

SECOND PARTY OPINION

SUMMARY

Kestrel Verifiers is of the opinion that the City of Boston General Obligation Bonds 2020 Series B (Green Bonds) (the “Series B Bonds” or “Green Bonds”) conform with the four pillars of the Green Bond Principles 2018 as follows:

Use of Proceeds

The City of Boston (the “City” or “Boston”) intends to issue Green Bonds to finance four projects which improve the City’s mitigation and adaptation to climate change. Projects include a building built to at least LEED Silver standards, energy efficiency upgrades, and flooding adaptation renovations to buildings and natural areas. The bonds align with the green buildings, energy efficiency, and climate adaptation project categories under the Green Bond Principles.

Process for Project Evaluation and Selection

Multiple sustainability and City planning documents and initiatives guide the project selection process. Initiatives pertinent to the Series B Bonds include Carbon Free Boston and Climate Ready Boston.

Management of Proceeds

Bond proceeds shall be allocated to a separate Project Fund account administered and used solely to finance the eligible green projects.

Reporting

Boston commits to reporting on the status of green projects and the allocation of Series B Bond proceeds to each. Boston will also post continuing disclosures to the Municipal Securities Rulemaking Board (MSRB) annually through the Electronic Municipal Market Access (EMMA) system.

Impact and Alignment with UN SDGs

Boston’s climate mitigation and adaptation projects at a park, community center, school, and many municipal buildings support UN Sustainable Development Goals 7: Affordable and Clean Energy, 9: Industry innovation and infrastructure, and 13: Climate Action.



ISSUER

City of Boston, Massachusetts

OPINION ON

General Obligation Bonds 2020 Series B (Green Bonds)

GREEN CATEGORIES

1. Green buildings
2. Energy efficiency
3. Climate change adaptation

EVALUATION DATE

November 30, 2020

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SECOND PARTY OPINION

Issuer:	City of Boston, Massachusetts
Issue Description:	General Obligation Bonds 2020 Series B (Green Bonds)
Project:	Mitigation and Adaptation Projects
Green Categories:	Green buildings Energy efficiency Climate change adaptation
Par:	\$23,885,000
Evaluation date:	November 30, 2020

GREEN BONDS DESIGNATION

Kestrel Verifiers, an Approved Verifier accredited by the Climate Bonds Initiative, conducted an independent external review of this bond to evaluate conformance with the Green Bond Principles (June 2018) established by the International Capital Market Association.

This Second Party Opinion reflects our review of the uses and allocation of proceeds and oversight and conformance of the bonds with the Green Bond Principles. In our opinion, the General Obligation Bonds 2020 Series B (Green Bonds) issued by the City of Boston are aligned with the four pillars of the Green Bond Principles and qualify for green bonds designation.

ABOUT THE ISSUER

The City of Boston (“Boston” or “City”) is the largest city in Massachusetts and has a population of nearly 700,000. As a financial, professional, educational, and medical hub in New England, Boston stands to lead by example through prioritizing projects that support sustainable development. The City’s population grew nearly 12% between 2010 and 2019 and this trend is expected to continue. Climate change adaptation projects and mitigation of the growing City’s impact are critical to its long-term sustainability.

Boston has set clear goals to mitigate the effects of climate change and increase the City’s resilience to the anticipated risks. The City has a goal of reducing emissions to reach carbon neutrality by 2050, and the City’s strategic plan sets a goal of 50% reduction by 2030. Boston’s original Climate Action Plan was released in 2007 and has undergone multiple updates. The most recent update occurred in 2019.

Three broad initiatives are in place: Climate Ready Boston, which prepares the city for extreme weather events and flooding, Carbon Free Boston, which lays out steps to achieve carbon neutrality by 2050, and Zero Waste Boston, which establishes a roadmap to become a zero waste city.

To achieve the ambitious carbon reduction and resilience projects, the City engages in multiple partnerships. These include collaboration with the Metropolitan Mayors Coalition, Urban Sustainability Directors’ Network, Climate Mayors, C40 Cities Climate Leadership Group, and Global Covenant of Mayors for Climate and Energy.

ALIGNMENT TO GREEN STANDARDS

Green Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the Green Bonds Principles (“pillars”) which include: Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting (International Capital Market Association definition).

Use of Proceeds

The Series B Bonds will be used to finance multiple green projects. Projects financed are eligible green projects as defined by the Green Bond Principles in the project categories of green buildings, energy efficiency, and climate change adaptation.

In order to avoid the worst impacts of climate change, municipalities must act swiftly and invest in infrastructure that is adapted to new weather-related risks and sea level rise. The projects to be financed with the Series B Bonds are examples of the projects needed to reduce carbon footprints and increase the resilience of the world’s coastal cities. The following paragraphs and Table 1 below provide an overview of the projects to receive partial financing from the Green Bonds.

Boston Center for Youth and Families Curley Community Center: The Series B Bonds will partially finance energy conservation and resilience improvements to the Curley Community Center. The Center is owned by the City and operated by Boston Center for Youth and Families. Green Bond proceeds will finance energy efficient lighting, installation of an efficient HVAC system, waterproofing of the floor slab and walls, and installation of doors with removable flood barriers.

Renew Boston Trust Phases 1 and 2: Green Bond proceeds will be allocated to partially finance Phases 1 and 2 of the Renew Boston Trust program. Renew Boston finances water and energy-saving renovation projects in municipal buildings and uses financial savings from the projects to finance additional conservation projects. Phase 1 of Renew Boston focused on projects at 14 locations ranging from building envelope improvements, water conservation measures, appliance efficiency improvements, and installation of solar panels. Phase 2 includes similar projects for over thirty buildings in the City. Water and energy savings are expected to be reported for projects at each location. Energy and water use efficiency projects primarily contribute to the climate change mitigation and natural resource conservation objectives.


Langone Park / Puopolo Playground: Proceeds will be used to make resiliency improvements to Langone Park and Puopolo Playground. This project is a project of the Department of Parks and Recreation and the Series B Bonds provide partial funding for a larger project involving plantings, improved drainage, and lighting improvements. The park is located in Boston’s inner harbor near the confluence of the Mystic and Charles Rivers and it has been demonstrated that the park is susceptible to storm surge and elevated sea levels. This project will reinforce the sea wall and elevate a walkway, softball, and baseball fields to improve resilience.

Boston Arts Academy: Boston Arts Academy is the City’s only public high school for visual and performing arts. Proceeds will finance the construction of a new building for the Academy which will be built to at least LEED Silver standards. The City expects to pursue LEED certification. Green buildings reduce the impact of construction on natural resources. Benefits of green buildings include reduced greenhouse gas emissions, healthier indoor spaces to learn and work, and reduced energy and water consumption. The construction is expected to be completed in 2022.

Table 1. Summary of projects to receive 2020 Series B Green Bond proceeds

Project Name	Anticipated Green Spending	Description
Boston Youth and Families Curley Community Center	\$3,000,000	Flooding resilience improvements to community center
Renew Boston Trust	\$10,000,000	Energy efficiency and water conservation improvements to municipal buildings
Langone Park / Puopolo Playground	\$2,000,000	Flooding resilience improvements to park
Boston Arts Academy	\$17,000,000	Construction of a new building built to LEED Silver standards or above

The projects conform with the Green Bond Principles:

STANDARD	ELIGIBLE PROJECT CATEGORIES
	<ul style="list-style-type: none"> Green buildings Energy efficiency Climate change adaptation

Process for Project Evaluation and Selection

Boston has several planning documents which guide decision-making and establish targets for success. In general, projects are prioritized with a vision for a strong, thriving, and sustainable city in mind. The City’s Imagine Boston 2030 document is a set of long-term (50-year) goals that guide project selection and shape the operations of City departments. The City’s Climate Action Plan also identifies areas of need and influences the type of projects that are eligible for funding. In order to issue bonds to finance City projects, loan orders approved by the City Council must be approved by the Mayor.

Each project has oversight and criteria which was met prior to approval for funding by the City and the Series B Bonds. The resilience projects advance the goals of Climate Ready Boston and the Resilient Boston Harbor plan that lays out a comprehensive vision for coastal resilience. The building and renovation projects advance the goals of Carbon Free Boston. In addition, the Massachusetts School Building Authority (MSBA) has played a central role in approving design specifications and supporting the financing of the Boston Arts Academy project. For Renew Boston Trust projects, full energy audits are assessed on municipal buildings to determine which should be prioritized for energy conservation projects.

Management of Proceeds

Proceeds from the Series B Bonds will be held in a separate account which is to be administered and used solely to finance the eligible green projects. 100% of the proceeds will finance the projects described in the Use of Proceeds section above and financing costs. Tracking expenditure of Green Bond proceeds will be the responsibility of the City’s Office of Budget Management and the City’s Treasury Department. Prior to allocation to specific projects, bond proceeds may be invested in temporary short-term investments according to Boston’s Investment Policy. Allowable investments include money market funds, US government and agency securities, and certain high-quality, short-term debt securities.




Reporting

Boston plans to report annually on the allocation of the net proceeds of the Series B Bonds to eligible green projects. The report is expected to be filed within 270 days of the end of the fiscal year on the Electronic Municipal Market Access (EMMA) system and is expected to include project status and the amount of proceeds disbursed for each project. These reports are expected to be prepared annually until full allocation of Series B Bond proceeds. Each project has an associated project website with organized project meeting minutes and regular updates on a project’s status. Standard continuing disclosures for the Series B Bonds will also be made available on EMMA but the Green Bond reports are not required under the terms of the City’s continuing disclosure certificate for the Series B Bonds.

Impact and Alignment with UN SDGs



Boston’s commitment to the mitigation and adaptation projects supports the sustainable vision of the UN Sustainable Development Goals (UN SDGs). The *2030 Agenda for Sustainable Development* adopted by all United Nations member states in 2015 provides “a shared blueprint for peace and prosperity for people and the planet.” The United Nations’ Agenda describes 17 Sustainable Development Goals (SDGs). The Series B Bonds directly support UN SDG 7: Affordable and Clean Energy, UNSDG 9: Industry innovation and infrastructure, and UNSDG 13: Climate Action. A comprehensive list of targets and background on UN SDGs 7, 9, and 13 is available on the United Nations’ website: <https://www.un.org/sustainabledevelopment/>

UN SDG Goals	GBP Project Category (SDG Targets)	Possible Indicators
 <p>7 AFFORDABLE AND CLEAN ENERGY</p>	<ul style="list-style-type: none"> Energy Efficiency (Target 7.3) 	<ul style="list-style-type: none"> Electricity savings (kilowatt hours) Money saved because of efficiency projects (dollars)
 <p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<ul style="list-style-type: none"> Climate Change Adaptation (Target 9.1) 	<ul style="list-style-type: none"> Value of infrastructure expected to withstand projected sea level rise by 2050 or 2100 Number of people accessing improved green and recreational spaces
 <p>13 CLIMATE ACTION</p>	<ul style="list-style-type: none"> Climate Change Adaptation (Targets 13.1, 13.2) 	<ul style="list-style-type: none"> Metrics measuring impact Reduction in weather-related disruption (days and/or risk frequency) Flood resilient floor space

CONCLUSION

Based on our independent verification, the General Obligation Bonds 2020 Series B (Green Bonds) conform, in all material respects, with the Green Bond Principles (2018) and are in complete alignment with three eligible project categories: green buildings, energy efficiency, and climate adaptation. The projects financed with the Series B Bonds help mitigate greenhouse gas emissions and improve Boston's resilience to increased climate change-related risks.



ABOUT KESTREL VERIFIERS

For 20 years Kestrel has been a trusted consultant in environmental finance. Kestrel Verifiers, a division of Kestrel 360, Inc. is a Climate Bonds Initiative Approved Verifier qualified to verify transactions in all asset classes worldwide. Kestrel is a US-based Woman-Owned Small Business and a certified Women's Business Enterprise.

For more information, visit www.kestrelverifiers.com

DISCLAIMER

This opinion aims to explain how and why the discussed financing meets the ICMA Green Bond Principles based on the information which was available to us during the time of this engagement (November 2020) only. By providing this opinion, Kestrel Verifiers is not certifying the materiality of the projects financed by the Green Bonds. It was beyond Kestrel Verifiers' scope of work to review issues relating to regulatory compliance and no surveys or site visits were conducted. Furthermore, we are not responsible for surveillance on the project or use of proceeds. The opinion delivered by Kestrel Verifiers does not address financial performance of the Green Bonds or the effectiveness of allocation of its proceeds. This opinion does not make any assessment of the creditworthiness of the Issuer, or its ability to pay principal and interest when due. This is not a recommendation to buy, sell or hold the Bonds. Kestrel Verifiers is not liable for consequences when third parties use this opinion either to make investment decisions or to undertake any other business transactions. This Opinion may not be altered without the written consent of Kestrel Verifiers. Kestrel Verifiers certifies that there is no affiliation, involvement, financial or non-financial interest in the issuer or the projects discussed. Language in the offering disclosure supersedes any language included in this Second Party Opinion.