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# Post-Issuance Verification Report

## ISSUER

California Educational Facilities Authority

## FRAMEWORK

Stanford University Series V-2 Green Bond Framework (March 31, 2021)

## STANDARD AND SECTOR CRITERIA

**Climate Bonds Standard** ▪ Low Carbon Buildings  
Version 3.0

## TYPE OF ENGAGEMENT

Post-Issuance Verification

## ENGAGEMENT PERIOD

February 2023

## BONDS ISSUED UNDER FRAMEWORK

Revenue Bonds (Stanford University) Series V-2 (Sustainability Bonds – Climate Bond Certified)

## PAR

\$300,400,000

## SCOPE AND OBJECTIVES

In April 2021, the California Educational Facilities Authority issued a series of Certified Climate Bonds on behalf of Stanford University ("Stanford" or the "University"). The Revenue Bonds (Stanford University) Series V-2 (Sustainability Bonds – Climate Bond Certified) ("Series V-2 Bonds") financed capital improvements which supported the University's emission reduction goals. The bonds received Pre-Issuance Certification by the Climate Bonds Initiative ("CBI") Standard Board in 2021 under the *Low Carbon Buildings* Sector Criteria. The Climate Bonds Standard (Version 3.0) and Certification Scheme requires a Post-Issuance Verification Report within 24 months of issuance. Stanford engaged Kestrel Verifiers in February 2023 to review the Nominated Projects and Assets financed by the designated bonds, and provide an assessment as to whether the projects conform with the Climate Bonds Standard Post-Issuance Requirements. In our opinion, the Series V-2 Bonds are aligned with the internationally accepted Climate Bonds Standard and the *Low Carbon Buildings* Sector Criteria.

This Post-Issuance Verification Report reflects Kestrel Verifiers' view of the University's projects and financing, allocation and oversight, and conformance of the Series V-2 Bonds with the Climate Bonds Standard (Version 3.0) and *Low Carbon Buildings* Sector Criteria. In our opinion, the Series V-2 Bonds continue to be aligned with the Climate Bonds Standard, the *Low Carbon Buildings* Sector Criteria, and the University's goal of net zero greenhouse gas emissions for Scope 1 and 2 by 2030.

## CONFORMANCE WITH CLIMATE BONDS STANDARD AND SECTOR CRITERIA

In March 2021, Stanford engaged Kestrel Verifiers to provide an independent verification on the alignment of the Series V-2 Bonds with the Climate Bonds Standard (Version 3.0) and Certification Scheme, and the *Low Carbon Buildings* Sector Criteria. CBI administers the Standard and Sector Criteria.

Kestrel Verifiers is a Climate Bonds Initiative Approved Verifier. The Kestrel Verification Team included environmental scientists, social scientists and financial professionals. We performed a Reasonable Assurance engagement to independently verify that the bonds met, in all material respects, relevant criteria.

Prior to bond issuance, Kestrel Verifiers reviewed Stanford's bond disclosure, Green Bond Framework, disclosures and documentation on the allocation and uses of bond proceeds, as well as relevant plans and alignment to Stanford's overarching climate action objectives. We examined public and non-public information and interviewed key staff at Stanford. Our goal was to understand the actual use of proceeds, execution of procedures for managing proceeds, ongoing reporting practices, and plans for future reporting on the Series V-2 Bonds.

## **Assurance Approach**

Post-issuance, Kestrel Verifiers' responsibility was to conduct a Reasonable Assurance engagement to determine whether the Series V-2 Bonds met requirements of the Climate Bonds Standard and were used as intended. Our Reasonable Assurance engagement was conducted in accordance with the Climate Bonds Standard (Version 3.0) and the *International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information*. Information relating to this engagement and the Verifier's and Issuer's Responsibilities, and Independence and Quality Control, are available in Appendix A and B.

Kestrel Verifiers has relied on information provided by the University. 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 within the information provided by the University that are incorrect. Our assurance is limited to University policies and procedures in place as of February 2023. The distribution and use of this verification report are at the sole discretion of the University. Kestrel Verifiers does not accept or assume any responsibility for distribution to any other person or organization.

## **Use of Proceeds and Conformance with Sector Criteria**

The California Educational Facilities Authority issued the Series V-2 Bonds in the amount of \$300,400,000 to finance and refinance capital improvement projects on the Stanford University campus. These projects support the continued growth of the University and enable the University to reach the goal of zero greenhouse gas emissions by 2030.

## **Updates to Nominated Project List**

Since the issuance of the Series V-2 Bonds, the University has experienced some project scheduling delays. As a result, and to manage cash flow for high priority capital projects, the University has removed certain projects from the original list of projects nominated to receive bond proceeds (Appendix C) and replaced these with other projects. Kestrel has reviewed the updated project list (Appendix D) and has determined that all Series V-2 Bond projects, including the substituted projects, continue to be aligned with the Climate Bonds Standard (Version 3.0) and *Low Carbon Buildings* Criteria (Version 1.0).

The Series V-2 Bond proceeds will no longer finance the following projects, which have been removed from the original list of nominated projects:

- Neuro/ChEM-H Research Complex, which was completed in 2019 and intended to be refinanced using Series V-2 Bond proceeds
- Minor residential building renovations and additions

New eligible projects are as follows:

- Undergraduate, graduate, staff and faculty housing construction and renovations, which will meet green building standards
- Safety and communications system upgrades
- Infrastructure improvements which contribute to the transition to a net zero campus
- Utility upgrades to support increased electrification of the campus

All bond proceeds are expected to be spent on or before year 2024.

## **Progress of Stanford University Capital Projects**

As of February 2023, in addition to the original refinancing of \$124,115,000, approximately \$189,800,000 of bond proceeds have been spent on eligible projects. The University expects to spend approximately

\$110,000,000 through the end of 2024 on remaining projects, of which approximately \$61,100,000 will utilize proceeds from the Series V-2 Bonds. See Appendix D for more details.

High-impact projects that have been completed or are near completion include:

- **Construction of Green Buildings:** Several of the bond-financed projects comply with robust green building standards, including the Santa Clara County Green Building Ordinance and California's CALGreen Tier 1 energy efficient building standards. Facilities with completed construction include the Center for Academic Medicine, Escondido Village Graduate Residences, and Middle Plaza Faculty and Staff housing.
- **Stanford Energy System Innovations ("SESI"):** A portion of the Series V-2 Bond proceeds financed the Chiller Plant Expansion. This is a component of the SESI initiative to replace the natural gas cogeneration plant with a more efficient Central Energy Facility that incorporates energy sourced from heat recovery systems and a renewable energy portfolio. The project expands chilled water capacity with the addition of four new 3,000-ton chillers at the Central Energy Facility and incorporates redundancy into the system. This project supports planned campus growth and aims to reduce the number of curtailment days during heat waves, thereby improving resilience. The Chiller Plant Expansion is expected to be completed in December 2023.

## Reporting Status

The University has provided information on the impacts of the Nominated Projects and Assets through an annual update report on its Department of Sustainability and Energy Management website [sustainability-year-in-review.stanford.edu/2021/](http://sustainability-year-in-review.stanford.edu/2021/). Stanford has also posted daily updates on the Chiller Plant's water capacity and curtailment status on the University website. In addition, Stanford has posted regular Audited Comprehensive Annual Financial Reports on the Electronic Municipal Market Access system. In 2022, Stanford renewed a Platinum rating through the Sustainability Tracking, Assessment & Rating System (STARS), administered by the Association for the Advancement of Sustainability in Higher Education (AASHE).

## BASIS FOR QUALIFICATION AND CONCLUSIONS

Based on the Reasonable Assurance procedures we have conducted, in our opinion, the Series V-2 Bonds continue to conform, in all material respects, with the post-issuance requirements of the Climate Bonds Standard, and bond-financed activities remain aligned with the *Low Carbon Buildings* Sector Criteria.

Sincerely,



Melissa Sherwood, Senior Verifier  
Kestrel Verifiers  
Hood River, Oregon, United States  
February 28, 2023

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## ABOUT KESTREL VERIFIERS



For 20 years Kestrel has been a trusted consultant in sustainable 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 certified Women's Business Enterprise.

For more information, visit [www.kestrelverifiers.com](http://www.kestrelverifiers.com)

## **DISCLAIMER**

This Post-Issuance Verification Report ("Opinion") aims to explain how and why the discussed financing meets the CBI Climate Bonds Standard based on the information that was provided by the Stanford or made publicly available by the Stanford and relied upon by Kestrel only during the time of this engagement (February 2023), and only for purposes of providing this Opinion.

We have relied on information obtained from sources believed to be reliable, and assumed the information to be accurate and complete. However, Kestrel Verifiers can make no warranty, express or implied, nor can we guarantee the accuracy, comprehensive nature, merchantability, or fitness for a particular purpose of the information we were provided or obtained.

By providing this Opinion, Kestrel Verifiers is neither addressing nor certifying the credit risk, liquidity risk, market value risk or price volatility of the projects financed by the Climate Bonds. It was beyond Kestrel Verifiers' scope of work to review for regulatory compliance, and no surveys or site visits were conducted by us. Furthermore, we are not responsible for surveillance, monitoring, or implementation of the project, or use of proceeds.

The Opinion delivered by Kestrel Verifiers is for informational purposes only, is current as of the date of issuance, and does not address financial performance of the Climate Bonds or the effectiveness of allocation of its proceeds. This Opinion does not make any assessment of the creditworthiness of the Stanford, nor its ability to pay principal and interest when due. This Opinion does not address the suitability of a Bond as an investment, and contains no offer, solicitation, endorsement of the Bonds nor any recommendation to buy, sell or hold the Bonds. Kestrel Verifiers accepts no liability for direct, indirect, special, punitive, consequential or any other damages (including lost profits), for any 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 reserves the right to revoke or withdraw this Opinion at any time. Kestrel Verifiers certifies that there is no affiliation, involvement, financial or non-financial interest in the Stanford or the projects discussed. We are 100% independent. Language in the offering disclosure supersedes any language included in this Opinion.

## Appendix A.

### ASSURANCE PROCEDURES

| REQUIREMENT   | ASSURANCE PROCEDURES  |
|---|---|
| <b>5. Use of Proceeds</b>   |   |
| 5.1 Proceed Allocation  | Confirm allocation of the Net Proceeds of the bond to Nominated Projects.   |
| 5.2 Eligibility Criteria  | Confirm alignment of Nominated Projects with Sector Criteria and overarching climate objective of the bond.   |
| 5.3 Allocation Timeline   | Confirm allocation within 24 months of issuance or disclose timeline for allocation to Nominated Projects.  |
| 5.4 Multiple Nominations for Certified Debt Instruments (5.4.1-5.4.2) | Review Nominated Projects for previous nominations to other Certified Climate Debt Instruments, green bonds, or other designated instruments, including whether certain portions are being financed by separately designated Certified Debt Instruments and/or whether Nominated Projects have been refinanced by other Certified Debt Instruments or bonds under assessment have refinanced existing Certified Debt Instruments. |
| 5.5 Refinancing   | If applicable, confirm appropriate tracking of Net Proceeds for refinancing or refunding.   |
| 5.6 Proceed Management  | Confirm procedures for appropriate tracking of allocation of proceeds and tracking unallocated funds.   |
| 5.7 Valuation   | Review Net Proceeds of the bond to ensure they are not greater than the value of the Nominated Projects.  |
| 5.8 Nominated Project Modifications (5.8.1)                           | Confirm modifications or alterations to the Nominated Projects and determine requirement to engage a Verifier to perform a Pre-Issuance or Post-Issuance Verification as a result of the change.  |
| <b>6. Process for Project Evaluation and Selection</b>                |   |
| 6.1 Decision-making Process for Determining Eligibility (6.1.1-6.1.5) | Review continued documentation of decision-making process used to determine eligibility, including conformance with climate-related objectives, and review of alignment of the Nominated Projects with Sector Criteria.   |
| <b>7. Management of Proceeds</b>                                      |   |
| 7.1 Proceeds Held in Subaccount                                       | Confirm the allocation of proceeds to a subaccount, sub-portfolio, or alternative accounting to appropriately track allocation of proceeds to Nominated Projects.   |
| 7.2 Earmarking of Proceeds  | Review and confirm the earmarking process to track flow of funds and uses of proceeds.  |
| 7.3 Temporary Investment Instruments (7.3.1-7.3.3)                    | Review management of unallocated proceeds, including temporary investments, and confirm non-contamination of proceeds.  |
| <b>8. Reporting</b>   |   |
| 8.1 Reporting Approach (8.1.2-8.1.3)                                  | Confirm disclosure and execution of procedures to provide Update Reports and/or procedures to undertake periodic Assurance Engagements during term of the bond to reaffirm conformance with the Climate Bonds Standard. Confirm availability of the Update Reports for investors and reporting in case of material developments.  |

## Appendix B. RESPONSIBILITIES AND QUALITY CONTROL

### Verifier's Responsibilities

Kestrel Verifiers' responsibilities for confirming alignment of the Series V-2 Bonds with the Climate Bonds Post-Issuance Verification Requirements include:

- Assess and certify the University's 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 the University for reporting;
- Assess the readiness of the University to meet and continue to meet the Climate Bonds Standard (Version 3.0) and *Low Carbon Buildings* Sector Criteria; and
- Express a Reasonable Assurance conclusion.

### Issuer's Responsibilities

Issuer was responsible for providing detailed information and documents relating to:

- The details of the Nominated Projects and Assets and the project selection process;
- Maintaining adequate records and internal controls designed to support the Climate Bond Post-Issuance Certification process; and
- The collection, preparation, and presentation of the subject matter in accordance with the Climate Bonds Standard and Criteria.

### Independence and Quality Control

Kestrel Verifiers provides green, social and sustainability bonds advisory services for corporate and public finance issuers. The Kestrel Verification Team is committed to providing robust, transparent, and accurate verifications. For over 20 years Kestrel has been a trusted advisor to state and local governments, nonprofits, and corporations. Kestrel certifies that there is no affiliation, involvement, financial or non-financial interest in the issuer or the projects discussed. Accredited as an Approved Verifier by the Climate Bonds Initiative, Kestrel is qualified to evaluate bonds against the Climate Bonds Initiative Standards and Criteria.

## Appendix C. ORIGINAL NOMINATED PROJECTS

**Middle Plaza:** Located along El Camino Real in Menlo Park, Middle Plaza is a mixed-use development which will provide 215 units for faculty and staff housing. The location has nearby transit options and was designed with bicycle and pedestrian pathways. The development is expected to meet LEED Gold equivalency. The project is expected to be completed in summer 2022.

**Center for Academic Medicine:** This newly constructed building will be part of the Stanford School of Medicine and will house clinical faculty, computational researchers, departmental leadership, and consolidate several administrative offices.

**Bonair Replacement Building:** This building will house Land, Buildings & Real Estate (LBRE) operations including offices, shops, warehouse storage, a loading dock, and a small classroom. The building will incorporate technologies for maximizing energy efficiency such as automation of lighting and HVAC controls. By consolidating the needs of multiple teams, the building will reduce overall square footage needs. The building also supports a motor pool plan that reduces the number of overall vehicles, increases the number of electric vehicles, and expands the electric scooter and bike pool. Construction is expected to be completed in 2023.

**Escondido Village Graduate Residences:** The four residence buildings at Escondido have rooms for 2,400 graduate students with space totaling 1.8 million square feet. The energy use intensity is expected to be less than similar residence halls with air conditioning, partially due to targeted strategies that reduce lighting and equipment plug loads from residents.

**Neuro/ChEM-H:** Completed in 2019, the new research complex co-located Stanford Neurosciences Institute and Stanford ChEM-H and host more than 40 laboratories, core research facilities, and collaborative spaces. Energy management features include background ventilation setback, recycled air in lab ventilation, improved roof and wall insulation, high performance window glazing and shades, and a 4-pipe distributed heating and cooling system.

**BioMedical Innovations Building 1:** Completed in 2019, the BioMedical Innovations Building 1 is the first in a series of buildings constructed to replace outdated laboratory and research facilities. Energy management features on this building include an innovative HVAC system that reduces peak energy consumption by over 50%, exhaust air heat recovery, efficient lighting, and high performance window glazing and shades.

**Maintenance and Capital Improvements:** Projects include chilled water line expansion, Americans with Disabilities Act (ADA) accessibility upgrades, seismic upgrades, electrical conduit improvements, alarm upgrades, and other improvements.

## Appendix D.

### BUDGET & DETAILS OF UPDATED PROJECT LIST

| No. | Project Name  | Original/<br>Removed/<br>New Project | Project Description  | Project<br>Budget<br>(\$ M) | Bond<br>Proceeds<br>Spent as of<br>Feb 2023<br>(\$ M) | Anticipated<br>Spending<br>Through<br>2023<br>(\$ M) |
|-----|---|--------------------------------------|--|-----------------------------|---|--|
| 1   | Middle Plaza at 500 El Camino (Residential)   | Original                             | See Appendix C   | \$52.8                      | \$52.8  | -  |
| 2   | Central Energy Facility Plant Expansion   | Original                             | See Appendix C   | \$57.8                      | \$47.8  | \$10.0   |
| 3   | Center for Academic Medicine (CAM1)   | Original                             | See Appendix C   | \$37.7                      | \$37.7  | -  |
| 4   | Biomedical Innovation Building 1  | Original                             | See Appendix C   | \$2.3                       | \$2.3   | -  |
| 5   | Escondido Village Graduate Residences & Parking Garage                                | Original                             | See Appendix C   | \$20.3                      | \$20.3  | -  |
| 6   | Bonair Replacement Building   | Original                             | See Appendix C   | \$49.4                      | \$17.5  | \$31.9   |
| 7   | Anne T. and Robert M. Bass Research Building (formerly New Biology Research Building) | Original                             | See Appendix C   | \$0.3                       | \$0.3   | -  |
| 8   | Governor's Corner EPC/Suites/Cottages Renovation                                      | Removed                              | N/A  | -                           | -   | -  |
| 9   | Stanford ChEM-H and Stanford Neuro Sciences Building (aka ChEM-H)                     | Removed                              | N/A  | -                           | -   | -  |
| 10  | Lagunita Dining – Kitchen & Servery   | Removed                              | N/A  | -                           | -   | -  |
| 11  | 1215 Welch Road   | New                                  | New building construction, building renovations, and related utilities work.   | \$0.6                       | \$0.6   | -  |
| 12  | Various graduate, undergraduate, faculty and staff housing projects                   | New                                  | Housing projects include:<br>- EV Blackwelder & Quillen Renovations (graduate)<br>- Lasuen and row house upgrades (undergraduate)<br>- Jerry House Renovations (undergraduate)<br>- Escondido Village (graduate) | \$48.4                      | \$10.5  | \$37.9   |

| No.           | Project Name  | Original/<br>Removed/<br>New Project | Project Description   | Project<br>Budget<br>(\$ M) | Bond<br>Proceeds<br>Spent as of<br>Feb 2023<br>(\$ M) | Anticipated<br>Spending<br>Through<br>2023<br>(\$ M) |
|---------------|---|--------------------------------------|---|-----------------------------|---|--|
| 13            | Miscellaneous infrastructure, utility, safety and communications projects | New                                  | Projects include:<br>- East Campus Networking<br>- Reservoir 1 Pump Station & Piping Ph 2<br>- Escondido Village Lowrises Sewer Line Replacement<br>- Storm Drainage System Renewal<br>- Felt Lake Water Replacement<br>- Upper Mayfield Sewer Replacement<br>- JSW Chilled Water Replacement | \$14.1                      | -   | \$14.1   |
| 14            | Emergency Operations Center and Electronic Communications Hub Building    | New                                  | Renovations to essential services facility located at Bonair Corporation Yard.  | \$16.1                      | -   | \$16.1   |
| <b>TOTALS</b> |   |                                      |   | <b>\$299.8</b>              | <b>\$189.8</b>  | <b>\$110.0</b>                                       |