

Green Bond

Independent External Review Form

General Obligation Capital Improvement Bonds, Series 2018

City of Minneapolis

Section 1. Basic Information

Issuer name: City of Minneapolis, Minnesota

Issuer Green Bond Framework Name: Green Bond Framework October 2018

Independent External Review provider's name: Kestrel Verifiers

Completion date of this form: October 16, 2018

Publication date of review publication: October 16, 2018

Section 2. Review overview

SCOPE OF 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 INDEPENDENT EXTERNAL REVIEW PROVIDER

- | | |
|--|---|
| <input checked="" type="checkbox"/> Second Party Opinion | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Scoring/Rating |
| <input type="checkbox"/> Other (please specify): | |

EXECUTIVE SUMMARY OF REVIEW

Proceeds from the City of Minneapolis' General Obligation Capital Improvement Bonds, Series 2018 are 100% dedicated towards environmental sustainably-oriented activities consistent with the Green Bond Principles, Green Buildings category. Bond proceeds will be used for the New Public Service Center and the Eastside Storage and Maintenance Facility. The City of Minneapolis has established a low carbon trajectory, and proceeds of the bonds are aligned with this trajectory. The New Public Service Center and the Eastside Storage and Maintenance Facility Project are both designed to achieve LEED Gold or higher certification. The Eastside Storage and Maintenance Facility is also designed to achieve 30% energy savings under LEED version 3, based on the scorecard provided. The LEED Gold strategies for Sustainable Sites, Water Efficiency,

Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality infer the Carbon Intensity Target of target **35.52** kgCO₂/sqm p.a. to align with the Paris Climate Agreement will be met. The New Public Service Center complies with the LEED v4 Gold Certification requirement. An energy savings of 20% is documented. The Energy Model was not yet completed at the time of this opinion. The Energy Model will show the comprehensive energy savings of the building, and it is reasonable to expect a minimum of 10% additional energy savings when passive daylighting, ventilation and envelope strategies as well as efficient lighting, HVAC and possible control systems are taken into consideration. These strategies could easily achieve the target for both the Proxy and Path 3 option as per the Climate Bonds Initiative criteria.

Both buildings have numerous additional features that contribute to environmental sustainability. The New Public Service Center is close to mass transit, and consolidates several City departments under one roof, eliminating many trips associated with employees and citizens traveling from place to place. The design of the New Public Service Center emphasizes natural daylighting, energy efficiency, indoor air quality and public art. The Eastside Storage and Maintenance Facility will showcase innovative stormwater management best practices to serve as an example for other organizations to follow.

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 City of Minneapolis will use the green bond proceeds for buildings that demonstrate energy efficiency metrics at above-market performance. Building ratings systems such as LEED, attest to the Energy & Atmosphere and Innovation attributes of projects. Energy efficient building projects built to LEED standards can positively impact carbon emissions, ozone depletion, mineral extraction, air quality, human health and infrastructure needs. Therefore, LEED-certified buildings meet the GBP Energy Efficiency criteria. The calculated carbon intensity target is 35.52 kgCO₂/sqm per annum assuming a bond term of approximately 15 years. To achieve this target, the buildings must show a minimum 30% energy savings (reduction) compared to the ASHRAE 90.1 baseline. The New Public Service Center and the Eastside Storage and Maintenance Facility Project are both designed to achieve LEED Gold or higher certification.

Eastside Storage and Maintenance Facility

The Eastside Storage and Maintenance Facility Project will be used by the City Public Works Department to combine the operations of several of its divisions together under one roof. The new facility will improve operational and energy efficiency, accommodate all Solid Waste and Recycling staff at one location, and allow the Solid Waste and Recycling Division to expand service to include organics collection. The project will showcase innovative stormwater management best practices to serve as an example for other organizations to follow.

This project is registered under LEED version 3, 2009, and is designed to achieve LEED Gold Certification, and 30% Energy savings under LEED version 3. According to the LEEDv3 Scorecard, the project meets a threshold of 30% energy cost savings with the 10 points earned for EA credit 1: Optimize Energy Performance compared to ASHRAE 90.1, 2007. It also exceeds the 60 point minimum threshold for LEED Gold. This project is designed to meet the calculated carbon intensity target for the City of Minneapolis. The facility will also include public art and green space, and sustainable components such recycled building materials and solar panels.

New Public Service Center

This project is registered under LEED version 4, 2013, and Complies with LEEDv4 Gold Certification Requirement. The LEEDv4 scorecard provided shows 8 “yes” points for Energy and Atmosphere credit 2: Optimize Energy Performance, which indicates 20% energy cost reduction compared to ASHRAE 90.1, 2010.

The Energy Model was not complete at the time of the scorecard, however, the passive daylighting, ventilation, envelope strategies, lighting, HVAC and control systems indicate that additional energy savings could be easily achieved.

Use of proceeds categories as per GBP:

- | | |
|--|--|
| <input type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input 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 type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input 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 City utilizes a robust and transparent annual process to prioritize capital improvements for financing. The Five-Year Capital Improvement Plan for the City of Minneapolis beginning with the 2015 – 2019 cycle and including the 2019 – 2023 cycle under Minnesota Statutes, Chapter 475 dated March 23, 2018, identified the Eastside Storage and Maintenance Facility and the New Public Service Center as a priority for bond financing. The City has not previously issued green bonds, and this is the City's first Green Bond Framework. Green buildings, also known as low-carbon buildings, are an eligible project type under the Green Bond Principles.

In 2015, Mayor Betsy Hodges signed the Compact of Mayors, the world's largest cooperative effort among mayors and city officials to reduce greenhouse gas emissions, track progress, and prepare for the impacts of climate change. Minneapolis is one of 17 cities across nine nations that joined to launch the Carbon Neutral Cities Alliance, a collaboration of global cities committed to reducing greenhouse gas pollution by 80 percent or more by 2050 or sooner.

The Minneapolis Climate Action Plan sets a goal of achieving a 1.5 percent annual reduction in greenhouse gas emissions from City facilities. Another goal is to ensure that City facilities and infrastructure, across all neighborhoods, are models of energy efficiency and renewable energy technology.

Evaluation and selection

- | | |
|---|--|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives | <input 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 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 Proceeds from this green bond sale are earmarked for green projects. The two facilities that will be constructed are designed to achieve LEED Gold or higher certification. Funds will be deployed in a reasonable period after issuance to achieve a timely green impact. The City will maintain a set of internal procedures for the management of proceeds, as described in the Official Statement for the Bonds.

Tracking of proceeds:

- | |
|--|
| <input checked="" type="checkbox"/> Green Bond proceeds segregated or tracked by the issuer in an appropriate manner |
| <input 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 type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input 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*):

So long as the General Obligation Capital Improvement Bonds, Series 2018 (Green Bonds) are outstanding, the City of Minneapolis will annually report on the use of proceeds, the currently allocated and outstanding amounts, and provide management confirmation that the use of proceeds of the Bonds is still in alignment with the Green Bond Principles. This reporting will be done annually on the Electronic Municipal Market Access (EMMA) system operated by the MSRB. Kestrel Verifiers will provide a post-issuance Use of Proceeds report, which the City will post on EMMA. Building performance (impact) will also be reported on the City's website.

Use of proceeds reporting:

- | | |
|---|--|
| <input type="checkbox"/> Project-by-project | <input type="checkbox"/> On a project portfolio basis |
| <input checked="" type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other <i>(please specify)</i> : |

Information reported:

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

Frequency:

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

Impact reporting:

- | | |
|---|--|
| <input type="checkbox"/> Project-by-project | <input type="checkbox"/> On a project portfolio basis |
| <input checked="" type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other <i>(please specify)</i> : |

Frequency:

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

Information reported (expected or ex-post):

- | | |
|---|---|
| <input checked="" type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings |
| <input type="checkbox"/> Decrease in water use | <input type="checkbox"/> Other ESG indicators <i>(please specify)</i> : |

Means of Disclosure

- | | |
|--|--|
| <input checked="" type="checkbox"/> Information published in financial report | <input checked="" type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input type="checkbox"/> Other <i>(please specify)</i> : |
| <input checked="" type="checkbox"/> Reporting reviewed <i>(if yes, please specify which parts of the reporting are subject to external review)</i> : | |

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

www.kestrelverifiers.com

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE**Type(s) of Review provided:**

- | | |
|--|---|
| <input checked="" type="checkbox"/> Second Party Opinion | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Scoring/Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Review provider(s):**Date of publication:** October 16, 2018

Monica Reid
Technical Team Leader
Kestrel Verifiers

About Kestrel Verifiers

Kestrel Verifiers provides green bonds advisory services for corporate and public finance teams and issuers. With deep expertise in water, energy and land uses, Kestrel is distinguished by its focus on green bonds, industry knowledge, and responsive customer service. For over 18 years, Kestrel has been a trusted advisor to state and local governments, non-profits and corporations. Accredited as an Approved Verifier by the Climate Bonds Initiative in late 2017, Kestrel is qualified to evaluate bonds against the Green Bond Principles, Climate Bonds Initiative or Social Bond Principles. Kestrel is a Woman-Owned Small Business and a certified Women's Business Enterprise.

For more information, visit www.kestrelverifiers.com

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

1. **Second Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
2. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
3. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
4. **Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.