

Attachment B - MOA for Community-Scale Reusables

MEMORANDUM OF AGREEMENT AMONG COALITION PARTNERS FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY CLIMATE POLLUTION REDUCTION GRANT FOR COMMUNITY-SCALE REUSABLE FOODWARE SYSTEM DESIGN AND IMPLEMENTATION

SECTION 1. OVERVIEW

This Memorandum of Agreement ("MOA") is between the cities of Sunnyvale, Cupertino, Mountain View, and San José, the County of San Benito (collectively the "Agency Partners"), and Perpetual, a nonprofit ("Perpetual"); collectively "Parties" or individually as a "Party."

SECTION 2. RECITALS

WHEREAS, the 2022 Inflation Reduction Act (IRA) established the Climate Pollution Reduction Grants (CPRG) program which provides funds for implementation grants administered by the United States Environmental Protection Agency (EPA);

WHEREAS, the Parties submitted a coalition implementation grant application on April 1, 2024 ("Implementation Grant"), seeking \$48,346,219 to fund the design and implementation of a community-scale reusable foodware system serving the jurisdictions of the cities of Sunnyvale, Cupertino, Mountain View, and San José, and the County of San Benito to reduce waste sent to the landfill and lower associated greenhouse gas emissions. The City of Sunnyvale applied as the coalition lead agency with the remainder of the Agency Partners as coalition partners;

WHEREAS, the grant term for this funding is expected to begin in October 2024 and the period of performance will be up to five years thereafter until December 2029. This end date is subject to change based on EPA extension or funds availability;

WHEREAS, the City of Sunnyvale, is lead agency to execute a grant agreement with EPA and administer grant funding received from EPA for the period of October 2024 to December 2029;

WHEREAS, Perpetual is a nonprofit organization that partners with public agencies and reuse service providers to design and implement reuse systems that reduce or eliminate single-use disposable foodware;

WHEREAS, as discussed in the Project Workplan, attached hereto and incorporated herein as Exhibit A, the Parties shall design and implement a Community-Scale Reusable Foodware System (the "Project");

WHEREAS, the Parties desire to execute this MOA to govern the use of grant funds to implement the Project and to set out the obligations of the Parties for life of the grant term.

NOW, THEREFORE, the Parties agree as follows:

SECTION 3. PURPOSE OF THE MOA

The purpose of this MOA is to establish:

- The obligations and responsibilities of each Party for the management and operation of the Project.
- Agreed upon roles, responsibilities, and commitments made by each Party to ensure Project success aligned with overall Project goals, objectives, and target outputs.

- An operating model for the Parties.
- How the collaboration and partnerships associated with the Parties will benefit the Project (as described in Exhibit A).
- The resources each Party will contribute to the Project.

SECTION 4. EFFECTIVE DATE AND TERM

This MOA shall be effective upon its execution by the Parties and shall remain effective until all obligations associated with the awarded Implementation Grant have been fulfilled. Without limiting the foregoing, the anticipated performance period for the Implementation Grant is to begin October 1, 2024 and end December 31, 2029. This MOA may only terminate early in the event that Implementation Grant funds are not awarded, in the event that grant funds are rescinded and all of the Parties' obligations associated with the rescinded grant funds have been fulfilled, or in the event that the Implementation Grant is funded in an amount less than the requested \$48,346,219. In the event that Implementation Grant is funded in an amount less than the requested \$48,346,219, the Parties shall immediately meet and confer regarding the feasibility of the Project. If the Parties do not agree to accept the funds and execute the Project due to a reduced award, the Lead Agency shall not execute the grant agreement associated with the award and this MOA will terminate upon the expiration of the period during which the grant agreement must be signed to accept awarded funds.

SECTION 5. STATEMENTS OF RESPONSIBILITIES

For purposes of the Implementation Grant, the City of Sunnyvale is the lead applicant, will be accountable to the EPA, and accepts full responsibility for effectively carrying out the full scope of work and the proper financial management of the Implementation Grant. All Parties commit to participate in the coalition as described in the Project Workplan, attached as Exhibit A of this MOA. All Parties other than the City of Sunnyvale are grant subrecipients and shall be accountable to and support the City of Sunnyvale, lead applicant, for proper use of EPA funding and successful Project implementation. Each of the Parties agrees to participate in the coalition for the life of the Project and may not withdraw or otherwise relieve themselves of any responsibilities created through this MOA.

SECTION 6. RECORDS AND ACCOUNTS AND THEIR RETENTION

The City of Sunnyvale and grant subrecipients will keep complete an accurate financial, payroll, and procurement records related to the Project. Upon reasonable notice to the City of Sunnyvale, any Party to this MOA may inspect the financial records related to the Project. Financial records, supporting documents, statistical records, and all other records pertinent to the Project must be retained by all Parties for period of three years from the date of submission of final expenditure report.

SECTION 7. FURTHER ASSURANCES

Each Party will adopt, execute, and make any and all further assurances, instruments and resolutions as may be reasonably necessary or proper to carry out the intention or to facilitate the Parties' performance of their obligations under this MOA.

SECTION 8. REPRESENTATIONS AND WARRANTIES

Each Party represents and warrants to all other Parties as follows:

Authority: Each Party has the full legal right, power, and authority under the laws of the State of California to enter into this MOA and to carry out all of its obligations herein.

Due Execution: Each Party's representatives who sign this MOA are duly authorized to sign and bind their respective Party.

SECTION 9. RESPONSIBILITIES OF THE CITY OF SUNNYVALE, LEAD AGENCY

The City of Sunnyvale is designated as the Lead Agency and Fiscal and Contracting Agent for Project funds. As the Lead Agency, the City of Sunnyvale is ultimately responsible for administering the Implementation Grant and performing all required reporting and the following responsibilities:

- Recommend and seek City Council approval to create a new position for grant-funded project administration and management services (the “Project Manager”) that will meet the responsibilities and needs described in the Project workplan. If the City Council, in its discretion, fails to approve a position, the Parties understand that Sunnyvale may not be able to fulfill its responsibilities as the Lead Agency and agree to meet and confer regarding alternatives for Project administration.
- Recruit and hire a Project Manager into a position approved by the City Council, to execute the Project’s workplan . Duties of the Project Manager shall include, but will not be limited to:
 - scheduling and facilitating planning meetings with Parties and partner organizations;
 - preparing agendas and meeting minutes;
 - maintaining all project records and files;
 - providing reports at planning meetings on the status of the Project Workplan;
 - reporting back and communicating with the EPA throughout the project term;
 - track and report grant expenditures monthly to the City of Sunnyvale Finance Department;
 - comply with all program compliance requirements, such as gathering data to submit grant reports and all necessary documentation to EPA;
 - monitor budget, actual expenditures and project timeline
 - seek grant reimbursement from the EPA (grant agency); and
 - monitor subrecipient funding.
- Perform additional administrative duties and administer grant funds and pass-through funds to Parties and/or grant subrecipients.
- Establish procedures to conduct subrecipient monitoring, following the 2 CFR 200. Subpart D – Subrecipient Monitoring and Management and the EPA Subaward Policy and EPA’s General Term and Conditions for Subawards.
- Administer grant funds, pass through funds to Parties and/or grant subrecipients.
- Facilitate close coordination with Parties and Project partners; closely track participant support costs; provide funds to service provider(s) during system design phase.
- Execute contracts with selected service providers.

The City of Sunnyvale shall serve as the Fiscal and Contracting Agent.

- The Fiscal and Contracting Agent shall be the treasurer of Project funds. The Fiscal and Contracting Agent, in accordance with generally accepted accounting principles (GAAP), shall keep the Project funds segregated from any other funds administered by the Fiscal and Contracting Agent; shall credit the Project with appropriate interest income earned on Implementation Grant funds in each fiscal year; and shall not expend any funds except in accordance with the Project budget approved by the Agency Partners.
- The Fiscal and Contracting Agent shall act in a reasonable amount of time to execute contracts with outside contractors which have been requested and approved by the Parties.

The Fiscal and Contracting Agent may request, as part of the Project budget, reimbursement for reasonable and customary costs incurred in providing the services described, including but not limited to costs for labor, benefits, administrative overhead, goods, services, and the costs associated with any

internal or external audit requirements. Costs incurred by the Fiscal and Contracting Agent in furtherance of the Project that are not eligible to be reimbursed by Implementation Grant funds will be reimbursed by the other Agency Partners, upon request of the Fiscal and Contracting Agent. Such costs will be split equally among the Agency Partners.

SECTION 10. RESPONSIBILITIES OF PERPETUAL

The success of the Project is dependent upon Perpetual's experience and expertise in designing and implementing reusable foodware systems. Upon award of Implementation Grant funds, Perpetual shall execute a professional services contract with the Lead Agency, which shall comply with 2 CFR 200.331(a)(1), to perform the scope of work identified in the Project Workplan. Compensation paid to Perpetual for its work on the Project shall be paid with Implementation Grant funds as a subaward and shall not exceed the subaward amount indicated in the Budget Description included in the Project Workplan. As a subrecipient, Perpetual shall only receive reimbursement for its actual direct or approved indirect costs in executing its scope of work related to the Project and shall not profit from the Project. Perpetual shall design the reuse system to be implemented within the budget identified in the Budget Description included in the Project Workplan.

SECTION 11. RESPONSIBILITIES OF ALL PARTIES

Upon receipt of Implementation Grant funds, the Parties shall perform the Project, as described in the Project Workplan. The Parties acknowledge that their individual responsibilities or obligations may increase or be altered during or as a result of the System Design phase of the Project and agree that they shall take all reasonable actions necessary to fulfill those responsibilities. The Parties anticipate that their responsibilities shall include:

- Provide oversight and support to contracted or sub-awarded organizations to lead the system design and implementation.
- Attend regular planning meetings, anticipated to be at least monthly in year one.
- Review budget and expenditures.
- Provide input and review of key decisions.
- Leverage existing multilingual communications channels and connections to improve stakeholder engagement, community outreach and system adoption.
- Help operator solicit food establishments and schools to enroll in the program.
- Help operator find real property in Santa Clara and San Benito counties to serve as the two infrastructure hubs following the requirements for procurement of property under 2 CFR 200 (OMB Uniform Grant Guidance).
- Provide information and data to include in grant reports within the deadlines set by the Lead Agency.
- Monitor budget and project timeline.
- Maintain all records if a grant subrecipient; keep complete and accurate financial records related to accomplishing the purposes of the Project and this MOA, and in compliance with the requirements of 2 CFR 200 (OMB Uniform Grant Guidance) and 2 CFR Part 1500 (EPA Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards).
- To meet Timekeeping requirements, keep activity reports required to account for total activity for which each employee is compensated. The activity reports must include a description of activities, hours worked on the Project, and support for salary, wages, and fringe benefits expenditures to be paid or reimbursed with Implementation Grant funds.
- To get indirect costs reimbursements, indirect cost rate proposals must be prepared in

accordance with the requirements of 2 CFR 200, Cost Principles for State, Local, and Indian Tribal Governments (Title 2 CFR 200).

- Must have the Single Audit conducted during the fiscal year Implementation Grant funds or subawarded funds were expended unless the Party is exempt from the audit requirements for that year.

Additionally, the Agency Partners acknowledge that Project work specific to their respective jurisdictions, such as public outreach work, may be best performed by contracts awarded by the Agency Partners, rather than through the Lead Agency. Depending on the system design and the availability of service providers, the reusable foodware system may be operated through contract with one or multiple service providers. As such, any, several, or all of the Agency Partners may be required to solicit bids and award contracts for the work involved in operating the reusable foodware system in their respective jurisdictions. Each Agency Partner agrees to award any such contracts, as needed, through competitive bidding procedures that conform to applicable federal law and reflect applicable state and local laws and regulations. Parties should refer to 2 CFR200.318 for additional information on general procurement standards and ensure all procurements follow these requirements of 2 CFR 200 (OMB Uniform Grant Guidance). The Agency Partners shall meet and confer prior to any single Agency Partner soliciting or awarding a contract for service specific to its jurisdiction to be paid or reimbursed through Implementation Grant funds to discuss and approve the procurement process and effect of the procurement on the Project budget. Project costs associated with approved contracts awarded by the Agency Partners that are eligible for reimbursement with Implementation Grant funds will be reimbursed through subawards. Parties must provide all contracts or assignment documents and associated records to the Lead Agency for reporting, budgeting, and audit purposes.

SECTION 12. COSTS

The Parties anticipate that the awarded Implementation Grant funds shall be sufficient to successfully complete the Project, and agree to take all reasonable and necessary steps to complete the Project within the budget established for the Implementation Grant funds. Perpetual shall design and potentially redesign or modify the design of the reuse system to adhere to the budget, as it may be amended from time to time upon agreement by the Parties, so that the Project is successfully completed expending only the Implementation Grant funds. However, in the event that the designed reuse system, or the Project generally, can no longer be sustained by Implementation Grant funds alone, the Parties will immediately meet and confer to discuss how to address budget shortfalls. The Parties agree that any resolution to such budget shortfalls shall not be contrary to, nor cause a breach or violation of the obligations and responsibilities contained in the grant agreement executed between the EPA and the Lead Agency, nor be contrary to any EPA requirements associated with the Implementation Grant.

SECTION 13. DISPUTE RESOLUTION AND BREACH

Any failure by any Party to perform the responsibilities outlined herein shall be deemed a breach of this MOA. In the event of any dispute regarding the proper interpretation of this MOA, the Parties shall first immediately meet and confer to attempt to resolve the dispute. If the dispute remains unresolved, the Parties may agree to mediation or other non-binding resolution processes and, if the Parties do not so agree, the dispute shall be decided by binding arbitration before a mutually agreed-upon arbitrator.

SECTION 14. INDEMNIFICATION

In lieu of and notwithstanding the pro rata risk allocation, which might otherwise be imposed between the Parties pursuant to Government Code Section 895.6, the Parties agree that all losses or liabilities

incurred by a Party shall not be shared pro rata but, instead, the Parties agree that, pursuant to Government Code Section 895.4, each of the Parties hereto shall fully indemnify and hold each of the other Parties, their officers, board members, employees, and agents, harmless from any claim, expense or cost, damage, penalty, or liability imposed for injury (as defined in Government Code Section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying Party, its officers, employees, or agents, under or in connection with or arising out of any work, authority, or jurisdiction delegated to such Party under this MOU. No Party, nor any officer, board member, or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of any other Party hereto, its officers, board members, employees, or agents, under or in connection with or arising out of any work authority or jurisdiction delegated to such other Party under this MOA. The obligations set forth in this paragraph will survive termination and expiration of this MOA.

SECTION 15. SEVERABILITY

The provisions of this MOA shall be severable, and if any clause, sentence, paragraph, provision or other part shall be adjudged by any court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions of this MOA will be valid and binding on the Parties.

SECTION 16. AMENDMENTS

This MOA may only be amended by a written instrument signed by the Parties.

SECTION 17. COUNTERPARTS

This MOA may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

SECTION 18. USE OF ELECTRONIC SIGNATURES

Unless otherwise prohibited by law, the Parties agree that an electronic copy of a signed contract, or an electronically signed contract, has the same force and legal effect as a contract executed with an original ink signature. The term "electronic copy of a signed contract" refers to a transmission by facsimile, electronic mail, or other electronic means of a copy of an original signed contract in a portable document format. The term "electronically signed contract" means a contract that is executed by applying an electronic signature using technology approved by the City of Sunnyvale. For the purposes of this agreement, the approved methods of signing shall be via DocuSign or original ink signature signed in counterpart and scanned over to the CITY via electronic mail.

SECTION 19. INTERPRETATION, PRIOR AGREEMENTS AND AMENDMENTS.

This MOA, including all Exhibits attached hereto, represents the entire understanding of the Parties as to those matters contained herein. In the event that the terms specified in any of the Exhibits attached hereto conflict with any of the terms specified in the body of this MOA, the terms specified in the body of this MOA shall control. No prior oral or written understanding shall be of any force or effect with respect to those matters covered hereunder. This MOU may be modified only by a written amendment duly executed by the Parties to this MOA.

SECTION 20. NO LEGAL RELATIONSHIP

By entering into this MOA, the Parties are neither forming, nor do they intend to form a partnership, agency, or any other legal entity relationship. No Party is authorized to bind or to act as the agent or legal representative of the other Party for any purpose, and neither Party is granted any express or implied

right or authority to assume or create any obligation or responsibility on behalf of or in the name of any other Party.

SECTION 21. GOVERNING LAW, VENUE

The formation, interpretation, and performance of this MOA shall be governed by the laws of the State of California. The venue for all litigation relative to the formation, interpretation, and performance of this MOA shall be in Santa Clara County, California.

IN WITNESS OF, the Parties have executed the MOA as of the last date set forth below:

City of Cupertino

Date:

Approved as to form, Cupertino City Attorney

Date:

County of San Benito, Public Works Administrator

Date:

Approved as to form, County of San Benito Deputy County Counsel

Date:

City of Mountain View, City Manager

Date:

Attest: _____

Asst. City Clerk

City of Mountain View, Acting Public Works Director

Date:

City of Mountain View – Finance and Administrative Services Director

Date:

Approved as to form, Mountain View Sr. Assistant City Attorney

Date:

City of San José
Date:

Approved as to form, San José Senior Deputy City Attorney
Date:

City of Sunnyvale
Date:

Approved as to form, Sunnyvale City Attorney
Date:

Perpetual
Date:

Approved as to form, Attorney for Perpetual
Date:

Community-Scale Reusable Foodware System Design & Implementation

Workplan for Santa Clara County & San Benito County Coalition (Cities of Sunnyvale, Mountain View, Cupertino, and San Jose, and County of San Benito)

Overall Project Summary and Approach

a. Description of GHG Reduction Measures

Single-use waste is a growing problem. Containers and packaging contribute over 23 percent of material reaching landfills in the U.S.,¹ and the last few years in particular have seen the consumption of single-use plastics, including packaging and disposable foodware, increase by 250 to 300 percent.²

To address the growing waste problem, reduce emissions associated with single-use models, and begin to push a transformative shift towards reuse, ***the proposed GHG reduction measure is the design and implementation of a community-scale reusable foodware system*** for a coalition of communities in Santa Clara and San Benito Counties led by the City of Sunnyvale.

A community-scale reuse system is specifically included in the County of San Benito and County of Santa Clara Priority Climate Action Plan (PCAP) as measure COM-3: Develop a Community-Scale Reuse System. See page 30 of the attached PCAP for additional information. The system will operate within the coalition of communities submitting this application, which is led by the City of Sunnyvale and includes the Cities of San Jose, Mountain View, and Cupertino, and the County of San Benito.

A reusable foodware system provides ‘foodware as a service’ to foodservice establishments (FSEs) to replace single-use foodware, such as cups and takeout containers. In such a system, a reusable foodware service provider supplies FSEs with reusable foodware in exchange for a per-use fee, similar to how FSEs currently purchase single-use products. FSEs are then able to serve food and drinks to their customers in those reusable items. Customers then return the reusable products to conveniently placed collection bins when they are finished using them. A reusable foodware service provider then collects, cleans, inspects, and repackages the reusable foodware items before once again redistributing them to FSEs. The system is designed to be immersive and convenient for all, profitable for the reuse service provider(s), free or low cost to users, and comparable in cost to using disposable products for participating businesses. A document that illustrates the Physical Nodes of a Community-Scale Reuse System, developed by Perpetual through its ongoing work to establish community-scale reuse systems in four U.S. cities, is included as an attachment.

Reusable foodware systems offer a compelling solution to the waste and pollution generated by single-use foodware. Life-cycle assessments (LCAs), academic studies, startup programs, pilots, and ongoing reuse operations have repeatedly shown that, even when including impacts associated with washing and logistics, reusables can result in 2 to 10 times less lifecycle GHG emissions than disposable alternatives, in addition to waste generation, litter, and other pollution benefits.³ Pilots and startups deploying reusable items have proven that the technical capabilities exist and users can have a great experience.⁴ With sufficient scale, reusable foodware can be affordable and reliable for businesses. And when reuse systems are implemented community-wide or on a regional level, returning foodware is convenient for customers and can become the social norm.⁵ Non-profit Perpetual, a partner on this project committed to assisting with the system design and implementation, is currently working to

¹ EPA, 2014

² Upstream, Reuse Wins.

³ Hitt, 2023; Gordon, 2023; Lelong, 2023; Reloop & Zero Waste Europe, 2020

⁴ Moss, 2022

⁵ Unpacking Customer Perspectives on Reusable Packaging, Closed Loop Partners, 2018

establish and validate just that - city-scale, community-centered, immersive reuse systems for foodware - in four cities around the U.S.⁶

The benefit is clear: well-designed reuse systems have the potential to be better than disposable foodware for the environment, businesses, people, and their communities. The challenge is establishing reusable foodware infrastructure and systems at sufficient scale to serve entire communities. With solar and wind electrical generation, the technological development required funding, and subsidies are still required to increase market adoption until the technologies become cost competitive with conventional power generation. With reusable foodware systems, funding support is similarly needed to overcome the capital investment required to purchase and install existing technology and equipment, and to subsidize operations until they get to critical volume and can be self-sustaining. One significant difference is that reusable foodware programs can achieve scale and cost competitiveness on a significantly shorter timeline because the technologies and equipment already exist and are mature. In a study from Zero Waste Europe, payback times were short as 3-4 years for this type of reuse model.⁷ Another difference is that, unlike solar panels and wind turbines, reusable foodware programs should be thoughtfully designed to fit the unique characteristics of the communities where they are implemented. This presents an opportunity to implement systems heavily influenced by public input which can facilitate adoption through fostering community excitement and buy-in.

This proposal seeks funding for the necessary tasks and infrastructure investments to establish an effective reusable foodware system that achieves this scale. This funding would enable the procurement of the equipment and supplies for a comprehensive system design and implementation effort which includes:

- A. a stakeholder engagement and community participatory design process;
- B. geospatial modeling of foodware flows within the city to determine optimal placement of assets and routing for collection and redistribution;
- C. a parametric Life Cycle Assessment model that can run scenario analysis to assess impacts of system design choices;
- D. Circularity Assessment Protocol (CAP) to provide a snapshot of a city's circularity and current foodware and plastic packaging flows;
- E. design for human behavior;
- F. reusable foodware system governance structure;
- G. procurement and installation of infrastructure and equipment;
- H. competitive process for selecting reusable foodware service provider(s) to operate the system;
- I. recruiting of restaurant and hospitality businesses and schools to participate in the foodware service;
- J. hands-on support during the launch of the system.

The final system design and items to be purchased will be determined through the community consultation and participatory design processes, with expert consultation on technical requirements, and the selection of a reuse service provider(s) to operate the system. The initial system design and enrollment efforts will be focused on restaurant takeout and delivery and reusable foodware for K-12 public schools. However, once the infrastructure is built, the system will be able to serve additional use cases, including providing reusable foodware to institutions like food courts, event spaces, corporate cafeterias, campuses, and stadiums; expanding to additional packaging formats; working with meal delivery services; and partnering with the Santa Clara County Food Recovery Program edible meal recovery and food distribution efforts. Partnering with the edible meal recovery efforts is in response to California's Senate Bill 1383 requirements of edible food generators, to provide reusable foodware options for edible food recovery and distribution, where food that would otherwise go to waste is collected and redistributed to local food programs.

We anticipate the system will be expanded and replicated in neighboring communities either organically (e.g., service providers self-funding expansion) or through additional communities seeking grant funding

⁶ These cities are: Hilo, Hawai'i; Savannah, Georgia; Ann Arbor, Michigan; and Galveston, Texas

⁷ [Zero Waste Europe, 2023](#)

after witnessing the transformative nature of this coalition project. In either scenario, the funding for this project will catalyze greater environmental, social, and economic benefits.

Restaurant Takeout and Delivery

Virtually all restaurant takeout and delivery happens in single-use, disposable containers, resulting in nearly one trillion disposable food service products used each year in the U.S.⁸ In the coalition area, more than 345 million single-use cups and containers are used and thrown away each year.⁹ In recognition of the exponentially growing problem of plastic waste, some steps have been taken to move away from plastic. Across the country, ordinances have been passed banning expanded polystyrene (Styrofoam), limiting single-use products like straws, or requiring that restaurants use compostable or recyclable containers. Many restaurants have voluntarily taken steps to move away from single-use plastics. However, the other single-use products that take their place have their own environmental impacts. Compostable bio-based products, for example, even when composted properly do not necessarily have lower Global Warming Potential (GWP) than plastics made from petrochemicals; when landfilled or incinerated, which they most often are, they have higher GWP. Paper packaging also produces greater lifecycle emissions than comparable plastic products. Across almost every environmental measure, reuse is better for the environment.¹⁰ Besides environmental impacts, there are detrimental health impacts as microplastics from food and beverage packaging leach into the food and drinks being consumed.¹¹

Reusable foodware programs for to-go food and drinks have been slowly gaining traction in Europe, Asia, South America and the U.S., with 38 cup and container programs in the U.S. as of 2022, and 56 in Europe.¹² These small-scale programs have proven that these systems can work technically - tracking technology, durable and appealing cup and container design, high-efficiency washing, and optimized logistics - but without the supporting ecosystem of infrastructure and messaging, the scale needed for the economics to work has been elusive. There are growing efforts to achieve this scale, and several cities in Europe have launched or are in the process of launching ambitious reuse systems for takeaway or delivery, which may catalyze further adoption.¹³

In the move towards reuse, a key barrier is the difficulty of competing with the dominance of single-use models, along with logistics challenges. To change behavior and consumption paradigms, individual restaurants cannot compete with disposable culture on their own, and the logistics need scale and upfront investment to be overcome. There needs to be comprehensive, system-level change that happens at an immersive and community-wide scale. The proposed measure would set up the infrastructure and system that would support exactly this type of community-scale reuse and would unlock the benefits of reuse while helping to shift the market and culture towards a more sustainable alternative.

K-12 Schools

During the 2022-2023 academic year, California's 5.8 million public K-12 school students ate approximately 826 million meals, the vast majority of which were served on single-use foodware. In the coalition areas, this meant that approximately 250,000 students at the communities' ~420 K-12 public schools ate most or virtually all school meals on single-use foodware. Schools are aware of the negative environmental and health impacts of exposure to certain PFAS via usage of single use food serviceware (such as links to kidney, testicular, breast cancers and other health effects including hormone disruption, damage to the immune system, thyroid disease, reduced growth hormones in children, increased cholesterol levels¹⁴), but have difficulty switching to reusable dishwashing systems at each school site.

⁸ Upstream, [Reuse Wins](#).

⁹ See the *Technical Appendix for calculation details*.

¹⁰ Upstream, [Reuse Wins](#).

¹¹ Jadhav et al, Microplastics from food packaging: An overview of human consumption, health threats, and alternative solutions, 2021. <https://www.sciencedirect.com/science/article/abs/pii/S2215153221001835>

¹² Living Landscape of Reuse Solutions - www.reuselandscape.org

¹³ <https://zerowasteurope.eu/press-release/launch-of-eric-project-empowers-local-authorities-to-prevent-plastic-waste-production/>

¹⁴ [CFH, 2020](#)

Despite case studies showing savings when schools switch to reusables, many school districts are reluctant to systematically install dishwashers at each school site due to increased labor costs, concern over maintenance of dishwashers and, for some, a trend to move towards dry kitchens and less food preparation at each school.¹⁵

Community dishwashing hubs represent a paradigm shift towards the circular economy. School districts are an ideal anchor client for these community dishwashing hubs for three specific reasons.

- Schools have consistent volume:
 - School meal programs represent a highly predictable quantity of daily business compared to other markets (e.g., events, individual restaurants).
 - This helps counteract the impact on operational efficiency from a less consistent quantity of products generated by individual restaurant takeout and delivery orders.
 - Schools' foodware usage is typically counter-cyclical with tourism, allowing for load-balancing and high utilization of washing facilities.
- High volumes at individual sites:
 - Cost effectiveness is maximized when collecting and delivering large quantities of products to the fewest number of individual locations.
 - A medium-size school district might generate approximately 20,000 product washes per day from a handful of schools.
- Closed loop system:
 - Reuse providers can easily collect used products at the same time they are delivering clean foodware on a daily basis.
 - Due to their contained nature, closed loop systems often achieve higher return rates yet require minimal investment for education and signage.

Role of Coalition

The coalition will provide oversight and support to contracted or sub-awarded organizations to lead the system design and implementation. Each coalition member will attend regular meetings, review budget and expenditures, provide input and review of key decisions, and leverage existing city or county communications channels and connections to improve stakeholder engagement, community outreach, and system adoption. The City of Sunnyvale, as the coalition lead, will administer the grant funds, pass funds through to coalition members and sub awardees, and be responsible for reporting to and communicating with the EPA. The City of Sunnyvale will submit an MOA signed by all coalition members by July 1, 2024 that outlines members' roles and responsibilities in more detail.

Throughout this project, we intend to leverage the resources and expertise of Perpetual, one of our nonprofit project partners, which has experience implementing these types of community-scale reuse projects in other locations. We intend to make a subaward to Perpetual to support their involvement in the system design. See the attached Letter of Commitment from Perpetual.

Our coalition recognizes the pervasive issue of single-use waste and the negative environmental and community impacts that come from our use of disposables, and each of us has taken steps to try to address it, from enforcing ordinances to testing pilots. The City of Sunnyvale, in exploring a Disposable Foodware Ordinance that would mandate restaurants use reusable foodware for dine-in services, has tested a reusable foodware pilot where 14 participating restaurants used reusables for dine-in customers.¹⁶ Santa Clara County's Recycling and Waste Reduction Commission Technical Advisory Committee (TAC) is working on a Request For Proposals (RFP) for a pilot to switch 3 schools within the County to reusables. City of Mountain View, in partnership with the Clean Water Fund, worked with ReThink Disposable to assist food service businesses in transitioning from single-use disposable foodware to reusable alternatives, signing up 20 participating businesses. The City of Mountain View has also been part of targeted partnerships, for example to provide reusable beer cups at the annual Art &

¹⁵ [Plastic Free Restaurants, 2023](#)

¹⁶ <https://www.sunnyvale.ca.gov/Home/Components/News/News/230/111>

Wine Festival in 2023, and uses Sparkl reusable foodware for City-employee events (plates, utensils, cups), as well as for Earth Day in 2023. In San Benito County, the City of San Juan Bautista has an ordinance banning polystyrene and requiring recyclable or compostable containers for restaurant takeout. In the City of Cupertino, the Single-Use Plastics Ordinance aims to reduce plastic waste by limiting the unnecessary use of single-use plastic foodware and instead requiring fiber-based compostable (or aluminum) cups and containers for take-out, and reusable foodware for dining in.¹⁷

While these initiatives have been valuable, they also underscore the need for scale and comprehensive infrastructure to truly effect transformative change related to reuse. Achieving meaningful progress requires more substantial support than can be provided through isolated pilot programs or local legislation. In addition, the regulatory landscape in the State of California is evolving, in particular with SB 54, the Plastic Pollution Prevention and Packaging Producer Responsibility Act, which enables reusables in order to reduce the use of plastics.¹⁸ Taking steps to implement the proposed reuse system will help our communities be SB 54-ready.

Furthermore, the proposed measure represents a significant departure from the current consumption paradigm; like other significant infrastructure and resource management systems, it requires federal-level support to realize its full potential. Our coalition recognized the opportunity that the CPRG program represents to provide the support needed to make reuse happen and quickly committed to working together and making this a measure a priority. It is the type of bold and innovative approach that addresses both the immediate imperative to reduce GHG emissions and single-use waste and the broader imperative to build more sustainable, resilient communities and models of consumption.

This measure is innovative and ambitious, and an ideal fit for the CPRG program. It will result in reuse on a groundbreaking scale, and will establish infrastructure and logistics to support a transformative system with significant potential to scale within California, while the model can be expanded and replicated in other jurisdictions. It achieves GHG emissions reductions that will continue to grow as the system expands, and it simultaneously helps address the increasingly concerning waste and pollution crises generated by single-use disposables. At the same time, it achieves considerable community benefits, leveraging extensive community and stakeholder engagement to create an equitable system built for its users that creates jobs in disadvantaged communities, enhances local economic resilience, and is convenient, user-friendly, and accessible.

Features, Tasks, and Milestones

The proposed reuse system integrates several features designed to ensure success and adoption of the measure.

- **Stakeholder Engagement.** Stakeholder engagement is a core feature of the system design, and the first phase of the project focuses primarily on engaging key stakeholders, partners, and community members to gather input to co-design a system that works for the communities.
- **Leveraging Local Partnerships.** Local partners and organizations with expertise in the communities will be important partners in designing and launching the reuse system. Organizations with expertise in outreach and engagement, deep community relationships, experience in workforce development, and unique community perspectives will be leveraged to provide invaluable input, advice, and assistance to system design and implementation, ensuring that the resulting system incorporates the best available expertise, local knowledge, and fulfills community needs.
- **Community Participatory Design Process and Regular Community Input.** From the first mapping and engagement stage to regular opportunities for input once the full system has been launched, community input in the design and operation of the system, solicited through various multilingual channels, will be critical to ensuring community buy-in, maximizing participation, and continually improving the system to make sure it works for the entire community.
- **Economic and Environmental Sustainability.** Core tenets of the proposed project are environmental and economic sustainability. The system will be designed to maximize the environmental benefits,

¹⁷ <https://www.cupertino.org/our-city/departments/environment-sustainability/single-use-plastics-ordinance>

¹⁸ <https://legiscan.com/CA/text/SB54/id/2600075>

for example through optimized logistics, using electric vehicles for distribution, and ensuring dishwashing is as efficient as possible. Economic sustainability is the ultimate goal - we will be establishing a system that, once operational, will be self-sustaining, ensuring the reuse system will serve the communities in perpetuity.

The project has been designed to follow a process similar to that Perpetual has used in other cities. Project phases, tasks, and related assumptions and risks described in detail below. See **Figure 1** later in this document for the implementation timeline.

Phase 1: Mapping & Engagement

Systems that can both represent and work for the communities in which they operate should be designed with public input and an understanding of the key components of a community including local geography, tourism flows, climate and weather, key languages, community assets, and more. This process will either be led by a nonprofit organization or put out to bid to an organization with expertise in diverse community outreach as well as equity and inclusion consideration. It will be conducted in close coordination with and with contributions from the municipalities.

Thorough stakeholder engagement and community-centered design will ensure that the system is designed and built for the communities it will serve. Local perspectives, preferences, and considerations will be incorporated into each element of the system design, helping the resulting reuse program fully meet the needs of all community members. The thorough stakeholder engagement process will also help build buy-in, driving excitement and adoption once the system is launched.

The workshops and survey(s) will seek to bring together a diverse cross-section of the community to provide input and engage with users of disposable foodware, as well as restaurant and K-12 school nutrition directors and cafeteria operators, to understand what would be needed for a reusable foodware system to work in their ecosystem. This phase may also uncover opportunities for the program to serve other groups. For example, there is already interest from edible food recovery programs (e.g., Joint Venture Silicon Valley who operates the Santa Clara County Food Recovery Program) and meal delivery programs (e.g., Meals on Wheels) in switching to reusable products.

This phase of work is critical to identify local assets, such as underutilized dishwashing facilities and transport vehicles, drop-off locations and pick-up routes for current materials management, and more. Leveraging existing assets to the extent possible will improve the cost-effectiveness and environmental sustainability of the measure and, as such, identifying those assets will be a key component of this phase.

Tasks

1. Conduct community “ecosystem assessment”
2. Conduct a series of participatory stakeholder workshops and surveys in each community
3. Engage Reuse Service Providers: Put out an open call for reuse service providers to engage in the process and conduct initial conversations regarding providers’ current technical capabilities
4. Map the current system landscape to identify existing assets and infrastructure
5. Circularity Assessment Protocol to set baseline circularity metrics
6. Develop five-year financial model

Milestones: *Ecosystem Assessment results obtained, Circularity Assessment Protocol results obtained, stakeholder workshops and surveys completed.*

Assumptions & Risks: The key assumption in this phase is that there will be stakeholder support and enthusiasm for developing a community-scale reuse program. From Perpetual’s experience designing reuse systems in four different cities, there is documented strong support from local communities for reuse options. In both Ann Arbor, MI, and Galveston, TX, for example, community workshops found that 96 percent of people were likely or very likely to use a reusable cup and container if the system were available in their community. In Hilo, HI, this number was 99 percent.¹⁹ On a national scale, 84 percent of

¹⁹ <https://www.perpetualuse.org>

registered US voters support increasing the use of reusable packaging and foodware and 80 percent support requiring companies to reduce their single-use plastic packaging and foodware.²⁰ In addition, based on the support for this project from coalition members and the reusable foodware pilots already planned for several Santa Clara County schools, we believe this risk is minimal.

Aside from the risk of potential lack of community support for a community-scale reusable foodware program, which we believe is negligible, there are timeline and budget risks associated with using a participatory design process. Public participation can be time-consuming and expensive. Additionally, if executed poorly, public participation can result in negative perceptions of the project or loss of faith in community leadership (e.g., local governments). A negative experience during the participatory process may lead participants to have negative perceptions of the proposed program itself and they may be less likely to participate. These risks can be mitigated by using best practices and leveraging Perpetual's involvement and lessons learned from community-scale reuse program participatory design processes executed in communities such as Hilo, HI; Galveston, TX; and Ann Arbor, MI.

Phase 2: System Design

The system design phase will create a system that incorporates best practices in reuse programs, represents the values of the community, and is optimized for the features of the coalition. By incorporating public input and data-driven design, the system design phase ensures that the resulting program meets community needs, is equitable, and is optimized for economic and environmental effectiveness and efficiency. During this phase, the insights from local community engagement are synthesized into a System Design Plan, which is put up for a public comment period before finalization. The data collected will be used to create a location-specific foodware flow model which will later be used to optimize asset placement and transportation routing for collection and redistribution. Careful considerations of all these elements at the design stage generates a sustainable reuse system from the very beginning.

The resulting System Design will include technical features (e.g., infrastructure needs, specifications for reusable items, collection locations, asset tracking, etc.), financial elements (e.g., deposit vs penalty vs other for consumers, fee per use, etc.), behavioral (e.g., ensuring design aligns with human behavior, specify non-financial return incentives, etc), and governance (e.g., contracting, coalition members' oversight roles, mechanisms for continued community input, etc.)

Tasks

1. Data collection on current usage volumes for single-use items
2. Volume Modeling: Create a location-specific foodware flows model to optimize asset placement and routing for collection and redistribution. See the relevant city map attachments for an example of draft maps for bin placement throughout the coalition members' communities. These maps are illustrative and would be verified and refined during the design process.
3. LCA Scenario Analysis: Use the parametric LCA model created by Dr. Greg Keoleian to test different system design scenarios and provide data to inform design choices.
4. Draft System Design
5. Hold a public input period to refine draft System Design
6. Finalize System Design

Milestones: *System design complete. See Perpetual's draft from the Hilo, HI Design Process document, included as an attachment, for a sample System Design plan.*

Assumptions & Risks: There are few risks in this stage, aside from the data collection, analysis, and design work taking longer and costing more than expected. However, Perpetual's experience designing systems for other communities will mitigate those risks. Public input on the draft System Design has risks similar to those in the Phase 1 participatory process, but those risks can be mitigated in a similar fashion. One risk that could impact the expected GHG emissions reductions is if system design choices selected are different than those that have been built into assumptions incorporated in the budget and emissions

²⁰ [Ipsos](#) and [Oceana](#)

reduction calculations. For example, the emissions calculation is based on lifecycle emissions savings of a reusable stainless steel container compared to disposable plastic and paper containers. If the system design and stakeholder input processes result in the selection of a different material for the reusable containers, such as glass, that will affect the emissions reductions of the system.

Phase 3: System Set Up & Pre-Launch

The system set up and pre-launch phase begins implementing the design determined during the engagement and mapping process. The set up phase includes procurement of necessary assets, infrastructure, permits; identification of and operational collaboration with reuse providers; development of the pricing model and enrollment process for participating businesses; and creation of the mechanism by which the community will have an ongoing voice in system operations. As the system is set up, the focus is on establishing a system that is environmentally sustainable, equitable, and that will become economically self-sustaining.

A key element of this phase is selecting a reuse service provider or multiple providers to individually or collectively operate the washing, reusable asset collection and distribution logistics, and other elements according to specifications outlined in the System Design. There are currently 38 reuse service providers operating reusable foodware programs in the U.S.²¹, and we expect 6-8 of them to be competitive for this project given its scale. Priority will be given to organizations already operating in the area, if possible. The selection process will also consider the potential that the Reuse Service Provider will be a collaboration or joint venture between an existing operator and a local entrepreneur or organization. Perpetual has experience issuing an RFP for service providers from its work in Galveston, TX²², that will be valuable to this step. Similar to how it was issued for Galveston, the RFP will likely be split into individual system components - Technology, Return Infrastructure, Reverse & Forward Logistics, Washing, and Foodware. Though it is plausible for one service provider to apply and be selected for multiple components of the system, each component will be contracted to the entity that is best fit for operational success while meeting environmental, and community needs.

Tasks:

1. Establish governance
2. Select and secure facility for washing and packaging
3. Competitive procurement process to select reuse service provider(s)
4. Procure system assets and equipment
5. Acquire required permits for washing facility and outdoor collection bins
6. Onboard participating businesses and K-12 schools for initial system launch
7. Install and test equipment with pilot businesses
8. Create reuse brand identity and communications strategy
9. Multilingual outreach and education campaigns
10. Continued stakeholder engagement

Milestones: *System operator chosen; reuse assets for initial launch procured and received; initial businesses and institutions confirmed.*

Assumptions & Risks: There are risks of system set up and pre-launch taking longer than anticipated, for example if the necessary permitting were delayed, which would push back the launch of the system and delay anticipated emissions reductions. However, the timeline has been structured to account for all set-up steps and necessary processes and timing, and we believe it is reasonable. Besides timing, a key assumption is that there will be a reuse service provider(s) who will respond to the RFP and will be able to effectively service the system. Perpetual can confirm from its experience and the Galveston RFP process that there are currently existing service providers who could provide every necessary component of a reuse system, and that service providers would be eager to respond to the opportunity

²¹ [Reuse Landscape, 2024](#)

²² [Perpetual, 2024](#)

to service a system that has received grant funding to overcome the initial barriers; as a result, the risk of this assumption being unreasonable is essentially zero.

Phase 4: Initial (Pilot) Launch

This phase will launch a pilot version of the reuse system with a subset of businesses and schools. Learnings from the initial launch will provide useful feedback on gaps and improvements needed before the full launch.

Tasks:

1. Mobilize volunteers to support system success during first two weeks of system operation
2. Hands-on support for system success
3. Promote launch

Milestones: *Initial system launched (April 2026)*

Assumptions & Risks: The risk of the pilot launch is that it will uncover significant unanticipated issues that will affect the full system launch. While this could delay the full launch and require resources and attention to address, identifying any potential issues during this initial launch will help test the system and ensure the success of the full launch. This risk is not expected to affect overall GHG emissions reductions.

Phase 5: Full System Launch

The full launch of the system is expected in January of 2027, targeting initial adoption among 5 percent of restaurants in Sunnyvale and the other Santa Clara County cities and 20 percent of restaurants in San Benito County.

Tasks:

1. Monitor system performance and address gaps
2. Continue enrolling businesses
3. Install equipment with businesses and schools for full system

Milestones: *Full system launched (January 2027)*

Assumptions & Risks: The assumption built into the budget and emissions calculations has been the initial adoption rate of reusables among restaurants and schools in the communities. If adoption is lower than anticipated, that will lower the resulting emissions reductions. Based on Perpetual's experience, validation from existing pilots, and reports from reuse service providers, we believe that the assumed initial adoption rates are reasonable and achievable and that the risk of not meeting them is low.

Phase 6: Expansion & Improvements

Once launched, continual monitoring and improvements will be important to ensuring the reuse system is operating as intended and meeting the needs of users and participating restaurants and schools. Ongoing marketing and outreach efforts to enroll additional participants will ensure gradual expansion of participation.

Tasks:

1. Monitor and improve system performance
2. Enroll additional businesses and schools
3. Ongoing engagement and outreach
4. User experience research
5. Regularly report operational and impact metrics

Milestones: *Report on first year of operations (2028), including operational and impact metrics, and regular subsequent reporting*

Assumptions & Risks: Once the system is operational and grant funding is no longer subsidizing operating expenses, there is an inherent risk that the system will not be viable without external funding support and will not be able to continue operating after the program period. If the system ceases to operate after the program period, the anticipated emissions reductions of the measure beyond 2030

would not be realized to the extent expected. Though the infrastructure and assets could be repurposed, without the broader system, the impact would be less transformative.

We believe this is an unlikely outcome. The barrier to establishing effective reuse systems at scale is the upfront investment required. The components of the system and pilot programs have proven the potential for success at scale and shown that it is possible to create a system that is profitable for the reuse service provider(s), free or low cost to users, and comparable in cost to using disposable products for participating businesses. Furthermore, immersive reuse systems are already happening in other places, and by the time of this program's launch will be in additional locations through Perpetual's current work. In Denmark, the City of Aarhus and TOMRA have partnered to implement a reuse system for takeaway packaging.²³ In Monaco, a reusable glass container system for takeout is available around the city.²⁴ In addition, Zero Waste Europe (ZWE) is working on to-go reuse initiatives in more than a half dozen cities. Through Perpetual's work, city-scale reuse systems for restaurant takeout are being set up in Galveston, Texas²⁵, and Hilo, Hawai'i.²⁶ The risks of launching reuse have been addressed by these other systems and countless pilots, and there are no challenges in implementing this measure that have not been previously overcome.

The commitment of the coalition members to this measure, the expertise of Perpetual's ongoing work and ability to leverage their resources from other cities, in conjunction with the experience of local organizations, and the transformative potential of reuse once it overcomes the initial capital requirements mitigate this risk and smooth the path for an effective and innovative system.

b. Demonstration of Funding Need

Reusable foodware and packaging pilots and efforts to date have successfully validated the essential elements of reuse systems for economic and environmental viability. There are examples of refillable beverage container systems operating at scale, hygiene and safety measures have been successful, and reuse services are being further codified in the next supplement to the 2022 FDA Food Code.²⁷ However, a key insight from these efforts is the importance of scale. Broad adoption of reuse requires that receiving and returning reusable items be convenient for users and that replacing disposable items with reusables not impose an economic or operational burden on businesses. To get to this point, community-scale reuse systems require support to get started and achieve scale and operating efficiencies, and they need a timeline that allows for the shift in behavioral norms needed to enable the mainstream success of reuse systems.

Reusable foodware systems require specific infrastructure, such as collection bins, transport vehicles and dishwashing machines. While some reuse service startups are using debt or investment capital to get started, receiving grant support for this infrastructure would allow the reuse service provider to charge a lower per-use fee sooner, lowering the cost burden on participating restaurants and foodservice operators. This enables the system to be economically self-sustaining more quickly and with lower risk.

There are no funding sources available on the scale needed to implement reuse as a community-scale climate solution. Some other entities have been successful at leveraging other grant opportunities, such as the EPA Solid Waste Infrastructure for Recycling (SWIFR) grant program, to apply to reuse, and the Pollution Prevention grants can address source reduction, but these opportunities are much smaller than the scale needed for true reuse impact, and there are not otherwise existing dedicated opportunities.

Given this lack of dedicated funding opportunities, the City of Sunnyvale has not received funding to implement the type of community-scale reuse system proposed. The City of Sunnyvale and other coalition members have recognized that replacing single-use foodware with reusables represents an opportunity to reduce both GHG emissions and waste, and have explored options that they can take on to encourage the use of reusables in restaurants. In the City of Sunnyvale, we have been exploring a Disposable Foodware Ordinance that would mandate restaurants use reusable foodware for dine-in

²³ [TOMRA and Aarhus City enter collaboration to create innovative reuse system. 2023](#)

²⁴ [Monaco Life, How to use MaConsigne's Reusable Take-Away Containers 2022](#)

²⁵ [Perpetual - Galveston. 2024](#)

²⁶ [Perpetual - Hilo, 2024](#)

²⁷ [FDA, 2023](#), [FDA 2022 Food Code](#)

services. After conducting a survey to assess potential impacts of such an ordinance on local businesses and consumers, the City tested a reusable foodware pilot where 14 participating restaurants used reusables for dine-in customers.²⁸ Similarly, the coalition members have also recognized the importance of and taken some steps toward encouraging the use of reusables in foodware, including the local ordinances, partnerships, and pilots identified in Section 1A. While these efforts have been positive steps, they provide neither the funding nor the transformative support on the scale needed to implement an effective reuse system that achieves its full potential environmental and economic benefits. CPRG support is integral to do something transformative.

Just as government funds have been foundational to establishing today's waste management and recycling systems, government funds are essential to establishing the reuse systems now increasingly recognized as far more effective and beneficial than their predecessor systems. A distinction with the proposed reuse system is that, while government funding has continued to support the ongoing operations of waste management and recycling systems past the initial establishment, the proposed reuse system only requires funding to get established; it is designed to be self-sustaining and fully operated by a private reuse service provider(s) after the initial period of start-up support.

CPRG funds would provide this support to achieve the necessary scale and ease of use, unlocking the environmental and economic benefits of reuse. This funding would provide the influx of support that would allow the system to deploy, allow the reuse service provider to charge a lower per-use fee sooner, lower the cost burden on participating restaurants and foodservice operators, and enable the system to be economically self-sustaining more quickly and with lower risk. CPRG funds in particular are an excellent fit for launching reuse systems, as these systems require initial financial support to deploy, yet they deliver cost-effective GHG and pollution reductions along with a range of other benefits to local communities and society as a whole.

Economic sustainability is a core premise of this project: the goal is to establish a reusable foodware system that generates enough revenue to be economically self-sustaining over time. The objective is for a Reuse Service Provider to be successfully established in the area with a revenue model that supports the ongoing operations of the reusable foodware system over time without the need for other funding (such as philanthropic or government). CPRG funding would overcome the initial barriers that, without such support, would limit convenience for consumers, affordability for businesses, or prevalence required to shift social norms. In this way, this project ensures that, once established, this service continues to provide reusable foodware, and the resulting benefits, to the communities it serves indefinitely.

Perpetual has received funding to support these types of community-scale reuse projects in other locations. From this funding, it has developed resources, tools, and data needed to establish reuse systems. To leverage these resources for our coalition, CPRG funds are needed to bring Perpetual's expertise from its ongoing work in other cities to design and implement an effective reuse solution for our communities. A potential future source of funding could come from SB 54 enabling reusables to reduce the use of plastics and shifting the plastic pollution burden from consumers to producers. The Producer Responsibility Organization will be funding certain activities by raising \$5 billion from industry members over 10 years. This could be an opportunity for future support, which could fund expansion of the reuse system, while CPRG funding would provide the kind of transformative support that is needed now to set up viable and self-sustaining reuse programs.

c. Transformative Impact

Reuse is a transformative climate solution. Life-cycle assessments (LCAs), academic studies, startup programs, pilots, and ongoing reuse operations have repeatedly shown that, even when including impacts associated with washing and logistics, reusables can result in 2 to 10 times less lifecycle GHG emissions than disposable alternatives.²⁹ Beyond the immediate GHG emissions reductions that will come from implementing a community-scale system, reuse is an innovative and replicable measure that

²⁸ <https://www.sunnyvale.ca.gov/Home/Components/News/News/230/111>

²⁹ [Hitt, 2023](#); [Gordon, 2023](#); [Lelong, 2023](#); [Reloop & Zero Waste Europe, 2020](#)

can be scaled up within our communities and transferred to other jurisdictions, driving behavior and consumption paradigm shifts that will lead to significant additional emissions reductions as it scales.

The transformative power of the community-scale reuse system proposed in this application comes from the infrastructure it develops. Once established, this infrastructure enables other settings, users, and applications to offer reusable options and achieve the environmental benefits that come from reuse. Infrastructure built for the open system designed around restaurant takeout and delivery can also be used by institutions, cafeterias, event spaces, and other closed venues. It can accommodate other packaging formats, serve additional surrounding areas, and make reuse the norm in our communities. It can expand to adjacent programs, including meal recovery efforts.

By the time this project is moving into implementation, there will be several examples of city-scale reuse projects functioning at scale. Through Perpetual's work, both Galveston, Texas and Hilo, Hawai'i will have operational systems. The impact results, learnings, and examples of proven success from these and our coalition's reuse system will streamline every future reuse project. They will make system replication and adoption easier, accelerating reuse and its transformative climate benefits across the country.

Impact of GHG Reduction Measures

Magnitude and Cost Effectiveness of GHG Reductions

The estimated GHG reductions are based only on the totals for the coalition communities. We expect additional communities to implement similar programs after success is demonstrated by this coalition project, in which case the GHG reductions resulting from EPA funding would be many times greater.

Cumulative GHG Reductions (2025-2030)	7,916 Mt CO2e
Cumulative GHG Reductions (2025-2050)	86,304 Mt CO2e
Cost Effectiveness of GHG Reductions (2025-2030)*	\$6,107 / Mt CO2e

**Cost effectiveness of GHG reductions = (Requested CPRG funding) / (Sum of Quantified GHG reductions from CPRG funding from 2025-2030)*

The measure will result in a permanent reduction in cumulative GHG emissions, and the transformative and scalable nature of the measure means that emissions reductions will increase as the system expands. The primary GHG reductions come from the avoided production of single-use items. A key factor that affects the magnitude of these benefits is the number of (re)uses in the lifecycle of a reusable container, and a key requirement to achieve these benefits is scale. Since CPRG funding will be establishing a system that has been designed to operate at scale, and reusable containers will directly replace single-use items, the emissions reductions are permanent and will increase as the system grows. CPRG funding would establish a system that, without such an influx of support and given the lack of other dedicated opportunities at a similar scale, would not otherwise be created. Once the infrastructure is established, the reuse system will scale after the program period: more equipment will be purchased, reusable assets will be added, and more restaurants, schools, and communities will be served. Because CPRG funding will be directly and solely responsible for the creation of the reuse system, designed to be self-sustaining to operate in perpetuity, all lifetime emissions reductions that result from the system, including as it scales, can be attributed to the CPRG funding used to set it up.

See the attached Technical Appendix for annual and cumulative emissions reductions from 2025 through 2050 and the methodology and assumptions used.

Environmental Results – Outputs, Outcomes, & Performance Measures

A & B. Expected Outputs, Outcomes, and Performance Measures

The expected outputs and outcomes of the reuse system are listed below. For each output and outcome, suggested performance measures to track progress are listed. The performance measures identified are

the minimum measures expected to be tracked. Others may be identified during the system design process.

To track progress toward achieving the expected outputs and outcomes associated with the reuse system, required tracking and reporting by the reuse service provider(s) will be a key source of updates. As part of the RFP and contract established with the reuse service provider(s) selected, metrics and reporting requirements will be outlined and agreed upon. This reporting will go to the governing entity of the reuse system, either the coalition or a separate governing body if determined / established during the system design process.

Perpetual and the coalition members, as subrecipients, will be required to report on progress and expenditures of funds to the City of Sunnyvale. Purchases of equipment and supplies, categorized as participant support costs, will be tracked closely by the City of Sunnyvale as the manager of the grant.

Reporting from the reuse service provider(s) and subrecipients will be included in regular reports provided by the City of Sunnyvale to the EPA. The required semi-annual and final reports will summarize technical progress, accomplishments, and milestones achieved. Outputs and outcomes will be described, planned activities for the next six months identified, and a summary of expenditures to date provided. Each report will include an update on community engagement, with the substance of the updates and results provided largely by Perpetual and other local organizations involved as relevant. Progress on job quality will also be described. Input from local organizations and partnerships with local job training groups will help ensure high quality employment opportunities, and tangible steps toward defining employment practices required of the reuse service provider(s) will be identified.

To quantify actual GHG emissions reductions, data from the reuse service provider(s) will provide information that has as yet been limited or nonexistent. Key areas of impact have been identified by existing research and include the transportation and washing processes, with return rate having a significant impact on overall emissions reduction potential of reuse. As the reuse system becomes operational, actual data from the reuse service provider(s) on the washing stage (e.g., hot water use, electricity) and transportation (e.g., miles driven) will improve emissions estimates and impact calculations.

Output / Outcome	Outputs & Outcomes	Performance Measures	Approach & Plan
Output	Establishment of reusable foodware infrastructure and services	Equipment, infrastructure, and associated service will be set up and operational on a pilot scale by April 2026 and full scale by January 2027.	Coalition will meet regularly with nonprofit partner(s) leading system design and implementation to ensure progress towards system set-up. Participant support costs will go largely to establishing the system infrastructure, and close tracking and reporting of expenditure of funds will be required.
Output	Creation of regionally cohesive system that functions across city and county lines	Participation in reuse system across city/county lines is seamless (e.g., reusable container received in City of Sunnyvale can be returned in city of Cupertino)	Incorporate regional stakeholder input in system design to ensure interoperability. Make decisions on branding, marketing, and system design with regional cohesion in mind.
Output	Strong adoption among foodservice establishments	5 percent of restaurants / foodware-using businesses across Santa Clara County coalition communities and 20 percent in San Benito County will participate in the system in the first year. 25 total public schools in coalition communities will participate in the system in the first year.	Outreach and onboarding to target restaurants and enroll schools. Reuse service provider(s) required to report on number of participating businesses and schools. Coalition to receive regular updates in meetings.

Output	Acceptance and usage by community users	90 percent or greater return rate of reusable items from consumers	Reuse service provider(s) required to report on return rate and average amount of time before items are returned.
Output	Transparent and accountable reporting	Complete semi-annual progress reports are submitted on time to the EPA Comprehensive final report is submitted on time to the EPA	Coalition members will meet regularly (anticipate monthly at least in Year 1) and will include reporting as an agenda topic. Expect that the nonprofit(s) involved in system design will assist with assembling report content. City of Sunnyvale will be responsible for submitting the reports to the EPA.
Outcome	GHG emissions reductions <i>~7,900 Mt CO₂e by 2030</i>	Number of reusable cup & container uses	Reuse service provider(s) required to report number of reusable product uses, which will be used to estimate emissions reductions. Further, the service provider(s) will be required to provide key metrics to refine GHG emissions estimates, such as monthly electricity bill, vehicle fuel or electricity consumption, water use, etc.
Outcome	Reductions in waste generation: Reduction in foodware waste generated by participating businesses & schools <i>(>2,500 tons by 2030)</i> Reduction in single-use plastic foodware items <i>(>1,500 tons by 2030)</i>	Number of reusable cup & container uses	Reuse service provider(s) required to provide usage data. Use the number of reusable cup/container uses to estimate the number and mass of avoided single-use items.
Outcome	Financial savings to city waste management departments from reduction in waste generation and avoided collection, processing and disposal costs	Number of reusable cup & container uses	Reuse service provider(s) required to provide usage data. Use number of uses to determine number and mass of avoided single-use items. Use city waste management costs to calculate savings.
Outcome	Jobs created, including jobs for people living in LIDAC communities <i>(70-80 FTEs created by 2030, with a majority in LIDAC communities)</i>	Number of FTEs Number of FTEs living in LIDAC communities	Reuse service provider(s) required to provide job data

C. Authorities, Implementation Timeline, and Milestones

The City of Sunnyvale, as well as each coalition member, have authority to implement the proposed system in their communities.

The implementation of the proposed measure will be a collaborative effort between the coalition, key project partners, and the reuse service provider(s) once selected. The City of Sunnyvale, as the coalition lead, and other coalition members will work closely with Perpetual and other organizations with relevant expertise to implement each phase of the project and ensure a successful reuse system is established.

Implementation will involve close collaboration between city departments, restaurant representatives, relevant community organizations, school representatives, and other stakeholders.

The MOA will clearly outline roles and responsibilities of each party. The general structure will be set up with the City of Sunnyvale administering the grant funds and passing through funding to other coalition members and nonprofit partner organizations. Coalition members will contribute support, assist with engagement and outreach, leverage city communication channels and connections, and participate in meetings. Perpetual and / or other nonprofit organizations will fulfill the responsibilities of conducting outreach and designing and implementing the system. Perpetual will provide technical advice to inform system design and input based on reuse systems set up in other cities. Once selected, the reuse service provider(s) will assume responsibility for operating the system and taking necessary set up steps such as obtaining permits.

Through regular coalition meetings and close collaboration with partner organizations, the reuse system will be implemented according to the timeline outlined in **Figure 1**, targeting a full launch of the system in January of 2027. This timeline assumes a grant award date of October, 2024. Key milestones of each stage are shown in green.

Figure 1: Implementation Timeline

Phase	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026	2027	2028	2029
Grant Reporting			Semi-Annual Report		2nd Semi-Annual Report		Semi-Annual Report		Semi-Annual Report	Semi-Annual Reports	Semi-Annual Reports	Semi-Annual & Final Report
Coalition Meetings												
Mapping & Engagement	Grant Award		Mapping & Engagement Complete									
Community "Ecosystem Assessment"												
Map the Current Landscape												
Circularity Assessment Protocol												
Stakeholder Workshops & Surveys												
Engage Reuse Service Providers												
Map the Current Landscape												
Circularity Assessment Protocol												
Develop 5-year financial model												
System Design					System Design Complete							
Data Collection on Disposable Use												
Volume Modeling												
LCA Scenario Analysis												
Public Input				Input on Draft								
System Design Plan				Draft System Design	Final System Design							
System Set Up & Pre-Launch												
Establish Governance						Governance Established						
Select Service Provider(s)					RFP Issued	Provider(s) Selected						

Select and Secure Facilities						Facilities Secured							
Procure Assets & Equipment						Assets Procured							
Acquire Permits						Permits Acquired							
Enroll & Onboard Businesses & Schools						Initial Participants Confirmed							
Install & Test Equipment													
Create Reuse Brand Identity						Brand Identity Created							
Outreach & Education Campaigns													
Initial (Pilot) Launch							Initial Launch (April)						
Mobilize Volunteers to Support First Two Weeks													
Hands-On Support for Pilot Launch													
Promote Launch													
Full System Launch											Full System Launch (Jan)		
Monitor Performance & Address Gaps													
Enroll Additional Businesses & Schools													
Install & Test Equipment													
Expansion & Improvements													
Enroll Additional Businesses & Schools													
Monitoring & Improvements													
Ongoing Engagement													
User Experience Research													
Report on Operations												Report on 1st Year	Report on Operations

Low-Income and Disadvantaged Communities

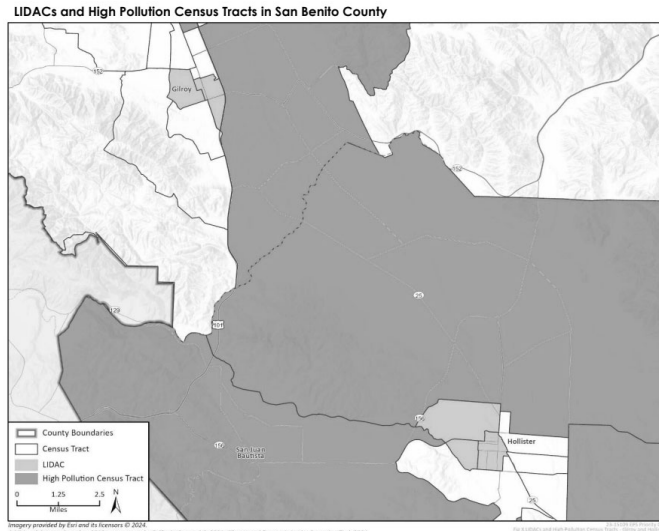
a. Community Benefits

The proposed project will result in both direct and indirect benefits to low-income and disadvantaged communities in the areas served. Maximizing the benefits to these communities and incorporating their input will be key considerations throughout the community engagement and system design stages, as well as an ongoing focus once the system is operating.

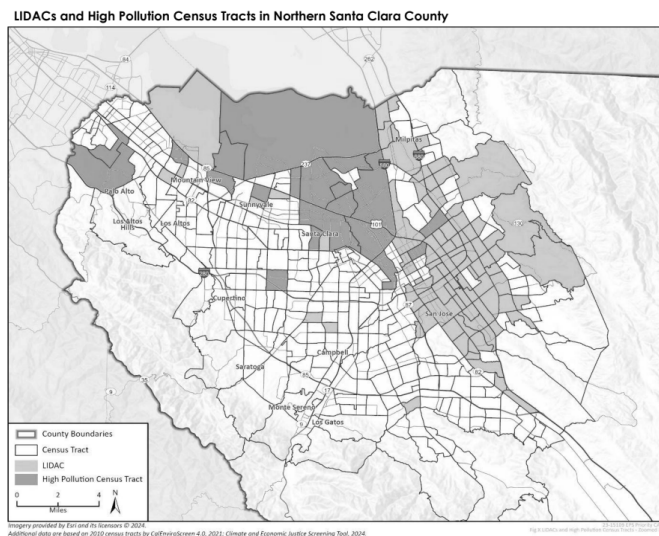
Based on the CEJST tool, the project area includes a total of 79 LIDAC census tracts in Santa Clara and San Benito Counties, with three LIDAC census tracts in San Benito County located near the city of Hollister and the remaining LIDAC census tracts located in the coalition cities within Santa Clara County. The San Benito County LIDAC tracts include a population of 15,787, or 23 percent of the county population. The Santa Clara County tracts include a population of 385,871, or 30 percent of the population of the communities in this coalition.

There are an additional 15 census tracts in Santa Clara and San Benito Counties that are considered high pollution burdened based on the CalEnviroScreen tool, 3 in San Benito County and 12 located in the

Cities of Sunnyvale, Cupertino, San Jose, and Mountain View. The figures below show the LIDAC and high pollution tracts identified in the PCAP for the area.



Source: San Benito and Santa Clara Counties PCAP



Source: San Benito and Santa Clara Counties PCAP

The vast majority of San Benito County corresponds to three high pollution census tracts. There is a high concentration of LIDACs and high pollution census tracts in the northeastern portion of Santa Clara County, which corresponds to where a larger portion of the County population resides. This concentration will be taken into account in the system design phase and will contribute to the location selection for washing facilities, which will directly benefit LIDAC communities by creating high-quality green jobs and economic opportunities.

The reuse system described in this application requests funding to establish two washing facilities, one in San Benito County and one in Santa Clara County, and all of the associated logistics infrastructure to support community-wide use of reusables. This infrastructure will create numerous high-quality jobs in sorting, washing, packing, distribution, collection and other logistics, as well as supervisory roles. The system is expected to create an estimated 56 jobs in the first year of operation and 79 by the end of the grant performance period. While exact site location will be determined in close coordination with the

communities and other stakeholders during the system design process, the plan is to locate the washing facilities in low-income and disadvantaged communities to ensure that the job creation benefits are directed to these communities as much as possible. In San Benito County, a wash hub near Hollister would serve the geographic area with the most demand and would provide job opportunities for the LIDAC communities in that area. In Santa Clara County, where the washing facility would serve the Cities of Sunnyvale, Cupertino, San Jose, and Mountain View, the intention is to locate the wash hub in the eastern side of San Jose, where several LIDAC tracts are located. Though this is not the geographic center of the communities in the county, proximity to the largest population center of San Jose and the LIDAC communities that could benefit from the job opportunities it creates would make this location favorable. Job opportunities will continue to increase as the system scales, and an emphasis will be placed on maximizing opportunities for LIDAC communities and for workers from disadvantaged populations as much as possible. During the stakeholder engagement phase, we will coordinate with local job training, workforce development, and similar organizations that serve these communities and have relevant expertise, and the system design will incorporate their feedback and suggestions.

Single-use plastic waste and pollution disproportionately burden lower income and disadvantaged communities.³⁰ With solid waste facilities usually located near these communities, they are most exposed to the resulting air, water, and soil pollution. However, alternatives to single-use plastic tend to be more expensive and some reuse programs have requirements that make them inaccessible for lower income communities. Lower cost restaurants and foodservice options are more likely to serve food and drinks in disposable foodware, increasing the exposure of vulnerable communities to chemicals of concern while also increasing the amount of trash that they are responsible for disposing of. Establishing a reusable foodware system that equitably serves the whole community provides a much needed alternative where none exists today. This system will give people a cost-free option to avoid the use of single use foodware and all of its associated challenges. Along with increased access to reuse services, increased awareness of reuse options and enhanced community engagement are additional benefits. Reduced use of single-use items, of which the majority are not widely recyclable, reduces the need for communities to find new capacity to manage waste such as landfills and incineration, which are often located near disadvantaged communities. Research has shown that in many cities disadvantaged neighborhoods often have less access to waste management services, leading to higher litter rates. This program can reduce this burden.³¹

The small business community is a subset of the populations covered that will benefit from the proposed measure. The reuse system will result in decreased reliance on the global disposables supply chain, leading to increased stability of foodware costs, which is particularly important to small business owners in a low-margin industry.

Potential negative impacts to low-income and disadvantaged communities could arise around the accessibility of reusable options, but these impacts will be mitigated by inclusive program design. For example, some reuse pilots have been designed using a deposit system, where a user pays an upfront deposit to borrow a reusable container, with this deposit returned once the container is returned. However, this approach, which requires a credit card or bank account, access to a smartphone, or a financial deposit upfront, can limit inclusion and accessibility of the system particularly for low-income and disadvantaged communities. The reuse program established through this grant will be intentionally designed to be equitable and accessible and will include options to use the system without a smartphone, credit card, or bank account. For instance, it could be designed to accommodate the use of benefits cards and/or transportation cards for engaging in the system.

Assessing and quantifying the benefits and avoided disbenefits to low-income and disadvantaged communities will be included in the performance tracking and reporting of the system. Specific processes will be determined in conjunction with the communities and with reuse service providers as part of the community engagement and system design processes, and considerations have been integrated into the engagement approach described in the next section.

³⁰ [UNEP, NEGLECTED: Environmental Justice Impacts of Marine Litter and Plastic Pollution, 2021](#)

³¹ [EPA, Equity in Solid Waste Management, 2023](#)

b. Community Engagement

Community engagement is a core element of program design and implementation. Incorporating community perspectives in the project design includes all community stakeholders, including low-income and disadvantaged communities, and intentional efforts are planned to include these communities in the development and implementation. A local organization will be selected to work as a partner and lead in the engagement phase of the project, leveraging local expertise and connections to maximize participation and facilitate outreach. Coalition agencies will also be closely involved in the engagement phase and will promote engagement opportunities for businesses and residents through their outreach channels.

The first phase of the project will involve identifying and reaching out to relevant local stakeholder groups and leveraging local organizations to ensure all stakeholders have been identified and contacted. A series of community participatory design workshops will be used as a key mechanism to engage with stakeholders. In order to engage the greatest number and diversity of people in the design workshops, local organizations will assist with the outreach, including using existing channels and going to existing community forums and meetings to introduce this work and let people know about opportunities to be involved and to provide input. Design workshops will be advertised through various print and digital outreach avenues in languages to be confirmed by coalition members, expected to be English, Spanish, Vietnamese, Russian, and Chinese (including Mandarin and Cantonese).

To facilitate community member attendance, days, times, and duration of meetings will be chosen that are convenient for participants with different types of jobs or other responsibilities. To ensure that workshop attendance is inclusive and representative, each workshop will provide reasonable incentives and accommodations, such as making childcare and food available and reimbursing travel and other expenses for those who need it. The workshops themselves will provide a hands-on experience of the reuse system to give people a chance to experience the elements of a reuse system so that they can provide meaningful feedback on design choices. Time in the workshops will be balanced between providing enough context for participants and deep listening. There will be a range of ways for participants to provide input - spoken, written, open form, survey.

Site selection will be a highly collaborative and community-centered process. Given the intention to locate the washing facilities in LIDAC tracts to maximize the job opportunities for these communities, integrating their input into site selection will be essential. This collaborative selection will be part of the system design phase.

Beyond the workshops, there will be opportunities for engagement and input throughout the process, including after the initial pilot launch and following the full system launch. Community engagement will be conducted regularly to understand what is working and what needs to be improved. Post-launch engagement may take the form of written and online surveys, listening sessions, and focus groups. This process will ensure that the community feels a sense of ownership in the program and that it continues serving the community's needs. Feedback from this engagement may be used to expand the program to other packaging formats. Further, the behavior analysis planned pre- and post-launch can help inform this engagement and where focus should be placed.

Job Quality

Job creation is one of the direct outcomes of the proposed measure, and ensuring job quality, a diverse workforce, and high road labor practices will be integrated into the system design. Good Jobs Principles will be integrated into the design of the system's workforce management, from the recruitment and hiring stage to career advancement. To ensure jobs created are high-quality and promote a diverse, skilled workforce, the below strategies and commitments will be followed.

Recruitment and Hiring: Applicants will be actively recruited from diverse pools, especially from underserved communities. Local jobs organizations will be contacted to share job opportunities among their networks. The San Jose Conservation Corps is one organization that is very interested in this issue and is representative of underserved communities. Applicants will be evaluated and treated equally. To

integrate the commitment to hiring from local communities, particularly LIDAC tracts, the RFP to select a reuse service provider(s) will require a local workforce component with training and hiring incentives for local residents.

Job Quality: Workers will have a safe, healthy, and accessible workplace, built on input from workers and their representatives. Workers will have job security without arbitrary or discriminatory discipline or dismissal. They will have adequate hours and predictable schedules. The use of electronic monitoring, data, and algorithms will be transparent, equitable, and carefully deployed with input from workers. Workers will be free from harassment, discrimination, and retaliation at work. All workers will have equal opportunity and will be respected, empowered, and treated fairly. Diversity, Equity, Inclusion, and Accessibility (DEIA) will be a core value and practiced norm in the workplace. Individuals from underserved communities will not face systemic barriers in the workplace.

Pay and Benefits: Workers will be paid a stable and predictable living wage, and pay will be fair, transparent, and equitable. In California, the state minimum wage is \$16/hour. The coalition cities have higher minimum wages (\$17.55 in San Jose; \$18.75 in Mountain View; \$18.55 in Sunnyvale; \$17.75 in Cupertino), and the highest rate will be used as the base hourly rate across the entire coalition area. Workers' wages will increase with increased skills and experience. Workers will be provided benefits that promote economic security and mobility and include paid leave and workforce flexibility.

Skills Development and Advancement: Workers will have equitable opportunities and tools to progress to future good jobs within their organizations or outside them. Workers will have transparent promotion or advancement opportunities.

Programmatic Capability and Past Performance

a. & b. Past Performance & Reporting Requirements

The City of Sunnyvale has a record of successfully completing assistance agreements. State CalRecycle grants the City has performed within the within the last three years, or is currently performing, include:

Project 1: AD and Composting

- **Assistance agreement number:** Grant Number: ORG5-21-0006
- **Federal or non-federal funding agency and assistance listing number:** CalRecycle, assistance listing number not applicable
- **Contact from organization that funded the assistance agreement:** Molly Park;
Molly.Park@CalRecycle.ca.gov
- **Description:** Grant funds will be used to replace food scraps pre-processing equipment and recovered organics diversion at the permitted Sunnyvale Materials Recovery and Transfer Station by purchasing integrated food scraps pre-processing system, and one shredder for recovering organic materials from the municipal solid waste processing line.
- **Status:** Staff expects to complete the final installation of the Shredder and SSO Equipment in May 2024. Equipment has been built, shipped and received either to SMaRT or to a storage location. Some installation of the SSO Equipment has been completed. Building permit submissions are in progress for the final installation.
- **Reporting:** Starting in May 2022, the City has been submitting periodic grant reports to CalRecycle every 3 months. Progress as well as delays in projects are promptly reported to CalRecycle.

Project 2: SB 1383 Local Assistance Grant Program (OWR1: 2021-22)

- **Assistance agreement number:** Grant Number: OWR1-21-0497
- **Federal or non-federal funding agency and assistance listing number:** CalRecycle, Grant ID 25382
- **Contact from organization that funded the assistance agreement:** Jayme Tesser;
Jayme.Tesser@CalRecycle.ca.gov

- **Description & Status:** Grant funds were used to partially fund City's portion of the edible food recovery program facilitated by Santa Clara County. Funds will also pay for a term-limited City staff position that will implement, monitor, enforce, and educate around SB 1383.
- **Reporting:** City has submitted progress reports on time for the duration of this grant.

Project 3: SB 1383 Local Assistance Grant Program (OWR4: 2023-24)

- **Assistance agreement number:** Grant Number: OWR4-22-0375
- **Federal or non-federal funding agency and assistance listing number:** CalRecycle, Grant ID 27876
- **Contact from organization that funded the assistance agreement:** Jayme Tesser;
Jayme.Tesser@CalRecycle.ca.gov
- **Description & Status:** City of Sunnyvale will use these funds for procurement of mulch and recycled organic waste products, their portion in the edible food recovery program administered by Santa Clara County, two years of SB 1383 data management and outreach.
- **Reporting:** The grant was awarded in Feb. 2024. Once the City obtains and begins using the funds, they plan to meet all progress report deadlines on time.

Project 4: Coronavirus Relief Fund Cares Act and State and Local Fiscal Recovery Funds (SLFRF)

- **Assistance agreement number** (if applicable):
- **Federal or non-federal funding agency and assistance listing number:** 21.019 (CRF Cares Act) and 21.027 (SLFRF funds)
- **Contact from organization that funded the assistance agreement:** No direct contact; funds came from CA state and Dept. of Treasury, respectively
- **Description & Status:** The CARES Act CRF funds were used for payroll for public health and safety employees, small business assistance, housing support, economic support, food programs, personal protective equipment, public health expenses, budgeted personnel and services diverted to a substantially different use and workers compensation. The ARPA SLFRF funds were used for Public Safety Services, including: police field and fire protection services for City of Sunnyvale residents; responding to emergency, non-emergency fire events, and medical emergency services; enforcing state and local laws; and investigating criminal activity.
- **Reporting:** Reports were submitted for 5 cycles to State of CA Dept of Finance, last report was submitted June 2021

Project 5: Silicon Valley Clean Energy Community Resiliency Grant

- **Assistance agreement number:** N/A
- **Federal or non-federal funding agency and assistance listing number:** Silicon Valley Clean Energy (SVCE)
- **Contact from organization that funded the assistance agreement:** Silicon Valley Clean Energy, 333 W El Camino Real #330, Sunnyvale, CA 94087, (844) 474-7823
- **Description:** The City of Sunnyvale is currently finalizing the construction on the new City Hall building as part of the Civic Center Campus Modernization project, with the building designed to be LEED Platinum, zero net energy, and have a solar plus battery energy storage system (BESS) designed to keep the building running in case of power outages. In order to supplement the costs of this building, Sunnyvale applied for funding through SVCE's Community Resiliency grant funding program.
- **Status:** Sunnyvale was awarded \$1 million. The funding was utilized to offset the costs of the solar and BESS for the building. An additional \$327,000 was awarded to Sunnyvale through the same SVCE grant program to purchase and install four EVArc units from Beam. The EVArc units are stand alone, solar arrays designed to power EV charging stations and can be used as emergency power supply when needed. Similarly, Sunnyvale worked with SVCE to meet all the timelines, communication needs and complete the project. Both projects have been fully reimbursed by SVCE.
- **Reporting:** Sunnyvale reported updates to SVCE as requested, on a quarterly basis. Any delays in the project were communicated in a timely manner, but ultimately the project was completed within the

grant timeline. Sunnyvale partnered with SVCE to do press and publicity on the project, supply a presentation on the project, pictures and other collateral as requested.

Coalition members also have a record of effectively managing a variety of grants and programs. The City of San Jose, as a sub-awardee, has a long history of administering local, state, and federal grants supporting a wide variety of programs. This external assistance has provided tens of millions of dollars in funding that has appreciably advanced City service programs in housing, economic and workforce development, energy, public safety, transportation, water supply, wastewater resource recovery and solid waste management.

c. Staff Expertise

Three individuals from the City of Sunnyvale will be directly involved in managing and administering this grant and have useful experience to contribute to successfully support the project's implementation.

Shikha Gupta, Solid Waste Programs Division Manager. Shikha has been a public servant for more than 17 years. She has progressive experience in program management for large regulatory public organizations with many leadership roles in vendor management, cross-functional team coordination, customer engagement, and strategy building. She has worked in the waste management discipline for more than 7 years managing multi-million dollars contracts and program budgets. She has comprehensive experience with complex contracts and managing industry relationships. Industry trend awareness and legislative application landscape are a part of her expertise. She has helped develop zero waste policies and is currently working on reuse and related systems for the City of Sunnyvale in her current role as the Solid Waste Programs Division Manager. Her current role entails managing the city's solid waste collection and processing systems of all waste streams in the City, operations of City's Materials Recovery and Transfer Station and zero waste strategic plan elements including outreach. She has experience with grant management in her current and previous roles.

Bailey Hall, Environmental Programs Specialist II. Bailey Hall was the former Program Director of Climate Corps AmeriCorps from 2016-19. She managed a \$3M CA state grant from California Volunteers and authored the grant application for another \$3M to fund the program from 2019-22. She's worked in the City of Sunnyvale's Solid Waste Division for the past 5 years, and is responsible for implementing behavior change campaigns, residential programs, and social media engagement related to proper materials reuse, recycling, and disposal. She was the lead applicant for the OWR4 CalRecycle SB 1383 Local Assistance grant, and is currently managing the Reusable Foodware Pilot the City is conducting with 14 participating restaurants.

Environmental Programs Manager. The person hired for this new position funded by the grant will have prior experience managing a federally funded grant, as well as relevant environmental experience that will be relevant to the reuse system proposed.

Coalition members and partners have relevant staff expertise to contribute to the successful management and implementation of the project as well. San Jose has experienced marketing and outreach staff currently promoting environmental programs through English, Spanish and Vietnamese channels. These staff will help amplify and disseminate outreach for program design and launch.

Perpetual is a nonprofit launched in early 2022 by a team with a collective 20+ years of experience in the reusable foodware space. Perpetual's mission is to accelerate the adoption of reuse, starting with foodware in the US. The Perpetual team is led by Ellie Moss, a veteran sustainability and circular economy strategist and facilitator, and Dagny Tucker, founder of Vessel, a reusable service provider that operated for seven years. (Dagny has fully relinquished her ownership interest in Vessel and is dedicated to working at the system design level.) The Perpetual team brings a unique combination of knowledge of the reuse space, on-the-ground experience working to scale reusable foodware solutions, systems thinking and solution design skills, stakeholder engagement expertise, and rigorous project management capabilities.

Budget and Timely Expenditure of Grant Funds

This proposal requests \$48,346,219 in funds for the design and implementation of a community-scale reusable foodware system in The Cities of Sunnyvale, San Jose, Mountain View, Cupertino, and the County of San Benito. Please see the attached Budget Description document for detail and explanation of the requested funds and a description of the approach to ensuring timely and efficient expenditure of awarded funds.

	2025 Year 1	2026 Year 2	2027 Year 3	2028 Year 4	2029 Year 5	Total
<i>Project Phase</i>	<i>Mapping & Engagement, System Design</i>	<i>System Set Up, Pre-Launch, Initial Pilot Launch (April), Expansion</i>	<i>Full System Launch (Jan)</i>	<i>Scaling & Improvements</i>	<i>Scaling & Improvements</i>	
I. Personnel						
Shikha Gupta, Solid Waste Programs Division Manager, 5% FTE @ \$207,579	\$10,379	\$10,379	\$10,379	\$10,379	\$10,379	\$51,895
Bailey Hall, Environmental Programs Specialist, 5% FTE @ \$125,679	\$6,284	\$6,284	\$6,284	\$6,284	\$6,284	\$31,420
Environmental Programs Manager, 100% FTE @ \$174,929	\$174,929	\$174,929	\$174,929	\$174,929	\$174,929	\$874,645
TOTAL PERSONNEL	\$191,592	\$191,592	\$191,592	\$191,592	\$191,592	\$957,960
II. Fringe Benefits						
Solid Waste Programs Division Manager @ 46.09% of salary	\$4,784	\$4,784	\$4,784	\$4,784	\$4,784	\$23,918
Environmental Programs Specialist II, @ 46.09% of salary	\$2,896	\$2,896	\$2,896	\$2,896	\$2,896	\$14,481
Environmental Programs Manager, @ 46.09% of salary	\$80,625	\$80,625	\$80,625	\$80,625	\$80,625	\$403,124
TOTAL FRINGE BENEFITS	\$88,305	\$88,305	\$88,305	\$88,305	\$88,305	\$441,524
III. Travel - None Requested	\$0	\$0	\$0	\$0	\$0	\$0
IV. Equipment - None Requested	\$0	\$0	\$0	\$0	\$0	\$0
V. Supplies - None Requested	\$0	\$0	\$0	\$0	\$0	\$0
VI. Contractual - None Requested	\$0	\$0	\$0	\$0	\$0	\$0
VII. Other						
Subaward to San Jose	\$18,170	\$5,975	\$5,012	\$5,275	\$6,140	\$40,571
Subaward to Perpetual	\$1,293,600	\$960,000	\$900,000	\$276,000	\$156,000	\$3,585,600
Participant Support Costs	\$0	\$22,642,923	\$9,558,879	\$6,272,847	\$4,750,120	\$43,224,769
TOTAL OTHER DIRECT COSTS	\$1,311,770	\$23,608,898	\$10,463,891	\$6,554,122	\$4,912,260	\$46,850,940
TOTAL DIRECT	\$1,591,666	\$23,888,795	\$10,743,787	\$6,834,018	\$5,192,157	\$48,250,423
INDIRECT Indirect Personnel Costs - de minimis 10%	\$19,159	\$19,159	\$19,159	\$19,159	\$19,159	\$95,796
TOTAL	\$1,610,825	\$23,907,954	\$10,762,947	\$6,853,178	\$5,211,316	\$48,346,219