



## **STANFORD UNIVERSITY**

FMS Procurement  
485 Broadway  
Redwood City, California 94063

## **REQUEST FOR PROPOSAL**

### **Waste Characterization Study**

**Release Date: April 12, 2024**

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## **Waste Characterization Study RFP**

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### **Responses must be received by:**

Friday, June 7, 2024

5:00 PM

Note: Please submit proposals and all related attachments via email.

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## Introduction

### Background

Stanford University is a place of cutting-edge discovery, creativity, and innovation, and is dedicated to its founding mission of benefitting society through research and education. Stanford was founded in 1885 and first welcomed students in 1891. Stanford strives to work toward a sustainable future, accelerate the impact of its research with external partners, catalyze discoveries about us and our world, and educate students as global citizens.

Stanford is a leader in sustainability and was the first university in the United States to have earned the highest (Platinum) ranking from the premier sustainability consortium for higher education, the Association for Advancement of Sustainability in Higher Education (AASHE).

Stanford University is a large campus located in unincorporated Santa Clara and San Mateo County with roughly 8180 acres, 600 buildings and 36,000-day time population that houses 92% of its students on campus and has about 800 single family homes on campus.

Stanford has taken bold strides to ensure that its management of resources and waste are aligned with an overall ethos of stewardship and sustainability. Through expansive waste reduction, reuse, recycling, and composting programs, Stanford has significantly reduced the total amount of material it sends to landfill, from a high of 14,000 tons in 1998 to approximately 6750 tons in 2023, and a diversion rate of 68% based on tons. Stanford's Zero Waste efforts are currently led by Associate Director of Zero Waste Systems in the Office of Sustainability that includes operational, communications, data, behavior, and strategic professionals along with Zero Waste Fellows and Interns.

In May 2018, Stanford University announced zero waste (90% diversion or higher) by 2030 to be one of the university's operational goals. Stanford has developed a comprehensive Zero Waste Plan to achieve this goal. Stanford's Zero Waste Plan identified viable solutions that focus on waste reduction, reuse, recycling, and composting driving toward a closed-loop system. Recommended strategies include:

- a. Expanding interior centralized waste stations and removing desk-side containers.
- b. Converting from dual stream recycling to single stream recycling throughout the campus.
- c. Upgrading waste enclosures to enable more efficient service.
- d. Implementing procurement programs that encourage waste reduction.
- e. Implementing laboratory waste recycling programs.
- f. Enhancing food rescue and donation programs.

In 2019, Stanford engaged a consulting firm to conduct a waste characterization study spanning a sampling of academic and administrative buildings, cafes and mixed-use buildings, labs, and student housing. The study revealed a landfill stream that contained 36% compostable, 26% recyclable, and 21% other recoverable materials by weight.

### Purpose of RFP

1. Stanford seeks to contract with (1) qualified service provider to provide an annual comprehensive waste characterization study to understand what is in the landfill waste stream by amount, type, location, product, and brand to strategize our next steps to higher levels of waste reduction to meet our goal of 90% waste reduction by 2030.
  - a. Determine material categories relevant to a university campus environment and optimal to making programmatic decisions.
  - b. Gather waste composition data using a methodology that is statistically representative of the University's landfill waste stream.
  - c. Quantify by weight for each measured material type of the landfill waste stream.

- d. Determine demographic and seasonal variability and differentiate landfill waste composition from different sectors on campus.
  - e. Determine the types and quantities of potentially recoverable recyclable and compostable materials found in the landfill stream.
  - f. Determine the brands or vendors of products that are disposed of incorrectly at a high rate in the landfill stream.
  - g. Design the study so that it could be replicated each year with rationale.
  - h. See appendix for possible waste generation sources, material types, and brands.
2. Contractor will coordinate samples with the University's Waste Service Provider.
  3. This contract for waste characterization could be extended for further waste characterizations that support Stanford's Zero Waste Planning needs and possible development of new goals and strategies.

## Scope of Work

### Scope of Services

1. Design a study to get a cross representation of a multi-functional University's landfill waste stream that allows for year-to-year comparisons. This shall include material categories, a sampling plan and rationale for the waste composition analysis and consistent, accurate, and efficient sorting and characterization methods. The plan shall allow flexibility to accommodate evolving needs and be able to be adjusted, while keeping enough year-to-year consistency that annual results can be compared if additional waste characterizations are performed.
2. Conduct a detailed waste characterization of the landfill waste stream providing detailed quantitative analysis on amount, type, location, product, and brand of items/materials found.
3. Analyze data and develop visual interpretations of data that can be used in presentations and on websites.
4. Develop recommendations based on data on next steps to achieve Zero Waste Goal.

## Supplier's General Responsibilities and Requirements

### Outline of Supplier's Responsibilities

Supplier will supply:

1. Design of Study which will include a plan outlining specific actions and shall include material categories, sampling plan and rationale for the waste composition analysis and consistent, accurate, and efficient sorting and characterization methods. This plan shall include milestones, responsibilities, and resource requirements for the entire period.
  - a. Note material categories should be tied back to the categories used EPA's GHG and Emissions Factors Hub but may include subcategories that will impact zero waste program development decisions.  
<https://www.epa.gov/system/files/documents/2024-02/ghg-emission-factors-hub-2024.pdf>
2. Data
  - a. Statistically appropriate analyses and error-free calculations
  - b. Raw and analyzed data in spreadsheet format.
  - c. Pictures of audit and material categories.
  - d. Provide data and analyses that allow the University to readily use and/or adapt and apply the data to local conditions.
3. Report on the analysis of data.
  - a. Longitudinal Study Design includes our 2019 waste characterization study as the baseline that compares year to year comparisons.

- b. In Depth Landfill Analysis including a trend analysis that identifies changes in waste composition over the five-year period. Consider external factors (e.g., changes in campus population, seasonality, policies) influencing waste generation.
  - c. Provide Study summary including pictures of the sorting that was conducted, an overview of the project and major findings in a format that can be used in presentations and on websites.
  - d. GHG emissions analysis of material types.
    - i. Ensure GHG emissions quantification methodologies are consistent with those used at Stanford for annual waste emissions reporting.
4. Recommendations
    - a. Identify where the University is making continuous improvement.
    - b. Identify annual adjustments that could be made to reduce waste at the University.
    - c. Identify waste reduction strategies that should be employed including innovative and technological solutions.
  5. Preliminary data should be delivered within 2 months of the actual audit. Final reports due within 3 months of actual audit.
  6. All data and documentation should be provided in formats that are editable and usable with existing University systems. The University will not be obligated to purchase any software, hardware, or other data tracking system, proprietary or otherwise.

#### Standard Compliance

The Supplier shall comply with all Federal, State, and local laws and follow the most restrictive guidance in cases of conflicting guidance. All work shall be performed in accordance with all applicable laws and codes, manufacturers' recommendations, and accepted industry standards. Existing or newly developed Stanford University policies, regulations, and specifications will apply.

### Sustainability Framework

1. All activities should prevent waste to the extent possible.

### Business Operations Requirements

#### Operational Requirements

1. The Supplier shall not employ persons or sub-contractors persons identified as a potential threat to the health, safety, security, general well-being or operational mission of the campus.
2. The Supplier shall ensure, at the Supplier's cost, that employees obtain and maintain current certifications/licenses needed to perform work to which they are assigned.
3. The Supplier will ensure that all of its employees and subcontracted employees communicate safely and effectively. All Supplier and sub-Supplier personnel needing unescorted access to Stanford University facilities should be subject to a background check.

#### Proposal Format

Proposal should include at minimum:

1. Describe/provide information of your organization, including the following characteristics:
  - a. Company Name and Location (headquarters)
  - b. Contact person's name, phone number, email.
  - c. Website information

- d. If applicable, describe any current business relationship with Stanford University, including any past or current services and products provided to Stanford.
2. Experience and Expertise
  - a. Key qualifications and reasons why your firm should be selected.
  - b. Provide three reference projects related to campus wide/city wide waste characterization studies and at least one innovative approach to a complex waste characterization study.
  - c. Project Team, including identification of project lead/manager and each person's role and responsibilities.
  - d. Provide resumes for all individuals projected to work on the tasks.
  - e. Details of health and safety plan.
3. Scope of Work/Deliverables/Methodology
  - a. Proposal shall demonstrate an understanding of the requested scope of work including the objectives and the longitudinal nature of waste characterization study. Include proposed work schedule and methodology for accomplishing the project, showing insight to the specific details of the project including any specific material types you think would be particularly valuable to identify in the study outside of the common material types.
  - b. Detail on internal QA/QC program.
  - c. Tentative detailed schedule for deliverables indicating meeting dates (in person vs remote), on site visits, annual dates for waste study (keeping in mind unique university factors, including academic calendar, large events, etc.), document submittals, review times, etc.
  - d. Propose procedures for communicating and reviewing tasks and deliverables with the University.
4. Budget and Cost-Effectiveness
  - a. Pricing proposal including itemization where feasible and options.
  - b. Provide hourly rates and position titles for all individuals, both the lead consultant and all sub-consultants, projected to work on the project.
  - c. If the Proposer chooses to submit a rate schedule, rates are to include the hourly rates of pay for any personnel who may be used on this project. Hourly rates shall include all markups and multipliers. Include a list of reimbursable expenses typical for this type of project.
  - d. Specify the percentage proposed for charging for overhead (including subcontractors) (Additional sub-consultants and/or individuals may be added to a task with the approval of the University.)
5. Limit the Proposal to 20 pages front and back; not including resumes; limit resume length to one page per person. The information requested below should be organized in the manner specified to achieve a uniform review process and obtain the maximum degree of comparability for the Selection Committee.

## Criteria and Evaluation

Supplier evaluation is an assessment of the Supplier's perceived ability to successfully accomplish the prospective scope of services and contract. Final Suppliers' proposals shall be reviewed and scored based solely on the information and references provided by the Supplier. Suppliers' submissions shall be reviewed by members of the Stanford University Selection committee. The Supplier selected will be the one determined to provide the "best value" to Stanford team. The best value will be determined in accordance with the selection criteria set forth herein:

The following is the criteria that will be used in evaluating this RFP:

1. Experience and Expertise 25%
2. Scope of Work/Deliverables 25%
3. Methodology 20%
4. Innovation and Creativity 10%
5. Budget and Cost-effectiveness 20%

## RFP Schedule and Award

### Project Timeline

Top scoring suppliers based on an evaluation of the written Proposal may be required to participate in interviews and/or presentations to support and clarify their Proposals. Stanford will make every reasonable attempt to schedule interviews or presentations at a time and location that is agreeable to the supplier. Failure of a supplier to interview on the date scheduled may result in rejection of the Supplier's Proposal.

Milestone	Projected 2024 Dates
RFP Release	April 12, 2024
Due date to submit inquiries via email	April 26, 2024
Deadline to distribute answers to inquiries via email	May 10, 2024
Proposals Due	June 7, 2024
Supplier Interviews/Presentation, if necessary	June 21, 2024
Contract Negotiations and Award	July 12, 2024
Kick Off Meeting	August 9, 2024
Waste Characterization Study (Tentative)	October 2024

### Presentations/Supplier Interviews

Stanford University will interview supplier finalists and give them an opportunity to personally present their proposal to a committee consisting of representatives of the University. Because only the top two or three finalists will be invited to an interview, it is imperative that your proposal and cost structure be thorough and offer the best package possible. Stanford University, facilitated by Procurement, will send out a Notification of Award letter to the supplier whose proposal and delivery of additional information at the finalist interview, in the sole judgment of Stanford University, are considered to have presented the most mutually beneficial arrangement for both the Supplier and the steering committee. Stanford University reserves the right to reject any or all proposals, and to waive any of the requirements of the proposal selection process explained within this document.

### Terms of Award

The contract will be awarded to a supplier at the sole discretion of Stanford after consideration of the quality of services/products required in the RFP, total cost and other factors that are deemed relevant to the services to be performed. By submitting a Proposal, Supplier hereby warrants and certifies that it is legally authorized to conduct business in the state of California and complies with all applicable laws, ordinances, and regulations. Supplier further warrants and certifies that there exists no prohibition or other legal or regulatory condition that would prohibit or limit doing business with Stanford by law, order, regulation, or otherwise, and that the person submitting the proposal on behalf of the supplier is authorized by the supplier to bind it to the terms of the proposal. In addition to the factors already set forth, the adequacy of the Supplier's proposal will be evaluated according to the following additional criteria:

- The Supplier's understanding and experience of the engagement, its purpose and scope as evidenced by the Proposal submitted.

- Supplier's commitment and success in supporting minority, disabled individuals, U.S. military veterans and women owned businesses.
- Supplier's ability to meet Stanford's performance requirements as well as collaborate effectively with the Stanford team in a fast-paced demanding environment.
- Supplier's financial stability and the depth of the company.
- Competitiveness of the total cost proposal.
- Willingness to agree to the Terms and Conditions of the Service Agreement – Appendix A.

## RFP Attachments

By submitting a response to this RFP, the supplier agrees to fully comply with each of the following requirements:

### Service Agreement and Appendices

Suppliers are required to review the attached sample of Stanford University Service Agreement in detail and note any concerns within your cover letter relative to signing a document containing the provisions as stated. An authorized signatory must execute a statement either agreeing to the provisions as stated or agreeing to the provisions with the exceptions noted on the submittal.

The following appendices are provided as separate tabs in the electronic attachment provided. All answers and responses for this RFP must be submitted electronically to [juliemuir@stanford.edu](mailto:juliemuir@stanford.edu).

- **Appendix A - Service Agreement/Sample Contract**
  - *Please note that the attached sample agreement contains major terms and conditions, but not necessarily all provisions.*
- **Appendix B – [Stanford University's 2019 Waste Characterization Study Summary](#)**
- **Appendix C – Waste Sources**
  - *The campus is made up of roughly 580 buildings with a variety of activities including dining and living, teaching, research, labs, health, sports, events, and museums.*
  - *There are seasonal variations due to the academic and sports schedule.*
  - *Rough breakdown of the major spaces on campus covered by Stanford's waste service provider contract:*
    - *LBRE/Academic Buildings including office, administration, teaching (School of Engineering, Business, Education, Law, Doerr School of Sustainability, and Humanities and Science).*
    - *School of Medicine - 16 buildings mostly wet labs, but also administrative*
    - *Lab Research Building (Clark Center, Chemistry, Biology, Shriram)*
    - *Athletics - 16 buildings for administration, training, and venues*
    - *Student Housing - Undergrad and Graduate housing, apartment, dormitories, and Row Houses, low/mid/high rise - 290 buildings*
    - *Dining Halls - 10 dining halls.*
    - *Stanford Linear Accelerator Center - 20 buildings*
    - *Tresidder and Old Union - Student Unions*
    - *Frost Amphitheater and other standalone venues - event waste.*
    - *Elementary School/Preschools - 2 public elementaries and 7 preschools.*
    - *SCRL - 800 homes and 2 multifamily units*
    - *30 Cafes are included in the buildings listed here.*
    - *Student Health Center (the Stanford Hospital and Clinics are not part of Stanford University's waste stream)*
- **Appendix D – Possible Waste Categories of Interest to University**



- *Reusables*
- *Textiles*
- *Household Goods*
- *Recyclable*
  - *Cardboard*
  - *Single Stream Recycling*
    - *Paper*
    - *Plastics*
    - *Pipette Tip Trays*
    - *Lab Plastics*
    - *#1-2-5 Single Use Food Service Items*
    - *#3-4-6-7 Single Use Food Service Items*
  - *Metals*
  - *Glass*
    - *Lab Glass*
- *Compostable*
  - *Donatable Edible Food Recovery*
  - *Food waste*
  - *Paper towels*
  - *Compostable Fiber/Food soiled paper/pizza boxes*
  - *Compostable Plastic*
- *Other*
  - *Single-Use Coffee Cups (Compostable vs non-compostable)*
  - *Gloves used in food serving or labs.*

#### Confidentiality and Media Release

This RFP is confidential and for the sole use of Supplier's preparation of a proposal. By Supplier's acceptance hereof, supplier agrees:

- Not to disclose, copy or distribute this RFP in whole or in part to persons other than supplier's employees and agents who are authorized by the nature of their duties to receive such information.
- To return any confidential or proprietary materials as requested.
- Not to use any information in this RFP or any other materials related to Stanford business affairs or procedures, other than in performance of this RFP.
- Stanford reserves the right to retain all submitted materials.
- Specific materials developed for this project will be limited to Stanford University use only.

All information in this RFP is classified as confidential. Supplier recipient is obligated to hold this confidential information without disclosure to the public until such information is made public solely by Stanford University. Supplier shall not disseminate any part of this letter to the public through social media, print media, or oral communication to a third party unless such disclosure is required pursuant to a court order or applicable statutory or regulatory authority. If such a court ordered disclosure is required, supplier must give notice to Stanford University prior to disclosing the confidential information. Stanford University reserves the right to review and approve the contents of any statement that is to be released or filed by the supplier with the applicable authority.

Supplier shall not represent directly or indirectly that any service provided by the Supplier to Stanford University has been approved or endorsed by Stanford University or include the name, trade name, trademark or symbol of Stanford University on a list of Supplier's customers without the express written consent of Stanford University.]

### Disclaimer

This RFP is not an offer to enter into a contract but is merely a request for the supplier to submit a proposal. Expenses incurred in responding to this request are the sole responsibility of the Supplier. All materials submitted become the property of Stanford and Stanford reserves the right to modify, reject or use without limitation any or all the ideas from submitted information.

### Duration of Offer

Proposals must be valid for one (1) year after the award of the purchase agreement if supplier is selected as a supplier.

### Response Instructions

All proposals must be submitted using MS Word, PDF and/or Excel in electronic format.

The responses must also provide the names, titles, phone numbers and e-mail addresses of those individuals with authority to clarify the information provided. An electronic copy of the response is to be sent via email to **juliemuir@stanford.edu**

Responses to this RFP must be on file no later than **June 7, 2024**, to be considered.

The cover letter must include a statement by the Supplier accepting all terms and conditions contained in this RFP and a brief discussion of the supplier's ability to perform this contract in accordance with the Scope of Work. Any exceptions to the stated terms and conditions as outlined must be explained in detail within the cover letter. Only those terms and conditions identified as exceptions in the cover letter may be considered for negotiation.

All inquiries regarding this bid shall be directed to **juliemuir@stanford.edu**. It is the responsibility of the suppliers to properly interpret and understand all requirements in this RFP prior to submission of the proposal.

Questions will be accepted only through **April 26, 2024**. Questions received during this time frame will be answered by or before **May 10, 2024**. Answers to all submitted questions will be shared via e-mail to all suppliers participating in the RFP process.

### Disqualifications

Under no circumstances are Suppliers to have contact, direct or otherwise, with any Stanford employee, representative, agent, legal or financial firm or counsel, or vendor of Stanford University or related affiliate employee in conjunction with this RFP, or any of the contents or information contained herein (except in response to Stanford initiated discussions).