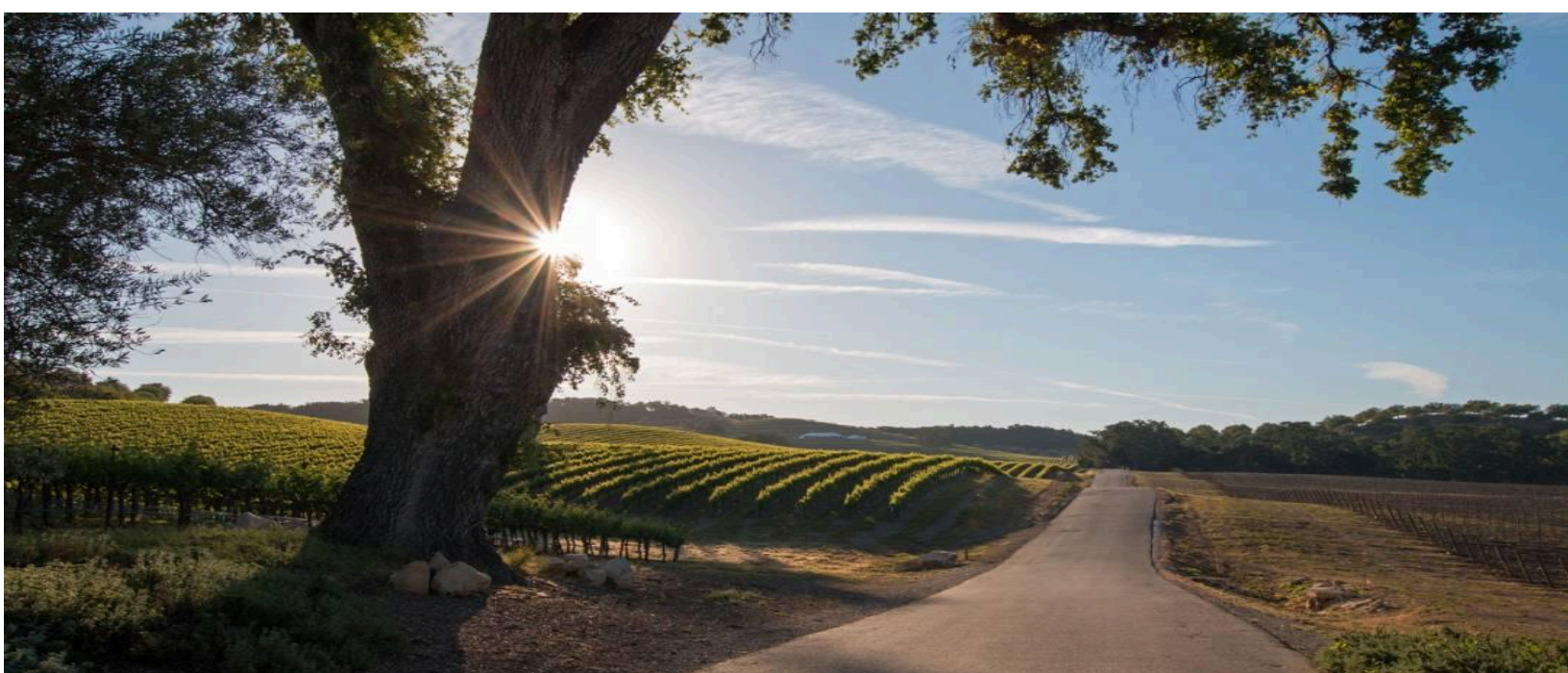




City of Paso Robles: Regional Renewable Energy Park



CPRG Implementation Grant

Organization: City of El Paso de Robles

Primary Contact Name: Adam Spaulding

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Email Address: aspaulding@prcity.com

Type of Application: Individual Application

Funding Requested: \$99,999,999.99

Application Title: City of Paso Robles: Regional Renewable Energy Park



Brief Description of GHG Measures

The Paso Robles Regional Renewable Energy Park will be composed of several interconnected advanced technologies, each independent in their reduction and/or conversion/upgrading to reduce GHG emissions.

Methane and F-gas reduction measures will be delivered through the collection, cleaning and conversion of landfill gas, and biogas collected from the on-site Anaerobic Digester. GHG reductions will be seen throughout this process in the utilization of previously uncaptured organic waste streams (agricultural and winery/brewery waste) and in the expansion of organic recovery throughout the region. This additional methane capture will then be used to supplement the power needed to produce green hydrogen, and charge electric vehicles.

Green hydrogen derived from the site will be further utilized to support three critical GHG-emitting sectors (Industry, Electric Generation, and Transportation). These sectors all currently rely heavily on energy derived from fossil fuels. Supporting the transition away from fossil fuels in these sectors will be transformative and impact local and regional communities, allowing residents, travelers, regional transit operators and jurisdictions to explore newer and greener transportation opportunities.

Additional GHG reduction measures will also be seen in the conversion of organic material to biochar for use in Agriculture/ Working Lands, and even in the production of concrete. These anticipated results will be seen in reduced GHG emissions from treated agricultural/working lands, reduction in transportation (vehicle miles traveled (VMT) for disposal of biosolids), reduced demand for water resources, and a reduction of aggregate utilized to create a necessary building material, concrete. An additional benefit that is difficult to accurately quantify will be reduced GHG emissions linked to a regional facility to treat materials for PFAS. As regulations evolve in the coming years and disposal becomes more restrictive, management of this hazardous material will force jurisdictions to explore more remote and costly disposal options which will inevitably increase VMT and GHG emissions.

Additionally, the proposed site is adjacent to two large vineyards and within 5 miles of the City-owned airport. The Paso Robles Regional Renewable Energy Park (PRRREP) will look to support these locations with needed, on-demand green electricity and hydrogen. The ability to create energy independence and redundancy is enticing to existing energy users, and is a critical infrastructure investment that will be necessary to help expand the planned Tech Corridor and Spaceport at the Paso Robles Municipal Airport.



Sectors

- ✓ Electricity Generation
- ✓ Industry
- ✓ Transportation
- ✓ Agriculture/Natural & Working Lands
- ✓ Waste Materials Management

Expected Total Cumulative GHG Emission Reductions

Expected Cumulative GHG Reductions for 2025-2030

874,278 MTCO2E

Expected Cumulative GHG Reductions for 2025-2050

4,401,034 MTCO2E

Location:

City: Paso Robles
State: CA

Applicable Priority Climate Action Plan(s) (PCAP) On Which Measures Are Based

PCAP Lead Organization(s): California Air Resources Board

PCAP Title(s): The State of California's Action Plan

PCAP Website Link:

<https://ww2.arb.ca.gov/sites/default/files/2024-03/California%20CPRG%20Priority%20Climate%20Action%20Plan%202024%20March%2010.pdf>

List of GHG Reduction Measures & PCAP Page Reference For Each

Electricity Generation - p.37, p.42, p.46-47

Industry- p.34, p.36, p.40,

Transportation- p.21, p.26, p.31, p.33,

Agriculture/Natural & Working Lands- p.42, p.50, p.52

Waste Materials Management- p.42, p.46, p.59



Letters of Support:

California Air Resources Control Board (CARB)
San Luis Obispo County Air Pollution Control District (SLO APCD)
Governor's Office of Business and Economic Development (Go-Biz)
US House of Representatives- Jimmy Panetta
US House of Representatives - Salud Carbajal
CA State Senate - James Laird
CA State Assembly - Dawn Addis
San Luis Obispo County - Supervisor John Peschong
San Luis Obispo Council of Governments (SLOCOG)
Integrated Waste Management Authority (IWMA) (a San Luis Obispo County JPA)
Regional Transit Authority (RTA, San Luis Obispo County)
Upper Salinas - Las Tablas Resource Conservation District (USLT RCD)
California State Polytechnic University, San Luis Obispo - Initiative for Climate Leadership and Resilience (Cal Poly)
Regional Economic Action Coalition (REACH - Central Coast)
Paso Robles Main Street Association
Travel Paso
Wine Country Alliance
City of San Luis Obispo
City of Morro Bay
San Miguel CSD
City Atascadero

Project Narrative

OVERALL PROJECT SUMMARY AND APPROACH

DESCRIPTION OF GHG REDUCTION MEASURES

The City of Paso Robles is proposing the development of a new and replicable Regional Renewable Energy Park (RREP) pilot program with the key goals of addressing greenhouse gas emissions and capture, renewable energy creation (fueling local fleets and powering local business/community), PFAS destruction (for water, wastewater and solid waste management), carbon sequestration, landfill gas reutilization, SB 1383 compliance for partner jurisdictions, healthy soil regeneration, sustainable watershed management, job creation and providing access to renewable fuels along a key transportation artery in Central California to both commercial and residential users.

The City of Paso Robles owns 133+ acres adjacent to the City's Landfill located on California State Route 46. This road serves not only the local community but also surrounding jurisdictions as a critical link between the Coast and the Central Valley. This single road moves well over \$8 Billion in trade annually.



The City's Landfill is ideally suited to process, manage and solve a host of environmental issues for the City as well as the surrounding partner jurisdictions (CARB, 266). The Paso Robles landfill is one of very few municipal-owned landfills and is located in a sparsely populated stretch of the County. The RREP will utilize this ideal location to develop an integrated solution to manage organic waste (reducing GHG emissions) and deliver groundbreaking solutions for the region. Paso Robles and the surrounding communities generate a significant amount of organic material through food scraps, yard waste, cultivation, industrial processing and proper forest management. The goal of the RREP is to integrate all of these varying waste streams into one facility where each of these resources can be fully utilized to deliver benefits to the community and to reduce any adverse environmental impacts.

The facility will consist of a series of interconnected solutions, all utilized to extract as much benefit from the materials as possible (CARB, 268). The Anaerobic Digester will be utilized to process organic waste to collect renewable gas (PCAP, Electric Generation, p.46). High-temperature pyrolysis units will be installed to treat biosolids and organic material for PFAS, while simultaneously extracting further energy production (PCAP, Energy, p.46). A dewatering press will additionally be necessary, to ensure that material meets the minimum requirements for pyrolysis or Anaerobic Digestion, which will be powered in-part by the power generated through the High-Temperature Pyrolysis process. Because of the facility's location, it will also be directly connected to the methane capture technologies at the landfill (PCAP - (Energy, p.46) (Waste, p.59)). Currently being flared, this gas will now be collected and upgraded along with the other recovered gasses, further reducing GHG emissions (CARB, 234). This upgraded gas can then be utilized by power local fleets as they deliver material to the site, or if necessary, can be connected to SoCal Gas, and this power can be utilized to fulfill SB 1383 procurement requirements for partner (or other interested) jurisdictions (PCAP, Transportation, pgs. 21, 26, 31, 33).

Further fueling opportunities exist to connect the power from this upgraded gas to both a private (Regional Transit Authority) and public renewable fueling station along CA-46 (PCAP, Transportation, pgs. 21, 26, 31, 33). This station will be connected to Green Hydrogen (additionally created on site), and electricity from biogas (Landfill and Anaerobic Digester derived) and from electricity created through various solar arrays on and surrounding the Landfill, not yet mentioned) (PCAP, p.37, p.42, p.46-47). This station represents the type of local solution to energy demand and security that would benefit not only Paso Robles and the surrounding community but can be utilized to demonstrate how this approach can be beneficial and replicable for other communities throughout the State (CARB, 267-268), and nation.

Through the high-temperature pyrolysis process, beyond the creation of beneficial renewable energy (in the form of hot water for the dewatering process), another byproduct of the process is the creation of Biochar. The processing of organic material through pyrolysis additionally provides the benefits of carbon capture through its reintegration back into the soil, and its elimination of smoke and fire risks while helping to reduce air pollution throughout the region (PCAP, Electric Generation, p.46). This single product will be critical for many solutions generated in this Program, including healthy soil regeneration, watershed management, carbon sequestration and various critical PFAS Treatment



opportunities. The benefits of biochar are significant and represent a key solution derived from a previous liability. At this time it is difficult to quantify the MTCO₂E estimates regarding the land application of biochar, as standards of application and use may vary, more research needs to be completed to fully quantify the benefits of application. Two interested parties, see Letters of Support, the USLT RCD and Cal Poly are both interested in further developing the adoption of biochar throughout the region, and could serve as key stakeholders for both the adoption of the use of biochar, and in clearly quantifying its benefits (including associated MTCO₂E reduction).

The material being sent to this facility includes all organic material, from forest fuel reduction to Fats, Oils, and Grease (FOG) and yard waste. Biosolids are another organic waste stream that the facility will treat. Biosolids have also been identified as a key location for PFAS in a community. Including high-temperature pyrolysis in the RREP allows for the partner jurisdictions to have an identified solution to their known PFAS disposal/destruction issues. High-temperature pyrolysis will also be critical to treat PFAS-containing elements involved in the water treatment process (Granular Activated Carbon, GAC) and in eliminating PFAS exposure through leachate treatment at landfills.

Beyond being replicable, the RREP is also scalable, so where opportunity (additional volume) may present itself in the future, the RREP has the ability to either expand its operations or include additional units of whatever component is necessary. While there is sufficient acreage to allow for continued growth, the future for this Program is to show and help develop similar facilities throughout the State, reducing the need for mega facilities and allowing for a more responsive local solution to key local challenges. Each RREP will prove to provide needed environmental solutions and economic benefits to a local community/region.

The Paso Robles Regional Renewable Energy Park hopes to address issues in the Waste Materials Management, Transportation, Energy Generation, Agriculture/ Natural & Working Lands, Industry sectors but it also looks to provide needed solutions to key the most critical Infrastructure programs, Water and Wastewater. These two critical sectors can be overlooked, and are generally managed by local jurisdictions. Creating a needed solution and reducing a significant future burden from these processes is critical for the health and safety of all communities throughout the nation.

Major milestones for this program will include the establishment and construction of the necessary anaerobic digester (and methane capture and refining equipment) to handle the various streams of organic waste (agricultural and industrial waste, forestry materials, food and yard waste, grocery waste, FOG, etc.) The RREP will also include the build-out of high-temperature pyrolysis unit(s) to further treat the digested material. Dewatering will also be necessary as many jurisdictions do not have individual processes that are able to reduce the water content in their biosolids which will allow for proper treatment for PFAS and further anaerobic digestion and/or pyrolysis. This extracted water can then be utilized (once treated with Biochar/Activated Carbon, for dust mitigation on the subject property, including the Landfill, and with testing, could prove to be the supply of water needed for



Green Hydrogen generation). Construction will also be necessary to connect the electricity generated from the Landfill gas collection to the larger project site.

Further development will also include the establishment of a fueling station; the Regional Transit Authority (RTA) could establish a regional transit hub at the PR RREP. The vehicles would have the ability to charge/fuel 24/7 on green, renewable energy sources. This process and availability of Zero-Emission Fuels, servicing the community and servicing LIDAC communities would greatly reduce exposure to harmful emissions, directly in those communities. The RTA has offered the City a Letter of Support (attached) to demonstrate their desire to help the PR RREP become a reality. The co-located transit facility would allow for the expansion of service to the Paso Robles area and for the quicker adoption of Zero Emission Vehicles for service. Additional benefits exist, in that with the creation of Green Hydrogen on site, the RTA would be able to explore alternative engines for different routes. Currently electricity demands on transit buses make connecting Paso Robles and the larger regional hub of San Luis Obispo problematic, as a significant grade exists between the two communities, where much stored energy in EVs is lost in the ascent (~40% loss). If Hydrogen vehicles prove to be more efficient in their conversion of fuel and can be utilized in this specific route, it could prove to be a boon for the riders and the RTA, expanding the capabilities of its fleet.

The PR RREP will also consist of several acres of solar arrays. The project component covered through the CPRG grant will include the installation of 5 acres worth of solar. This installation will supplement the creation of green hydrogen, and for the charging of electric vehicles. The scale of the solar onsite will continue to evolve. The City's Landfill will be undergoing Partial Final Closure activities to cover the Southern facing portions (the oldest) of the Landfill. The City will be exploring in what way they can utilize this as an opportunity to expand solar onsite, and to create a "Brightfield." None of the expansion options for GHG Emission Reduction have been added to the overall GHG Emission Reductions calculated for this grant. However, the scale for the expected growth of the facility is significant. The total site is just over 133 acres, not including the closed portion of the landfill that will be upgraded to a Brightfield. Leaving enough room for expansion of the various components of the program, access roads etc. it would not be unreasonable to assume over 90 acres in solar production. Calculations are included below and in the supplemental information, the current 5MW solar array is estimated to utilize 15 acres. The City, when possible, would look to fully utilize this additional land. The additional 75 acres of land, using the same calculations included below, would amplify the PR RREP's estimated GHG Emission Reductions by an additional 956,195 MTCO₂E, between 2025-2050).

The CPRG grant will be utilized to establish the regional facility, it will allow for the integration for the most challenging components of the technologies to be installed. From there the expansion and further reduction becomes more economically feasible. The current Anaerobic Digester costs are significant, they represent an annual processing of 40,000 Tons of material, and an annual reduction in GHG Emissions of 110,343 MTCO₂E. However, based on the proposed budget a second additional 40,000 Ton digester can be added, within the same footprint and utilizing the existing infrastructure for only 10% of the installation of the first digester (~\$5M). Which is to say, the City will be looking to expand its facility, to double its GHG emission reduction, with the reinvestment of tipping fees from



the Anaerobic Digester for a fraction of the price. The material exists throughout this and surrounding jurisdictions, and based on the GHG Emission Reduction calculations submitted for this grant, adding this additional unit, (likely by 2030) would expand the reduction in GHG emissions to include an additional (110,343 mtCO₂e x 20 years) 2,206,860 MTCO₂E to the current total. This would bring the total GHG Reduction to 6,607,894 MTCO₂E for 2025-2050. Combined with the Solar Expansion this would total **7,564,089 MTCO₂E (\$13.22/MTCO₂E Removed)**. The goal of the facility would be to capture all of the organic material currently not being diverted from the Landfill, or being land-applied throughout the area, this estimated tonnage is in the neighborhood of 200,000 T annually. This further expansion and calculation will not be included, but will be the objective of the PR RREP. The collection and continued diversion of this material, serves to benefit the environment and the growth of the project. If possible and through growth opportunities, it would not be impossible to see the PR RREP having the ability to further reduce emissions by nearly 400,000 MTCO₂E a year.

The establishment of the Paso Robles Regional Renewable Energy Park will serve as a template that can show the scale and opportunity that exists in underserved areas throughout the State and nation (CARB, 269). Historically the most consequential investments are made in large metropolitan areas, leaving lesser developed areas to attempt to manage the same challenging problems with little to no resources. The City and its partners are endeavoring to demonstrate that with collective action and planning, a solution like this can not only be successful but can be a boon to the local environment, community and economy. The coalition that has been developed in support of this project is expansive, ranging from State and Local enforcement authorities to State and Local elected members. The coalition includes organizations focussed on economic development and tourism, which is linked to the focus of additional members, being environmental sustainability, research and development.

Letters of support have been provided by; California Air Resources Control Board (CARB), San Luis Obispo County Air Pollution Control District (SLO APCD), Governor's Office of Business and Economic Development (Go-Biz), US House of Representatives- Jimmy Panetta, US House of Representatives - Salud Carbajal, CA Senate - James Laird, CA Assembly - Dawn Addis, San Luis Obispo County Supervisor John Peschong, San Luis Obispo Council of Governments (SLOCOG), Integrated Waste Management Authority (IWMA) (a San Luis Obispo County JPA), Regional Transit Authority (RTA), Upper Salinas - Las Tablas Resource Conservation District (USLT RCD), California State Polytechnic University, San Luis Obispo - Initiative for Climate Leadership and Resilience (Cal Poly), Regional Economic Action Coalition (REACH - Central Coast), Paso Robles Main Street Association, Travel Paso, Wine Country Alliance. Additional Letters of Support from the following Utilities Directors: City of San Luis Obispo, City of Morro Bay, San Miguel CSD, City Atascadero, City of Goleta

A final show of support for the PR RREP can also be seen in the attached Memorandum of Understanding between 16 Regional Jurisdictions of the Central Coast Biosolids Coalition.



MOU Member Jurisdictions:

- City of El Paso de Robles
- City of San Luis Obispo
- City of Santa Maria
- City of Atascadero
- City of Morro Bay
- Cayucos Sanitary District
- South San Luis Obispo County Sanitation District
- Avila Beach Community Service District
- San Miguelito Mutual Water Company
- Templeton Community Services District
- San Miguel Community Services District
- Cambria Community Services District
- City of Pismo Beach
- City of Santa Barbara
- Goleta Sanitary District
- Nipomo Community Service District

The PR RREP will show a myriad of benefits that can be derived from developing an innovative regional solution to universal challenges. Once operational, the full scale of additional opportunities and benefits will be clear, and these developments can be replicated and implemented where sufficient volume, interest and collaboration are possible, both in California and throughout the nation. Delivering a successful replicable program will allow smaller and more remote communities to address significant environmental and health issues without having to attempt to overcome these burdens alone.

The success of the PR RREP will also support State initiatives to advance identified GHG reduction strategies (CARB, 241, 247 and 252). The PR RREP will provide solutions to the following Sectors identified in the State of California's PCAP: Electricity Generation (p.37, p.42, p.46-47), Industry (p.34, p.36, p.40), Transportation (p.21, p.26, p.31, p.33), Agriculture/Natural & Working Lands (p.42, p.50, p.52), Waste Materials Management (p.42, p.46, p.59).

DEMONSTRATION OF FUNDING NEED

The City has explored and is exploring all known grants to fund this Pilot Program. The City was unsuccessful in joining a previously submitted DOE Grant, and has since expanded the scope and capabilities to be included in the program. The City will simultaneously be looking to fund initial development, including CEQA and the development of an RFP, both internally and through grant funding where available. These preliminary activities will help establish a clear direction for developers to design and deliver on the necessary infrastructure. Beyond those initial steps, the City has discussed internalizing or financing some portion of construction. To secure the best possible result for our community and to impact the environment in the most beneficial way, the City would need significant additional funding to offset these significant construction costs. Additionally, many of the jurisdictions that have cosigned the MOU do not have the significant resources or personnel to dedicate to the development and delivery of the project.

The City has already made significant progress in the development of a regional cooperative by securing 16 member jurisdictions to an MOU (listed above and attached in Other Attachments), who



are committed to the development of a regional facility to manage their biosolids. There has even been interest expressed by a State/Federal entity to utilize the facility once built. The biosolids MOU has been two years in the making.

Additional funding opportunities will continue to be explored to expand the benefits that will be offered through the development of the RREP. Ideally, further energy generation will be created through additional solar arrays, microgrid systems can be installed, and additional energy can be delivered to neighboring communities and businesses. Additionally, the City hopes to be able to deliver 100% renewable energy to the City's Airport, which is currently being built out as a Tech Corridor. Many of the installations/companies that are hoping to utilize these facilities have consistent energy demands that can become challenging with brownouts, which do currently occur. The PR RREP would be able to provide renewable, reliable energy 24hrs a day 7 days a week, by combining both Solar and Green Hydrogen as energy sources. The integration of these two projects will prove to be beneficial for each. As the City can establish base users for its energy production, and the Airport can offer reliable, independent and green, renewable energy to its current and future clients.

These continued developments will take place after the initial construction of the PR RREP.

The City and partners will be looking to secure additional funding wherever possible to not overburden our relatively small population. Current opportunities exist at the state I-Bank, through grants EPA-Regional Source Reduction Assistance Grant, California Energy Commission- Large-Scale Centralized Hydrogen Production (H2Central) Grant, WaterSMART, Solid Waste INfrastructure for Recycling Grant (SWIFR), Greenhouse Reduction Fund, USDA Composting and Food Waste Reduction Program and NREL Waste-to-Energy Technical Assistance. These opportunities continue to develop and the City will utilize these additional opportunities to help grow the PR RREP to the largest scale possible that can still deliver on its initial goal of reducing GHG Emissions and providing needed, transformative and cost effective environmental solutions for the region.

The most critical component of need is in the initial funding request to the CPRG. While in theory it would be possible to establish individual portions of this facility, they would likely only serve a small cross section. Additionally, the types of funding structures that would be required dramatically reduces the overall impact of GHG Emission reductions for our communities. For example, if CPRG grant funding is not provided for the PR RREP, funding may be secured to develop a Green Hydrogen installation, but there would be a partnership with a vendor who would determine where that product would be sold and who it would benefit. Those beneficiaries would likely not be local organizations as pricing would likely send produced hydrogen to high demand locations like Los Angeles or San Francisco. Where the CPRG grant is intended to be transformative and impactful, many of these opportunities would be dramatically reduced or eliminated if the resources produced through the process were distributed solely based upon market demand. And even where green hydrogen would be produced, it would not be a viable solution to increase usage in our surrounding communities, as the material would be under contract to distant locations.



Biochar, has a significant value as the base for carbon black, a clothing dye, it additionally has a significantly increased value when used in Carbon negative concrete - and where those processes are good and needed - they do not directly serve the community where we live. If CPRG funding is able to support the initial investment into the PR RREP it would allow the City and its collaborative partners to identify the most beneficial uses of these products. Where land application is desired, Biochar could be available, otherwise the entirety of production would be sold to more remote locations for different uses. None of which would be beneficial to the local community.

Additionally, CPRG funding would establish necessary infrastructure for continued GHG emission reduction. Where the City is due for landfill flare upgrades, the PR RREP would create the opportunity to integrate this budgeted flare expansion, into the purchase of a gas generator. This will not be possible without the CPRG funding. A component included in the budget is the gas upgrading that will be needed for Landfill gas ~\$800,000 , a generator is roughly ~\$550,000+. Putting the ability to generate electricity onsite at \$1.35M, however the City has ~450,000 scheduled for investment in a Landfill Flare upgrade. If the infrastructure (gas upgrader) is already present, this funding could be utilized to expand further gas recovery and conversion to electricity, reducing or eliminating landfill flare emissions (including F-Gases, (PCAP, High Global Warming Potential Gasses, p.48).

The CPRG funding is not the entire project. It is the funding that establishes the base from which our community and the surrounding communities can build a lasting legacy of environmental stewardship and innovation. The CPRG will fund the establishment of an independent renewable energy production facility, sponsor industry leading innovative PFAS mitigation efforts, invest in the future of green, renewable transportation connectivity throughout Central California, and make it possible for farmers to see the benefits of Biochar on their lands, and for students to study and promote those same activities (See letters of support from Cities of Atascadero, Morro Bay, Goleta, San Luis Obispo, the San Miguel Community Services District, Cal Poly and the USLT RCD).

TRANSFORMATIVE IMPACT

The PR RREP development will be critical for the long-term reduction of GHG emissions in San Luis Obispo, Santa Barbara and surrounding Counties. The scale of its impacts will not fully be known until many years after its full development. As tonnages increase and land application of biochar grows these significant reductions will then be able to be tabulated. The collective effects of these measures will also be transformative, in that they will demonstrate that the PR RREP can be an effective and replicable template to drive significant environmental change in previously underserved areas throughout the State, and nation.

As the development of the PR RREP advances additional opportunities can also be unlocked, allowing for continued development at the site. These advancements include expanded energy delivery to surrounding communities and businesses. One prospect would be to utilize funding through the



continued development of the program to directly improve energy resiliency in the City of Paso Robles, including a focus on the City's LIDAC communities.

The creation of the PR RREP will also allow for the exploration of funding to expand the size and capabilities of the fueling station. There are several DOE Transportation grants that would be able to support a more robust development at the site, allowing for a full-service station for all travelers. The co-location of the RTA at the PR RREP will be integral in helping to transform the project. By establishing the facility as a known and reliable charging or fueling location, it will only enhance its usage as the project expands and demand for those resources increases through the further adoption of EV and Hydrogen vehicles. The PR RREP will also be able to address the needs for a key transportation sector of medium to heavy-duty, serving as a critical refueling node along the renewable energy highway infrastructure (PCAP, 26).

The pioneering effort that would be established through the destruction of PFAS on site, its conversion to a usable and needed agricultural amendment (with its associated key GHG reduction benefits) as well being a fully replicable solution for a complete circular economy, is not only unmatched, it is unprecedented. To the City's knowledge no other existing project in the United States has so completely integrated every aspect of production and reuse into a circular and replicable environmental solution. Beyond the goals established by the CPRG program, the PR RREP would address a future imminent environmental risk (PFAS). Where these challenges typically are most harshly felt by rural and LIDAC communities, the CPRG Grant, makes liability an asset. The integration and co-location of these key advanced technologies, while dramatically reducing GHG emissions, will also serve as a demonstration on the future of waste handling in the United States.

Additionally, integration of green hydrogen into the PR RREP will serve as a transformative effort for the community, the region and the State. Paso Robles is located at a key cross roads in Central California, connecting the Central Coast and the Central Valley. Providing a needed renewable energy hub (including hydrogen) will allow for the faster adoption of new vehicle technologies (PCAP, ps. 30-31) for both commercial and non-commercial uses. Beyond transportation uses, green hydrogen could prove to be critical for the expansion of renewable energy, as it could support solar installations allowing for 24/7 dependable power.

IMPACT OF GHG REDUCTION MEASURES

There are several critical GHG efforts that will be undertaken at the same time during the course of delivery of the RREP. The collection, digestion and pyrolysis of organic material will be a significant source of GHG reduction. This material includes significant tonnages from the agricultural and forestry industries, which to date have not been captured. In the processing of some biosolids material, some jurisdictions do not have advanced anaerobic digestion systems, so these emissions have previously not been captured. Additionally, because of the site's location, there will be a significant reduction in vehicle miles traveled in the delivery of these biosolids. Santa Barbara alone



sends six (6) loads a day past the Paso Robles Landfill to Lost Hills (a single load reduction of just over 106 vehicle miles).

Additional GHG reduction will also be attributed to the development and utilization of Green Hydrogen or Electricity from the facility. ONce a program has been developed to track and measure these avoided GHG emissions, they can be included on the quarterly or annual reports to the EPA.

While challenging to determine, Landfill gas is regarded as the second-highest stand-alone producer of methane. Converting the City's flare to a recoverable and useful product will offset and reduce further the impact of GHG emissions from the Landfill (CARB, 234).

Biochar utilization as a soil amendment and as carbon storage, both efforts reduce GHG emissions and align with government directives (CARB, 254), however, for now these numbers are not included in the GHG Emissions Reduction totals as there are too many unknown variables to determine with certainty the quantity of emissions reduction.

Between 2025-2030, the City anticipates these emissions reductions to be significant. As the RREP continues to expand its impact will continue to grow, creating an even more significant reduction in GHG emissions and improved regional air quality. The City anticipates between 2025-2050 there may be an opportunity for continued expansion of refinement which will allow the system established to show the full scale of its benefit to the community. Additional PR RREP expansion totals were estimated above but the only reportable numbers are those directly tied to the CPRG funding.

Related GHG Emissions reductions are also likely when the PR RREP is used as a template to implement replicable projects throughout the US. These additional emissions are not calculated, but should be considered, as they are a likely result of this successful development, and would lead to a vast reduction in GHG emissions throughout the State and country.

There are further GHG Emissions that can also not currently be tabulated, as the City does not know the full scale of Vehicle Miles Traveled that will be reduced regionally in the use of this facility. Where many industrial users are making weekly and even daily trips to Bakersfield, each one of these trips could see a reduction of over 100 miles (roundtrip), this reduction calculated to scale would increase the total GHG emissions reduced significantly, however it is too early to begin to quantify the full effect of this project. Additional research through Cal Poly (see letter of support) and other regional institutions will allow for a more complete picture to develop once the PR RREP has been constructed.



Total Estimated GHG Reductions/ Project/ Time Frame (MTCO2E)		
	2025-2030	2025-2050
Landfill (Methane Capture)	199,500	997,500
Anaerobic Digester (Methane Capture)	551,715	2,758,576
Transit (RTA Emissions Avoided by Converting to Renewable Power)	76,893	422,909
Transit (Remaining Emissions Avoided by Landfill Power Generation)	7,922	30,810
Power (Electric and Vehicle Charging)	38,248	191,239
Total GHG Reduction	874,278	4,401,034
* Not Calculated GHG Emission Reductions		
GHG Emission Reduction through Biochar Application		
Reduced Fertilizer Usage converted to GHG Emissions Reductions		
Reduced Vehicle Miles Travelled by vendors: Waste Haulers, FOG Haulers, Bisolids Haulers, and Organic Material Haulers		
Additional benefits beyond MTCO2E reduction that exist in the conversion of Landfill and AD biogas into green Hydrogen (example F-gas)		

Exhibit A

MAGNITUDE OF GHG REDUCTIONS FROM 2025 THROUGH 2030

874,278 MTCO2E

MAGNITUDE OF GHG REDUCTIONS FROM 2025 THROUGH 2050

4,401,034 MTCO2E

COST-EFFECTIVENESS OF GHG REDUCTIONS

2025-2030 (see Exhibit A)

$(\$100,000,000 / 874,278 \text{ MTCO2E}) = \mathbf{\$114.38 / MTCO2E}$

The steep initial costs of construction are significant and can be seen in the value of MTCO2E / dollar spent. However, these returns are consistent and are non-elastic. The proposed diversion will continue throughout the project's lifecycle by consistently generating the same GHG Emission Reductions. However, it must also be noted that after the installation of the first AD, upgrading to a second unit is far less burdensome and will greatly amplify the GHG Emission reductions and would make the unit cost of per MTCO2E avoided significantly less, which would cut this estimated cost/unit nearly in half.



2025-2050 (see Exhibit A)

$(\$100,000,000/4401034 \text{ MTCO}_2\text{E}) = \mathbf{\$22.72 / MTCO}_2\text{E}$

During this longer time frame the true cost of GHG Emission Reductions are more easily seen. While the initial cost was significant the life of these facilities allows for a far more effective unit cost as the projects age. Additionally, as mentioned above, at this point the City would have already invested in a 2nd Digester and these unit prices would be nearing single digit dollars per MTCO₂E avoided.

DOCUMENTATION OF GHG REDUCTION ASSUMPTIONS

Please see “GHG Calculations Spreadsheet” and “Technical Appendix: GHG Emissions Calculations document for Calculations.” Totals and explanations of emission calculations and assumptions to calculate above GHG Emission Reduction totals.

ENVIRONMENTAL RESULTS – OUTPUTS, OUTCOMES, AND PERFORMANCE MEASURES

EXPECTED OUTPUTS AND OUTCOMES

The City estimates that the amount of MTCO₂E reduced for 2025-2030 to be 874,278, and for 2025-2050 to be 4,401,034. It is further estimated that the City will generate over 8 tons of biochar annually for use in local agriculture and working lands. Annually the City also expects to create over 292,000kg of Green hydrogen. The PR RREP also looks to deliver a fully renewably fueled fleet for use by the Regional Transit Authority. The PR RREP will also be looking to fully integrate local government infrastructure (Paso Robles Airport/ Spaceport), and some private industry and residents into an independent renewable energy mini grid system. The solutions provided by the PR RREP will also be serving communities in six different counties, representing over 240,000 individuals who reside in LIDAC communities.

All of these activities and measures will be tracked, updated and integrated into the reporting required by the EPA.

Additionally, all of these efforts will result in several important benefits to the community, including lower energy costs (for some users), resilient infrastructure (where applicable), high-quality soil amendments and pollution reduction (CARB, 262)(PCAP, pgs. 21, 34, 37, 42, 46). The facility will be able to reduce or eliminate the need for future rate increases (that would have occurred if PFAS destruction opportunities did not exist within the county, this includes rates from both water and wastewater utilities).

PERFORMANCE MEASURES AND PLAN



Modeling provided by the EPA can help track many of the above outputs. Tracking will occur by material type and sector when arriving at the facility, volume of hydrogen produced, KWh generated, fuel/electricity utilized by local fleets, procurement credits used to fulfill SB 1383 targets, tons of Biochar produced and sold, and methane generation from the Landfill will also be captured and included in reports. All of these outputs will provide better context for the success and challenges that are faced in the implementation of such a RREP, and can be utilized to help replicate the PR RREP throughout the State and country. Additional tracking will also be possible to determine where material is being produced, where it previously was going for disposal and the associated Vehicle Miles that were avoided. Follow up will also be possible regarding the best and most effective utilization of biochar. GHG emission reduction tests and analysis will be able to be completed through work with our partner organizations and these future data points will also be included in future reports.

AUTHORITIES, IMPLEMENTATION TIMELINE, AND MILESTONES

The PR RREP will be managed and operated under many different regulatory bodies; The SLO Air Pollution Control District, California Air Resource Boards, California Waterboards, Department of Toxic Substances Control, CalRecycle etc. All of these agencies require different regulatory compliance measures and frequencies throughout the development of the project; it will be a core focus to track and manage the data associated with the elimination or avoidance of GHG Emissions. The PR RREP will be the first of its kind, being able to properly quantify and demonstrate its key benefits will be integral for its adoption as a pilot program and its ability to be scaled and replicated throughout the State and Country. Efforts will be made to track all measurable commodities and production. Not only does assist with grant tracking but it additionally helps with the fiscally responsible manner by which to run a facility with interconnected advanced technologies.

Measures will be collected daily, as commodities are produced, delivered or sold. These efforts will be paired with research which will accompany the utilization of many of these beneficial byproducts. All of this data and any additional relevant measures will be included in monthly, quarterly and annual reports.

Timelines for implementation can move quickly. As the land is already owned by the City and the partner organizations are supportive of the creation of the PR RREP, which benefits their constituents, most hurdles to development should be alleviated in short order. The longest hurdle to full operation is simply the timeline for materials to arrive on site, and the necessary waiting period to award contracts for construction or technology delivery. Ideally those efforts will be completed prior to the end of this calendar year, 2024 if awarded. Even though these technologies are co-located they can be delivered independently and begin GHG Emission reduction near immediately, from the installation of gas cleanup for the Landfill generator, the installation of the dewatering units and the high temperature pyrolysis units, and the installation of the solar array and Green Hydrogen production facility. All of these portions of the PR RREP should be completed or near completion by the end of



2025. The remaining large outstanding item would be the installation of the Anaerobic Digester, once a vendor is selected the AD facility would be operational in 20-24 months, mid to late 2026.

In early spring/summer of this year, even before we have been identified as a recipient of the CPRG funding an RFP for the various technologies will be developed to secure their products. Once the EPA selects Paso Robles as a winner of the award, this RFP will be distributed for bidding to determine the best suited technologies to deliver the desired results for the facility. All of these activities could be completed prior to the funding arriving in the City's account. All of this is to say the City would be acting most expeditiously to ensure the prompt expenditure and delivery of the project.

The buildout, procurement and reporting would all adhere to the standards required through work completed through the EPA as well as the City of Paso Robles design and delivery standards. Additional consideration will be paid to the "Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements."

The City anticipates being able to report on the completed installation of the full PR RREP by the end of 2026 or the middle of 2027 at latest. However, ongoing reporting will be ongoing to cover the portions of the installation that are already operating and successfully avoiding/converting GHG Emissions.

LOW-INCOME AND DISADVANTAGED COMMUNITIES

COMMUNITY BENEFITS

The PR RREP presents an opportunity for all communities in San Luis Obispo & Santa Barbara County, and portions of the surrounding counties (Kern, Kings, Monterey, Fresno) to destroy PFAS, a known carcinogen. Eliminating key risks associated with this harmful compound, from known sources (water, wastewater and landfills) will be a benefit, improving the quality of life for every community member and visitor to the affected jurisdictions (CARB, 254) (PCAP, p.42). In servicing the growing coalition of jurisdictions and agencies, the PR RREP would in practice, be servicing PFAS waste from these Counties, creating a solution for all LIDAC communities in the region. Collectively it is estimated that this number would be around 240,000 individuals who reside in LIDAC communities, covering 43 different CEJST census tracts.

At this time, the PR RREP does not represent a disbenefits to any of these affected tracts, as the processing of the materials and the avoidance of further contamination within other local jurisdictions removes this burden and risk from these populations. Additionally, the ability for the RTA to integrate clean renewable green transportation options for the Paso - San Luis Obispo service area will improve air quality in these associated tracts.



COMMUNITY ENGAGEMENT

To date, the RREP has been developed and expanded through the utilities in these areas. As the RREP grows and implementation timing becomes more refined, outreach will continue and will include all sectors of the community, demonstrating the benefits of the program to LIDAC Communities throughout the partnered region. Additionally, this submission has attached 23 Letter of Support representing many differing community organizations, elected officials and regulatory agencies, all of which see benefit and need in the solution that the City of Paso Robles is attempting to deliver through the PR RREP. The city of Paso Robles will look to continue outreach to the communities we hope to benefit, through these organizations and independently - to draw awareness to the real environmental risks faced by our communities and to provide insight into the solutions we are pursuing on all of our community member's behalf.

Letters of support have been provided by; California Air Resources Control Board (CARB), San Luis Obispo County Air Pollution Control District (SLO APCD), Governor's Office of Business and Economic Development (Go-Biz), US House of Representatives- Jimmy Panetta, US House of Representatives - Salud Carbajal, CA Senate - James Laird, CA Assembly - Dawn Addis, San Luis Obispo County Supervisor John Peschong, San Luis Obispo Council of Governments (SLOCOG), Integrated Waste Management Authority (IWMA) (a San Luis Obispo County JPA), Regional Transit Authority (RTA), Upper Salinas - Las Tablas Resource Conservation District (USLT RCD), California State Polytechnic University, San Luis Obispo - Initiative for Climate Leadership and Resilience (Cal Poly), Regional Economic Action Coalition (REACH - Central Coast), Paso Robles Main Street Association, Travel Paso, Wine Country Alliance. Additional Letters of Support from the following Utilities Directors: City of San Luis Obispo, City of Morro Bay, San Miguel CSD, City Atascadero, City of Goleta

	CEJST Census Tracts	Counties	POPULATION
PHASE 1	27	2	144,918
PHASE 2	43	6	239,651

JOB QUALITY

The City of Paso Robles utilizes defined criteria to determine vendors and suppliers for the City, including the use of the "Greenbook" Standards. Priority and scoring will benefit organizations that engage and attempt to deliver solutions through Diversity and Inclusion, additionally, where



applicable the City will look to incorporate the Department of Labor’s “Good Jobs Principles” to help identify priority opportunities for delivery of goods and services. These principles will be utilized throughout the delivery of the PR RREP for vendors, sub-contractors, etc.

PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

PAST PERFORMANCE

Identified below are a list of current and past infrastructure projects that the City has and is completing. All of these activities require monitoring by the City itself, or through contractors who oversee portions of this compliance. All of these efforts result in timely submissions of grant reports and clearly defined compliance schedules and resolutions. The below activities typically all require mandatory compliance with prevailing wage, Buy America Build America (for new projects), restrictions on origin of Steel, labor compliance and material and labor cost oversight.

The City will look to the “Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements” for further advice regarding any future procurements associated with the PR RREP.

Airport Airfield Electrical Upgrade- FAA

Grant Award: \$1.2M

Agreement # FAA AIP 3-06-0184-028-2021

CFDA # 20.106

Grant Manager- Ditas Esperanza/Mark Scandalis

Description of the agreement):

FAA grant funded project to upgrade the Airfield lighting to LED lighting at Paso Robles Municipal Airport

Contact:

Federal Aviation Administration, FAA

Was the City successfully able to complete and manage the listed agreement?

Yes.

Did the City submit acceptable interim and final reports for agreement?

Yes, Reimbursement payments/grant draws were submitted to the FAA.

What process was/is in place to ensure reporting compliance?

FAA review of the grant and engineering specifications. City Council acceptance of the grant offer.

Was it successful for that agreement?

Yes.



Fiber Network Installation

Grant Award:\$2.8M

Est. Total Project Cost:\$3.5M

Economic Development Administration through US Department of Commerce

Description of the agreement):

Grant to install city wide fiber network system at various locations

Contact:

Ulehla@eda.gov

Was the City successfully able to complete and manage the listed agreement?

Yes. This is a current project. Construction is about to begin.

Did the City submit acceptable interim and final reports for agreement?

Yes, Monthly and quarterly reports are required to be submitted

What process was/is in place to ensure reporting compliance?

Monthly communication (virtual) allowed success to carry out project

Was it successful for that agreement?

Yes, ongoing.

24th Street Bridge Rehab

Grant Award:\$1.8M Planning

Pending Construction Grant Award: \$14.7M

Est. Total Project Budget: \$18.5M

Agreement # BHLS-5084 (017)

CFDA # 20.205

Grant Manager- Ditas Esperanza

Description of the agreement:

Prepare environmental documents, final engineering, and right of way acquisition to expand the 24th Street Bridge over Union Pacific Railroad

Contact and Organization :

Federal Highway Administration (FHWA)

Caltrans Local Assistance Engineer Tammy Mar tammy.mar.dot.ca.gov

Was the City successfully able to complete and manage the listed agreement?

Yes, still in process. Environmental complete, Design is 65% complete and we are in the midst of acquiring right of ways

Did the City submit acceptable interim and final reports for agreement?

Yes

What process was/is in place to ensure reporting compliance?

Monthly communication with Grant Administrator, including

Was it successful for that agreement?

Yes



Recycled Water Pipeline Installation
California State Revolving Fund
Grant Award: \$31M

Description of the agreement:

The State Revolving fund has agreed to support the construction of 8 miles of Recycled Water Pipeline to the East of the City, Phase 1 is complete, Phase 2 is set to begin after receipt and selection of vendor after RFP is flown.

Contact and Organization :

State Revolving Fund

Was the City successfully able to complete and manage the listed agreement?

Yes, still in process.

Did the City submit acceptable interim and final reports for agreement?

Yes

What process was/is in place to ensure reporting compliance?

Monthly communication with Grant Administrator. Including frequent phone calls and emails

Was it successful for that agreement?

Yes

REPORTING REQUIREMENT

As stated above all activities will be structured to comply with all Federal Standards required by the EPA, and will also be required to fulfill all requirements by the City prior to, during and to complete any associated work or the purchase of services

All construction, labor and development will take place within the standards required in the CPRG, through and through State and local mandates. Additional specific efforts will be made to encourage construction companies to hire a diverse and local labor force. Safety, pay and quality standards will also be monitored and enforced by a Construction and Compliance Manager. The selection of contractors will reflect their commitment to deliver on the above-listed priorities, as well as a demonstrated history of successful delivery of similarly complicated projects.

The City is the owner of the subject property and it has begun activities to formally incorporate it into the City, (CEQA, where an IS/MND is anticipated shortly). The City will then act as the lead authority for the PR RREP and will assist in its successful implementation. In keeping with the City's Climate Action Plan objectives, (reduction of GHG emissions (AB 32), as well as renewable energy production), and in coordination with the City's Hazardous Mitigation Plan (incorporating efforts to reduce the high risks associated with Wildfires and Draught and Water Shortage), the Program will align with previously identified key City objectives.



STAFF EXPERTISE

Total Staff Experience in Infrastructure Delivery - 137 years

Total Estimated Historical Project Delivery Budget - \$945,000,000

Christopher Alakel, MBA, MS Engineering, PE, Utilities Director

BS Civil Engineering

Licensed California Civil Engineer

Area(s) of focus: 27+ years of Municipal Infrastructure Project Delivery

Awards:

- American Society of Civil Engineers: Sustainable Project of the Year Award 2016

Projects:

- Nacimiento Water Treatment Plant (\$14M)
- Westside Reservoir (\$8M)
- Sherwood Arsenic Removal Systems (\$5M)
- Annual Utilities Capital Improvement Projects (\$4.5M)

Total Historical Project Delivery Budgets (\$135M+)

Ditas Esperanza, MPA, PE, Capital Projects Engineer

BS Civil Engineering

Licensed California Civil Engineer

Area(s) of focus: 25+ years of project management of roadways, bridges, sewer, water, fiber conduit.

From Planning to Construction Completion both public and private sector.

Projects:

- Niblick Bridge Expansion (over Highway 101, Union Pacific Railroad and Salinas River)
- Realignment Theater Drive at Highway 46
- Southbound Ramp Improvements from Highway 46 to US 101 South
- New Southbound Ramp at 17th Street and US 101
- Seismic Retrofit of 13th St Bridge (over Salinas River) and 24th St Bridge (over Union Pacific Railroad)

Total Historical Project Delivery Budgets (\$150M+)

Kirk Gonzalez, Utilities Engineering Manager

BS and MS - Civil and Environmental Engineering

Registered Civil Engineer (California), Certified Public Manager

Area(s) of focus: 18 years of expertise in Water Resources & Municipal Utilities

Projects:

- Recycled Water Distribution System (\$31MM) (in progress)
- Main West Tank (\$8MM)
- WRRF Energy Efficiency Sustainable Solutions Turnkey Program (\$14MM)



- Southland Treatment Plant Upgrade (\$13MM)

Total Historical Project Delivery Budgets (\$200M+)

Chris Huot, Assistant City Manager

BA. Public Relations, Masters, Mass Communication

Awards:

- GFOA Distinguished Budget Presentation Award (2012 to 2019)

Area(s) of focus: Senior executive municipal management, project management, internal service delivery, legislative engagement, budget development and implementation, innovation, efficiencies, and outcomes. 13 years of experience.

Projects:

- Measure N – 1 cent general sales tax; Generates \$121 million/annual revenues (FY24 projected)
- CARES Act Funding Administration; \$33.5 million allocated
- Bakersfield Fire Station 8 Rehabilitation; \$2 million
- Clean City Initiative; \$800,000+ annually

Total Historical Project Delivery Budgets (\$160M+)

Matt Thompson, Recycled Water Manager, Civil Engineer

Areas of Focus: Wastewater Tertiary Treatment and Recycled Water Distribution.

Years in area(s) of expertise: 15 years

Projects:

- Wastewater Tertiary treatment Facilities: \$14.1 million
- Wastewater Treatment Plant Upgrade: \$45.9 million
- Recycled Water Distribution System: \$9.3 million expended-to-date (\$35.4 million project)

Total Historical Project Delivery Budgets (\$150M+)

David LaCaro, Public Works Operations Manager

Ecology and Systematic Biology, Cal Poly, San Luis Obispo

Area(s) of focus: Stormwater Management (design, permit compliance, project management), Public Works municipal operations and maintenance.

10 years experience (8 years SW Program, and 2 years PW Ops).

Projects:

- Bolen Street CIPP Rehabilitation Project (cure-in-place storm drain pipe installation) (\$330,000)
- Niblick Road Corridor Traffic Signal Upgrades (upgraded 8 intersections to improve safety through the roadway) (\$220,000)
- Centennial Creek Storm Rehabilitation Project (multi-agency project) (1.2M)

Total Historical Project Delivery Budgets (\$50M+)

David Athey, PE, Water Resources Manager/Acting City Engineer

BS Environmental Engineering, Masters of Engineering Management



Registered California Civil Engineer

Background: Water Supply engineering, City engineering, utilities, roads, environmental remediation, landfill engineering, traffic engineering, CIP

Years in area(s) of expertise: 29

Projects:

1. Niblick Road Corridor Project, In design, Grant Award 18M
2. Two Bridge Projects, 10 M, Developed successful Grant application.
3. City of Atascadero Downtown Corridor Project, 1M
4. Other transportation and utility Projects delivered ~ 5M

Total Historical Project Delivery Budgets (\$100M+)

The City is well versed in complying with the various state and federal obligations associated with various funding structures including prevailing wage, American Iron and Steel, Buy America Build America. Completion of the Paso Robles Regional Renewable Energy Park will reflect the continued successful delivery of transformative infrastructure projects in the City of Paso Robles and San Luis Obispo County.

BUDGET

Budget Narrative:

The PR RREP requested funding caps out just under \$100,000,000. The design and desire of the City is to be able to develop and implement needed environmental solutions to address known and future environmental risks. The hazards and dangers associated with GHG emissions are significant, the PR RREP is determined to provide a needed solution for that concern and to head off developing environmental issues associated with PFAS. The City plans to deliver an integrated advanced technology renewable energy park that can process all types of organic material and create environmentally beneficial products and opportunities.

The City is looking to leverage its location on a key corridor in Central California to offer the opportunity to create immediate and lasting solutions for our community and the communities that surround us.

The CPRG grant funds would be utilized to establish the base infrastructure that the City will then utilize to fully scale up all of the various technologies integrated at the site. The City plans to further develop solar installations, on the landfill and adjoining City-owned property, expand Hydrogen production, fully capture and repurpose landfill emissions, expand and incorporate more anaerobic digesters and pyrolysis units. The PR RREP requires funding to support this initial investment, the future growth and development will be possible by the reinvestment of revenue created at the RREP.

While revenue is integral to the growth and success of the project, it is not the only goal. This is why you will not see "Revenue" identified on the budget sheet. The City acknowledges that the services it is set to provide will generate revenue, however, the pricing, sale and utilization of these resources will not be wholly determined by market demand. Where higher environmental benefit to the local



community is possible the PR RREP will prioritize the ability to improve the local environment over profit wherever possible, this can be seen in public utilization of biochar and green hydrogen to power municipal buildings, fleets etc.

Expenditure of Awarded Funds:

The City intends to utilize standard procedures required by the EPA and by the City to oversee and report out expenses and compliance. The vast majority of the spending will be in purchasing of containerized technologies, so while the investment is significant the oversight, construction and reporting should be relatively straight forward and manageable.

Reasonableness of Costs:

The development of the PR RREP was done to generate the highest amount of GHG reductions in the most cost effective manner, while still simultaneously addressing the varying and complex nature of the environmental hazards/challenges that are faced by the communities of the Central Coast. The solutions identified are costly, however they are also the most technologically advanced solutions that can effectively and reliably solve the complex issues that are being faced by our communities. Costs were managed in a way to allow for future investment by the City to fully maximize the initial investment by the EPA. The City acknowledges that some associated technologies are expensive, however the environmental benefits that our community and the members of the surrounding communities will enjoy offset these initial cost hurdles - over the long run the total investment will reduce a single MTCO₂E to less than a dollar per unit. Which would be an incredible value and a reasonable cost.