

SECOND PARTY OPINION

GREEN BONDS

SUMMARY

Kestrel Verifiers is of the opinion that the City of Berkeley, California 2020 Refunding General Obligation Bonds, Series B (2008 Election Measure FF: Neighborhood Branch Library Improvements Project) (Green Bonds) conform with the four pillars of the Green Bond Principles 2018 as follows:



Use of Proceeds

The City of Berkeley intends to use the proceeds of the Series B 2020 Refunding General Obligation Bonds to refund the Series 2010 General Obligation Bonds that were used to finance renovations and construction of four neighborhood library branches. The libraries have successfully obtained green building certifications including LEED and Zero Net Energy. Kestrel Verifiers considers that the City's investments in these areas will continue to lead to positive environmental impacts.



Process for Project Evaluation and Selection

The Board of Library Trustees approved funds to assess library needs in 2008 and approved the Branch Libraries Facilities Master Plan which identified branch needs and informed decision-making. Voters approved Measure FF in a 2008 election, which authorized up to \$26 million in general obligation bonds for renovations and improvements to the City's four neighborhood branch libraries. Berkeley's Climate Action Plan sets green building requirements.



Management of Proceeds

100% of the bond proceeds are required to be allocated to the refunding and related finances immediately after bond issuance. Proceeds will be allocated to a separately established Refunding Debt Service Fund to refund the General Obligation Bonds, Series 2010 (Neighborhood Branch Library Improvements Project).



Reporting

The City of Berkeley commits to posting continuing disclosures to the Municipal Securities Rulemaking Board (MSRB) done annually on the Electronic Municipal Market Access (EMMA) system.



ISSUER:

City of Berkeley, California

OPINION ON:

2020 Refunding General
Obligation Bonds, Series B (2008
Election Measure FF:
Neighborhood Branch Library
Improvements Project)
(Green Bonds)

GREEN CATEGORY:

Green Buildings

EVALUATION DATE:

May 5, 2020

KESTREL VERIFIERS CONTACTS:

Evan Smith

Lead Verifier evan@kestrel-inc.com (+1) 530-919-9162

April Strid

Verifier/Environmental Scientist april@kestrel-inc.com (+1) 503-860-1125

Monica Reid

CEO, General Inquiries monica@kestrel-inc.com (+1) 541-399-6806



SECOND PARTY OPINION

Par: \$11,690,000

Issuer: City of Berkeley, California

Issue Description: 2020 Refunding General Obligation Bonds, Series B (2008 Election Measure

FF: Neighborhood Branch Library Improvements Project) (Green Bonds)

Project: Library Improvements Project

Green Category: Green Buildings **Evaluation date:** May 5, 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 issued by the City of Berkeley are aligned with the four pillars of the Green Bond Principles and qualify for green bonds designation.

ABOUT THE CITY OF BERKELEY, CALIFORNIA

The City of Berkeley is located east of San Francisco and has the highest population density of any city in the East Bay with a population of 123,328 as of January 2019. The city is in Alameda County and is the home to University of California, Berkeley, which plays a significant role in the economic and social culture of the city. The City is committed to environmental sustainability, as demonstrated by local voters approving a goal of reducing greenhouse gas emissions by 80% by 2050 in a 2006 ballot measure and by the City Council adopting a Climate Action Plan (Plan) in 2009. The Plan lays out the community's vision with guidance on the paths to emission reductions in sectors including sustainable transportation and land use, building energy use, waste reduction and recycling, empowerment and preparing for climate change impacts. Under the city's Plan, all major city building projects must be designed to meet, at a minimum, LEED Silver certification.

The Office of Energy & Sustainable Development leads the City's sustainability efforts through the Climate Action Plan. In 2015, Mayor Tom Bates 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 impacts of climate change. In 2017, Mayor Jesse Arreguin signed the Mayors National Climate Action Agenda as a demonstration of the City's ongoing commitment to accelerate climate progress.



THE BOND-FINANCED PROJECT

The Branch Library Improvements Project began in 2009 and was completed in December 2013. The Branch Libraries Facilities Master Plan addressed needs at the West Branch, the North Branch, the Claremont Branch, and the South Branch libraries. The Central downtown library was not included in the renovation plans.

The Claremont and North branches were remodeled, and the South and West branches were demolished and rebuilt. The libraries were designed to meet and have successfully attained multiple green building certifications. The Leadership in Energy and Environmental Design (LEED) certification program demonstrates a building's adherence to a scorecard for green building criteria. Points are received based on site selection, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation in design.

Table 1: Library Improvement Projects that received Measure FF funds

Library Branch	Description	Certification
Claremont	Remodeled	LEED Silver (2012)
North	Remodeled	LEED Silver (2013)
South	Rebuilt	LEED Gold (2014)
West	Rebuilt	LEED Platinum (2016) Net Zero Energy

Table 1 displays the LEED certifications attained by each library branch. In addition to the certifications listed above, the West Branch received the American Institute of Architect's Committee on the Environment Top Ten award in 2016. The building also received certification as a Zero Net Energy building because it produces enough renewable energy to offset the energy that it consumes each year. Features such as rooftop solar, energy efficient lighting, water saving fixtures, innovative designs and native plant landscaping contribute to the sustainability of these buildings.

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 2020 Refunding General Obligation Bonds will be used exclusively to refund the bonds that financed the Library Improvements Project and related finances. The library improvements that received LEED certifications are eligible green projects as defined by the Green Bond Principles in the project category of Green Buildings.



California's second largest source of greenhouse gas emissions is the building sector. LEED certified buildings must meet certain energy efficiency standards that reduce energy demands and emissions. Environmental benefits of the library improvements include the following:

- Responsible site selection for construction
- Greenhouse gas emission reductions
- Diversion of waste from landfills
- Water conservation

The project conforms with the Green Bond Principles:

BOND LABEL	ELIGIBILITY CRITERIA	
The Green Bond Principles	Green buildings which meet regional, national or internationally recognized standards or certifications	

Process for Project Evaluation and Selection

The City of Berkeley uses a transparent decision-making process to select capital projects for financing. The Board of Library Trustees is responsible for Berkeley library operations and consists of a group of five Berkeley residents and one member of City Council. The Board of Trustees approved funds to assess library needs in 2008 and initiated the completion of the Branch Libraries Facilities Master Plan that identified branch needs and informed decision-making.

The original 2010 bond was authorized by voters on Measure FF in the November 2008 election. Voters approved up to \$26 million in general obligation bonds for renovations and improvements to the City's four neighborhood branch libraries. City Council adopted the Refunding Bond Resolution on February 25, 2020.

In addition to this informed decision-making process involving the Master Plan, Board of Trustees, and voters, designs and construction plans for the library renovations had to align with Berkeley's Climate Action Plan which aims to reduce greenhouse gas emissions by 80% by 2050, and addresses

Management of Proceeds

100% of the bond proceeds are required to be allocated to the refunding immediately after bond issuance. Proceeds will be allocated to a separately established fund, namely, the Refunding Debt Service Fund, to refund the General Obligation Bonds, Series 2010 (Neighborhood Branch Library Improvements Project). The Fund will be established and managed as a separate fund from the city's other assets. Proceeds of the original refunded bonds were deposited to the Project Fund.

Reporting

During the Library Improvements Project, the Board of Trustees reported annually to the City Council on the use of bond proceeds. So long as the Refunding General Obligation Bonds, Series B are outstanding, the City of Berkeley will submit continuing disclosures to the Municipal Securities Rulemaking Board (MSRB). This reporting will be done annually on the Electronic Municipal Market Access (EMMA) system operated by the MSRB.



CONCLUSION

Based on our independent verification, the City of Berkeley, California 2020 Refunding General Obligation Bonds, Series B (2008 Election Measure FF: Neighborhood Branch Library Improvements Project) (Green Bonds) conform, in all material respects, with the Green Bond Principles (2018). It is the opinion of Kestrel Verifiers that these bonds are in complete alignment with the Green Buildings category of the Green Bond Principles. The Library Improvements Project financed by the refunded bonds follows efficient and responsible building design that will conserve natural resources and help the State of California meet its exemplary greenhouse gas reduction goals.

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 (May 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.