



VERIFIER'S REPORT

**California Infrastructure and Economic Development Bank Lease Revenue Bonds
(California State Teachers' Retirement System Headquarters Expansion),
Series 2019 (Green Bonds) – "Series 2019 Green Bonds"**



Prepared for: California State Teachers' Retirement System (CalSTRS)

September 30, 2019

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California Infrastructure and Economic Development Bank Lease Revenue Bonds (California State Teachers' Retirement System Headquarters Expansion), Series 2019 (Green Bonds)

(“Series 2019 Green Bonds”)

Borrower: California State Teachers' Retirement System
Project: Headquarters Expansion Project
Green Category: Low Carbon Buildings
Location: 200 Waterfront Place, City of West Sacramento, CA, USA
Financing value: Approximately \$339.8 million*
Evaluation date: September 30, 2019

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* The financing value is subject to change until the Guaranteed Maximum Price is finalized and the bonds are sold. However, the total amount financed shall not exceed \$350 million.

TRANSACTION OVERVIEW

California Infrastructure and Economic Development Bank, a conduit issuer, plans to issue approximately \$339.8 million in California Infrastructure and Economic Development Bank Lease Revenue Bonds (California State Teachers' Retirement System Headquarters Expansion), Series 2019 (Green Bonds) ("Series 2019 Green Bonds") for California State Teachers' Retirement System (CalSTRS), the conduit borrower.

CalSTRS proposes financing the Headquarters Expansion Project with certified Climate Bonds. The innovative project design will expand the existing CalSTRS headquarters with a new, state-of-the-art structure for employee offices, parking, and public amenities. CalSTRS is demonstrating green leadership with the Zero Net Energy design—the building is designed to consume no more energy than is produced or sourced from a clean renewable resource over the course of a year. The following environmental standards were applied to the design of the project:

- Leadership in Energy and Environmental Design (LEED) standards issued by the U.S. Green Building Council,
- WELL Building Standard version 2 (WELL) established by the International WELL Building Institute, and
- Living Building Challenge Petal Certification (LBC) issued by the International Living Future Institute.

The building design incorporates a lobby, childcare center, café, general purpose rooms for use by employees and the public, electric vehicle parking and a pedestrian skybridge to connect the new building to the existing CalSTRS' headquarters in West Sacramento, California. The project also includes significant on-site renewable energy with a 6.7 megawatt (MW) solar array. Energy efficient mechanical, electrical and plumbing systems will minimize maintenance and operational costs for the building.

The Headquarters Expansion Project will result in 260,000 square feet of new office space for employees and a 250,000 square foot parking structure which extends the existing garage to provide approximately 450 additional parking spaces. This, coupled with photovoltaic solar arrays and efficient building systems, creates a total CO₂ emission reduction of 56% over a baseline building and an 81% reduction compared to baseline electricity use.

This Verifier's Report reflects our view of the CalSTRS' project and financing, allocation and oversight, and conformance of the bonds with the Climate Bonds Standard (V2.1) and Low Carbon Buildings sector criteria.

In our opinion, the Series 2019 Green Bonds to be issued by CalSTRS are aligned with the Climate Bonds Standard and Low Carbon Buildings criteria.

ABOUT THE BORROWER

CalSTRS is a California State government agency, located in West Sacramento, California, that provides retirement, disability and survivor benefits to over 960,000 educators.

The primary guiding principle of CalSTRS is to responsibly manage risk for the long-term financial strength of CalSTRS, to the benefit of members, stakeholders and the environment. The organization advances sustainability practices that promote long-term value creation, responsible investment strategy, stewardship of natural resources and engagement with stakeholders.

CalSTRS has designed the Headquarters Expansion Project to support a low-carbon trajectory by including energy efficient lighting, water savings technologies, on-site renewable energy and many other sustainable features.

CalSTRS is pursuing Leadership in Energy and Environmental Design (LEED) certification as well as other green certifications for this building. The Headquarters Expansion Project will also include onsite renewable energy to assist CalSTRS in achieving a zero net energy facility. This demonstrates leadership in transitioning to a carbon neutral future.

CalSTRS plans to use the proceeds exclusively to finance the Headquarters Expansion Project and associated capitalized interest and financing costs.

ABOUT THE VERIFICATION ENGAGEMENT

CalSTRS has engaged Kestrel Verifiers to provide a pre-issuance, independent verification on the alignment of the Series 2019 Green Bonds with the Climate Bonds Standard and Certification Scheme—which includes the Climate Bonds Standard (V2.1) and Low Carbon Buildings sector criteria. The Climate Bonds Initiative (the “CBI”) administers the standard and sector criteria. Additionally, Kestrel Verifiers has examined alignment of the Series 2019 Green Bonds to the United Nations Sustainable Development Goals (“SDGs”).

Kestrel Verifiers is an Approved Verifier for Climate Bonds, as per the CBI. The Kestrel review team included a Low Carbon Buildings specialist. We performed a Reasonable Assurance engagement for CalSTRS’ Series 2019 Green Bonds to provide an independent verification as to whether the subject matter meets, in all material respects, the relevant criteria, defined later.

For this engagement, Kestrel Verifiers reviewed CalSTRS’ green bond framework, examined public and non-public information, and interviewed members of CalSTRS’ management and finance teams. Our goal was to understand sustainability impacts of the business, the planned use of proceeds, procedures for management of proceeds, and plans and practices for reporting. This document contains Kestrel’s opinion of the Series 2019 Green Bonds.

CalSTRS’ Responsibilities for Climate Bonds Verification

CalSTRS is responsible for providing detailed information and documents relating to:

- the details of the Headquarters Expansion Project and the corresponding selection process;
- record keeping and internal controls;
- how the project meets the criteria; and
- reporting and procedures for reporting on the Series 2019 Green Bonds.

Verifier’s Responsibilities

Kestrel Verifiers’ responsibilities for confirming alignment of the Series 2019 Green Bonds with the Climate Bonds Standard and Low Carbon Buildings criteria include:

- assess and certify CalSTRS’ internal processes and controls, including selection process for projects and assets, internal tracking of proceeds, and the allocation system for funds;
- assess policies and procedures established by CalSTRS, including reporting;
- assess the readiness of CalSTRS to conform to the Climate Bonds Standard (V2.1) and Low Carbon Buildings sector criteria; and
- express a Reasonable Assurance conclusion.

Relevant Climate Bonds Sector Criteria and Other Standards

The Series 2019 Green Bonds align with the Climate Bond Initiative’s Climate Bonds Standard (V2.1) and Low Carbon Buildings criteria.



Independence and Quality Control

Kestrel Verifiers is providing an independent opinion on the conformance of these Series 2019 Green Bonds with the Low Carbon Buildings criteria of the Climate Bonds Standard. For almost twenty years, Kestrel has worked at the intersection of finance and sustainability, helping clients to advance water, energy and environmental projects. Kestrel relies on our experienced team of dedicated professionals, our qualified judgment and our attention to detail to ensure the highest quality assessment and verification. Our assurance process incorporates the robust knowledge and skills of our technical team, financial team and assurance team operating together to deliver the required competencies to assess how the bonds conform to the Climate Bonds Standard.

Assurance Approach

Kestrel Verifiers’ responsibility was to conduct a Reasonable Assurance engagement to determine whether the CalSTRS’ Series 2019 Green Bonds met, in all material respects, the requirements of the Climate Bonds Standard. Our reasonable assurance was conducted in accordance with the Climate Bonds Standard (V2.1) and the *International Standard on Assurance Engagements (ISAE) 3000: Assurance Engagements Other than Audits or Reviews of Historical Financial Information*.

Reasonable Assurance engagements offer a high level of scrutiny over the bond-financed activities and allow the Verifier to positively conclude whether those activities meet the specified criteria.

Kestrel Verifiers has relied on information provided by CalSTRS. There are inherent limitations in performing assurance, and fraud, error or non-compliance may occur and not be detected. Kestrel Verifiers is not responsible or liable for any opinions, findings or conclusions that are incorrect. Our assurance is limited to CalSTRS’ policies and procedures in place as of September 30, 2019, ahead of the issuance of the Series 2019 Green Bonds. The distribution and use of this assurance report are at the discretion of CalSTRS. Kestrel Verifiers does not accept or assume any responsibility for distribution to any other person or organization.

CONFORMANCE WITH THE CLIMATE BONDS STANDARD

Project Description

CalSTRS’ first green bond is the *California Infrastructure and Economic Development Bank Lease Revenue Bonds (California State Teachers' Retirement System Headquarters Expansion), Series 2019 (Green Bonds)*, herein referred to as the “Series 2019 Green Bonds.” The Series 2019 Green Bonds will finance CalSTRS’ Headquarters Expansion Project.

CalSTRS’ existing headquarters, located in the City of West Sacramento, California, symbolizes CalSTRS’ promise to sustainability. The 17-story, 409,000 square foot building has maintained its LEED Platinum certification since 2011. LEED, or Leadership in Energy and Environmental Design, is the most widely used green building rating system in the world and Platinum is the highest LEED rating level a project can

achieve. CalSTRS' headquarters is surrounded by native and adaptive landscaping and diverts more than 95 percent of its waste from the landfill each month.

The headquarters will be expanded with the Headquarters Expansion Project, a multi-benefit project that includes a new, state-of-the-art green building which will provide a healthy working environment for over 1,200 employees. The Series 2019 Green Bonds will finance the approximately 510,000 square foot structure, which includes five levels of office space (260,000 square feet) atop five levels of parking (450 additional spaces). The project includes a lobby, childcare center, café, general purpose rooms for use by employees and the public, electric vehicle parking and a pedestrian skybridge to connect the new building to the existing CalSTRS' headquarters. The project also includes on-site renewable energy, which will provide more efficient mechanical, electrical and plumbing systems while minimizing building maintenance and operational costs.

The project will be located on a 1.1-acre parcel adjacent to the existing headquarters. CalSTRS has performed extensive planning to research micro and regional climates, source regional materials, and optimize operational performance. With CalSTRS' vision and guiding beliefs in mind, the Headquarters Expansion Project is designed to support green building practices, including green technologies, sustainable construction methods, energy conservation and whole-building integrated energy efficiency measures in addition to employee wellness goals. The following environmental standards were applied to the design of the project:

- Leadership in Energy and Environmental Design (LEED) standards issued by the U.S. Green Building Council,
- WELL Building Standard version 2 (WELL) established by the International WELL Building Institute, and
- Living Building Challenge Petal Certification (LBC) issued by the International Living Future Institute.

CalSTRS anticipates the new building will achieve LEED Platinum, WELL Gold, and LBC Materials, Beauty and Place Petals certifications.

By incorporating new technologies, reducing environmental impacts and generating as much renewable energy on-site as is feasible, CalSTRS seeks to operate a Zero Net Energy (ZNE) building. The building is designed to consume no more energy than is produced or sourced from a clean renewable resource over the course of a year.

The Series 2019 Green Bonds will finance approximately \$339.8 million in a new construction project fund, capitalized interest and financing costs, as shown in Table 1.

Table 1. Summary of Sources of Funds

| 2019 Project Financing Component | Cost |
|----------------------------------|-----------------------|
| Par Amount | \$ 277,735,000 |
| Premium | \$ 62,086,639 |
| Total | \$ 339,821,639 |

| 2019 Project Component | Cost |
|------------------------|-----------------------|
| Project Fund | \$ 300,000,000 |
| Capitalized Interest | \$ 37,723,467 |
| Issuance Costs | \$ 2,098,172 |
| Total | \$ 339,821,639 |

The project fund covers hard costs and soft costs related to construction. Hard costs include site work, building construction, tenant improvements and general conditions and liability insurance. Soft costs include architect and engineering fees, pre-development consultant fees, development management fees, test, inspection and permit fees, technology equipment, furniture, fixtures, and other equipment costs and moving expenses.

CalSTRS has entered into an agreement with DPR Construction (the “Construction Contractor”) to build the project. The Construction Contractor has significant experience in constructing large-scale projects, including office buildings, hospitals and medical facilities, hotels and manufacturing facilities. CalSTRS has retained the services of Ridge Capital, Inc. (the “Construction Monitor”) to provide oversight services for project design, local and State jurisdictional approvals, and the construction process. The Construction Monitor will verify work progress and quality, resolve issues, and monitor the construction budget. CalSTRS has also established an internal Project Governance Plan to guide decision-making and reporting for the project.

Sector Criteria

The project is an eligible asset (“Commercial Building”) per the Climate Bonds Standard Low Carbon Buildings Criteria:

| Eligible asset types | Eligible use of proceeds | Mitigation | Adaptation & resilience |
|--|---|------------|-------------------------|
| Commercial Buildings - a building or portfolio of buildings where more than half of the floor area is used for commercial purposes, including but not limited to the following sub-categories of commercial buildings: Offices Schools & Campuses Shopping centres & retail | Origination or refinancing of loans or mortgages, including portfolios | ● | ○ |
| | Capital costs of performance upgrades such as building envelope retrofits, lighting upgrades, appliance & equipment upgrades, smart metering, etc | ● | ○ |
| | Operating expense of ongoing maintenance, where increased energy efficiency and decreased carbon emissions are materially significant. | ● | ○ |

Figure 1. Eligible Asset Types

Source: Table I, Climate Bonds Standard - Buildings Criteria, September 2018

The project aligns with the Low Carbon Buildings “Absolute Performance Threshold Pathway” to certification via the “Trajectory Method.” Commercial Buildings can be assessed for conformance to the sector criteria using either of two methods: the “Absolute Performance Threshold” or the “Relative Performance Improvement,” as shown in Figure 2.

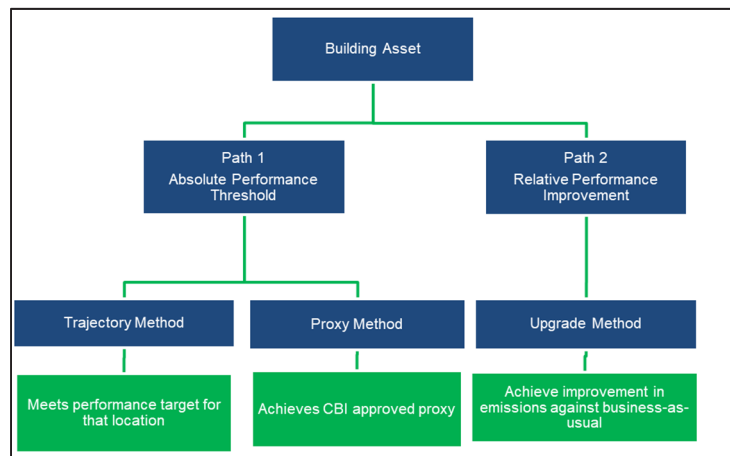


Figure 2. Certification Pathways for Bond Issuers

Source: Diagram I, Climate Bonds Standard - Buildings Criteria, September 2018

For CalSTRS, the “performance target” is set by CBI’s Commercial CO₂ Target Calculator for Sacramento. This tool calculates the “emissions performance target” an issuer in Sacramento must satisfy. The calculation is based on an emissions performance trajectory that begins with the “initial baseline emissions performance” of the top 15% of buildings in the city in 2019, and declines to zero carbon emissions in 2050. See Figure 3.

In 2019, CBI determined the initial baseline emissions performance of the top 15% of buildings in Sacramento to be 19.1 kilograms of carbon dioxide emissions per square meter (19.1 kg CO₂-e/sqm). The blue line shown in Figure 3 illustrates the Zero Carbon Trajectory, a linear pathway from this baseline to zero emissions 2050, a reduction of approximately 0.62 kg CO₂-e/sqm each year.

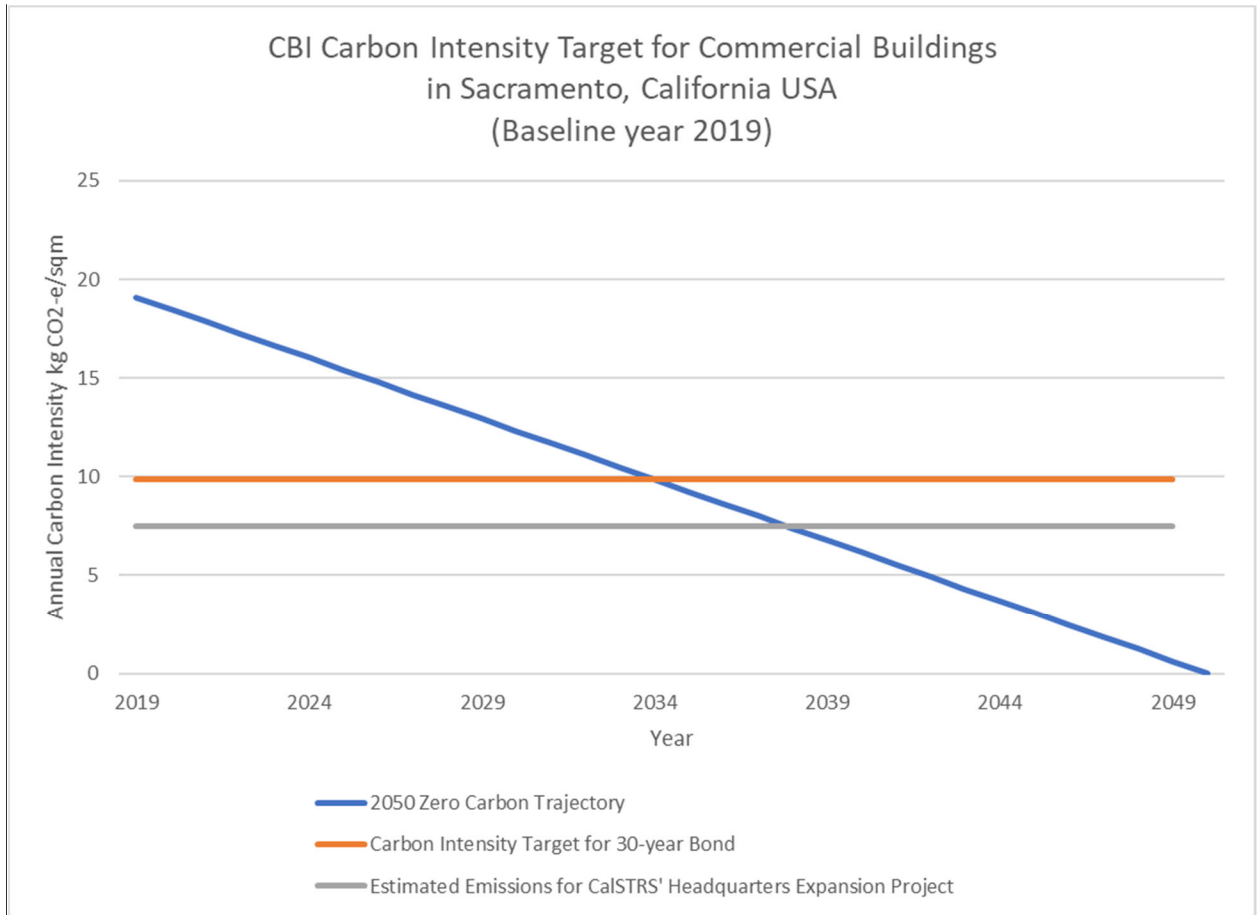


Figure 3. Carbon Intensity Target
Source: Climate Bonds Initiative, August 2019

For a 30-year bond issued in 2019, this corresponds to an annual carbon intensity target of approximately 9.9 kg CO₂-e/sqm, as illustrated in orange in Figure 3.

Over the 30-year bond term, CalSTRS estimates total emissions of the 510,000 square-foot Headquarters Expansion Project to be roughly 10,653 metric tons CO₂-e. Figure 4 shows emissions sources. This converts to a total emissions of 224.8 kg CO₂-e/sqm, or roughly 7.49 kg CO₂-e/sqm each year. Because estimated emissions are below the target for the life of the bond, CalSTRS’ Headquarters Expansion Project satisfies the Trajectory Method of the Climate Bonds Standard Buildings Criteria, described earlier in Figure 2.

| CO ₂ E SOURCES | 1 YEAR | 30 YEARS |
|---------------------------|--------|----------|
| Electricity (Mt) | 106 | 3,180 |
| Natural Gas (Mt) | 220 | 6,601 |
| Refrigerants (Mt) (LEED) | 18 | 531 |
| Refrigerants (Mt) (EPA) | 29 | 872 |
| Total | 355 | 10,653 |

Figure 4. Estimated Emissions for the Headquarters Expansion Project
Source: CalSTRS Headquarters Energy Performance Analysis - PAE Engineers, March 2019

The solar electric generation system is comprised of five photovoltaic arrays, which are anticipated to be located on roofs of the new and existing buildings, on canopies over walkways in front of the buildings, and on the parking garage. The combined output of these systems will reduce the building's total electricity consumption by 92% and 73% of the total energy use annually. Annually, five photovoltaic solar arrays will provide a 51% reduction in overall building emissions. CalSTRS' Headquarters Expansion Project is targeting net zero source energy operation per the California definition of Net Zero Energy. The LEED Platinum strategies for Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality is a holistic approach to reducing the environmental impact of development.

Additional Information

The State of California leads the nation in development and implementation of sustainability policies related to greenhouse gas emissions, energy, water, transportation, and green operations. California leads by example by implementing these policies on its own facilities and operations, often years in advance of requiring measures of the general public. This helps the State ensure that these policies can be achieved, have positive results, and that tools, mechanisms and resources are developed to help support widespread implementation.

The State of California intends to lead by example, while curbing greenhouse gas emissions and moving State facilities toward Zero Net Energy (ZNE), designing and building efficient State buildings that produce as much clean, renewable energy as consumed annually.

Executive Order B-18-12 requires the following actions to reduce the environmental impact of State facilities on climate change:

- All new State buildings and major renovations beginning design after 2025 shall be constructed as Zero Net Energy facilities.
- State agencies shall also take measures toward achieving Zero Net Energy for 50% of the square footage of existing State-owned building area by 2025.
- All new State buildings, major renovations, and build-to-suit leases beginning design after October 23, 2017, shall be designed and built following cost-effective energy efficiency strategies for achieving ZNE.
- Renewable energy generation shall be added to State facilities either on-site, and/or off-site to achieve Executive Order B-18-12 targets by following renewable energy generation prioritization and strategies identified below.

Alignment with United Nations Sustainable Development Goals

In a related area, and recognized by CalSTRS, 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). CalSTRS’ operations, including the Series 2019 Green Bonds, align with two of the SDGs:



SDG 9: Industry, Innovation and Infrastructure, which includes targets to upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.



SDG 12: Responsible Consumption and Production, which includes targets to encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

Use of Proceeds

The Series 2019 Green Bonds will be used to finance the Headquarters Expansion Project exclusively. The Headquarters Expansion Project is an eligible green project as defined by the Climate Bonds Initiative’s Standard and Certification Scheme (Low Carbon Buildings).

Project Evaluation and Selection

As an organization, CalSTRS is committed to advancing sustainability practices that promote long-term value creation, responsible investment strategy, stewardship of natural resources and stakeholder engagement. CalSTRS considers the global impact of its business practices in the use of natural resources within its own facilities and through the procurement of goods and services. These policies and practices are described in annual Sustainability Reports published by CalSTRS.

CalSTRS’ guiding beliefs associated with sustainability support the vision of reducing environmental impacts. The Headquarters Expansion Project meets this vision and subsequent criteria. The Climate Bonds Taxonomy indicates that low-carbon buildings that support a decarbonization trajectory of 2-degrees Celsius and/or are in-line with a zero-carbon building sector in 2050 are eligible project types. As the Headquarters Expansion Project is a Zero-Net-Energy commercial building, it meets this standard. CalSTRS has engaged Kestrel Verifiers, a Climate Bonds Initiative Approved Verifier, to provide an independent third-party verification that the bond meets the Climate Bonds Standard.

CalSTRS uses a transparent decision-making process to select capital projects for financing. Capital projects are identified and developed by the Facilities Planning and Development team, validated by professional consultants, and approved by the Teachers’ Retirement Board (“Board”). Projects are considered by the Board at an open meeting, and properly noticed in accordance with California’s Bagley-Keene Open Meeting Act. Project goals are identified based on organizational needs, financial constraints and core organizational beliefs, including environmental sustainability.

CalSTRS believes in transparency to both constituents and investors regarding the process for project evaluation and selection. It is part of CalSTRS’ approval process to ensure that all its financed activities comply with internal environmental and social directives. CalSTRS’ environmental and social policies can be found in the annual Sustainability Report at: <https://www.calstrs.com/sustainability-reports>

In addition to meeting CalSTRS’ long-term space needs, the Headquarters Expansion Project is being designed to meet the following objectives:

1. Support CalSTRS’ mission to secure the financial future and sustain the trust of California’s educators by completing the project within budgetary constraints with the purpose of enhancing services to members and employers by recruiting and retaining highly skilled staff.
2. Enhance CalSTRS’ status as an employer of choice by promoting collaboration, innovation and employee well-being through design solutions and technology applications.

3. Emphasize campus integrity, flexibility and design continuity while supporting long-term, optimal building performance.
4. Advance sustainability practices by designing a project that considers the global impact of our business practices in the use of natural resources within CalSTRS' facilities, including an effort to achieve a Zero Net Energy (ZNE) building as defined by the State of California, LEED-NC certification for construction, and operations and maintenance at the Platinum level and strategies and requirements set forth in the Living Building Challenge through the International Living Future Institute.

Management of Proceeds

CalSTRS' management of proceeds is in line with market best practices. Net proceeds will be tracked by CalSTRS' Finance team and 100% of funds will be allocated to fund the Headquarters Expansion Project, capitalized interest and financing costs.

Series 2019 Green Bonds proceeds are required to be 100% allocated to fund the Headquarters Expansion Project, capitalized interest, and financing costs. The proceeds will be expended as needed at bond closing, based on the decisions made in accordance with the process described above. Any major changes in the use of proceeds, while not likely, would require a similar approval process.

Bond proceeds will be held by a trustee and shall be applied, used and withdrawn only for the purposes authorized in Table 1 above. The trustee shall invest said proceeds in permitted investments as defined by CalSTRS, with capital preservation as the priority. Permitted investments as defined, are legal investments under the laws of the State and could include, but are not limited to:

1. Bonds or interest-bearing notes or obligations of the United States, or those for which the faith and credit of the United States are pledged for the payment of principal and interest;
2. Bills of exchange or time drafts drawn on and accepted by a commercial bank otherwise known as banker's acceptances, which are eligible for purchase by the Federal Reserve System;
3. Interest-bearing accounts in state or national banks or in state or federal savings and loan associations having principal offices in the State, the deposits of which shall be secured at all times and in the same manner as state moneys are by law required to be secured;
4. Deposits in the Pooled Money Investment Account of the State of California;
5. Repurchase agreements;
6. Investment agreements or other contractual arrangements with corporations, financial institutions or national associations within the United States; and
7. Money market funds.

Reporting

Continuing Disclosures

So long as the Series 2019 Green Bonds are outstanding, CalSTRS 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. CalSTRS will also voluntarily provide annual management confirmation that the use of proceeds of the Bonds is still in alignment with the Climate Bonds Standard.

Within 12 months of the bonds closing, Kestrel Verifiers will provide one post-issuance Update Report.

Impact Reporting

In 2012, California Governor Edmund J. Brown issued a sweeping executive order directing all State agencies, departments, and other State entities to reduce their grid energy use by 20 percent by 2018 (compared to a 2003 baseline). In addition to energy reduction goals, the executive order also called for a reduction of 20 percent of state water use by 2020 (compared to a 2010 baseline). Progress toward those goals is tracked at this website: <https://green.ca.gov/buildings/>

As part of a State agency, CalSTRS complies with this order and reports on its existing facilities. For the Headquarters Expansion Project, CalSTRS will report annually on energy use, water use, total greenhouse gas emissions, energy grid intensity and total energy generated from renewable sources.

These reports will be available at: <https://green.ca.gov/buildings/department/CALSTRS#chartanchor>.

In addition, CalSTRS prepares a voluntary, annual Sustainability Report, which is made available through its website: <https://www.calstrs.com/2017-18-sustainability-report>.

OPINION

Based on the Reasonable Assurance procedures we conducted, in our opinion, the CalSTRS' Series 2019 Green Bonds conform, in all material respects, with the Climate Bonds Standard, and the bond-financed activities are aligned with the Low Carbon Buildings sector criteria and the United Nations Sustainable Development Goals 9 and 12.

CalSTRS supports the vision of sustainability practices with the Headquarters Expansion, which exceeds baseline emissions criteria. By including onsite renewable energy to assist CalSTRS in achieving a zero net energy facility, CalSTRS has taken additional steps to show leadership in this space.

It is the opinion of Kestrel Verifiers that CalSTRS' Series 2019 Green Bonds are in complete alignment with the Low Carbon Buildings criteria of the Climate Bonds Standard, and that CalSTRS is demonstrating leadership toward a zero-carbon future with the Headquarters Expansion.

Sincerely,



Monica Reid, CEO and Verification Team Leader
Kestrel Verifiers
September 30, 2019

About Kestrel Verifiers

To public and corporate finance teams who are preparing green bonds, Kestrel is an Approved Verifier with direct and varied project experience in many sectors: green buildings, water, renewable energy, energy efficiency, pollution prevention and control, climate change adaptation, natural resources and land uses. As bespoke US municipal specialists, we strive to provide a personal, focused approach and dedicated support. We bring real-world experience, relationships and tools to efficiently verify and report on green bonds. Kestrel is a Woman-Owned Small Business and a certified Women's Business Enterprise.

For more information, visit www.kestrelverifiers.com

APPENDIX A.

Detailed List of Nominated Projects & Assets Reviewed in the Verification Engagement

1. CalSTRS' Headquarters Expansion Project

APPENDIX B.

Kestrel Verifiers' Procedures for Assessing Conformance with the Climate Bonds Standard (V3.0)

| CLIMATE BONDS STANDARD | KESTREL PROCEDURES |
|--|---|
| 1. Use of Proceeds | |
| 1.1 Project Documentation | Review documentation of the Nominated Projects through basis of design and project documentation |
| 1.2 Project Nomination | Review Board meeting minutes and ensure project is not involved in any other Certified Climate Bonds |
| 1.3 Valuation | Review net proceeds of the Bond to ensure they are not greater than the value of the project |
| 2. Process for Project Evaluation and Selection | |
| 2.1 Decision Making Process | Review documents pertaining to CalSTRS' sustainability practices and climate-related objectives of the bond, review of technical details pertinent to eligibility criteria |
| 2.2 Eligibility | Review additional documentation CalSTRS provided including strategic directions and standards. Review CalSTRS' Green Bond Framework, and confirm its coverage for the Nominated Projects. |
| 2.3 Taxonomy & Technical Criteria | Obtain "Commercial CO2 Target Calculator" for Sacramento, California, from CBI. Test project to determine that it meets the minimum technical requirements. |
| 3. Management of Proceeds | |
| 3.1 Documentation of Processes & Procedures | Confirm that policies and procedures are in place for tracking bond proceeds |
| 3.1.1 Tracking of Proceeds | Review the allocation of funds to ensure they can be tracked against nominated projects |
| 3.1.2 Managing of Unallocated Proceeds | Not Applicable – 100% of funds to be allocated to project costs |
| 3.1.3 Earmarking Funds | Confirm that bond proceeds are earmarked for this project |
| 4. Reporting | |
| 4.1 Bond Disclosure Documentation | Review final bond disclosure documentation |
| 4.1.1 Climate Objectives | Review final bond disclosure documentation and objectives |
| 4.1.2 Investment Areas of Nominated Projects | In final bond disclosure, affirm that project falls under Low Carbon Building criteria as in the CBI taxonomy Clause 9.1 |
| 4.1.3 Portion Re-financed | Not Applicable |
| 4.1.4 Temporary Investment Instruments | Review final bond disclosure documentation |
| 4.1.5 Verifier | Verification done by Kestrel Verifiers and noted in disclosure documentation |
| 4.1.6 Update Reports | Confirm intended approach to use of proceeds reporting and impact reporting. Review previous sustainability reports. |