of Toronto is well positioned to identify, manage and mitigate environmental and social risks associated with financed projects.

Section 3: Impact of Use of Proceeds

All of the eligibility criteria defined in the City of Toronto's Green Debenture Framework are recognized as having beneficial environmental impacts by the Green Bond Principles 2017. Sustainalytics highlights below some key impacts of projects that meet the eligibility criteria of the Framework.

The importance of low-carbon transportation and the impact of transitioning to a low-carbon transport system

The City of Toronto's public transport network is an important and highly utilized system. In 2016, the Toronto Transit Commission stated that it experienced 538.1 million rides, surpassing the 537.6 million in the previous year⁸, amounting to 22% of people using public transport to get to work. At the same time, 66% of the people commuting to work used cars⁹; road vehicles being responsible with producing approximately 80% of GHG emissions locally¹⁰. One of the City's low-carbon goals is to achieve the outcome of 17% people walking, 28% cycling, 23% taking transit and only 32% driving to work.

To move towards this public transportation goal, the City plans to finalize its transit and active transportation infrastructure expansion and carry out the electrification of its transportation fleet, which would result in

3 City of Toronto Strategic Actions 2013-2018: <https://www.toronto.ca/wp-content/uploads/2017/08/8f97-strategic-actions-2013-2018.pdf>.

4 The Ontario Human Rights Code <https://www.ontario.ca/laws/statute/90h19>

5 The City of Toronto Act <http://www.mah.gov.on.ca/Page343.aspx>

6 Safe Drinking Water Act <https://www.ontario.ca/laws/statute/02s32>

7 Ontario Drinking Water Quality Standards: <https://www.ontario.ca/laws/regulation/030169>

8 Toronto Transit Commission: https://www.ttc.ca/About_the_TTC/Operating_Statistics/2016/section_two.jsp

9 City of Toronto, <https://www.toronto.ca/wp-content/uploads/2017/10/99b9-TransformTO-Climate-Action-for-a-Healthy-Equitable-and-Prosperous-Toronto-Report-2-The-Pathway-to-a-Low-Carbon-Future-Staff-Report-April-2017.pdf>

10 City of Toronto, <https://www.toronto.ca/legdocs/mmis/2014/pe/bgrd/backgroundfile-70321.pdf>

3150kt of annual GHG reduction potential in 2050¹¹. Among the goals of these two programmes, the implementation of only electric buses by 2040 and of only electric new vehicles by 2030, including the construction of 25 lines of rapid transit across Toronto, while also developing an express bus network across the City by 2050, are the most ambitious¹². Sustainalytics is of the view that funding projects in low-carbon transit through its green debenture will produce significant positive environmental impacts and is aligned with the City's overall environmental mandate to reduce GHG emissions and support the transition to a cleaner transportation system.

Promoting energy efficient improvements in residential buildings

In Canada, the GHG emissions resulting from residential buildings amounted to 65.4 Mt of CO₂e in 2015 (approximately 13% of the total)¹³. Moreover, homes and buildings produce almost half of the GHG emissions in Toronto¹⁴. One of the City's goals is that by 2050, all new buildings will have been retrofitted to enhance energy performance by about 40%¹⁵. In order to reduce the emissions produced by households and achieve the overall municipal, provincial and national set targets for 2050, the City of Toronto launched the Home Energy Loan Program (HELP). Through HELP, homeowners can receive a low-interest loan in order to perform home energy improvements, such as: high-efficiency furnaces/boilers/air conditioners, windows/doors, insulation, high-efficiency water heaters and solar hot water panels¹⁶. Sustainalytics is of the view that encouraging and supporting energy efficiency improvements for residential buildings through loan programs (such as HELP) funded by the City's green debenture will contribute to an overall increase in energy efficiency, reduce GHG emissions related to residential buildings, and help the City meet its climate change related goals.

Alignment with and contribution to the UN Sustainable Development Goals

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green debenture advances the following SDG goals and targets:

Use of Proceeds Category	UN SDG	SDG target
Renewable Energy Energy Efficiency	7.Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix 7.3 By 2030, double the global rate of improvement in energy efficiency.
Sustainable Clean Transportation Climate Change Adaptation and Resilience Green Buildings	11. Sustainable Cities and Communities 13.Climate Action	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport. 11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels. 13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
Pollution prevention and control,	6. Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous

11 City of Toronto, <https://www.toronto.ca/wp-content/uploads/2017/10/99b9-TransformTO-Climate-Action-for-a-Healthy-Equitable-and-Prosperous-Toronto-Report-2-The-Pathway-to-a-Low-Carbon-Future-Staff-Report-April-2017.pdf>

12 City of Toronto, <https://www.toronto.ca/wp-content/uploads/2017/10/99b9-TransformTO-Climate-Action-for-a-Healthy-Equitable-and-Prosperous-Toronto-Report-2-The-Pathway-to-a-Low-Carbon-Future-Staff-Report-April-2017.pdf>

13 Government of Canada, <http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/showTable.cfm?type=HB§or=aaa&juris=ca&rn=3&page=4&CFID=1444661&CFTOKEN=e2c866c889c9a485-6D4FC4CC-BE9F-73BB-E86A8877DDB8371F>

14 City of Toronto, <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/transformto/>

15 City of Toronto, <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/transformto/>

16 City of Toronto, <https://www.toronto.ca/services-payments/water-environment/environmental-grants-incentives-2/home-energy-loan-program-help/>


<p>Sustainable Water and Wastewater Management</p> <p>Eco-Efficient and/or Circular Economy Principles Integration</p>	<p>12. Responsible Consumption and Production</p>	<p>chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.</p> <p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.</p>
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Conclusion

The City of Toronto, through its Green Debenture Framework, aims to invest in projects that promote environmentally sustainable development and the transition to a low-carbon economy, while also mitigating and adapting to the effects of climate change. Sustainalytics is of the opinion that the City of Toronto’s planned use of proceeds will create positive environmental impact as all categories are recognized as eligible by the GBP. Furthermore, the City’s project selection and management of proceeds processes are aligned with market practice. The City has also committed to allocation and impact reporting on an annual basis. Based on the above, Sustainalytics is confident that the City of Toronto’s Green Debenture Framework is robust and credible, and aligns to the four pillars of the Green Bond Principles.

Appendices

Appendix 1: Green Building Certifications Comparison Table

	LEED	TGS
Background	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.	The Toronto Green Standard (TGS) represents a set of performance standards that facilitate more sustainable development in Toronto, implementing the environmental policies decided by the City of Toronto's Official Plan. The TGS was initially introduced as a voluntary standard for new building development in 2006, which, afterwards, became a two-tiered system, one mandatory and another voluntary, in 2010. The TGS is revised and updated every four years, the current version being 2.1. Starting from May 1, 2018, the TGS will enter its third version, which will feature two additional tiers. A comparison of the Toronto Green Standard V2 to LEED v4 was undertaken in order to align the Toronto Green Standard with the most recent LEED green building standard. The review included comparison to the new Canada Green Building Council Zero Carbon Standard, Toronto Zero Emissions Buildings Framework, the Well Building Standard and the Living Building Challenge.
Certification levels	Certified Silver Gold Platinum	Tier 1 (Mandatory) Tier 2 (Voluntary) Tier 3 (Voluntary) Tier 4 (Voluntary)
Areas of Assessment: Environmental Project Management	Integrative process, which requires, from the beginning of the design process, the identification and creation of synergies between the various project stakeholders regarding the construction choices and the technical systems.	The TGS addresses Toronto's urban environmental pressure, promoting sustainable site and building development.
Areas of Assessment: Environmental Performance of the Building	Energy and atmosphere Sustainable Sites Location and Transportation Materials and resources Water efficiency Indoor environmental quality Innovation in Design Regional Priority	<ul style="list-style-type: none"> • Air Quality • Climate change and energy efficiency • Water balance quality and efficiency • Ecology • Solid waste
Requirements	Prerequisites (independent of level of certification) + Credits with associated points These points are then added together to obtain the LEED level of certification There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools-/Retail-/Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).	A building receives Tier 1 certification if it meets the requirements set for each category. For Tier 2, 3, and 4 there are optional performance measurements that need to be met in addition to those of Tier 1. Tier 2,3, and 4 projects that have been verified may be eligible for a refund of development charges up to 20% of the 2014 rate. In order to achieve TGS certification, a building planning submission must include TGS Checklist, TGS Statistics Template, Energy Report, TGS Documentation and Development Charge Refund (Tier 2). There are currently two versions of the TGS ("Low-Rise Residential" and "Mid to High-Rise Residential and Non-Residential"), each relating to different development types.
Performance display		None
Accreditation	LEED AP BD+C LEED AP O+M	City Planning Division of Toronto Third party reviewer for Tier 2,3,4 applications.
Qualitative considerations	Widely recognised internationally, and strong assurance of overall quality.	The TGS certification system is part of the City of Toronto's TransformTO action plan, which aims at reducing the GHG emissions by 80% by 2050 (compared to the 1990 levels).

Appendix 2: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	City of Toronto
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	City of Toronto Green Debenture Framework
Review provider's name:	Sustainalytics
Completion date of this form:	March 5, 2018
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	March 5, 2018

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to the City of Toronto Green Debenture Framework available at (<https://www.toronto.ca/city-government/accountability-operations-customer-service/city-administration/staff-directory-divisions-and-customer-service/environment-energy/>) and the Second-Party Opinion document above

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section:

The proceeds of each green debenture will be applied exclusively to finance or re-finance, in whole or in part, new and/or existing capital projects under the City of Toronto Green Debenture Framework. "Eligible Projects" means identified capital projects that meet the City's environmental objectives. The selection of these projects is generally guided by the prevailing plans, policies and strategies as approved by Toronto City Council. The environmental objectives supported by these projects generally include:

- mitigation and adaptation to the effects of climate change,
- abatement and avoidance of GHG emissions,
- resource recovery and a hierarchical waste management approach, and
- air, water and soil pollution prevention and control.

Without limitation, capital projects across the following categories will be considered eligible for financing from green debenture proceeds:

1. renewable energy, production and distribution, including but not limited to: solar, wind, geoexchange and biogas technologies.¹⁷

2. energy efficiency, including but not limited to: retrofits of existing buildings, and new construction and retrofits of energy storage, district heating and cooling, smart grids and equipment. This also includes energy efficient improvements in private buildings through initiatives such as the Home Energy Loan Program (HELP)¹⁸ for ground related housing and the HiRIS program¹⁹ for multi-residential housing where the City utilizes mechanisms under the Local Improvement Charge regulation to provide financial loans towards energy efficiency retrofits.

3. pollution prevention and control and utilizing waste as a resource, including but not limited to: wastewater treatment infrastructure, infrastructure for air emissions reduction, greenhouse gas control, soil remediation, the prevention, reduction, reuse and recycling of waste, energy/emission-efficient waste to energy or energy recovery, value added products from waste and remanufacturing, and associated environmental monitoring for waste reduction.

4. Sustainable clean transportation, for humans, goods and services mobility enhancements, including but not limited to: core and supporting infrastructure and fleet for electric, hybrid, public, rail, non-motorised, multi-modal transportation, as well as infrastructure for low-carbon vehicles and reduction of harmful emission, and walking and cycling infrastructure.

5. sustainable water and wastewater management, including but not limited to: sustainable infrastructure that reduces water loss and increases the efficiency of clean and/or drinking water provision, wastewater treatment, storm water management, sustainable urban drainage systems and flood mitigation measures.

6. climate change adaptation and resilience, including but not limited to: flood reduction infrastructure, green roofs, and back-up power equipment.

7. eco-efficient and/or circular economy principles integration, including but not limited to: use of recycled or alternative building materials in development and redevelopment, establishment of alternatives to traditional product consumption models towards rental, maintenance, repair services for infrastructure designs and

¹⁷ Excludes the production and distribution of hydropower exceeding 25MW and nuclear power

¹⁸ <https://www.toronto.ca/services-payments/water-environment/environmental-grants-incentives-2/home-energy-loan-program-help/>

¹⁹ <https://www.toronto.ca/community-people/community-partners/apartment-building-operators/hi-ris/program-overview/>

upgrades, adapted products, production technologies and processes which minimize negative externalities and maximize resource value to its greatest potential

8. green buildings, which meet or exceed local, regional, national or internationally recognized standards and certifications, including but not limited to: Toronto Green Standard (Tier 2, 3 or 4) , Leadership Energy and Environmental Design (LEED) rating system (Gold or Platinum)

Use of proceeds categories as per GBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input checked="" type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input checked="" type="checkbox"/> Clean transportation |
| <input checked="" type="checkbox"/> Sustainable water and wastewater management | <input checked="" type="checkbox"/> Climate change adaptation |
| <input checked="" type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input checked="" type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other (<i>please specify</i>): |

If applicable please specify the environmental taxonomy, if other than GBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The selection of Eligible Projects is the responsibility of the Corporate Finance Division (CFD) in consultation with internal and external expert stakeholders, which may include the combined effort of Environment & Energy, City Planning, Solid Waste Management Services, Parks, Forestry and Recreation, Toronto Water and Legal Services Divisions and other City Divisions, Agencies and Corporations, as required. CFD will select the eligible capital project(s) that meet the guidelines for use of proceeds as described above. Projects must also comply with all applicable laws and regulations, and policies of the City of Toronto, including assessments of the social and environmental risks of a given project. CFD will verify the suitability and eligibility in collaboration with the Environment & Energy Division. Then the City will follow its current debt issuance procedure in accordance to the City of Toronto's Financing of Capital Works Policy and Goals. The Mayor or the Mayor's Alternate and the CFO are authorized to issue debt within the annual limit approved by Council. The internal or external legal representative(s) will draft a debenture by-law outlining the use of proceeds, amongst other items, that includes a schedule to the by-law listing the capital projects to be financed by the debenture, and the list of capital projects will also be shared on the City's website. The debenture by-law shall be passed by the City's Debenture Committee

Evaluation and selection

- | | |
|--|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input checked="" type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (<i>please specify</i>): |

Information on Responsibilities and Accountability

- | | |
|--|---|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input checked="" type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

The majority of capital projects to be funded by a debenture issued by the City have been completed or substantial completion criteria met. In these common instances, the proceeds of the debenture will be applied directly to the project to repay the City's temporary funding for the project. Where substantial completion has not been met on an Eligible Project, the funds will be held in an account of the City and invested in holdings with maturities aligned with substantial completion of the projects identified in the schedule to the by-law. In the rare case where substantial completion has been achieved and excess funds exist, the funds will be applied to other projects classified as Eligible Projects under this Green Debenture Framework

Tracking of proceeds:

- | |
|---|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input checked="" type="checkbox"/> Disclosure of intended types of temporary investment instruments for unallocated proceeds |
| <input type="checkbox"/> Other (<i>please specify</i>): |

Additional disclosure:

- | | |
|---|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input checked="" type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input checked="" type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (<i>please specify</i>): |

4. REPORTING

Overall comment on section (if applicable):

CFD will coordinate with relevant City divisions to collect reporting metrics and provide an annual newsletter on its website addressing both funding allocation and sustainability impact reporting that will cover:

- debenture by-laws outlining the specific projects and amounts funded by green debentures
- a summary of the City’s green debenture developments including existing and future projects
- updates with respect to distribution of unspent debenture proceeds
- project updates and status reports for Eligible Projects, when possible
- key performance indicators (KPI)

Use of proceeds reporting:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Project-by-project

<input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> On a project portfolio basis

<input type="checkbox"/> Other (<i>please specify</i>): |
|--|--|

Information reported:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Allocated amounts

<input type="checkbox"/> Other (<i>please specify</i>): | <input checked="" type="checkbox"/> Green Bond financed share of total investment |
|--|---|

Frequency:

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Annual

<input type="checkbox"/> Other (<i>please specify</i>): | <input type="checkbox"/> Semi-annual |
|---|--------------------------------------|

Impact reporting:

- | | |
|---|--|
| <input type="checkbox"/> Project-by-project

<input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> On a project portfolio basis

<input checked="" type="checkbox"/> Other (<i>please specify</i>): Program-by program |
|---|--|

Frequency:

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Annual

<input type="checkbox"/> Other (<i>please specify</i>): | <input type="checkbox"/> Semi-annual |
|---|--------------------------------------|

Information reported (expected or ex-post):

- | | |
|--|---|
| <input checked="" type="checkbox"/> GHG Emissions / Savings

<input checked="" type="checkbox"/> Decrease in water use | <input checked="" type="checkbox"/> Energy Savings

<input checked="" type="checkbox"/> Other ESG indicators (<i>please specify</i>): |
|--|---|

Reduction in Particulate matter concentration (PM2.5/PM10)
Waste recovery and landfill diversion rate (%)

Cycling and Walking trips (% of modal share)
 Bike lanes installed (kms)
 Increase in permeable surface area (%)
 Avoided cost of basement flooding (\$), increase in tree canopy (%), green roof space (m2)
 Value of eco-efficient procurement (\$)
 Number of eligible buildings that received third party-verified green building certification (LEED Gold or Platinum) or Toronto Green Standard (Tier 2,3 & 4)

Means of Disclosure

- | | |
|--|---|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input checked="" type="checkbox"/> Other (please specify):
Annual newsletter on website |

<input type="checkbox"/>	Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):
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Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer’s documentation, etc.)

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SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer’s Green Bond framework. “Second Party Opinions” may fall into this category.
- ii. Verification: An issuer can have its Green Bond, associated Green Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may

focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.

- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.
- iv. Rating: An issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Green Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Green Bond frameworks / programmes.

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