

PACIFIC GROVE

CLIMATE ACTION AND ADAPTATION PLAN

2025

CLIMATE ACTION AND ADAPTATION PLAN

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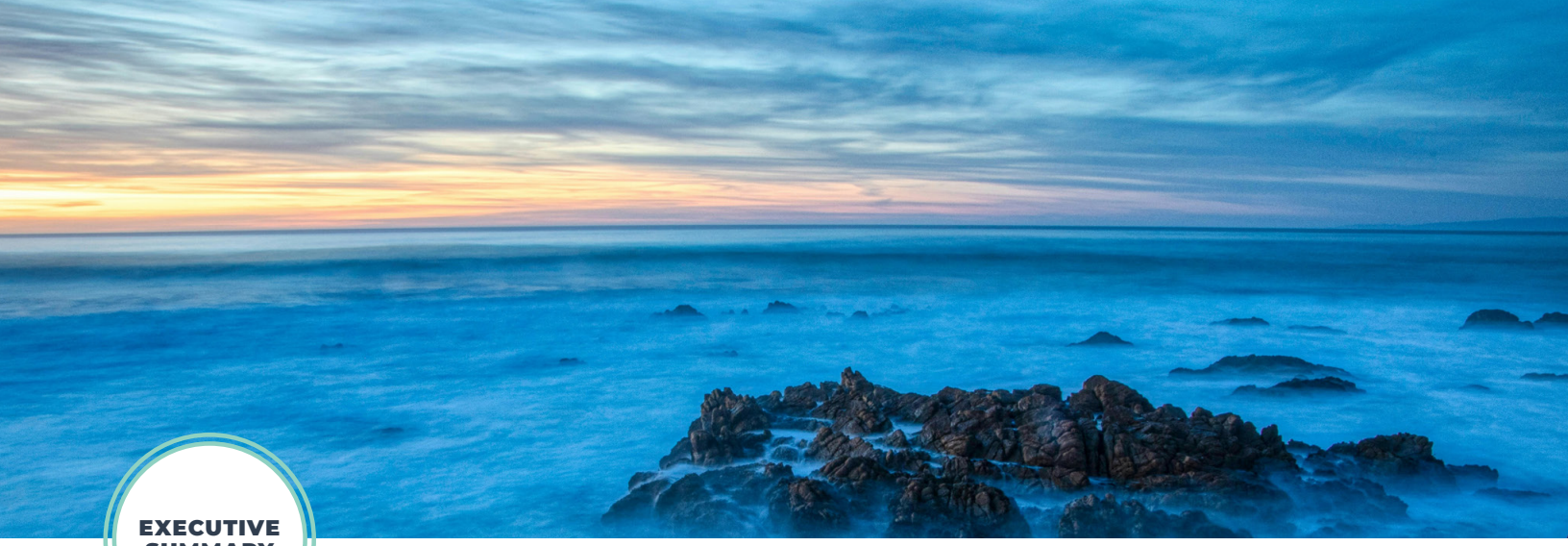






2025

EXECUTIVE SUMMARY

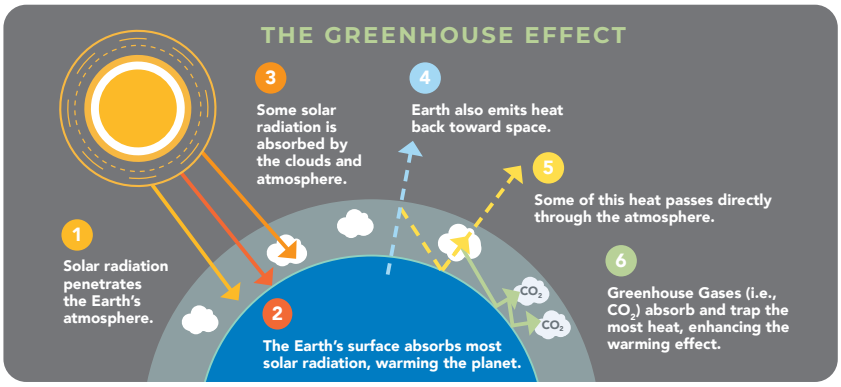


EXECUTIVE SUMMARY

CALL TO ACTION

Climate change is a pressing global challenge that requires collective action and sustainable solutions to safeguard our planet's future. Greenhouse gas (GHG) emissions which are emitted from the cars we drive, the energy we consume, and the products we buy are having a harmful effect on our environment and are increasing temperatures at an unsustainable pace.

The next few years are critical in limiting global temperature to a 1.5°C increase and mitigating the most severe impacts of climate change. To do so, global emissions need to be halved by 2030, and net zero emissions must be achieved before 2050. According to the most recent report from the Intergovernmental Panel on Climate Change, the Earth has warmed 1.09°C since 1850 and many changes such as sea-level rise and glacier and arctic ice melt are now irreversible. Global temperature rise is likely to reach 1.5°C by the mid-2040s which will further stress our environmental systems and, at a local level, will result in more frequent and intense heat waves, floods, drought, wildfire, and air pollution. As a global community, we are rushing to find ways to mitigate the worst of what is to come. As a local community, we are seeking ways to thrive despite the disruptions to our lives and well-being.





EXECUTIVE SUMMARY

PURPOSE AND SCOPE

In developing this Climate Action and Adaptation Plan (CAAP), the City of Pacific Grove (City) acknowledges that the effects of climate change are no longer abstract. They are already affecting the community's infrastructure, health services, housing, and day-to-day operations. Increasing extreme weather events, shifts in temperature and precipitation, sea level rise, and more frequent energy outages reflect the urgent need for more sustained climate action.

The City's 2026 CAAP is meant to serve as a guiding document, providing a roadmap as the City tackles the challenges of climate change. It is designed as a comprehensive set of strategies to reduce GHG emissions in a manner consistent with state guidelines and regulations, while also advancing adaptation measures that strengthen the community's ability to withstand and recover from climate impacts. The CAAP identifies cost-effective opportunities for existing and future residents, businesses, and development projects to contribute to a more sustainable and resilient community. As a living document, the CAAP can be revised as needed, with clear and transparent metrics by which progress will be assessed and measured. While the City remains flexible in its approach, it is steadfast in its commitment to mitigation, adaptation, and resilience objectives. This CAAP represents a bold, holistic step forward in building a sustainable, climate-ready, and resilient future for Pacific Grove.



EXECUTIVE SUMMARY

STRATEGY DEVELOPMENT

Building on the baseline data and stakeholder input, the Strategy Development phase focused on crafting a CAAP that reflects unique priorities of the City while aligning with broader state and federal climate goals. This phase involved identifying key strategies to reduce GHG emissions, enhance energy efficiency, integrate renewable energy, and strengthen climate resilience. Scenario modeling tools were utilized to project the potential impacts of proposed strategies, helping to refine approaches that best support environmental stewardship.



EXECUTIVE SUMMARY

GOALS, STRATEGIES, AND ACTIONS

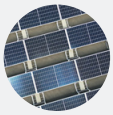
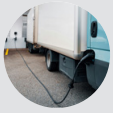
The CAAP includes 28 goals, 73 strategies, and 172 associated actions, all designed to serve as a clear roadmap for implementation. Of the plan's strategies, 43 prioritize GHG mitigation in sectors including energy, transportation, and waste; while the remaining 30 focus on adaptation and resilience, all of which include co-benefits and educational outreach components. Within the CAAP, certain strategies have emerged as the most impactful climate actions for the City. These high-priority strategies, identified for their cost-effectiveness and potential impact, are highlighted as the **"Top 10 Biggest Bang for Your Buck"**, as shown in **Table A**, to help City Council focus its efforts where they will achieve the greatest results.

Strategies listed in Table A concentrate on municipal operations, representing a variety of strategies for which the City has the most direct control, influence and authority to implement; can be enacted immediately or within the near-term; and provide additional high-impact co-benefits such as operational cost reduction potential, improved energy independence, resilience and grid reliability, and increase overall community resilience.



EXECUTIVE SUMMARY

Table A: Top 10 Biggest Bang for Your Buck

TOP 10 BIGGEST BANG FOR YOUR BUCK	
 1	**RE 5.1.2** Consider a microgrid at the Public Works Yard
 2	**RE 2.2** Continue and expand energy savings retrofits and installations including LED lighting, as well as light sensors, timers, and smart thermostats based on occupancy patterns in all applicable areas in municipal buildings, parks and facilities
 3	**RE 4.1** Complete a community-wide and municipal electrification study and establish a long-term implementation plan (Phase 1 and Phase 2)
 4	**RE 5.1** Implement energy management and energy storage systems at municipal locations to charge during low-use and release energy during peak demand hours. Implement one or more installations every 5 years by 2030, 2035, 2040 and 2045
 5	**RE 6.1** Continue to leverage 3CE for carbon free electricity, while working to increase local renewables, microgrids, and community incentives in line with early goals of the organization
 6	**TR 1.1** Develop a municipal Fleet Electrification Plan by 2028 that identifies vehicle replacement schedules, charging infrastructure needs, deployment timeframes and phasing, and estimated capital and operating costs
 7	**TR 1.2** Install 35 electric vehicle chargers at city facilities
 8	**TR 1.3** Accelerate the transition to EVs community-wide by making charging more accessible; tap into 3CE Electrify Your Ride rebates
 9	**AP 3.1** Add funding and implementation schedule as an appendix to the Shoreline Management Plan
 10	**GC 3.3** Integrate annual CAAP report goals during the budget review process at the direction of the City Manager

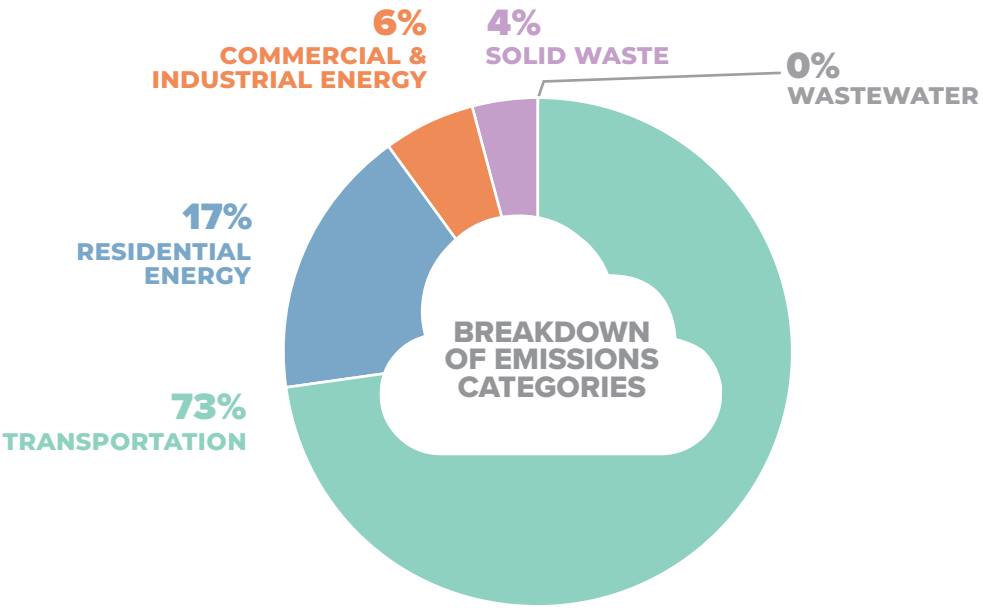


EXECUTIVE SUMMARY

GHG INVENTORY

The most recent GHG inventory for the City was completed for the year 2020 and serves as the foundation for this CAAP. Total community emissions within Pacific Grove's city limits in 2020 were estimated at 111,144 metric tons of CO_2e. **Figure A** shows the breakdown of emission categories for the City. The largest source of emissions are from the transportation sector, primarily from on-road passenger vehicles, following that are emissions from residential energy, commercial energy, solid waste, and wastewater.

Figure A: Breakdown of emission categories





CONCLUSION

While the proposed CAAP strategies can be intimidating, the cost of inaction is much higher. Investments now will substantially reduce long-term operation costs, reduce recovery costs from climate-related disasters, and promote growth in local jobs and the economy. The goals are ambitious, but achievable. There will undoubtedly be twists and turns on this path, and the City will need to stay flexible and adapt along the way. The overarching goal of the CAAP is to bring community benefits and financial resources to create better air quality and quality of life to every resident who lives within the City.



2025

INTRODUCTION



INTRODUCTION

BACKGROUND

Pacific Grove, known as “America’s Last Hometown,” is a coastal city of approximately 15,000 residents located at the tip of the Monterey Peninsula in Monterey County. Bordered by Monterey to the east, Pebble Beach to the south, and the Pacific Ocean along its northern and western edges, the City is defined by its dramatic shoreline, historic Victorian architecture, and proximity to nationally significant marine and natural resources. Demographically, the City has a relatively older population than the state average, with many long-term residents and retirees, and while it is less ethnically diverse than California overall, it is characterized by strong community cohesion and civic engagement. The City’s cultural identity is shaped by its origins as a 19th-century Methodist retreat, its longstanding artistic and educational traditions, and its stewardship of unique ecological assets, including the Monarch Butterfly Sanctuary, the Pacific Grove Museum of Natural History, and Hopkins Marine Station. The economy is supported primarily by tourism, hospitality, and marine research, while the community benefits from a walkable, small-town environment enriched by annual events and seasonal natural attractions such as the “Magic Carpet” bloom.

Looking ahead, the City faces several challenges and opportunities that will shape its future. The City must address climate change impacts, including sea-level rise, coastal erosion, and stormwater management, by advancing adaptation and resilience measures. Economically, there are opportunities to diversify beyond tourism by leveraging the City’s strengths in marine science, education, and sustainable practices, while continuing to support local businesses. By balancing historic preservation with thoughtful development, and by advancing sustainability and equity alongside economic vitality, the City can build on its unique heritage to ensure a resilient and thriving future.



INTRODUCTION

ALIGNMENT WITH STATE PLANNING

The City can align its climate action efforts with California's statewide climate and resilience priorities by ensuring the CAAP reflects the goals of SB 32, AB 1279, and the California Climate Adaptation Strategy. The CAAP should maintain consistency with the California Air Resources Board's Scoping Plan by setting measurable GHG reduction targets and incorporating strategies that advance carbon neutrality by 2045. In alignment with SB 379, the CAAP includes comprehensive climate adaptation and resilience strategies that address sea-level rise, coastal erosion, wildfire risk, and extreme weather impacts.

To meet the state's energy mandates, the City will continue to leverage Central Coast Community Energy's (3CE) 3CPrime program, which provides a 100% renewable electricity option to local customers. Complementary actions such as implementing energy efficiency upgrades, adopting all-electric building standards consistent with the California Building Standards Code (Title 24), and expanding distributed energy resources, including rooftop solar and battery storage, will further advance the City's progress along California's clean energy and decarbonization pathway.

The CAAP reflects the principles of SB 375 by prioritizing strategies that reduce vehicle miles traveled (VMT) and support the transition to zero-emission mobility. This includes expanding pedestrian and bicycle infrastructure, enhancing transit access, and investing in electric vehicle (EV) readiness through charging infrastructure and fleet conversion, consistent with the California Transportation Plan 2050 and Caltrans' Climate Action Plan for Transportation Infrastructure. These efforts directly advance the state's goal of achieving a 90% reduction in transportation emissions by mid-century.



INTRODUCTION

ALIGNMENT WITH LOCAL PLANNING

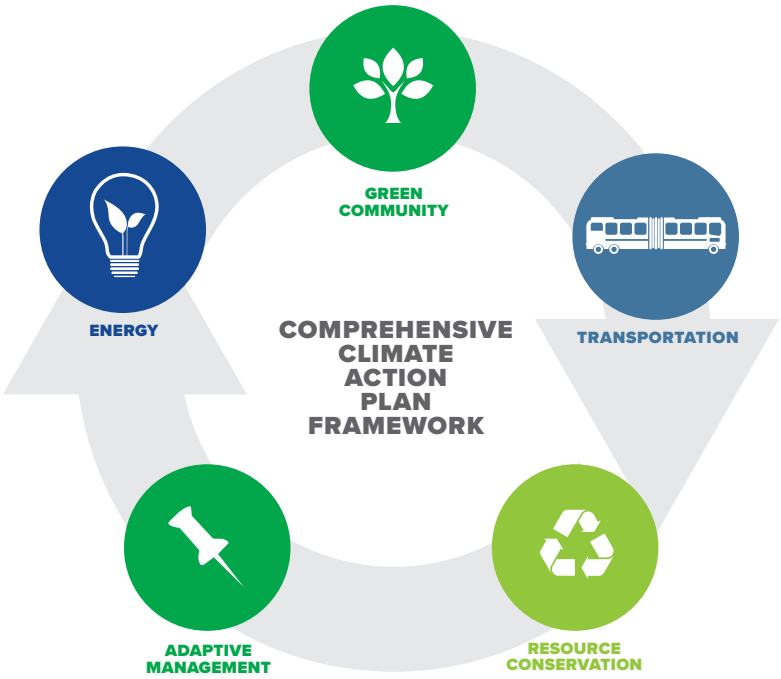
The CAAP will significantly strengthen the City's local planning efforts by providing a unified framework for reducing emissions, building resilience, and integrating climate considerations across city policies. The CAAP can inform updates to the General Plan, the Shoreline Management Plan (SMP), the Perkins Park Plan, the Great Tide Pool Plan, and the Hazard Mitigation Plan. By coordinating with regional partners such as the Association of Monterey Bay Area Governments (AMBAG), 3CE, the Central Coast Climate Collaborative, and the Transportation Agency for Monterey County (TAMC) the City can use the CAAP to leverage data, attract state and federal funding, and ensure consistency with regional climate goals. Ultimately, the CAAP serves as both a technical roadmap and a policy bridge, ensuring that every local planning decision contributes to a resilient, low-carbon, and climate-ready community.



INTRODUCTION

APPROACH TO DEVELOPING THE CAAP

The CAAP is rooted in a community-driven planning process, centered on inclusive engagement with key stakeholders. This participatory approach ensured that GHG reduction measures were both locally informed and culturally aligned with local priorities and values. Each strategy within the CAAP was evaluated for its feasibility, effectiveness, and consistency with existing policies and best practices in adaptation, resilience, and mitigation.





INTRODUCTION

CLIMATE ACTION TRACKER

The Climate Action Tracker (Tracker) is being used to track annual progress of the CAAP. The Tracker acts as an internal tracking system for staff roles and responsibilities, timelines, and funding approaches. The Tracker combines stakeholder feedback with strategy development to determine and clearly identify what additional gaps in data or funding is needed. The Tracker functions like a workbook and serves as the single point for planning, reporting, and ongoing performance monitoring. The Tracker: (1) establishes a "starting point" for future comparisons; (2) tracks strategies and actions identified in the CAAP; (3) ensures contributions and actions of multiple city and regional leaders; and (4) summarizes results and impacts. The Tracker can be used to assign various action and reporting requirements to key departments responsible for reporting.



INTRODUCTION

PRIORITIZATION

The Tracker provides initial priority rankings and timelines for each CAAP strategy. As a primary step, each strategy is ranked by its potential impact on GHG emission reductions:

TIER 1 FOUNDATIONAL:
GHG emission reductions that are drawn out as immediate priorities, regardless of funding available or political will

TIER 2 SUPPORTIVE:
Indicate strategies that have less GHG reduction potential but are still critical elements in reducing environmental impacts

TIER 3 COMPLIMENTARY:
Educational strategies that are a cornerstone to the CAAP's ability to succeed

The second step involves assigning co-benefits to each strategy to better evaluate its feasibility and effectiveness. These co-benefits are weighted numerically and categorized according to their level of impact, high, medium, or low. Each co-benefit is then assigned a specific percentage based on its contribution to each respective category.

GHG REDUCTION POTENTIAL
(40%)

COST
(10%)

CAPITAL COSTS VERSUS AVAILABLE FUNDING
(10%)

ENHANCES EQUITY AND CLIMATE JUSTICE
(10%)

PROVIDES COMMUNITY BENEFITS
(30%)



STAKEHOLDER ENGAGEMENT

Community engagement was a key component of the CAAP planning process. Community members are the ones that experience the effects of its plan, projects, and policies. In the process of creating the CAAP, the project team worked (and will continue to collaborate) with local organizations, small businesses, and public and private stakeholders. The stakeholder engagement events have included a survey report and two public workshops. Over 100 participants' comments and suggestions have been integrated into the CAAP to the best of the project team's abilities. As this CAAP is implemented, collaboration between the project team and these stakeholders will remain essential because they are, as members of the community, best equipped to inform the CAAP team of the challenges the community faces.



INTRODUCTION

GHG INVENTORY

A GHG inventory is a comprehensive accounting of the emissions produced within a community over the course of one year, including emissions from key sectors such as transportation, buildings, waste, and other local activities. Usage data was gathered from primary and secondary sources and are multiplied by emission factors provided by the U.S. Environmental Protection Agency (EPA) to estimate emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). These values are then converted to carbon dioxide equivalent (CO_2e) using Global Warming Potentials (GWPs) to reflect each gas's relative impact on climate change.

The most recent GHG inventory was completed for the year 2020 by AMBAG and serves as the foundation for this CAAP. Total community emissions within the City's city limits in 2020 were estimated at 111,144 metric tons of CO_2e. With a population of 15,299, this equates to 7.3 MT CO_2e per capita, which is lower than the North American urban average of 8.4 MT CO_2e per person per year. **Table B** presents the distribution of community-wide CO_2e emissions by sector. The City commits to updating its GHG inventory every five (5) years beginning in 2028.

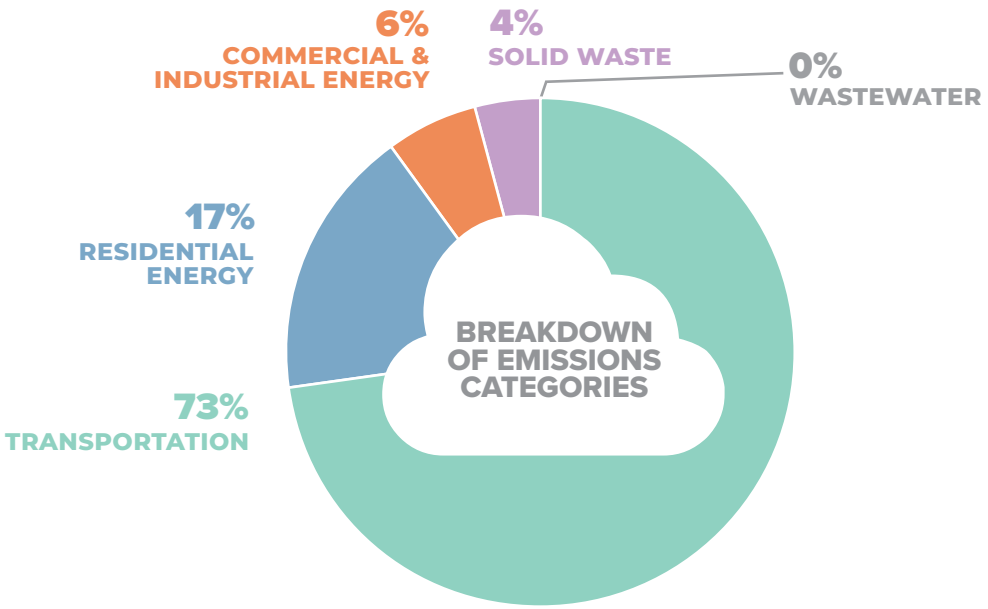
Table B: Community CO2e Emissions by Sector

COMMUNITY MT CO_2e EMISSIONS BY SECTOR	MT CO_2e
Residential	19,267
Commercial and Industrial	6,970
Transportation	80,987
Solid Waste	3,875
Wastewater	44
TOTAL	**111,144**



Figure B below shows the breakdown of emission categories for the City. The largest source of emissions are from the transportation sector, primarily from on-road passenger vehicles, following that are emissions from residential energy, commercial energy, solid waste, and wastewater.

Figure B: Breakdown of emission categories





INTRODUCTION

EMISSION FORECASTING

To understand the City's future emissions trajectory, a business-as-usual (BAU) and adjusted business-as-usual (ABAU) forecast was developed to estimate how GHG emissions may change if no additional local, state, or federal mitigation measures are adopted beyond those already in place. The BAU scenario reflects expected population and economic growth, while the ABAU scenario builds upon the BAU with changes in energy use, anticipated improvements in vehicle efficiency, and the regional electricity grid mix under current policies. These forecasts provide a baseline against which the potential impact of future climate actions can be measured.



BUSINESS-AS-USUAL FORECAST

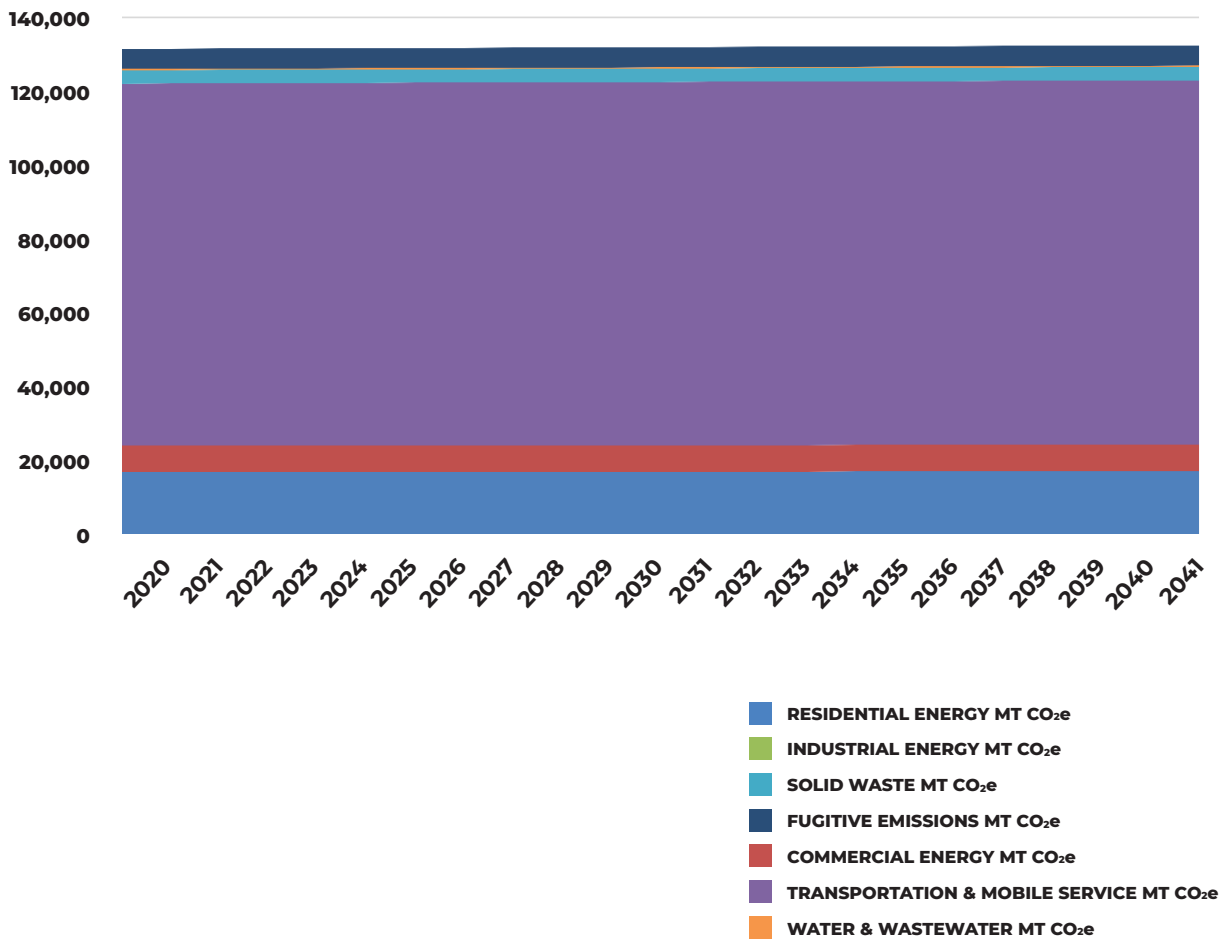
Based on U.S. Census Bureau decennial data, the City experienced a marginal population increase of 49 residents between 2010 and 2020, growing from 15,041 to 15,090, a rate of just 0.33% over the decade, or approximately 0.033% per year. This near-flat population trajectory forms the basis of the BAU emissions scenario, as shown in **Figure C**.

Under BAU conditions, GHG emissions are projected to remain largely stable, tracking the essentially unchanged population base and assuming no significant shifts in energy systems, transportation patterns, building stock, or consumption behaviors. With population growth effectively stagnant, total community-wide emissions are not expected to rise substantially from growth pressure alone. However, per-capita emissions are assumed to remain flat or increase slightly, reflecting continued reliance on natural gas for space and water heating, personal vehicle use as the dominant mode of transportation, and grid electricity that retains a fossil fuel component.

As a result, the BAU scenario does not represent a path toward meaningful emissions reduction. Without active policy intervention, the City would not meet California's statewide climate targets under AB 32 or SB 32, as flat population growth does not translate into flat or declining emissions in the absence of structural changes to the City's energy and transportation systems.



Figure C: Pacific Grove Business-as-Usual





ADJUSTED BUSINESS-AS-USUAL FORECAST

The ABAU scenario builds upon the BAU baseline by incorporating two key emission reduction trajectories that reflect existing policy commitments and established regulatory trends, as shown in **Figure D**. First, electricity-related emissions are projected to decline to net zero by 2045, reflecting both the City's participation in a CCA, through which the community already benefits from bulk renewable electricity purchasing, and state-level decarbonization of electricity generation under California's SB 100, which mandates 100% zero-carbon electricity by 2045. These parallel efforts are expected to progressively reduce the carbon intensity of electricity consumed in the City without requiring additional local policy action beyond current commitments. Second, emissions from on-road vehicles are estimated to decline at a rate of 1.8% per year, consistent with emission reduction assumptions applied under the ICLEI US Community Protocol framework and reflective of fuel economy improvements driven by federal Corporate Average Fuel Economy (CAFE) standards and California's vehicle emissions regulations. Together, these two reductions represent the most significant near-term opportunities for passive emissions reductions in the City, and establish a more optimistic but policy-grounded baseline against which active mitigation measures can be evaluated.

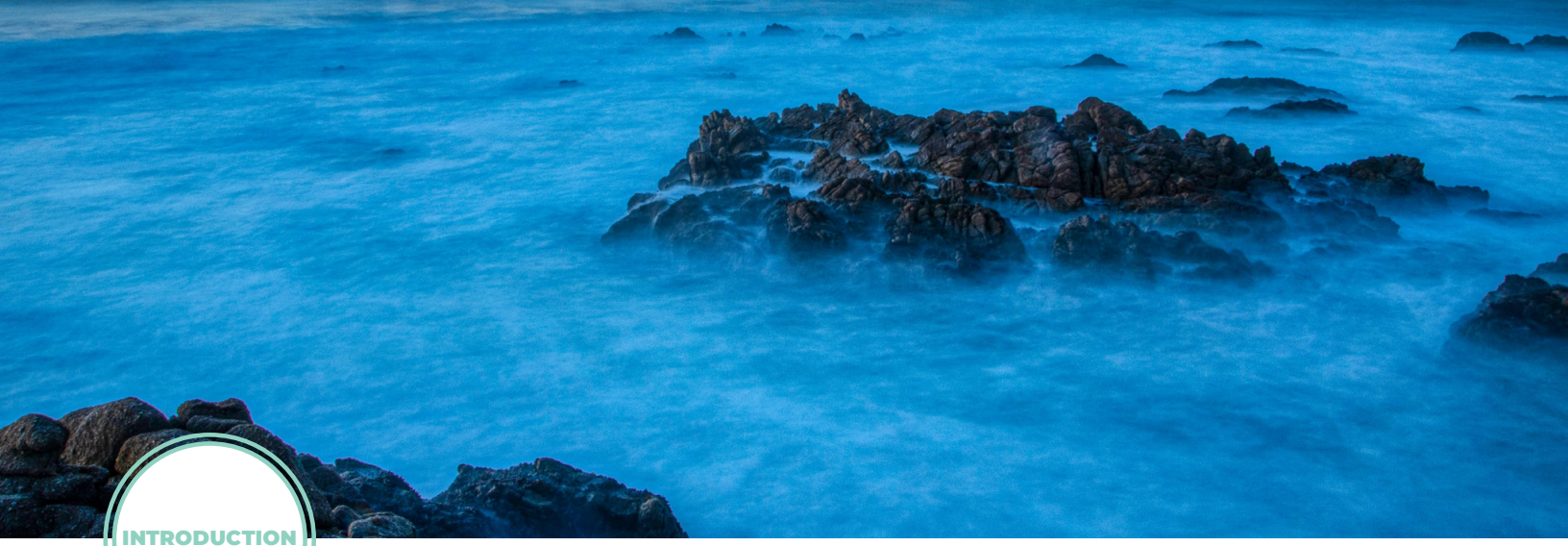
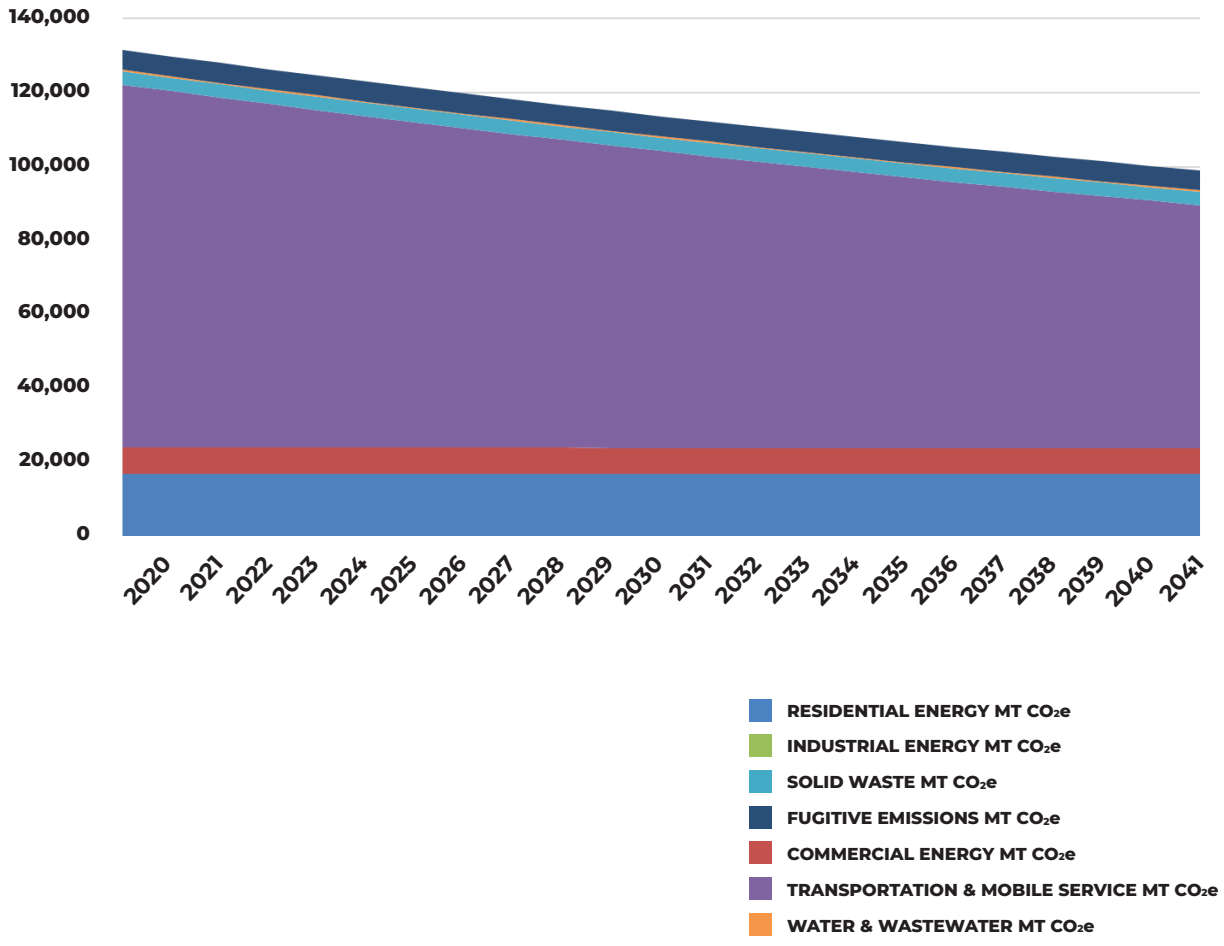


Figure D: Pacific Grove Adjusted Business-as-Usual





TOP 10 EMISSION REDUCTION FORECAST

The emission reduction scenario represents a best-case trajectory based on the full implementation of the ten highest-impact strategies identified in the City's CAAP. These strategies were selected for their combined potential to deliver meaningful GHG reductions relative to their cost and feasibility.

Full community-wide electrification is estimated to eliminate emissions from the natural gas sector entirely, as buildings and municipal facilities transition away from fossil fuel-based heating and appliances. Concurrent expansion of local renewable energy generation and continued carbon-free electricity procurement through 3CE are expected to eliminate the small remaining emissions associated with electricity procurement, effectively decarbonizing the entire energy sector. The combined effect of municipal fleet electrification, expanded EV charging infrastructure, and community-wide EV adoption aligns the City with California's broader goal of decarbonizing the transportation sector by 2045. Taken together, these energy and transportation strategies represent a near-complete decarbonization of the City's two largest emission sectors. **Figure E** shows the emission reduction capabilities of the top-ten strategies.

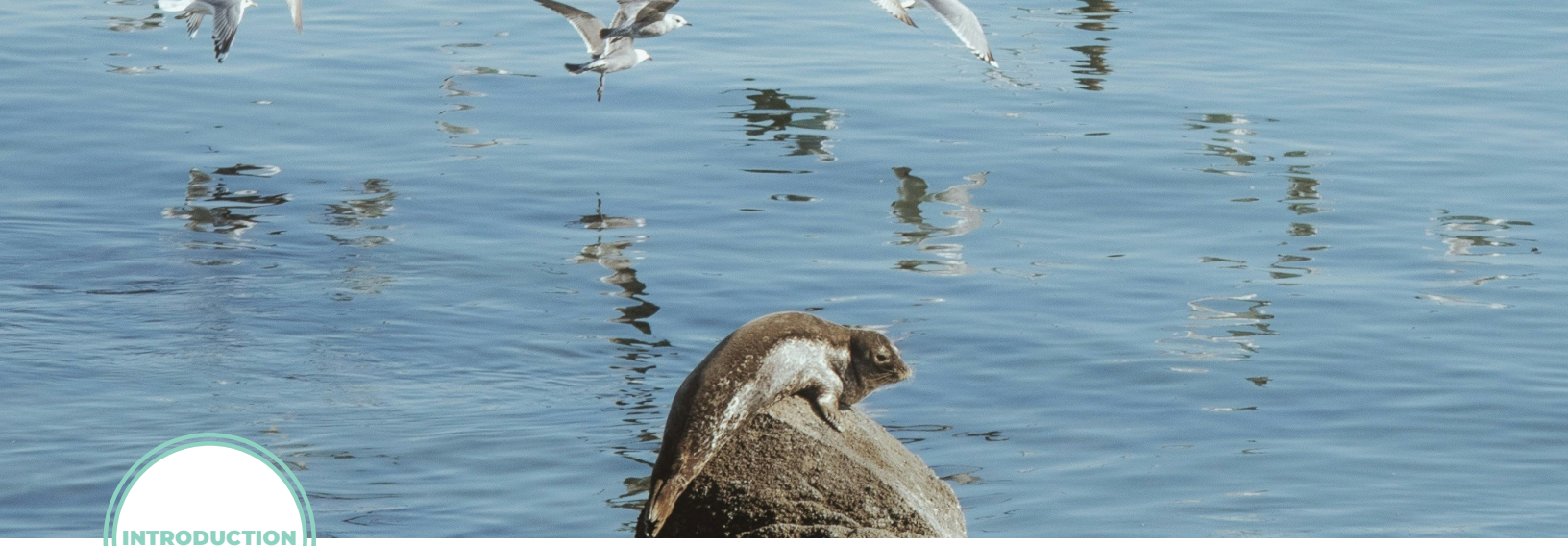
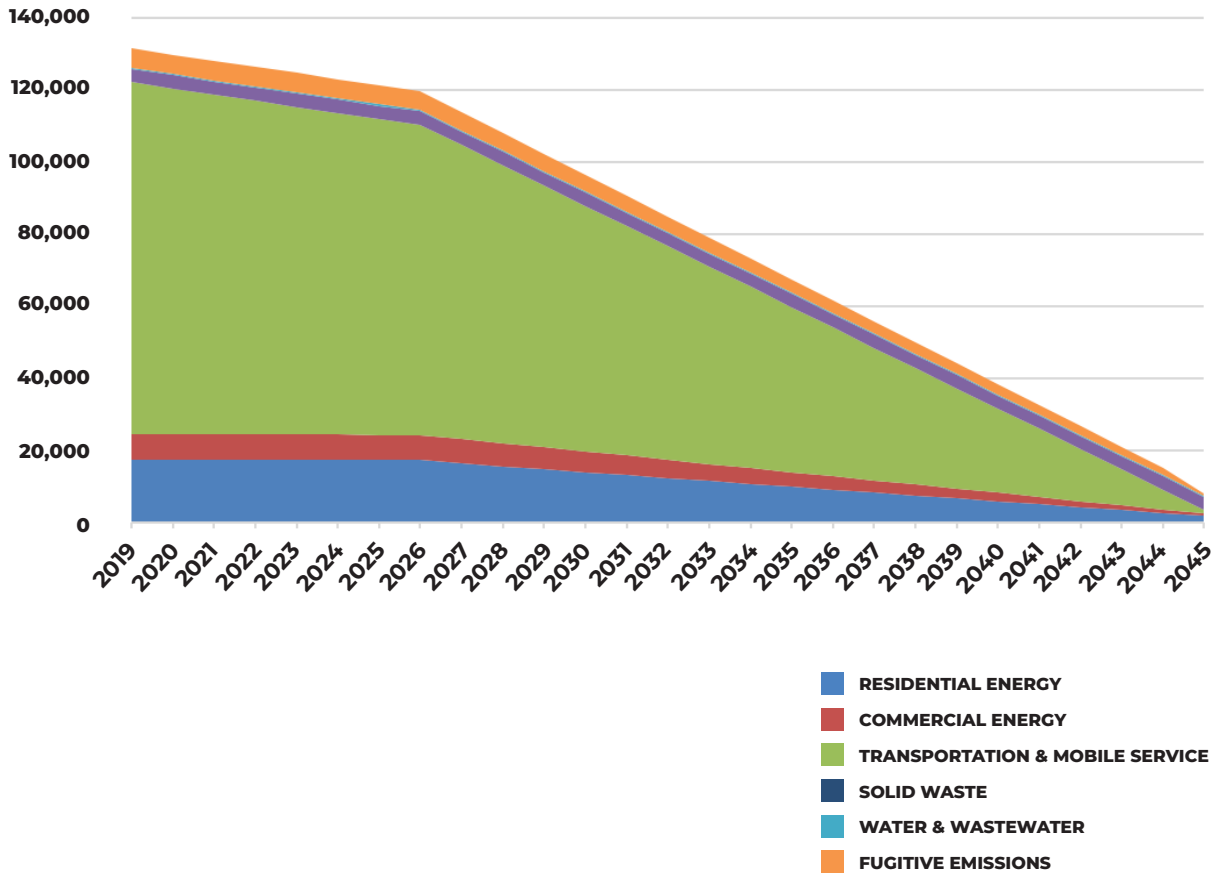


Figure E: Top 10 Strategies Emission Pathway





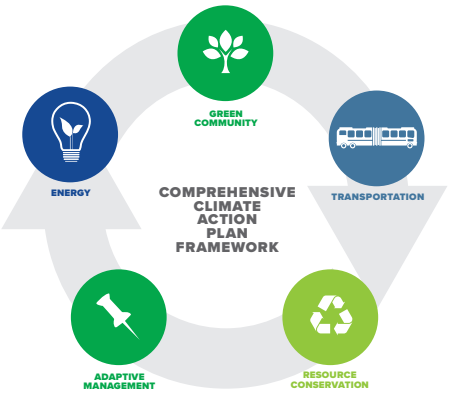
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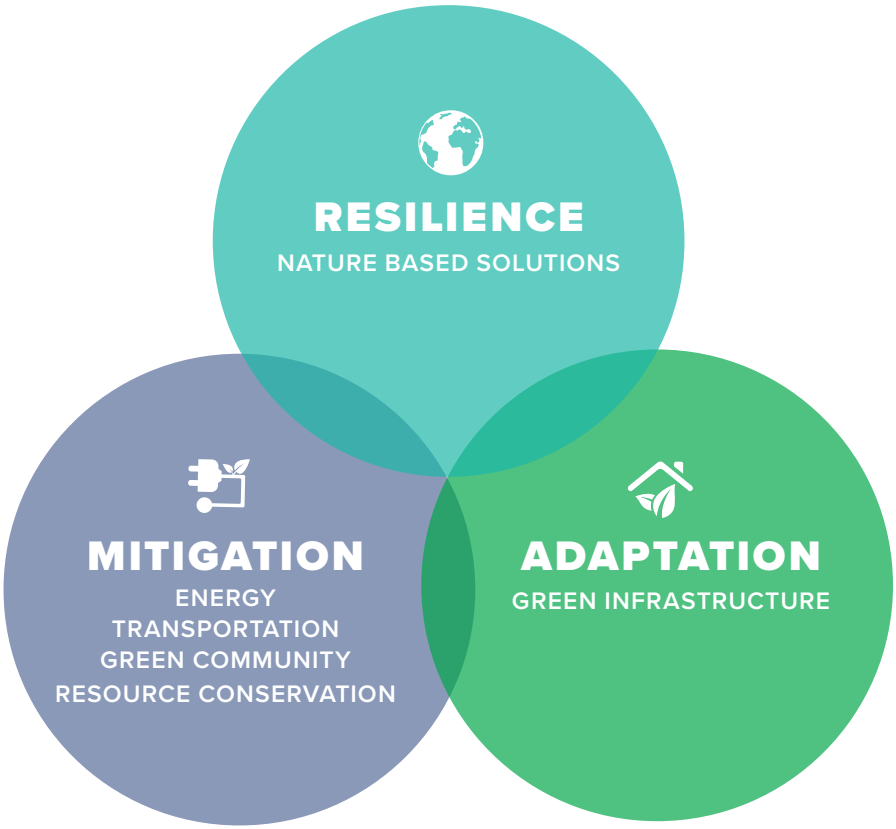
GOALS AND STRATEGIES



GOALS AND STRATEGIES

Mitigation, adaptation, and resilience tackle climate risk from complementary angles: mitigation cuts the drivers of climate change by reducing GHG emissions or increasing carbon sinks; adaptation modifies buildings, infrastructure, and behaviors to live with current and expected impacts; and resilience is the capacity of people and systems to withstand shocks, keep operating, and recover quickly.







MITIGATION

ENERGY
TRANSPORTATION
GREEN COMMUNITY
RESOURCE CONSERVATION



GOALS AND STRATEGIES

MITIGATION

ENERGY

Energy use is an essential component of community resilience, particularly as climate change introduces more frequent and severe disruptions to energy supply and demand. This positions energy as a high-impact opportunity for driving efficiency, reducing GHG emissions, and electrifying systems. As part of this effort, the CAAP calls for a strategic movement toward renewable energy projects that support long-term grid reliability. By investing in distributed energy resources (DER) such as solar and battery storage, the City can enhance its ability to withstand and recover from grid interruptions. These projects can also stimulate local economic development and create jobs while ensuring that homes, businesses, and essential services remain operational during extreme weather events or grid stress periods.

- GHG REDUCTION POTENTIAL
- COST
- CAPITAL COSTS VERSUS AVAILABLE FUNDING
- ENHANCES EQUITY AND CLIMATE JUSTICE
- PROVIDES COMMUNITY BENEFITS



ENERGY

Goal: RE 1
Increase local renewable energy projects community-wide

STRATEGY	ACTION	
RE 1.1 Consider a crowdfunding residential and commercial bulk purchasing solar campaign, "Solarize PG", to bring upfront costs down	**RE 1.1.1** Announce three phases of campaign by 2026 on the City's Climate Action website to allow interested parties time to prepare and set appropriate funds aside; Phases I: 2026, Phase II: 2029, and Phase III: 2032 **RE 1.1.2** Co-brand this crowdfunding campaign with 3CE; Work with 3CE to establish additional incentives to further their local renewable energy generation goals and community reinvestment	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**



ENERGY

Goal: RE 2
Achieve 30% reduction in municipal energy use by 2035 from 2020 baseline

STRATEGY	ACTION	
RE 2.1 Conduct a comprehensive energy audit of municipal facilities, including the Pacific Grove Museum of Natural History and the Pacific Grove Library	**RE 2.1.1** Update energy audit every five years or as needed **RE 2.1.2** Install motion sensor lighting in all municipal buildings **RE 2.1.3** Decrease temperature setting one (1) degree	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RE 2.2 Continue and expand energy savings retrofits and installations including LED lighting, as well as light sensors, timers, and smart thermostats based on occupancy patterns in all applicable areas in municipal buildings, parks, and facilities.	**RE 2.2.1** Set annual targets for energy upgrades in lighting and infrastructure to decrease energy use **RE 2.2.2** Identify and set transition timelines for natural gas infrastructure that can be electrified in municipal buildings	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**



ENERGY

Goal: RE 2
Achieve 30% reduction in municipal energy use by 2035 from 2020 baseline

STRATEGY	ACTION	
RE 2.3 Participate in 3CE's Hourly Flex Pricing pilot, which offers financial incentives for shifting municipal electricity use away from peak demand periods	**RE 2.3.1** Track results to maximize energy and cost savings over time	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RE 2.4 Launch smart energy management systems for real-time with remote use adjustments for increased energy savings	**RE 2.4.1** Continue to regularly upgrade energy management systems for peak performance	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



ENERGY

Goal: RE 3
Achieve 20% reduction in residential and commercial energy use by 2035 from 2020 baseline

STRATEGY	ACTION	
RE 3.1 Incentivize energy efficiency upgrades, using tax credits, for existing buildings at the time of a major remodel or change of ownership	**RE 3.1.1** Promote 3CE's Electrify Your Home rebate, PG&E's Building Electrification incentive, and California's GoGreen Home Energy Financing Program which are all programs to support electrification and energy efficiency; promote on one-stop-shop website (Cross cutting strategy GC 1.2) **RE 3.1.2** Promote The Switch is On website to access dozens of rebates, tax credits, financing to support renewable energy and energy efficiency projects in California	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RE 3.2 Reduce permit fees and streamline permitting requirements for renewable energy building renovations	**RE 3.2.1** Review existing permitting process and identify opportunities for streamlining. Adopt updated policy or ordinance(s)	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



ENERGY

Goal: RE 3
Achieve 20% reduction in residential and commercial energy use by 2035 from 2020 baseline

STRATEGY	ACTION	
RE 3.3 Implement programs to provide weatherization services, improve energy efficiency, and reduce utility costs for low income households beginning in 2026	**RE 3.3.1** Partner with Central Coast Energy Services to provide weatherization audits **RE 3.3.2** Promote 3CE's residential battery program which provides a rebate of $300 per Kw; $500 per Kw for low income communities **RE 3.3.3** Partner with the state's Low-Income Home Energy Assistance Program to implement similar programs for low-income customers using utility and census data to target energy efficiency efforts at a granular level	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**

ENERGY

Goal: RE 4
Write an Electrification Plan

STRATEGY	ACTION	
RE 4.1 Complete a community-wide and municipal electrification study and establish a long-term implementation plan (Phase 1 and Phase 2)	**RE 4.1.1** Promote a building electrification outreach program to educate and encourage energy conservation and gas-to-electric conversions in residential and commercial buildings. Include training materials, incentives, and resources in English and Spanish. Promote on the one-stop shop website. (Cross cutting strategy GC 1.2)	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:** 
	RE 4.1.2 Partner with 3CE to promote residential and commercial electrification incentives through their New Construction Electrification program	
	RE 4.1.3 Heat Pump Promotional Campaign: Establish a crowdsourcing city campaign (similar to "Solarize PG RE 1.1) involving rebates and financing programs to encourage adoption of ground- and air-source heat pump systems for space and water heating in both residential and commercial settings	
	RE 4.1.4 Encourage all new commercial construction to be all electric and wired for solar	



ENERGY

Goal: RE 5
Implement a DER program to reduce peak demand

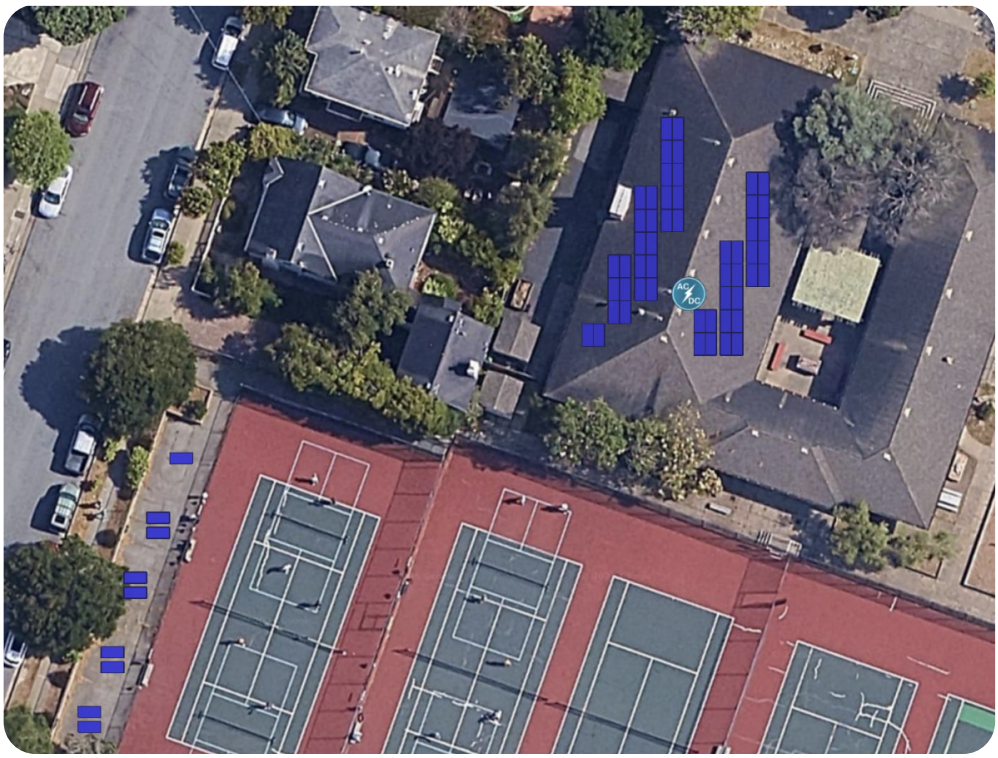
STRATEGY	ACTION	
RE 5.1 Work to implement energy management and energy storage systems at municipal locations to charge during low-use and release energy during peak demand hours. Plan one or more installations every five (5) years by 2030, 2035, 2040 and 2045	**RE 5.1.1** Consider microgrid at the Community Center (Cross cutting strategy RS 2.1) - **Figure F** **RE 5.1.2** Consider a microgrid at the Public Works Yard Cross (Cross cutting strategy TR 1.3.2) - **Figure G** **RE 5.1.3** Consider microgrid at Pacific Grove Local Water Project - **Figure H** **RE 5.1.4** Push for better Net Energy Metering (NEM) rates (or incentives payments) for municipal, residential and commercial accounts through 3CE membership; bundle into bundle RE RE 5.1 .1 - RE 5.1.3 projects into crowd sourcing campaign	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**

The City is actively exploring opportunities to advance its climate action and sustainability goals through increased adoption of local renewable energy. Figures F–H showcase the three projects being considered. Please refer to **Appendix A** for additional analysis.

ENERGY

Goal: RE 5
Implement a DER program to reduce peak demand

Figure F: Pacific Grove Community Center, 515 Junipero Ave



The Community Center's 19.52-kilowatt rooftop solar array could produce 26.83 megawatt-hours per year, achieving a performance ratio of 83.7 percent. The system could be well-matched to the building's load profile, providing more than twice the annual consumption and creating an effective energy buffer for future electric vehicle charging or facility expansion. With a payback period of 7.4 years and a return on investment of 276.6 percent, this installation remains one of the most reliable and balanced contributors to the citywide portfolio.



ENERGY

Goal: RE 5
Implement a DER program to reduce peak demand

PARAMETER	Value
System Type	Rooftop
System Capacity	19.52 kW
Annual Generation	26.83 MWh
Performance Ratio (PR)	83.7%
Energy Offset	204%
Payback Period	7.4 years
Return on Investment (ROI)	276.6%
Rate Schedule	PG&E B-6

ENERGY

Goal: RE 5
Implement a DER program to reduce peak demand

Figure G: Pacific Grove Local Water Project, near the intersection of Ocean View Boulevard and Central Avenue



The ground-mounted system at the Pacific Grove Local Water Project could produce 61 megawatt-hours annually and achieve a performance ratio of 86.8 percent. The array would be optimized for daytime consumption, resulting in a moderate export volume and a 21.7 percent offset of total site energy. With a return on investment above 700 percent and a payback period of 3.7 years, this facility remains a cornerstone of the City's energy strategy, offering dependable savings and consistent performance.



ENERGY

Goal: RE 5
Implement a DER program to reduce peak demand

PARAMETER	Value
System Type	Ground-Mount
System Capacity	40.00 kW
Annual Generation	61.0 MWh
Performance Ratio (PR)	86.8%
Energy Offset	21.7%
Payback Period	3.7 years
Return on Investment (ROI)	718.6%
Rate Schedule	PG&E B-1 / B-10-S

ENERGY

Goal: RE 5
Implement a DER program to reduce peak demand

Figure H: Pacific Grove Public Works Yard, 2100 Sunset Drive



The 62.08-kilowatt carport array could generate 95.34 megawatt-hours annually with a performance ratio of 87.4 percent and an energy offset of 185.8 percent. The system's payback period of 6.1 years and return on investment near 400 percent confirm strong economic performance. This site is a leading candidate for battery integration, as storage would further reduce exports and align generation with the facility's daytime operational profile.



ENERGY

Goal: RE 5
Implement a DER program to reduce peak demand

PARAMETER	Value
System Type	Carport
System Capacity	62.08 kW
Annual Generation	95.34 MWh
Performance Ratio (PR)	87.4%
Energy Offset	185.8%
Payback Period	6.1 years
Return on Investment (ROI)	398.4%
Rate Schedule	PG&E B-1



ENERGY

Goal: RE 6

Engage proactively as a member of 3CE to accelerate local energy goals

STRATEGY	ACTION	
RE 6.1 Continue to leverage 3CE for carbon free electricity, while working to increase local renewables, microgrids, and community incentives in line with early goals of the organization	**RE 6.1.1** Actively leverage 3CE by increasing the City's influence on the Governing Board **RE 6.1.2** Continue to purchase 100% renewable energy through 3CE's 3CPrime product for all metered energy used by the City; promote adoption community-wide **RE 6.1.3** Proactively encourage 3CE to invest in local renewables, microgrids, and community incentives to accelerate energy efficiency, increase local renewable energy generation, electrify natural gas uses, increase EV adoption, and support local energy resilience **RE 6.1.4** Leverage 3CE membership to reduce barriers to participation; if existing incentives are not fully meeting needs, advocate for adjustment, enhancement, refinements, extensions to better serve the community	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**



GOALS AND STRATEGIES

MITIGATION

TRANSPORTATION

The City is committed to advancing clean and accessible transportation options that reduce emissions and improve mobility for all residents. Efforts will focus on planning for the gradual electrification of the municipal fleet, expanding the availability of EV charging infrastructure, and encouraging the community-wide transition to EVs. At the same time, the City will promote sustainable travel choices through enhanced education and outreach programs that encourage walking, biking, and public transit use.

GHG REDUCTION POTENTIAL

COST

CAPITAL COSTS VERSUS AVAILABLE FUNDING

ENHANCES EQUITY AND CLIMATE JUSTICE

PROVIDES COMMUNITY BENEFITS



TRANSPORTATION

Goal: TR 1
Reduce community-wide combustion engine VMT 25% by 2030 and 30% by 2045

STRATEGY	ACTION	
TR 1.1 Develop a municipal Fleet Electrification Plan by 2028 that identifies vehicle replacement schedules, charging infrastructure needs, deployment timeframes and phasing, and estimated capital and operating costs	**TR 1.1.1** Implement "EV-first" vehicle purchasing policy to ensure that EVs are considered as the primary replacement option for every vehicle; Educate all departments making vehicle procurement selections **TR 1.1.2** Apply for 3CE's Plan Your Fleet program to strategically plan and support the transition of the entire municipal fleet to EVs; application due in October 2026 **TR 1.1.3** Participate in the EV Infrastructure Training Program, a recognized certification for licensed electrician to help understand EV maintenance **TR 1.1.4** Give preference for contractors that utilize EV for services (e.g street sweeping)	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**

STRATEGY	ACTION	
TR 1.2 Install 35 EV chargers at city facilities	**TR 1.2.1** Apply for 3CE's Charge Your Fleet Program to receive rebates on EV chargers	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**



TRANSPORTATION

Goal: TR 1

Reduce community-wide combustion engine VMT 25% by 2030 and 30% by 2045

STRATEGY	ACTION	
TR 1.3 Accelerate the transition to EVs community-wide and make charging more accessible	**TR 1.3.1** Apply to and promote 3CE's Electrify Your Ride program which offers $4,000 in rebates for new or used EVs	TIER 1 FOUNDATIONAL **PRIORITY SCORE: 1** **CO-BENEFITS:**
	TR 1.3.2 Determine four locations for additional Level 2 EV charging stations in high traffic areas such as but not limited to PG Golf Links, Downtown, and Public Works Yard (Cross cutting strategy 5.1)	
	TR 1.3.3 Promote 3CE's $400 rebate for Level 2 charger installations; Leverage 3CE membership to reduce barriers to participation	
	TR 1.3.4 Require installation of EV charging stations as a ratio of total required parking for new and redeveloped commercial and multi-family projects beginning with American Tin Cannery (Cross cutting strategy TR 1.3)	
	TR 1.3.5 Establish public charging rates that will allow the City to reinvest profits into future EV infrastructure	



TRANSPORTATION

Goal: TR 2
Support Transit-Oriented Development

STRATEGY	ACTION	
TR 2.1 Expand education and outreach campaigns and events to promote walking, biking and taking transit	**TR 2.1.1** Modify and reduce parking downtown along Lighthouse Ave. to expand the vibrant new vision for the City which launched with the new permanent outside seating **TR 2.1.2** Partner with Pacific Grove Unified School District to encourage Robert Down and Forest Grove to host annual Walk and Roll to School events, promoting traffic safety, helmet use, and how to navigate street crossings safely	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
TR 2.2 Work with Monterey Salinas Transit (MST) to increase access to public transit by increasing frequency of service near Holman building, Lover's Point, and Grove Market	**TR 2.2.1** Prioritize first and last mile gaps in MST's transportation network within the City	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



TRANSPORTATION

Goal: TR 2
Support Transit-Oriented Development

STRATEGY	ACTION	
TR 2.3 Introduce a free trolley from downtown to Aquarium and Asilomar beach similar to and integrated with Monterey's model	**TR 2.3.1** Partner with City of Monterey to replicate and expand the existing trolley service into PG, using Monterey's approach as a model	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
TR 2.4 Continue to collaborate with regional transportation agencies, Transportation Agency for Monterey County (TAMC) and Association of Monterey Bay Area Governments (AMBAG) on regional emissions reductions initiatives, programs and policies	**TR 2.4.1** Contribute to and utilize TAMC and ABMAG to leverage regional transportation planning for reduced emissions and improved regional transportation and housing planning **TR 2.4.2** Ensure CAAP is integrated into City's Capital Improvement Program (CIP) annual and 5-year planning so actions may be considered with additional context of CAAP commitment alignment **TR 2.4.3** Leverage cooperative regional grant opportunities, funding and regional partners to further transportation and housing initiative implementation in alignment with City's CAAP objectives	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**



TRANSPORTATION

Goal: TR 3
Launch dedicated Active Transportation Fund to invest in strategic infrastructure development, smart growth, education, incentives, and connectivity enhancements in line with CAAP objectives

STRATEGY	ACTION	
TR 3.1 Incorporate separated bike lanes through town using similar signage as outlined in the SMP	**TR 3.1.1** Increase the number of bike lockers and racks in downtown **TR 3.1.2** Incorporate protected bike lanes using landscaped buffers or stormwater planters to mimic SMP “soft shoreline” approaches, absorbing runoff and improving aesthetics. Install green median or curb extensions with native plants functioning like “mini living shorelines” to filter runoff and cool streets **TR 3.1.3** Install permeable pavement for bike lanes or adjacent parking to reduce localized flooding and support infiltration	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
TR 3.2 Install sidewalks in Del Monte Park neighborhood to support a "Safe Route to School" program	**TR 3.2.1** Expand traffic calming, sidewalks, and bike lanes to expand safe routes city-wide **TR 3.2.2** Offset new sidewalks by using porous surfaces	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



TRANSPORTATION

Goal: TR 3
Launch dedicated Active Transportation Fund to invest in strategic infrastructure development, smart growth, education, incentives, and connectivity enhancements in line with CAAP objectives

STRATEGY	ACTION	
TR 3.3 Create an incentive for commercial businesses who develop Transportation Demand Management (TDM) programs	**TR 3.3.1** Explore alternative work schedules within the City; lead by example **TR 3.3.2** Incentivize employees to take public transit by offering free transit passes or incentives for active transportation use, including biking, walking, and public transit	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
TR 3.4 Partner with nonprofits or community-based organizations to host “mobility pop-ups” that offer bike repair, trip planning, and transit education	**TR 3.4.1** Replicate successful prior events by Salinas Valley Recycles (SVR), Transportation Agency for Monterey County, Greenfield Bike Lab, and ReGen Monterey (ReGen), combining bicycle recovery, repair and mobile transit promotion	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
TR 3.5 Pursue reissuing the complete street Request for Proposals (RFP); incorporate in new development as feasible	**TR 3.5.1** Increase projects aimed at making streets safer and more accessible for pedestrians, cyclists, transit riders, and people of all ages and abilities by including features like sidewalks, bike lanes, and better crosswalks	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



GREEN COMMUNITY

The City is committed to building a thriving and sustainable community that supports both people and the natural environment. Through collaboration, education, and strategic investment, the City will foster partnerships that encourage sustainable business practices, environmental stewardship, and community engagement. Efforts will focus on creating opportunities for residents, businesses, and local organizations to participate in programs and initiatives that enhance communication structures, strengthen climate preparedness, and promote long-term sustainability. By working across departments and with regional partners, the City will build capacity, share knowledge, and ensure that sustainability principles are embedded in decision-making and daily operations.

- GHG REDUCTION POTENTIAL
- COST
- CAPITAL COSTS VERSUS AVAILABLE FUNDING
- ENHANCES EQUITY AND CLIMATE JUSTICE
- PROVIDES COMMUNITY BENEFITS



GREEN COMMUNITY

Goal: GC 1
Foster Green Business Practices

STRATEGY	ACTION	
GC 1.1 Collaborate with the Chamber of Commerce and environmental organizations to promote, expand, and enhance adoption of the California Green Business Program (GBP) to increase the number of certified green businesses within the City	**GC 1.1.1** Organize a city-sponsored annual event to recognize new and existing green businesses operating within the City **GC 1.1.2** Reinvigorate GBP participation by dedicating annual funding contribution, combined with specific allocation targeted for technical assistance, education and outreach by CGBN or similar facilitative environmental service organization **GC 1.1.3** Host quarterly workshops, promoting green Best Management Practices that will help businesses transition to greener practices and GBP certification **GC 1.1.4** Allocate annual funding to CGBN to recruit, promote, and maintain local certified green businesses **GC 1.1.5** Launch annual campaign focused on technical assistance and recruitment of specific business districts each year, such as Downtown, Lighthouse, Forest Hill, etc. Promote results through annual recognition event(s). (Cross cutting action GC 1.1.1)	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**



GREEN COMMUNITY

Goal: GC 1
Foster Green Business Practices

STRATEGY	ACTION	
GC 1.2 Develop a one-stop-shop resource page on the city's website tailored to residents and businesses	**GC 1.2.1** Compile list of practices and resources to increase adoption of green practices to include, as a starting point, recycling and waste reduction, EVs and EV charger installation, 3CE resources, energy-efficient HVAC systems, water-saving fixtures, renewable energy and battery storage opportunities, technical assistance services, installation resources, rebates and incentive programs **GC 1.2.2** Include list or links to promote businesses committed to green practices, such as certified green businesses, Blue Zones, Monterey Bay Aquarium's Sustainable Seafood participants, Water Wise businesses and similar	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



GREEN COMMUNITY

Goal: GC 2

Increase initiatives that support the communities' transition to environmentally practices

STRATEGY	ACTION	
GC 2.1 Partner with local organizations to promote, expand, and enhance local initiatives focused on native plants, pollinators, Integrated Pest Management (IPM), low-impact design and stormwater management, rainwater catchment, rain gardens, food systems, beach clean-ups, and similar environmental initiatives	**GC 2.1.1** Partner with the Museum of Natural History to expand native plant and pollinator garden installations across city parks and schools **GC 2.1.2** Promote Integrated Pest Management to residents and businesses; adopt a city policy for IPM for city buildings, facilities, and parks **GC 2.1.3** Expand the number of beach clean ups and volunteer restoration events in partnership with Save Our Shores and other environmental organizations	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
GC 2.2 Develop annual fund or grant program to support local initiatives in expanding and sustaining reach and impact	**GC 2.2.1** Collaborate with local environmental organizations such as but not limited to Save Our Shores, Monterey Bay Aquarium, Museum of Natural History, Pacific Grove Adult School, Blue Zones, and others to identify needs, opportunities and gaps to inform and launch annual funding; Incorporate targeted engagement of disadvantaged populations and services	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



GREEN COMMUNITY

Goal: GC 3

Increase resources that support the communities' transition to environmentally practices

STRATEGY	ACTION	
GC 3.1 Increase regional involvement with Central Coast Climate Collaborative (4C) to gain insight on regional projects and to leverage resources	**GC 3.1.1** Review 4C's Central Coast Resilience Hubs toolkit for the region; Contribute to and facilitate adoption of policies and practices **GC 3.1.2** Sign up for the 4C newsletter, participate in quarterly meetings, training and technical assistance opportunities **GC 3.1.3** Become a 4C member; actively seek opportunities for partnership such as joint grant funding opportunities to further local initiatives	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**

STRATEGY	ACTION	
GC 3.2 Integrate climate preparedness in planning, maintenance, and capital improvements through the development of work plans, screening of capital improvements, and cross-sector collaboration. The Environmental Program Manager or equivalent will lead this effort	**GC 3.2.1** Monitor and report progress toward achieving CAAP goals on an annual basis (Cross-cutting strategy 3.3)	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



GREEN COMMUNITY

Goal: GC 3

Increase resources that support the communities' transition to environmentally practices

STRATEGY	ACTION	
GC 3.3 Integrate annual CAAP report goals during the budget review process at the direction of the City Manager	**GC 3.3.1** Follow the yearly funding needs outlined in the CAAP (Cross-cutting strategy TR 2.4.2)	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**

STRATEGY	ACTION	
GC 3.4 Join the Monterey Bay Climate Adaptation Network (MBCAN)	**GC 3.4.1** Become a MBCAN member, participate in quarterly meetings, training and technical assistance opportunities. Actively seek opportunities for partnership such as joint grant funding opportunities to further local initiatives	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**

STRATEGY	ACTION	
GC 3.5 Ensure that marginalized communities have access to green spaces, clean water, affordable housing, and sustainable transportation options to ensure climate resilience benefits are shared equitably	**GC 3.5.1** Collaborate with 4C, Central Coast Climate Justice Network, Community-Based Organizations, Housing Authority, and similar organizations serving marginalized populations	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



GOALS AND STRATEGIES

MITIGATION

RESOURCE CONSERVATION

The City is committed to building a sustainable and resilient future through responsible resource management and environmental stewardship. By advancing zero waste and resource recovery efforts in partnership with regional agencies and community organizations, the City will continue to reduce waste generation and increase the recovery and reuse of materials. At the same time, the City recognizes that water conservation and reuse are critical to long-term resilience and environmental health. Through collaboration, education, and forward-thinking policies, the City will promote efficient water use, innovative recycling and reuse practices, and the integration of conservation measures across all aspects of community life, ensuring that both materials and water are managed sustainably for the benefit of future generations.

- GHG REDUCTION POTENTIAL
- COST
- CAPITAL COSTS VERSUS AVAILABLE FUNDING
- ENHANCES EQUITY AND CLIMATE JUSTICE
- PROVIDES COMMUNITY BENEFITS



RESOURCE CONSERVATION

Goal: RC 1
Continue, expand, and enhance SB 1383 collaborative efforts

STRATEGY	ACTION	
RC 1.1 Continue successful regional collaboration with ReGen, SVR, and Blue Strike Environmental (BSE) to achieve zero waste goals	**RC 1.1.1** Leverage ReGen's Technical Advisory Committee (TAC), and ReGen/SVR joint subcommittees to continue BSE coordinated cooperative regional delivery of zero waste programs, education, and outreach to maximize cost efficiency, impact, and effectiveness **RC 1.1.2** Continue regional Memorandum of Understanding for shared costs to achieve SB 1383 and other waste diversion goals. Expand to include additional mandates and initiatives to support zero waste goals **RC 1.1.3** Continue regional campaign design, messaging, and promotions, building on the success of the Sort with Heart campaign	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 1
Continue, expand, and enhance SB 1383 collaborative efforts

STRATEGY	ACTION	
RC 1.2 Continue regional collection, education, outreach, technical assistance, enforcement, procurement, and reporting efforts to meet and exceed SB 1383 mandate of 75% reduction in organic waste-to-landfill efforts and maximum the amount of edible food recovery; 20% is the statewide edible food recovery goal	**RC 1.2.1** Continue annual food rescue organization capacity building grant program in partnership with ReGen, SVR, and BSE, awarding up to $100,000 annually county-wide using pooled waste district contributions **RC 1.2.2** Continue, expand, and enhance commercial, multifamily and residential organics door-to-door education, outreach, and technical assistance programming in partnership with local franchise waste hauler and BSE **RC 1.2.3** Continue Tier 1/Tier 2 edible food generator education, outreach, technical assistance, and compliance enforcement programming in partnership with ReGen, SVR and BSE **RC 1.2.4** Support long term local procurement solutions for use of locally generated organic mulch and compost, resulting from increased organics diversion and processing. Ensure all city purchased mulch and compost is locally produced and tracked to adhere with SB 1383 procurement requirements. Continue to partner with ReGen on direct service agreements that facilitate reduced pricing for local agriculture producer use of mulch/compost. Facilitate new initiatives to increase use of and city procurement credit for mulch/compost by local agricultural producers, residents, businesses, and city operations	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 2
Write a community-wide Zero Waste Plan with a goal of 75% diversion by 2030 (currently 45%)

STRATEGY	ACTION	
RC 2.1 Advance targeted waste management solutions through continued regional collaboration with ReGen	**RC 2.1.1** Continue to develop and deploy service-specific recycling education, outreach and technical assistance programs and incentives (e.g. Business, Residential, and Multi-family)	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**
	RC 2.1.2 Continue to develop and deploy sector-specific recycling education, outreach, and technical assistance programs and incentives (e.g. schools, restaurants, hotels, groceries, industry, special events, venues, etc.)	
	RC 2.1.3 Continue to develop and deploy material-specific recycling programming for hard to recycle items based on ReGen's most recent Waste Characterization Study (e.g. carpet, solar panels, paint, fuel canisters, etc.). Promote and expand established successful collection events, drop-off facilities (Last Chance Mercantile (LCM), and/or pick-up services (including bulky item pick-up days, LCM Household Hazardous Waste drop-off, E-Waste collection, paint, batteries, etc.)	



RESOURCE CONSERVATION

Goal: RC 2
Write a community-wide Zero Waste Plan with a goal of 75% diversion by 2030 (currently 45%)

STRATEGY	ACTION	
RC 2.2 Enforce CalGreen's construction and demolition standard which mandates that construction projects recycle or salvage at least 65% of nonhazardous construction and demolition (C&D) debris	**RC 2.2.1** Coordinate with local hauler and ReGen to proactively increase C&D diversion, remove barriers to adoption and ease placement and processing of separated C&D loads. Collaborate to further deconstruction initiatives that promote reclamation, reuse, and recycling of all materials **RC 2.2.2** Assess current enforcement and adoption of CalGreen C&D mandates to drive diversion improvements	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RC 2.3 Utilize franchise agreement with local franchise waste hauler to support continued and increasing diversion and waste reduction through curbside collection and complimentary services	**RC 2.3.1** Track franchise compliance to further diversion results. Continue to follow the ReGen's TAC recommendations for an improved Franchise agreement with local franchise hauler in 2030 **RC 2.3.2** Continue successful regional approach to Franchise Agreement development for streamlined collections, education, outreach and improved cost effectiveness	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 2

Write a community-wide Zero Waste Plan with a goal of 75% diversion by 2030 (currently 45%)

STRATEGY	ACTION	
RC 2.4 Continue to participate in ReGen's TAC and joint subcommittees on Edible Food Recovery	**RC 2.4.1** Recommend that the TAC go beyond state mandates to increase education, outreach and technical assistance to businesses, residents, food recovery organizations (FRO), and edible food generators (EFG), and facilitate circular economy goals **RC 2.4.2** Continue to partner with BSE to reach 75% reduction in organic waste sent to landfills and 20% recovery of currently disposed edible food **RC 2.4.3** Commit to providing ongoing education for FRO, EFG, commercial businesses, multifamily facilities and residents on organics diversion and edible food recovery	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 2
Write a community-wide Zero Waste Plan with a goal of 75% diversion by 2030 (currently 45%)

STRATEGY	ACTION	
RC 2.5 Expand TAC to plan for SB 54 which requires waste reduction from single-use packaging waste and single-use plastic food ware	**RC 2.5.1** Support local development of education, outreach, and technical assistance initiatives to comply with SB 54 requirements that all packaging and plastic foodware must be compostable by 2030 **RC 2.5.2** Begin regional planning for SB 54 recycling and composting implications and related Extended Producer Responsibility and circular economy statewide developments	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RC 2.6 Require new development to incorporate a minimum of 15% of recycled materials into construction to encourage the market for recycled goods	**RC 2.6.1** Review model ordinances and institute as part of building permit process	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 3
Utilize policy to advance zero waste diversion

STRATEGY	ACTION	
RC 3.1 Enforce the city's Environmental Preferred Purchasing Policy	**RC 3.1.1** Understand the gaps for hard-to-manage items that do not have a recycling market; and actively adjust purchasing	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**
	RC 3.1.2 Distribute guidance document within the staff intranet which lists specific sustainable product alternatives	
	RC 3.1.3 Evaluate the success of this policy's implementation on an annual basis	
	RC 3.1.4 Work with purchasing vendors to eliminate Styrofoam used in packaging within city facilities	
	RC 3.1.5 Create a policy using stricter language in vendor agreements; limit the number of vendors to better control materials	
	RC 3.1.6 Create a centralized Purchasing Department to track internal purchases	



RESOURCE CONSERVATION

Goal: RC 3
Utilize policy to advance zero waste diversion

STRATEGY	ACTION	
RC 3.2 Review existing codes, ordinances, and policies to identify opportunities to remove barriers from implementation	**RC 3.2.1** Develop special event and meeting sustainability protocols to include recycling and composting bins, source reduction, and guidance on use of disposable materials **RC 3.2.2** Review model C&D ordinances for potential local adoption in support of increased C&D diversion **RC 3.2.3** Consider the adoption of a waste diversion equal space ordinance for renovations and new construction to reduce service barriers and encourage increased participation in available commercial and multi-family recycling and/or organics collection services	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 4
Demonstrate city leadership in zero waste adoption

STRATEGY	ACTION	
RC 4.1 Further municipal zero waste practices in city buildings, parks, facilities and owned properties	**RC 4.1.1** Establish prominent three-bin (recycling, organics and trash) zero waste systems in all city buildings, parks, and facilities committing to one or more buildings annually until complete	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RC 4.2 Encourage Chamber of Commerce to implement improved zero waste practices, recycling, and organics diversion, water refill stations, and plastic water bottle and Styrofoam ban at Good Old Days, as the largest community event held within the City	**RC 4.2.1** Encourage an environmental fee to booth registration that will be returned if vendor complies **RC 4.2.2** Include educational materials on organics and recycling diversion using three-bin zero waste systems; Promote serviceware use that maximizes readily recyclable and compostable waste accepted in local collection systems **RC 4.2.3** Model zero waste events in city operations, meetings and events	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RC 4.3 Install an additional eight (8) water refill stations in city buildings, facilities, and parks to encourage refillable water bottles	**RC 4.3.1** Promote use of refillable bottles and refill stations among community and city employees	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 5
Enforce contemporary building water efficiency standards

STRATEGY	ACTION	
RC 5.1 Require all new developments and major renovations to meet Model Water Efficient Landscape Ordinance (MWELO) standards, including use of water-efficient and native plants, drip irrigation, and moisture sensors	**RC 5.1.1** Integrate MWELO standards into Road Management Plan, Tree Plan, and SMP **RC 5.1.2** Update language in zoning laws to require a complete Landscape Documentation Package prior to permit issuance. Compliance with water budgeting, hydrozoning, and efficient irrigation standards will be verified through both plan review and post-installation audit	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RC 5.2 Require all new construction and major remodels to include EPA WaterSense fixtures (toilets, sink faucets, and showerheads) beginning in 2026	**RC 5.2.1** Promote CalAm Water and Monterey Peninsula Water Management District's rebate program for water-efficiency appliances and fixtures (toilets, low-flow irrigation, dishwashers, rain harvesting and greywater systems)	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 5
Enforce contemporary building water efficiency standards

STRATEGY	ACTION	
RC 5.3 Demonstrate city leadership through adoption of EPA WaterSense retrofits in all municipal buildings by 2027	**RC 5.3.1** Retrofit all municipal buildings with EPA WaterSense fixtures (toilets and sink faucets) by 2027	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**
STRATEGY	**ACTION**	
RC 5.4 Expand rain garden, rainwater catchment, and low-impact design demonstration projects community-wide	**RC 5.4.1** Promote city leadership of rain garden, rainwater catchment, and low-impact design installation through demonstration projects. Combine with education and incentive programs to increase adoption by residents and businesses	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**
STRATEGY	**ACTION**	
RC 5.5 Partner with Monterey Peninsula Water Management District to encourage residential and commercial recycled water projects and provide greywater installation training workshops, rain barrel distribution, financial incentives and/or technical and installation assistance	**RC 5.5.1** Fund and promote resources to increase practice adoption, including policies that remove barriers for residential and business installation	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**



RESOURCE CONSERVATION

Goal: RC 5
Enforce contemporary building water efficiency standards

STRATEGY	ACTION	
RC 5.6 Offer expedited and/or reduced cost permits to new developments and major renovations of existing developments that include greywater systems or pipes for recycled water	**RC 5.6.1** Encourage residents to adopt Low Impact Development techniques through the RainScapes Rebate Program	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
RC 5.7 Continue regional collaborative management of water recycling and stormwater management	**RC 5.7.1** Consider expanding capacity with Monterey Regional Water Pollution Control Agency to increase water recycling and improving overall water security for the Monterey Peninsula; Increased capacity could reduce reliance on potable water, replenish groundwater, support new development opportunities, encourage a zero-discharge goal, and protect sensitive ecosystems like Carmel River Watershed and manage stormwater **RC 5.7.2** Continue Monterey Regional Stormwater Management Program collaboration to support further an enhanced stormwater management solutions	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**



ADAPTATION

GREEN INFRASTRUCTURE

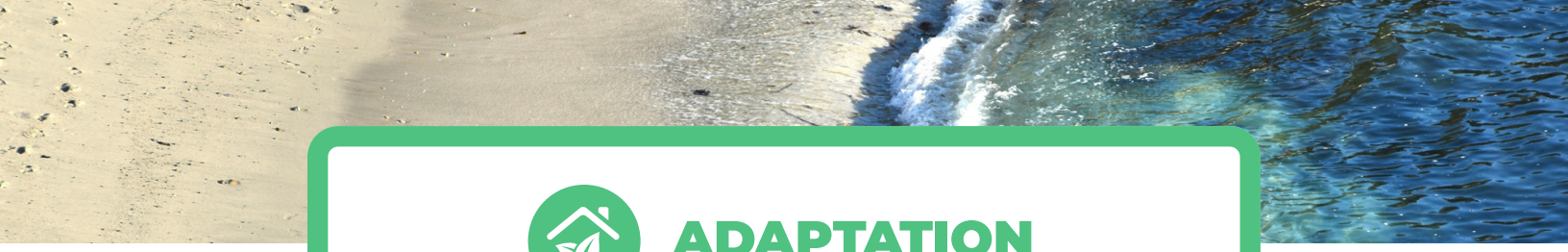


GOALS AND STRATEGIES

ADAPTATION

Through thoughtful planning, nature-based solutions, and close collaboration with regional and state partners, the City is proactively working to safeguard its coastline, preserve biodiversity, and enhance community resilience in the face of accelerating climate impacts. Adaptation strategies include integrating living shoreline projects, native habitat restoration, and green infrastructure to buffer against sea-level rise, coastal erosion, and storm surges while strengthening natural ecosystems that provide vital protection and habitat. The City's adaptation efforts are deeply rooted in community values, balancing environmental stewardship, public safety, and the preservation of the city's unique sense of place. Ultimately, adaptation in the City is not only about protecting what exists today; it is about building a sustainable and thriving future that upholds the city's ecological integrity, coastal heritage, and quality of life for generations to come.

- GHG REDUCTION POTENTIAL
- COST
- CAPITAL COSTS VERSUS AVAILABLE FUNDING
- ENHANCES EQUITY AND CLIMATE JUSTICE
- PROVIDES COMMUNITY BENEFITS

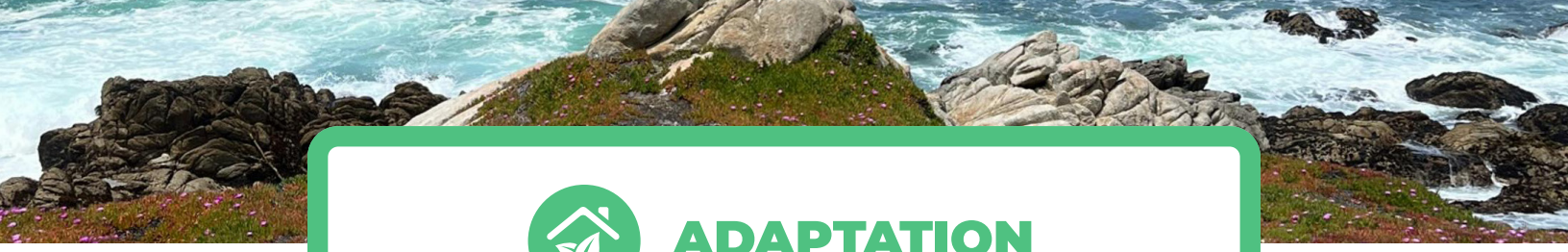


ADAPTATION

Goal: AP 1

Implement inland upslope and coastal downslope solutions that prioritize nature based, permaculture, and biomimetic solutions to slow, spread, sink, and store water, improving stormwater drainage, reducing sediment erosion, and stabilizing slopes, bluffs and landscapes through softening

STRATEGY	ACTION	
AP 1.1 Set annual goal for increased porous surface acres. Increase number of acres from (e.g. 500 acres to 750 acres by 2035); Create an implementation plan including annual budget and priority locations	**AP 1.1.1** Continue the expansion and enhancement of tree wells using organic mulch to improve safety, reduce maintenance, and provide a clean, uniform appearance as budget allows **AP 1.1.2** Expand rain garden demonstration projects; identify locations; provide more upkeep and attention to current rain gardens at Community Center and Museum **AP 1.1.3** Promote Monterey Regional Water Management District and Monterey Bay Friendly Landscaping grants and rebates to encourage residents and businesses to convert private property hardscapes to porous surfaces **AP 1.1.4** Require new development to include permeable surfaces, bioswales, low-impact design and native plantings. Offer free training and demonstration sites to guide implementation	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



ADAPTATION

Goal: AP 1
Implement inland upslope and coastal downslope solutions that prioritize nature based, permaculture, and biomimetic solutions to slow, spread, sink, and store water, improving stormwater drainage, reducing sediment erosion, and stabilizing slopes, bluffs and landscapes through softening

STRATEGY	ACTION	
AP 1.2 Integrate Living Shoreline protection at Lovers Point combining natural materials (plants, sand, shells, biodegradable logs) with structural elements to stabilize the coast	**AP 1.2.1** Pilot implementation beginning with the rock walls along Lover's Point **AP 1.2.2** Oversee implementation in alignment with the SMP	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



ADAPTATION

Goal: AP 2
Utilize monitoring, coastal trail hardening, vegetative planting, and planned retreat on the coastline to prevent erosion and habitat destruction

STRATEGY	ACTION	
AP 2.1 Partner with the Monterey Bay Sanctuary to promote citizen science programs, such as Dry Run and First Flush Monitoring Program, E9c Outfall Monitoring, and PG Local Water Project	**AP 2.1.1** Partner with Save Our Shores and other environmental organizations to conduct citizen-focused training workshops	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**

STRATEGY	ACTION	
AP 2.2 Reevaluate the outcomes and remaining needs at the Great Tide Pools site, a five year restoration project initiated in 2014	**AP 2.2.1** Reach out to Rana Creek Habitat Restoration and other horticultural orgs to evaluate progress	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
AP 2.3 Identify gaps in the Point Pinos Coastal Trail Project (and others); create a formal assessment report to include priority projects and timeline for implementation	**AP 2.3.1** As the SMP is implemented, make considerations for dune restoration improvements in environmentally sensitive habitat areas **AP 2.3.2** Consider cylindrical rolls of coconut fiber or similar biodegradable materials placed along the dune crest to reduce erosion and trap sand	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



ADAPTATION

Goal: AP 2

Utilize monitoring, coastal trail hardening, vegetative planting, and planned retreat on the coastline to prevent erosion and habitat destruction

STRATEGY	ACTION	
AP 2.4 In alignment with the Perkins Park Plan, continue to restore and maintain the existing purple carpet ice plant along Ocean View Boulevard, but consider native species elsewhere in the City	**AP 2.4.1** Pass a resolution to reflect this approach	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**

STRATEGY	ACTION	
AP 2.5 Develop site-specific managed retreat scenarios focused on infrastructure with timeline and cost estimates for relocating trails, signage, amenities where armoring is not recommended (Reaches 15, 19)	**AP 2.5.1** Implement the Esplanade footpath project, currently funded with approved design. Document lessons learned to accelerate replication of similar projects at additional locations on annual or biannual basis in line with goals of the SMP	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



ADAPTATION

Goal: AP 3
Fund and implement the SMP with adaptation in mind

STRATEGY	ACTION	
AP 3.1 Add funding and implementation schedule as an appendix to the SMP	**AP 3.1.1** Integrate specific practices into projects prioritized in the SMP including but not limited to trails across the road from Borg's Motel **AP 3.1.2** Convert paved and gravel public parking lots along Ocean View Blvd. and Pine Ave. to porous surfaces complemented by bioswales and native plantings to support stormwater drainage management and reduce erosion. Where feasible, eliminate parking and transition to managed open space with native and tree planting, bioswales, rain gardens and other low-impact design **AP 3.1.3** Convert or remove unrestricted public parking on the ocean side of Ocean View Blvd., especially in zones directly buffering seawalls and steep slopes with minimal space for retreat. Replace with hybrid designs combining porous surface, berms, bioswales, rain gardens, native plantings, vegetated riprap, submerged breakwater and similar designs. **AP 3.1.4** Explore and map upper streets parallel to Ocean View Blvd. with an eye toward historic sediment flows (see Geology & Soil Map p.22, SMP) Prioritize porous surface transitioning along parallel strips with the goal of supporting three to five continuous berms in succession from inner City to coastal shore **AP 3.1.5** Utilize low-impact design prioritizing porous surface, contour berms, rain gardens, bioswales, and native planting when redesigning and installing all new SMP coastal trail widening projects	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESILIENCE

NATURE BASED SOLUTIONS



GOALS AND STRATEGIES

RESILIENCE

As a coastal community, the City is deeply connected to the natural environment and uniquely vulnerable to the impacts of climate change. Strengthening resilience means preparing for and adapting to challenges such as sea level rise, coastal erosion, extreme weather, and wildfire risks while protecting the community's natural beauty and quality of life. The City will continue to plan for a resilient future by safeguarding critical infrastructure, supporting emergency preparedness, and investing in nature based solutions that protect both people and ecosystems. Through collaboration with regional partners and active community engagement, the City will enhance its ability to withstand and recover from climate-related impacts, ensuring a safe, vibrant, and sustainable future along the shoreline.

- GHG REDUCTION POTENTIAL
- COST
- CAPITAL COSTS VERSUS AVAILABLE FUNDING
- ENHANCES EQUITY AND CLIMATE JUSTICE
- PROVIDES COMMUNITY BENEFITS



RESILIENCE

Goal: RS 1

Actively facilitate fire safe practices in open spaces, parks and private properties for fuel reduction and ecosystem health

STRATEGY	ACTION	
RS 1.1 In partnership with the Monterey Fire Department, host a "Wildfire Ready" annual workshop event that is specific to Pacific Grove residents starting in 2026; offer in multiple languages and ensure inclusive engagement with vulnerable populations	**RS 1.1.1** Increase communication about this annual event to the high risk communities of Del Monte Park, Glen, Forest Grove, and Pacific Grove Acres East; Deploy and promote community education on defensible space, vertical and horizontal clearance and structure hardening, combined with incentives to facilitate fire-safe practice adoption **RS 1.1.2** Address concerns around evacuation routes in and out of the City **RS 1.1.3** Work with Meals on Wheels to develop an inventory of locations with isolated seniors and align these residents with the ongoing Community Wildfire Protection Plan (CWPP) outreach and education activities	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**

STRATEGY	ACTION	
RS 1.2 Implement and fund CWPP for Pacific Grove	**RS 1.2.1** Identify and fund annual project implementation of CWPP projects specific to Pacific Grove. Partner with local jurisdictions, CalFire and relative agencies to cooperatively secure funding and drive implementation	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**



RESILIENCE

Goal: RS 2

Invest time and money into emergency preparedness to build climate resilience

STRATEGY	ACTION	
RS 2.1 Identify, fund, and prepare existing and new public facilities to serve as resilience hubs (i.e. locations which are able to generate power in the event of a power outage, distribute emergency supplies, and coordinate communication)	**RS 2.1.1** Utilize the library as a primary resilience hub (Cross-cutting strategy RE 5.1.1, 5.1.2) **RS 2.1.2** Establish and prepare the Community Center as a secondary center with shower facilities as needed	**TIER 1 FOUNDATIONAL** **PRIORITY SCORE: 1** **CO-BENEFITS:**



RESILIENCE

Goal: RS 2

Invest time and money into emergency preparedness to build climate resilience

STRATEGY	ACTION	
RS 2.2 Prioritize considerations for resilient communities	**RS 2.2.1** Engage in regional resilience planning initiatives including Monterey Bay Climate Adaptation Action Network's coastal resilience efforts; prioritize integrated recovery strategies that reduce long-term climate impact costs **RS 2.2.2** Integrate resilience measures such as cooling designs and green roofs in future housing developments, especially in alignment with the City's efforts to increase affordable housing projects **RS 2.2.3** Pilot four nature based solution projects such as rain gardens, permeable pavement, and bioswells as part of the City's 2025 Complete Streets Plan. Possible locations: Roundabout concept at Congress Ave., Sunset Ave., Lovers Point, and Lighthouse Ave. **RS 2.2.4** Promote grants and incentives available through PG&E's Resilience Hubs Grant Program	**TIER 2** **SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESILIENCE

Goal: RS 2

Invest time and money into emergency preparedness to build climate resilience

STRATEGY	ACTION	
RS 2.3 Educate and Protect Residents and Businesses	**RS 2.3.1** Use the one-stop-shop website to detail climate-related risks, including wildfire smoke, heat, drought, and flooding (Cross cutting strategy GC 1.2)	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**
	RS 2.3.2 Conduct regular community engagement sessions, in collaboration with the Pacific Grove Library, Chamber of Commerce, and Museum of Natural History, to gather feedback on climate communication effectiveness	
	RS 2.3.3 Implement targeted outreach programs to ensure vulnerable and underserved populations (e.g. isolated seniors, outdoor workers, long-term care residents) receive tailored information and resources. This could involve working with local community leaders and organizations to address language barriers, accessibility issues, and cultural sensitivities, ensuring equitable access to climate information and resources	



RESILIENCE

Goal: RS 3
Develop a Carbon Fund modeled after the City of Watsonville's Carbon Fund in conjunction with Renewable Energy Generation and Energy Efficiency requirements.

STRATEGY	ACTION	
RS 3.1 Applicants can receive partial or full refunds of the Carbon Impact Fee by incorporating energy efficiency measures, retrofits, and/or on-site renewable energy systems that exceed California Title 24 energy code requirements	**RS 3.1.1** Design refund program to include a refund of 50% of the building permit fee for new residential and nonresidential construction; 30% of the building permit fee for multifamily residential and nonresidential additions or alterations; and 30% of the building permit fee for single-family residential additions over 500 square feet **RS 3.1.2** Utilize Carbon Impact Fee to catalyze a fund to support local renewable energy generation and energy efficiency projects	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESILIENCE

Goal: RS 4

Integrate local hiring and workforce equity into all city-led climate projects

STRATEGY	ACTION	
RS 4.1 Require all major city-funded or city-partnered climate projects, such as solar, EV charging, energy retrofits, tree planting to include local hire targets of 30% of funding allocated to Monterey Bay Area residents or businesses	**RS 4.1.1** Track job creation, wages, and hours worked by Monterey Bay Area residents and businesses across all CAAP implementation efforts **RS 4.1.2** Incorporate local preferencing into RFP and bidding processes **RS 4.1.3** Include workforce development language in all relevant RFPs to encourage contractors to offer apprenticeships or collaborate with training programs	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**



RESILIENCE

Goal: RS 5
Achieve an overall 33% tree canopy

STRATEGY	ACTION	
RS 5.1 Perform an Urban Tree Canopy Assessment, by 2027 and create a roadmap of planting activities (locations and timeline) with the goal of establishing 33% of overall tree canopy coverage within the City	**RS 5.1.1** Promote California's Turf Replacement Program which offers rebates for tree planting and transitioning to native landscaping **RS 5.1.2** Continue celebrating Arbor Day annually and maintaining the City's Tree City designation for another 25 years **RS 5.1.3** Update the City's Title 12 Tree ordinance which enhances replanting requirements	**TIER 3 COMPLIMENTARY** **PRIORITY SCORE: 3** **CO-BENEFITS:**



RESILIENCE

Goal: RS 6

Green Business Engagement Programs: Develop programs to engage and support businesses in adopting sustainable practices and reducing their environmental impact

STRATEGY	ACTION	
RS 6.1 Establish an annual funding allocation to increase and maintain the number of certified green businesses each year in partnership with organizations such as the Monterey Bay Area Green Business Program, and recognize and promote current participants	**RS 6.1.1** Establish an annual campaign to identify and target specific business districts for green business certification (e.g. Year 1 Lighthouse District, Year 2 Downtown, Year 3 Forest Hill, etc.); focus outreach on food service providers, as a primary step, and emphasize organics diversion and plastic reduction legislation **RS 6.1.2** Establish campaign over time to target historically certified green businesses within the City to facilitate certification renewal and promotion of businesses. Currently, Happy Girl Kitchen is the only certified business, despite historically broader participation **RS 6.1.3** Establish biannual or quarterly networking and promotional events in partnership with green businesses, combined with educational presentations for businesses and residents on sustainability, climate, and resilience concepts (e.g. Green Drinks gatherings) **RS 6.1.4** Utilize a green business engagement program to implement and enforce a single use plastic ordinance	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESILIENCE

Goal: RS 6

Green Business Engagement Programs: Develop programs to engage and support businesses in adopting sustainable practices and reducing their environmental impact

STRATEGY	ACTION	
RS 6.2 Collaborate and allocate incentive funds to increase adoption of Green Business and Sustainability Frameworks, and related initiatives, especially among hospitality businesses	**RS 6.2.1** Create Green Business Champion program where certified businesses act as mentors to support additional new business certification. Collaborate with See Monterey, Monterey Bay Hospitality Association and Chamber of Commerce to promote the green businesses with concurrent efforts to promote the region as a sustainable destination **RS 6.2.2** Collaborate with See Monterey and specific hospitality businesses to adopt Sustainability Framework for green meetings and events, replicating efforts being led by Portola Hotel & Spa. Provide city incentives for framework adoption	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 2** **CO-BENEFITS:**



RESILIENCE

Goal: RS 7

Improve coastal resilience through proactive and targeted annual funding investment in SMP implementation

STRATEGY	ACTION
RS 7.1 Accelerate implementation of SMP through annual and multi-year funding allocations and pilot implementation. Use Vulnerability Assessment to guide prioritization (e.g. Lovers Point, Ocean View Blvd., and Asilomar Dunes)	**RS 7.1.1** Enhance Community Resilience Against Extreme Climate Events through SMP implementation and proactive collaboration with Monterey Bay Climate Adaptation Action Network for regional funding **RS 7.1.2** Develop integrated strategy for Lovers Point to combine and set timelines for seawall repair, nature-based solutions and planned retreat. Expand pedestrian zones and reduce vehicle access to support retreat. Incorporate bike path, native bluff stabilization, upslope bioswales, rain gardens, porous surface, and catchment basins for drainage **RS 7.1.3** Implement hybrid shoreline solutions at Coral St. to Sea Palm Ave. and portions of Ocean Blvd. combining armoring with natural rock landscaping and/or planting to absorb wave energy and reduce visual impact. Pilot in one to two new locations **RS 7.1.4** Develop site-specific, managed retreat scenarios with timeline and cost estimates for relocating trails, signage, amenities where armoring is not recommended (Reaches 15, 19) **RS 7.1.5** Implement living shoreline projects in lower-energy shoreline segments in Asilomar and Coral St. Beach. Pilot native plantings to stabilize bluffs, interpretative signage **RS 7.1.6** In partnership with National Marine Sanctuary, monitor human activities in marine protected areas, providing data that can be used to assess and manage the impact on sensitive habitats

TIER 2 SUPPORTIVE

PRIORITY SCORE: 2

CO-BENEFITS:





RESILIENCE

Goal: RS 8
Protect wildlife through local policy and planning

STRATEGY	ACTION	
RS 8.1 Restrict public access to identified wildlife breeding, nesting, or pupping areas during sensitive periods as determined by qualified biological monitoring	**Action 8.1.1** Educate recreational users about where fishing and wildlife disturbance are restricted and why it matters **Action 8.1.2** Partner with the National Marine Sanctuary to build education	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 3** **CO-BENEFITS:**

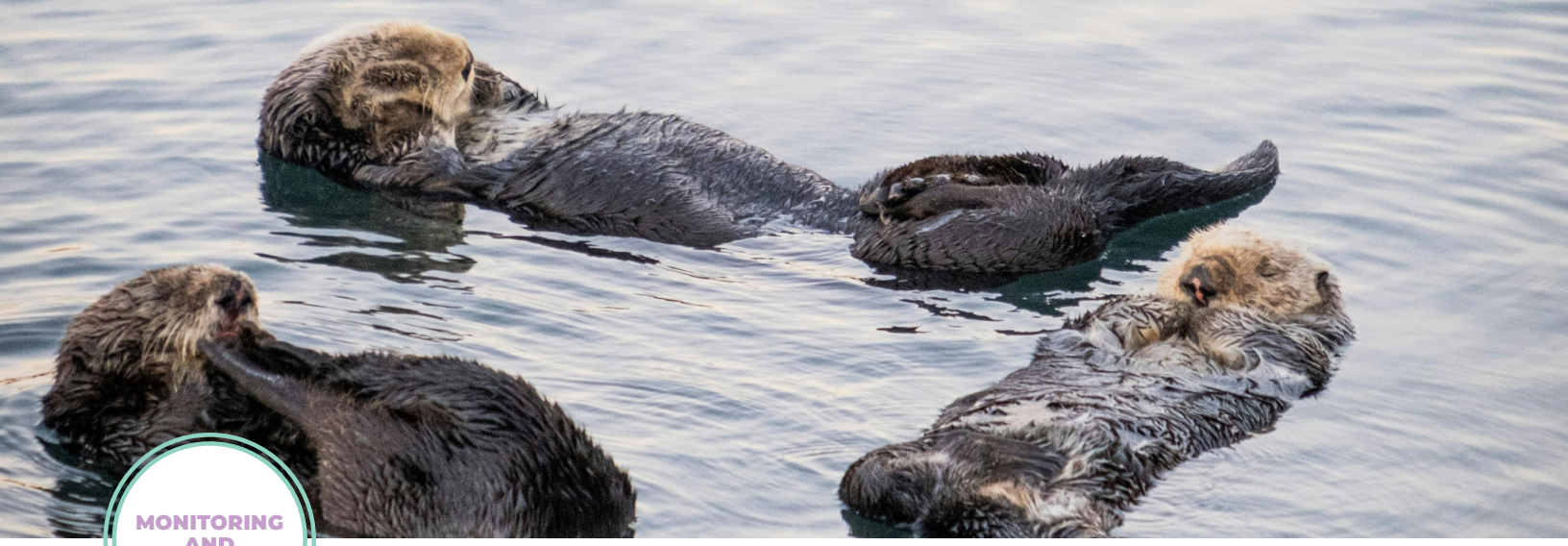
STRATEGY	ACTION	
RS 8.2 Reduce artificial light impacts on marine and shoreline wildlife while preserving safety and community character	**Action 8.2.1** Install motion sensors for non-essential lighting **Action 8.2.2** Decrease lighting around harbor seal pupping and shorebird nesting sites	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 3** **CO-BENEFITS:**

STRATEGY	ACTION	
RS 8.2 Strengthen language in the Local Coastal Plan to include stricter language around stormwater runoff that directly affects the health of the National Marine Sanctuary's kelp forest	**Action 8.3.1** Mandate Low Impact Development for all new development along the coastline **Action 8.3.2** Require permeable paving in all shoreline zones **Action 8.3.3** Assess the carbon storage and sequestration impacts of the kelp forest ecosystem	**TIER 2 SUPPORTIVE** **PRIORITY SCORE: 3** **CO-BENEFITS:**



2025

MONITORING AND REPORTING



MONITORING AND REPORTING

This CAAP outlines a phased implementation approach across short, medium, and long-term timelines. It includes an expanded implementation framework that provides guidance on execution and monitoring. This framework incorporates critical elements such as implementation timelines, cost estimates, outlining projected financial requirements and underlying assumptions to aid in fiscal planning, and lead departments, responsible for guiding and carrying out specific initiatives. Additional details are included to support internal execution, covering lead agencies, priority levels, associated benefits, policy connections, and progress tracking.

While the specifics of individual initiatives are designed to remain adaptable, responding to shifting community priorities, evolving city departments and partner organizations, new legislative measures, and changing environmental factors, consistent and thorough monitoring will be key to realizing long-term objectives. As conditions evolve, the City aims to conduct regular assessments and evaluations and, in time, consider hiring additional staff for support. Additionally, a structured review and update process will be established to ensure the CAAP remains a relevant and effective tool for advancing climate action and enhancing overall quality of life. Special attention will be given to prioritizing immediate actions that are essential for achieving measurable progress in the short and medium term. This comprehensive approach will serve as the operational blueprint for implementing the CAAP effectively.



2025

FUNDING PLAN



FUNDING

Securing the necessary funding to effectively execute the CAAP demands a diverse range of funding strategies and avenues. An integral facet of this financial approach is identifying potential external funding sources, particularly for actions that require additional support. Recognizing that certain strategies might surpass the City's current resources, tapping into external funding becomes essential. Within this framework, specific funding sources are identified where known. The implementation year for each strategy is selected based on the prioritization score, as introduced in the CAAP's Prioritization section. An imminent implementation year signifies a high prioritization score for that strategy, while a later year means a comparatively lower score.

Table C outlines a financial snapshot of the CAAP. The entire Funding Plan can be found in Appendix B. The cost estimates are indicative only; they are based on preliminary assessments, comparisons with similar programs, and expert input and are meant to provide a rough order of magnitude evaluation. For example, several of the strategies involve efforts of city staff. Strategies that are in bold indicate the initial implementation year.

Staff time represents the primary cost associated with implementing the CAAP. Most of the identified strategies emphasize strengthening collaboration with regional partners and pursuing available rebates and incentives. The majority of the Capital Improvement Budget items pertain to energy and transportation initiatives, with only a few exceptions. Oversight of CAAP implementation will be led by the Environmental Program Manager; however, it is recommended that the City consider hiring a part-time staff member or organization to provide additional support for these efforts.



FUNDING

Table C: Financial snapshot of the CAAP

Strategy	Implementation Year	Annual Cost estimate	Total project duration	Total project cost remaining	Possible Funding Source(s)
2026					
RE 1.1 Consider a crowdfunding residential and commercial bulk purchasing solar campaign, "Solarize PG", to bring upfront costs down.	2026	Staff Time	2026-2030	$0	Operating Budget
RE 2.1 Conduct a comprehensive energy audit of municipal facilities, including the Natural History Museum and the Pacific Grove Library	2026	$10,000	2026-2031	$40,000	3CE's Audits & assessments: determining where energy savings exist. California Energy Commission; PG&E's "Whole Building Performance Based" Program

ENERGY

PROGRAM	AGENCY	PURPOSE
Local Government Building Decarbonization Challenge Program Energy Efficiency	California Energy Commission (CEC)	Offers grants and other funding to advance clean energy, efficiency, and climate goals Offers energy efficiency financing options (zero- and low-interest loans/grants) for cities, counties, and public entities
PACE (Property Assessed Clean Energy)	Property owners (where available)	Enables financing renewable installations on commercial and nonprofit properties via property tax liens.
Greenhouse Gas Reduction Fund / Green Banks	EPA	Includes billions for clean energy projects through green investment institutions, some targeting municipalities
Energy Efficiency and Conservation Block Grants Revolving Loan Fund Grants	U.S. Department of Energy (DOE)	Receive direct allocations to support electrification in public buildings States may use up to 25% of Revolving Loan Fund award funds for grants/technical assistance to "conduct energy audits, upgrades, and retrofits"
Community Development Department grants	U.S. Department of Housing and Urban Development (HUD)	Supports projects that integrate EV charging, energy-efficient community facilities, or clean transportation investments
Green Banks & Clean Energy Financing Support	EPA	Allocates hundreds of billions through financing intermediaries to enable project-level investment in clean energy, including electrification measures
SWEEP & LED Street Lighting loans	IBank CLEEN Center	Low-cost loans ($500k–$30M) for public-sector efficiency projects
Grants	3CE	Funds electrification and efficiency for member agencies

ENERGY

PROGRAM	AGENCY	PURPOSE
Energy Savings Performance Contract	City of Pacific Grove	Ideal for bundled LEDs, sensors, and controls across facilities
Microgrid Incentive Program	Pacific Gas and Electric Company (“PG&E”)	Offers up to $14 million per project for multi-customer, front-of-meter community microgrids
Community Microgrid Assistance Partnership Smart Grid Grants	DOE	Provides funding and technical assistance for microgrid systems that enhance reliability/affordability, including for local governments Designed to increase flexibility, efficiency, and reliability of the electric power system. A municipal smart energy system (smart sensors, grid controls, EV integration, storage) could align well
Utility and regulatory programs	California Public Utilities Commission	Support microgrid deployment for resilience in vulnerable communities.
Multiple “grants for energy”	State & Local Clean Energy Financing / Grants	These may not always be labelled “smart energy system funding” but include the needed themes: distributed energy, efficiency, new grid technologies

TRANSPORTATION

PROGRAM	AGENCY	PURPOSE
Active Transportation Infrastructure Investment Program	Department of Transportation (DOT)	Aims to integrate various modes of transportation, including pedestrian and bicycle infrastructure, to create a more connected and accessible urban environment.
Transportation Alternatives Program	DOT	Offers an 80/20 funding match, covering up to 80% of eligible project costs, with a maximum federal contribution of $800,000 per project
Low or No Emission Vehicle Program	Federal Transit Administration (FTA)	Provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses, including the acquisition, construction, and leasing of required supporting facilities
EV Funding Finder tool	Joint Office of Energy and Transportation	Helps identify federal funding programs, including grants, loans, and tax incentives, suitable for various fleet electrification projects
Clean Air Grants	HUD	Support infrastructure that benefits low- to moderate-income residents. E-bike vouchers—and associated safety infrastructure—could qualify under accessible mobility and public health
Carbon Reduction Program	Federal Highway Administration (FHA)	Supports projects that reduce transportation emissions, including investments in public transit, bicycle and pedestrian infrastructure, and congestion management strategies
Congestion Mitigation and Air Quality Improvement Program	FHA	Provides flexible funding to state and local governments for transportation projects that help meet the requirements of the Clean Air Act, including those aimed at reducing VMT
Rebuilding American Infrastructure	DOT	Funds capital investments in surface transportation projects that will have a significant local or regional impact, including those that aim to reduce VMT through improved infrastructure and connectivity
California Climate Investments	CEC	Reduces GHG emissions through clean transportation, energy, waste, etc.
California Electric Vehicle Infrastructure Project (CALeVIP) & Clean Transportation Program	CEC	Incentives for purchase and installation of publicly accessible EV charging stations

GREEN COMMUNITY

PROGRAM	AGENCY	PURPOSE
Peer Network for Local Governments	Green Cities California	Facilitates collaboration, sharing of funding strategies and best practices in climate/ sustainability for cities in CA
Program Support Tooling & Membership Resource	California Green Business Network	While more of a network than a grant program, supports cities/businesses with green business certification and access to grant strategies
Related State Planning Grants	Urban Greening Program	"Sustainable Communities Grants" and other planning/implementation grants tied to transportation/green growth strategies in California
All Programs Portal	California Climate Investments	State-wide funding across many climate/ sustainability areas
Federal Funding Sources for Municipal Sustainability & Climate Action	National League of Cities	A searchable database of federal programs for cities focused on sustainability, climate mitigation/resilience.
ICLEI USA – Municipal Investment Fund	Coalition for Green Capital	Grants + technical support for municipalities to develop project pipelines that unlock private investment in clean energy/green business projects.

ADAPTATION AND RESILIENCE

PROGRAM	AGENCY	PURPOSE
Community Energy Reliability & Resilience Investment (CERRI) Program	CEC	Funds grid-hardening and energy resilience projects
Regional Resilience Planning and Implementation Grant Program	Governor's Office of Planning and Research (OPR)	Implementation of resilience projects via regional partnerships
The Adaptation Clearinghouse (via ResilientCA) and other State resources	Toolkit of funding online	Provide lists and searchable databases of adaptation and resilience funding and tools
Integrated Climate Adaptation and Resiliency Program	OPR	Supports climate adaptation planning
Coastal and Watershed Resilience Grants	California State Coastal Conservancy	Supports projects in coastal watersheds for nature-based solutions, resilience, restoration
Sea Level Rise Adaptation Planning Grant Program	OPC	Supports coastal governments to plan for and/or implement SLR adaptation
Climate Ready Program: Public Infrastructure Sea Level Rise Projects	OPC	Focuses on protecting communities and natural resources from SLR — especially public infrastructure, urban waterfronts, ports, ecosystems.
Local Coastal Program (LCP) Grant Program	California Coastal Commission	Provides funds to local governments to update or complete Local Coastal Programs
U.S. Federal Grant Programs	National Oceanic and Atmospheric Administration (NOAA)	For projects under its Effects of Sea Level Rise (ESLR) Program
Protect Coasts / Green Infrastructure	EPA	Includes resources and some funding pathways aimed at coastal hazard mitigation, storm surge/ SLR, infrastructure resilience
Urban & Community Forestry Grant Program	California Department of Forestry and Fire Protection	Supports tree planting, urban forest management, and related activities, with eligibility for cities, counties and nonprofits

ADAPTATION AND RESILIENCE

PROGRAM	AGENCY	PURPOSE
Funding sources	California ReLeaf	Lists many public & private funding sources for urban forestry and tree-planting across the state
Urban Greening Program	California Natural Resources Agency	Funds tree planting, green infrastructure and street/park tree projects
Clean California Local Grant Program	DOT	Competitive program for beautification, streets/ roads, pathways and public spaces
Resilience Hubs Grant Program	PG&E	Offers grants of $25,000 (feasibility phase) and $100,000 (design/build phase) for resilience-hub projects in PG&E's service area
Community Resilience Centers Program	Strategic Growth Council	Supports new construction or upgrades of neighborhood-level resilience centers

RESOURCE CONSERVATION

PROGRAM	AGENCY	PURPOSE
Watershed Resilience Program	California Department of Water Resources (DWR)	Offers a variety of grants and loans for public agencies including water-use efficiency, and integrated regional water management Offers grants & loans for water-infrastructure, drinking water access and efficiency
"Smart Water Rebates"	California Water Efficiency Partnership	Runs the "Smart Water Rebates" program for participating water agencies, covering many WaterSense-labeled product retrofits
Various	The California State Water Resources Control Board	Maintains several grant/loan programs covering drinking water, wastewater, stormwater, non-point source, water conservation, water recycling projects.
SB 1383 Local Assistance Grant Program - DONE	California Department of Resources Recycling and Recovery (CalRecycle)	Offers grants and loans for local governments to support recycling, composting, organics diversion infrastructure
Local Water Project Grant	Monterey Peninsula Water Management District	Focused largely on water supply, recharge, groundwater and large projects, this grant program may be open to smaller infrastructure installations if they support public access or water-conservation goals
WaterSense program	EPA	Has a "Rebate Finder" tool listing rebates for WaterSense-labeled products (indoor/outdoor fixtures) available in many areas
Rebate listings	Central Coast Greywater Alliance	Offers rebates (e.g., US $100 per fixture, US $150 after workshop, up to US $1,000 for permitted systems) in the Central Coast region

2025

APPENDICES



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CLIMATE ACTION AND ADAPTATION PLAN

APPENDIX A

Public Works Yard Solar and Storage Optimization (REopt Analysis)

A.1. Introduction

This appendix presents the detailed technical analysis conducted to evaluate the addition of battery storage to the City of Pacific Grove's Public Works Yard solar carport system. The assessment examines how pairing a 14 kW / 56 kWh lithium-ion battery with the existing 62.08 kW DC PV array affects solar utilization, curtailment, grid purchases, and overall cost-effectiveness. Modeling was completed using the National Renewable Energy Laboratory's (NREL) REopt Lite optimization tool, which simulates hourly PV generation, battery charging and discharging, and grid interactions across a typical meteorological year. This appendix documents the modeling assumptions, annual energy flows, daily dispatch dynamics, and financial results that support the project's feasibility findings.

A.2. Modeling Inputs and Assumptions

Table A-1 summarizes the key technical, operational, and financial assumptions used in the REopt optimization. These inputs reflect verified PG&E usage for the facility, HelioScope production modeling of the carport array, and current 2025 market pricing for municipal-scale battery systems. A synthesized NREL commercial load profile was scaled to match the Yard's measured annual energy use and aligned to the facility's typical weekday operating hours.

PUBLIC WORKS YARD SOLAR AND STORAGE OPTIMIZATION (REOPT ANALYSIS)

Table A-1. Key Modeling Parameters

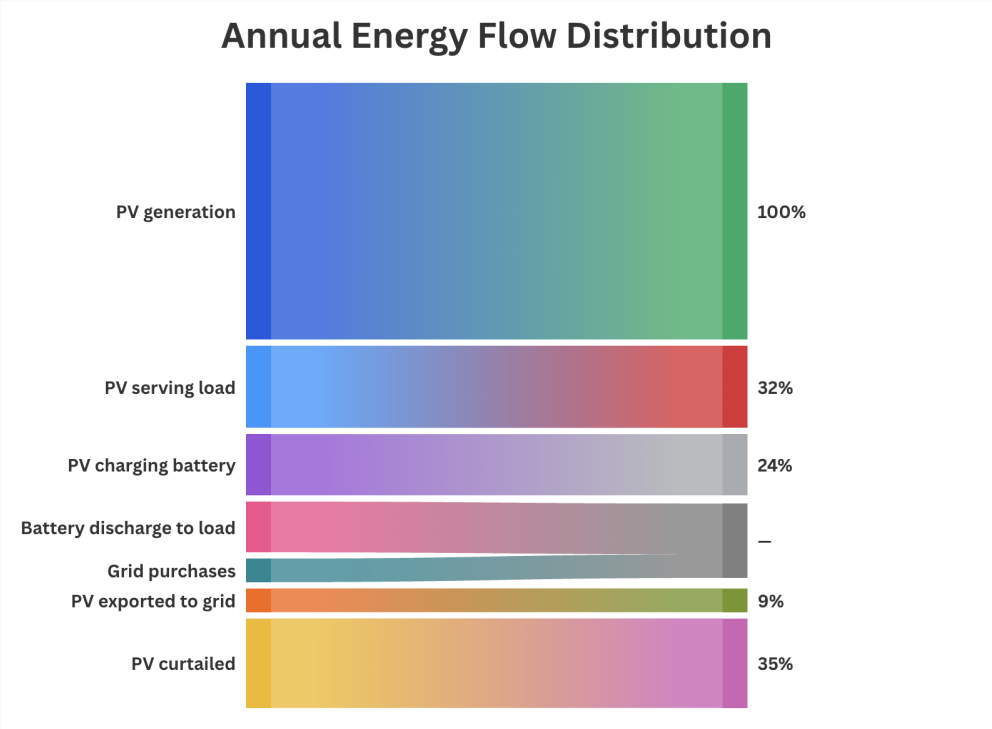
Parameter	Value	Notes
Annual site load	50,678 kWh	Based on verified PG&E utility data
PV system size	62.08 kW DC	Existing fixed-tilt (10°), south-facing
PV losses	13%	Performance ratio of 0.87
Installed PV cost	$3,500/kW	Typical municipal carport pricing
Battery usable capacity	56 kWh	Optimized size from REopt
Battery power rating	14 kW	Optimized size from REopt
Battery cost	$400/kWh, $1,000/kW	2025 turnkey estimate
Round-trip efficiency	90%	AC-coupled Li-ion
Export rate	$0.0307/kWh	PG&E NSC
Retail rate	$0.43256/kWh	PG&E B-1 blended
Analysis period	25 years	Public sector financial assumptions

The load profile exhibits strong daytime alignment with PV generation, making the site an excellent candidate for increased solar self-consumption through storage.

A.3. Annual Energy Flow Distribution

The visual below illustrates how the system's 83,011 kWh of annual PV generation is distributed among different end uses after battery optimization.

Figure A-1. Annual Energy Flow Distribution



The optimized configuration substantially increases the fraction of PV energy used on-site:

1. 32% serves load directly
2. 24% charges the battery
3. 9% is exported at NSC rates
4. 35% is curtailed due to limited storage and load during peak solar hours

This demonstrates the importance of battery storage for mitigating curtailment and improving the value of the existing PV array.

A.4. Annual PV Utilization Breakdown

To quantify where annual PV generation is allocated, Figure A-2 and Table A-2 summarize the major PV energy pathways.

Figure A-2. Annual PV Generation and Utilization

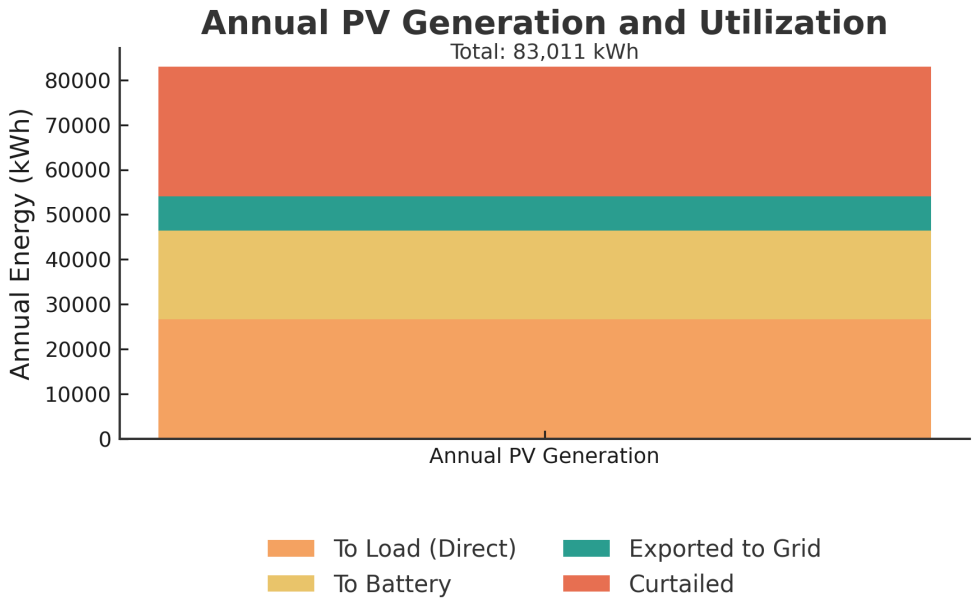


Table A-2. Annual PV Utilization

Component	Annual Energy (kWh)
PV → Load (direct use)	26,613
PV → Battery	19,776
PV Exported to Grid	7,662
PV Curtailment	28,960
Total PV Generation	**83,011**

The battery stores nearly **20 MWh/year** of excess midday solar that would otherwise be lost to curtailment, increasing total on-site solar use by more than **40%** relative to a no-battery case.

A.5. Annual Load Supplied by Source

Figure A-3 shows how the Public Works Yard's 50,678 kWh annual load is met through direct PV, stored PV delivered from the battery, and residual grid energy.

Figure A-3. Annual Site Load Supplied by Source

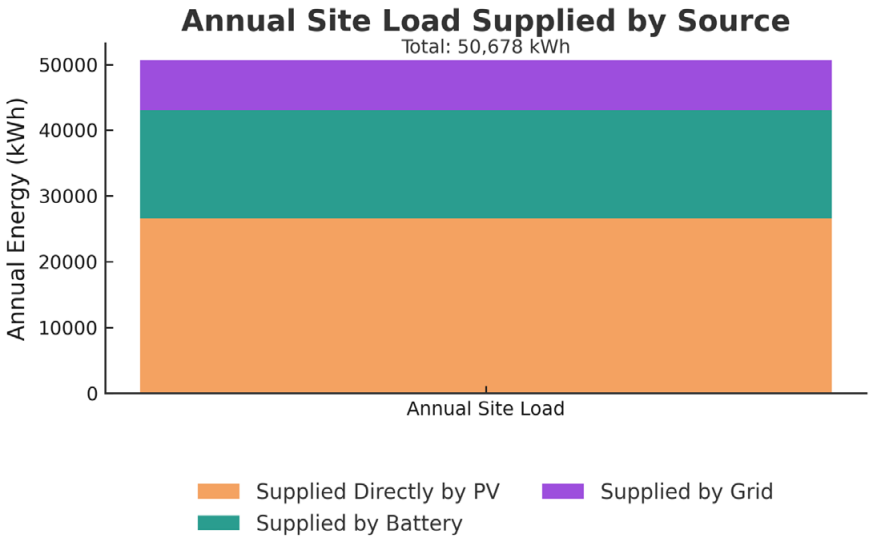


Table A-3. Annual Load Supply by Energy Source

Source	Annual Energy (kWh)
Supplied directly by PV	26,613
Supplied by Battery (stored PV)	16,423
Supplied by Grid	7,641
Total Site Load	50,678

Key outcome:

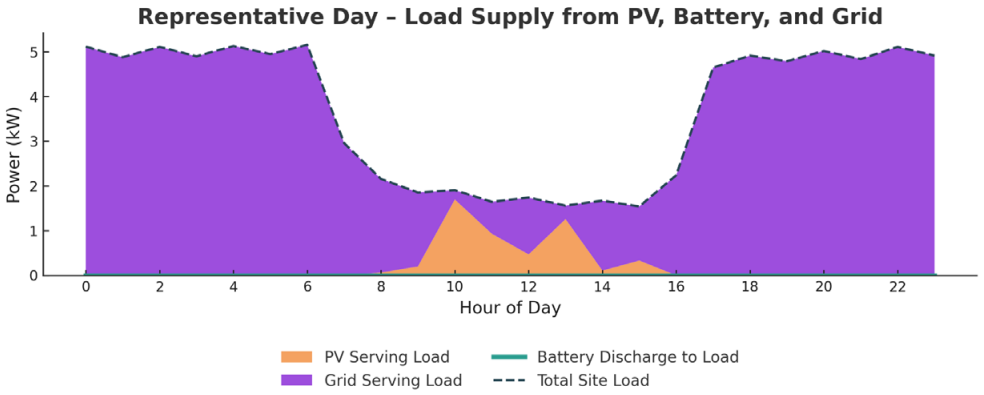
85% of the Yard's annual electricity use is met by on-site solar energy, leaving only 15% to be purchased from PG&E.

The optimized storage system substantially improves the site's self-sufficiency and reduces vulnerability to utility rate increases.

A.6. Representative Day Dispatch Behavior

The figure below illustrates hourly system behavior for a high-solar spring day. It highlights how PV, battery storage, and the grid interact to serve the facility load.

Figure A-4. Representative Day – Load Supply from PV, Battery, and Grid



Operational observations:

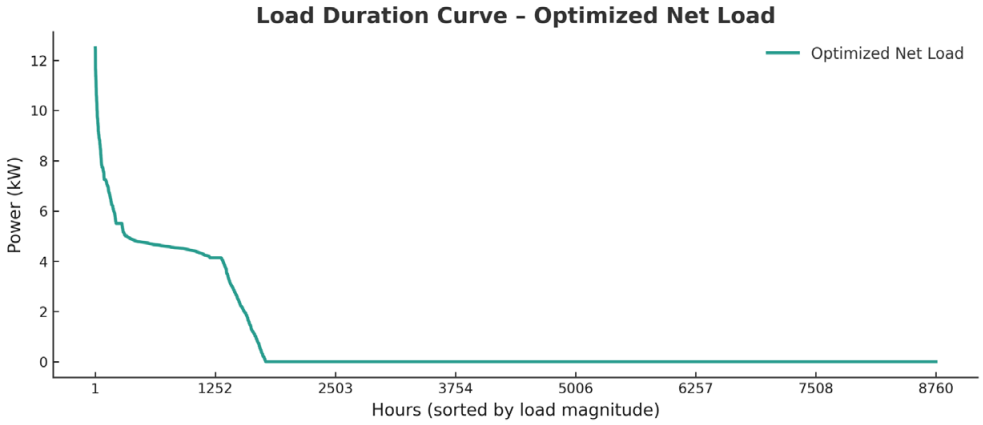
- Midday: PV meets nearly 100% of load
- Morning/evening: The battery discharges to cover load before/after peak solar
- Grid: Only provides energy during short overnight periods or when PV and battery are insufficient

This dispatch pattern demonstrates how the battery extends the usefulness of mid-day solar into hours of higher demand.

A.7. Load Duration Curve (Optimized Case)

The load duration curve below ranks hourly net load from highest to lowest. The optimized profile shows significantly reduced peaks, reflecting the battery's contribution to lowering grid dependence.

Figure A-5. Optimized Load Duration Curve



Compared to a business-as-usual profile, the optimized curve shows significantly reduced peak loads. This smoothing effect indicates improved operational resilience and reduced exposure to potential demand-related charges.

A.8. Economic Summary

The optimized PV + battery configuration produces positive life-cycle financial performance.

Table A-4. Economic Summary

Metric	Value
Net Present Value (NPV)	$8,936
Payback period	12.44 years
Internal Rate of Return (IRR)	7.1%
Total battery capital cost	$36,387
Year 1 utility bill reduction	$5,077
Lifetime utility savings	$76,913

Value creation comes primarily from increased PV self-consumption, reduced grid purchases, and recovery of energy that would otherwise be curtailed.

A.9. Emissions Impact

By reducing annual grid purchases from 23,188 kWh to 7,641 kWh, the optimized system lowers life-cycle emissions by approximately:

- Approximately 19 metric tons of CO_2 avoided, with negligible impacts on NO_x, SO_2, and $PM_{2.5}$ due to California's relatively clean grid.

A.10. Summary and Conclusions

The REopt analysis demonstrates that integrating a 56 kWh battery with the existing Public Works Yard solar carport produces meaningful operational, economic, and environmental benefits:

1. Reduces PV curtailment by nearly 20 MWh/year
2. Increases on-site solar contribution to 85% of annual load
3. Cuts grid imports by 67%
4. Provides a positive NPV and strong long-term savings
5. Smooths net load and enhances operational resilience

Overall, battery integration is a cost-effective and high-impact strategy for maximizing renewable energy use at the Public Works Yard.

CLIMATE ACTION AND ADAPTATION PLAN

APPENDIX B

City of Pacific Grove Funding Plan

Table B: Possible Funding Mechanisms

Bold indicates implementation year

STAFF TIME KEY:

= 1 – 20 staff hours (annually)

= 20 – 60 staff hours (annually)

= 60+ staff hours (annually)

= Recurring annual staff needed

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
2026					
RS 1.1 In partnership with the Monterey Fire Department, host a "Wildfire Ready Monterey" annual workshop event that is specific to Pacific Grove residents starting in 2026; offer in multiple languages and ensure inclusive engagement with vulnerable populations	2026		2026-2031	$0	Monterey Fire Department
RS 2.2 Prioritize considerations for resilient communities	2026		2026	$0	Operating Budget
RS 2.3 Educate and Protect Residents and Businesses.	2026		2026	$0	Operating Budget
RS 4.1 Require all major city-funded or city-partnered climate projects, such as solar, EV charging, energy retrofits, tree planting to include local hire targets of 30% of (job hours/funding) allocated for Pacific Grove (or Monterey Bay Area?) residents or businesses	2026		2026	$0	Operating Budget
RS 5.1 Using the 2026 Urban Tree Canopy Assessment, create a roadmap of planting activities (locations and timeline) with the goal of planting 100 trees annually	2026	$107,200	2026-2031	$643,200	California Department of Forestry and Fire Protection; California ReLeaf; California Natural Resources Agency
RS 6.1 Establish annual funding allocation to increase and maintain the number of certified green businesses each year in partnership with the Monterey Bay Area Green Business Program, and recognize and promote current participants	2026	$5,000	2026-2031	$30,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital
RS 6.2 Collaborate and allocate incentive funds to increase adoption of Green Business and Sustainability Frameworks, and related initiatives, especially among hospitality businesses	2026	$50,000	2026-2031	$300,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RS 7.1 Accelerate implementation of Shoreline Management Plan through annual and multi-year funding allocations and pilot implementation. Use Vulnerability Assessment (CCVA) to guide prioritization (e.g. Lovers Point, Ocean View Blvd, Asilomar Dunes).	2026	$75,000	2026-2031	$350,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 1.1 Set annual goal for increased porous surface acres. Increase from (e.g. 500 acres to 750 acres by 2035); Create an implementation plan including annual budget and priority locations	2026	$900,000	2026-2031	$5,400,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 1.2 Integrate Living Shoreline protection at Lovers Point combining natural materials (plants, sand, shells, biodegradable logs) with structural elements to stabilize the coast	2026	$800,000	2026	$0	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 2.1 Partner with the Monterey Bay Sanctuary to promote citizen science programs, such as Dry Run and First Flush Monitoring Program, E9c Outfall Monitoring, and PG Local Water Project	2026		2026-2031	$0	Monterey Bay Sanctuary
AP 2.4 In alignment with the Perkins Park Plan, continue to restore and maintain the existing purple carpet ice plant along Ocean View Boulevard, but consider native species elsewhere in the City	2026		2026	$0	Operating Budget
AP 2.5 Develop site-specific managed retreat scenarios with timeline and cost estimates for relocating trails, signage, amenities where armoring not recommended (Reaches 15, 19)	2026		2026	$0	Operating Budget

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
AP 3.1 Add funding and implementation schedule as an appendix to the Shoreline Management Plan	2026	$2,000,000	2026-2031	$12,000,000	California State Coastal Conservancy Grants; Urban Greening Program; California State Water Resources Control Board; EPA; Caltrans
RE 1.1 Consider a crowdfunding residential and commercial bulk purchasing solar campaign, "Solarize PG", to bring upfront costs down	2026		Phase I: 2026	$0	Operating Budget
RE 2.1 Conduct a comprehensive energy audit of municipal facilities, including the Museum of Natural History and the Pacific Grove Library	2026	$10,000	2026-2027	$40,000	Energy Efficiency & Conservation Block Grant Program; U.S. Department of Energy; 3CE's Audits & assessments: determining where energy savings exist. California Energy Commission; PG&E's "Whole Building Performance Based" Program
RE 2.2 Continue and expand energy savings retrofits and installations including LED lighting, as well as light sensors, timers, and smart thermostats based on occupancy patterns in all applicable areas in municipal buildings, parks and facilities	2026	$100,000	2026-2031	$440,000	3CE rebates and grants; IBank CLEEN Center – SWEEP & LED Street Lighting loans; California Energy Commission – Local Government programs; Energy Savings Performance Contract
RE 2.3 Participate in 3CE's Hourly Flex Pricing pilot, which offers financial incentives for shifting municipal electricity use away from peak demand periods	2026		2026	$0	3CE
RE 2.4 Launch smart energy management systems for real-time with remote use adjustments for increased energy savings	2026	$250,000	2026-2027	$250,000	Energy Savings Performance Contract; Green Banks & Clean Energy Financing Support; Local Government Building Decarbonization Challenge Program

APPENDIX B

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RE 3.1 Incentivize energy efficiency upgrades, using tax credits, for existing buildings at the time of a major remodel or change of ownership	2026		2026	$0	Avoided Income
RE 3.2 Reduce permit fees and streamline permitting requirements for renewable energy building renovations	2026		2026	$0	Avoided Income
RE 3.3 Implement programs to provide weatherization services, improve energy efficiency, and reduce utility costs for low income households beginning in 2026	2026		2026	$0	Energy Efficiency & Conservation Block Grant, State Energy Program, SAVES Revolving Loan Program & Local Energy Loan Programs; Central Coast Energy Services
RE 6.1 Continue to leverage 3CE for carbon free electricity, while working to increase local renewables, microgrids and community incentives in line with early goals of the organization	2026	Already budgeted for purchasing 3CPrime	2026-2031	$0	3CE
TR 1.1 Develop a municipal Fleet Electrification Plan by 2028 that identifies vehicle replacement schedules, charging infrastructure needs, deployment timeframes and phasing, and estimated capital and operating costs	2026	Paid for by 3CE	2026	$0	3CE
TR 1.2 Install 35 electric vehicle chargers at city facilities	2026	$40,000	2026-2031	$160,000	3CE's Charge Your Fleet program
TR 1.3 Accelerate the transition to EVs community-wide and make charging more accessible.	2026		2026-2031	$0	3CE's Electrify Your Ride Rebates
TR 2.1 Expand education and outreach campaigns and events to promote walking, biking and taking transit	2026		2026-2031	$0	Partnerships; Regional Surface Transportation Program, Active Transportation Support Program, Work with TAMC on Safe Route to School program, CALTrans' Active Transportation Program

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
TR 2.2 Work with MST to increase access to public transit by increasing frequency of service near Holman building, Lover's Point, and Grove Market	2026		2026	$0	MST
TR 3.1 Incorporate separated bike lanes through town using similar signage as outlined in the Shoreline Management Plan	2026	$160,000	2026-2031	$640,000	HUD's Clean Air Grants; DOT's Transportation Alternatives Program & Active Transportation Infrastructure Investment Program
TR 3.3 Create a tax incentive for commercial businesses who develop Transportation Demand Management programs	2026		2026	$0	Avoided Income
TR 3.5 Pursue complete street RFP; incorporate in new development as feasible	2026		2026	$0	Operating Budget
RC 1.1 Continue successful regional collaboration with ReGen Monterey (RGM), Salinas Valley Recycles (SVR) and Blue Strike Environmental (BSE) to achieve zero waste goals	2026		2026-2031	$0	Operating Budget
RC 1.2 Continue regional collection, education, outreach, technical assistance, enforcement, procurement and reporting efforts to meet and exceed SB 1383 mandate of 75% reduction in organic waste to landfill and maximum amount of edible food recovery and 20% statewide edible food recovery goals	2026		2026-2031	$0	Operating Budget
RC 2.1 Advance targeted waste management solutions through continued regional collaboration with ReGen Monterey	2026		2026-2031	$0	Operating Budget
RC 2.2 Enforce CalGreen's construction and demolition standard which mandates that construction projects recycle or salvage at least 65% of nonhazardous C&D debris	2026		2026-2031	$0	Operating Budget

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RC 2.3 Utilize franchise agreement with GreenWaste Recovery to support continued and increasing diversion and waste reduction through curbside collection and complimentary services	2026		2026-2031	$0	Operating Budget
RC 2.4 Continue to participate in ReGen Monterey's TAC and joint subcommittees, including leadership on Edible Food Recovery (EFR) Subcommittee	2026		2026-2031	$0	Operating Budget
RC 2.5 Expand Technical Advisory Committee to plan for SB 54 which requires waste reduction from single-use packaging waste and single-use plastic food ware	2026		2026-2031	$0	Operating Budget
RC 2.6 Require new development to incorporate a minimum of 15% of recycled materials into construction to encourage the market for recycled goods	2026		2026	$0	Operating Budget
RC 3.2 Review existing codes, ordinances and policies to identify opportunities to remove barriers from implementation	2026		2026	$0	Operating Budget
RC 4.1 Further municipal zero waste practices in city buildings, parks, facilities and owned properties	2026		2026-2031	$0	Operating Budget
RC 4.2 Partner with the Chamber of Commerce to implement improved zero waste practices, recycling and organics diversion, water refill stations, and plastic water bottle and Styrofoam ban at Good Old Days, as the largest community event held within the city	2026		2026-2031	$0	Operating Budget
RC 4.3 Install eight water refill stations in city buildings to encourage refillable water bottles	2026	$24,000	2026	$0	American Water Charitable Foundation; California Department of Water Resources; Monterey Peninsula Water Management District

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RC 5.1 Require all new developments and major renovations to meet Model Water Efficient Landscape Ordinance (MWELO) standards, including use of water-efficient & native plants, drip irrigation, and moisture sensors	2026		2026	$0	Operating Budget
RC 5.2 Require all new construction and major remodels to include EPA WaterSense fixtures (toilets, sink faucets, and showerheads) beginning in 2026	2026		2026-2031	$0	Operating Budget
RC 5.4 Expand rain garden, rainwater catchment, and low-impact design demonstration projects by city, residents and businesses	2026		2026-2031	$0	Partnerships
RC 5.5 Partner with Monterey Peninsula Water Management District to encourage residential and commercial recycled water projects and provide greywater installation training workshops, rain barrel distribution, financial incentives and/or technical and installation assistance	2026		2026-2031	$0	Monterey Peninsula Water Management District; Central Coast Greywater Alliance; EPA; The California State Water Resources Control Board; California Water Efficiency Partnership
RC 5.6 Offer expedited and/or reduced cost permits to new developments and major renovations of existing developments that include greywater systems or pipes for recycled water	2026		2026-2031	$0	Avoided Income
RC 5.7 Continue regional collaborative management of water recycling and stormwater management	2026		2026-2031	$0	Partnerships

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
GC 1.1 Collaborate with the Chamber of Commerce and California Green Business Network (CGBN) to promote, expand and enhance adoption of the California Green Business Program to increase the number of certified green businesses within the City of Pacific Grove	2026	$25,000	2026-2031	$150,000	The National League of Cities; The Coalition for Green Capital ; California Climate Investments; Urban Greening Program; California Green Business Network; Green Cities California
GC 1.2 Develop a one-stop-shop resource page on the city's website tailored to residents and businesses	2026		2026-2031	$0	Operating Budget
GC 2.1 Partner with local organizations to promote, expand and enhance local initiatives focused on native plants, pollinators, Integrated Pest Management (IPM), low-impact design and stormwater management, rainwater catchment, rain gardens, food systems, beach clean-ups, and similar environmental initiatives	2026		2026-2031	$0	Monterey Bay Chapter – California Native Plant Society; Monterey Regional Stormwater Management Program; Save Our Shores; Pacific Grove Museum of Natural History
GC 2.2 Develop annual fund or grant program to support local initiatives in expanding and sustaining reach and impact	2026	$100,000	2026-2031	$500,000	Operating Budget
GC 3.1 Increase regional involvement with Central Coast Climate Collaborative (4C) to gain insight on regional projects and to leverage resources	2026		2026-2031	$0	Partnerships
GC 3.2 Establish an interdepartmental Steering Committee to integrate climate preparedness in planning, maintenance, and capital improvements through the development of work plans, screening of capital improvements, and cross-sector collaboration	2026		2026-2031	$0	Operating Budget

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
GC 3.3 Integrate annual CAAP report goals during the budget review process at the direction of the City Manager	2026		2026-2031	$0	Operating Budget
GC 3.4 Join the Monterey Bay Climate Adaptation Network	2026		2026-2031	$0	Operating Budget
GC 3.5 Ensure that marginalized communities have access to green spaces, clean water, affordable housing, and sustainable transportation options to ensure climate resilience benefits are shared equitably	2026		2026-2031	$0	4C, Central Coast Climate Justice Network (C3JN), Community-Based Organizations (CBOs), Housing Authority
TOTAL ANNUAL FUNDING NEEDED - $5,566,200					
2027					
RS 1.1 In partnership with the Monterey Fire Department, host a "Wildfire Ready Monterey" annual workshop event that is specific to Pacific Grove residents starting in 2026; offer in multiple languages and ensure inclusive engagement with vulnerable populations.	2027		2027-2031	$0	Monterey Fire Department
RS 1.2 Implement and fund Community Wildfire Protection Plan (CWPP) for Pacific Grove.	2027	$60,000	2027	$0	Operating budget
RS 3.1 Applicants can receive partial or full refunds of the Carbon Impact Fee by incorporating energy efficiency measures, retrofits, and/or on-site renewable energy systems that exceed California Title 24 energy code requirements	2027	$0	2027	$0	Avoided income
RS 5.1 Using the 2026 Urban Tree Canopy Assessment, create a roadmap of planting activities (locations and timeline) with the goal of planting 100 trees annually	2027	$107,200	2026-2031	$536,000	California Department of Forestry and Fire Protection; California ReLeaf; California Natural Resources Agency

APPENDIX B

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RS 6.1 Establish annual funding allocation to increase and maintain the number of certified green businesses each year in partnership with the Monterey Bay Area Green Business Program, and recognize and promote current participants	2027	$5,000	2027-2031	$25,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital
RS 6.2 Collaborate and allocate incentive funds to increase adoption of Green Business and Sustainability Frameworks, and related initiatives, especially among hospitality businesses	2027	$50,000	2027-2031	$250,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital
RS 7.1 Accelerate implementation of Shoreline Management Plan through annual and multi-year funding allocations and pilot implementation. Use Vulnerability Assessment (CCVA) to guide prioritization (e.g. Lovers Point, Ocean View Blvd, Asilomar Dunes).	2027	$75,000	2027-2031	$275,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 1.1 Set annual goal for increased porous surface acres. Increase from (e.g. 500 acres to 750 acres by 2035); Create an implementation plan including annual budget and priority locations	2027	$900,000	2027-2031	$4,500,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 1.1 Partner with the Monterey Bay Sanctuary to promote citizen science programs, such as Dry Run and First Flush Monitoring Program, E9c Outfall Monitoring, and PG Local Water Project	2027		2027-2031	$0	Monterey Bay Sanctuary
AP 2.2 Reevaluate the outcomes and remaining needs at the Great Tide Pools site, a five-year restoration project initiated in 2014	2027		2027-2031	$0	Operating Budget
AP 2.3 Identify gaps in the Point Pinos Coastal Trail Project (and others); create a formal assessment report to include priority projects and timeline for implementation	2927		2027-2031	$0	Operating Budget

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
AP 3.1 Add funding and implementation schedule as an appendix to the Shoreline Management Plan	2027	$2,000,000	2027-2031	$10,000,000	California State Coastal Conservancy Grants; Urban Greening Program; California State Water Resources Control Board; EPA; Caltrans
RE 2.1 Conduct a comprehensive energy audit of municipal facilities, including the Museum of Natural History and the Pacific Grove Library	2027	$40,000	2027	$0	Energy Efficiency & Conservation Block Grant Program; U.S. Department of Energy; 3CE's Audits & assessments: determining where energy savings exist. California Energy Commission; PG&E's "Whole Building Performance Based" Program
RE 2.2 Continue and expand energy savings retrofits and installations including LED lighting, as well as light sensors, timers, and smart thermostats based on occupancy patterns in all applicable areas in municipal buildings, parks and facilities	2027	$100,000	2027-2031	$340,000	3CE rebates and grants; IBank CLEEN Center – SWEEP & LED Street Lighting loans; California Energy Commission – Local Government programs; Energy Savings Performance Contract
RE 2.4 Launch smart energy management systems for real-time with remote use adjustments for increased energy savings	2027	$250,000	2027	$0	DOE; Various state smart energy funding grants
RE 3.3 Implement programs to provide weatherization services, improve energy efficiency, and reduce utility costs for low income households beginning in 2026	2027		2027-2031	$0	Energy Efficiency & Conservation Block Grant, State Energy Program, SAVES Revolving Loan Program & Local Energy Loan Programs; Central Coast Energy Services
RE 4.1 Complete a community-wide and municipal electrification study and establish a long-term implementation plan (Phase 1 and Phase 2)	2027	$100,000	2027	$0	CEC; 4CE Electrification & Innovation Grant Program; Energy Efficiency and Conservation Block Grants

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RE 5.1 Implement energy management and energy storage systems at municipal locations to charge during low-use and release energy during peak demand hours. Implement 1 or more installations every 5 years by 2030, 2035, 2040 and 2045	2027	Public Works Yard (2027) - $100,000 Wastewater Treatment facility (2030) Community Center (2035)	2027	$0	PG&E; DOE; California Public Utilities Commission
TR 1.2 Install 35 electric vehicle chargers at city facilities	2027	$40,000	2027-2031	$120,000	3CE's Charge Your Fleet program
TR 1.3 Accelerate the transition to EVs community-wide and make charging more accessible	2027		2027-2031	$0	3CE's Electrify Your Ride Rebates
TR 2.1 Expand education and outreach campaigns and events to promote walking, biking and taking transit	2027		2026-2031	$0	Partnerships; Regional Surface Transportation Program, Active Transportation Support Program, Work with TAMC on Safe Route to School program, CALTrans' Active Transportation Program
TR 2.3 Introduce a free trolley from downtown to Aquarium and Asilomar beach similar to and integrated with Monterey's model	2027	$1,300,000	2027	$0	DOT's Rebuilding American Infrastructure; FHA's Congestion Mitigation and Air Quality Improvement Program; FHA's Carbon Reduction Program; FTA's Low or No Emission Vehicle Program
TR 3.1 Incorporate separated bike lanes through town using similar signage as outlined in the Shoreline Management Plan	2027	$160,000	2027-2031	$480,000	HUD's Clean Air Grants; DOT's Transportation Alternatives Program & Active Transportation Infrastructure Investment Program

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
TR 3.2 Install sidewalks in Del Monte Park neighborhood to support "Safe Route to School" program	2027	$792,000	2027-2031	$2,376,000	HUD's Clean Air Grants; DOT's Transportation Alternatives Program & Active Transportation Infrastructure Investment Program
TR 3.4 Partner with nonprofits or community-based organizations to host "mobility pop-ups" that offer bike repair, trip planning, and transit education	2027		2027-2031	$0	Operating Budget
RC 1.1 Continue successful regional collaboration with ReGen Monterey (RGM), Salinas Valley Recycles (SVR) and Blue Strike Environmental (BSE) to achieve zero waste goals	2027		2027-2031	$0	Operating Budget
RC 1.2 Continue regional collection, education, outreach, technical assistance, enforcement, procurement and reporting efforts to meet and exceed SB 1383 mandate of 75% reduction in organic waste to landfill and maximum amount of edible food recovery and 20% statewide edible food recovery goals	2027		2027-2031	$0	Operating Budget
RC 2.1 Advance targeted waste management solutions through continued regional collaboration with ReGen Monterey	2027	Staff time	2027-2031	$0	Operating Budget
RC 2.3 Utilize franchise agreement with GreenWaste Recovery to support continued and increasing diversion and waste reduction through curbside collection and complimentary services	2027		2027-2031	$0	Operating Budget
RC 2.4 Continue to participate in ReGen Monterey's TAC and joint subcommittees, including leadership on Edible Food Recovery (EFR) Subcommittee	2027		2027-2031	$0	Operating Budget

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RC 2.5 Expand Technical Advisory Committee to plan for SB 54 which requires waste reduction from single-use packaging waste and single-use plastic food ware	2027		2027-2031	$0	Operating Budget
RC 4.1 Further municipal zero waste practices in city buildings, parks, facilities and owned properties	2027		2027-2031	$0	Operating Budget
RC 4.2 Partner with the Chamber of Commerce to implement improved zero waste practices, recycling and organics diversion, water refill stations, and plastic water bottle and Styrofoam ban at Good Old Days, as the largest community event held within the city	2027		2027-2031	$0	Operating Budget
RC 5.3 Demonstrate city leadership through adoption of EPA WaterSense retrofits in all municipal buildings by 2027	2027	$21,200	2027-2031	$84,800	EPA's WaterSense program; Monterey Peninsula Water Management District; California State Water Resources Control Board; California Water Efficiency Partnership
RC 5.4 Expand rain garden, rainwater catchment, and low-impact design demonstration projects by city, residents and businesses	2027	$4,000	2027	$0	Monterey Peninsula Water Management District; Central Coast Greywater Alliance; EPA; The California State Water Resources Control Board; California Water Efficiency Partnership
RC 5.5 Partner with Monterey Peninsula Water Management District to encourage residential and commercial recycled water projects and provide greywater installation training workshops, rain barrel distribution, financial incentives and/or technical and installation assistance	2027		2027-2031	$0	Monterey Peninsula Water Management District; Water Awareness Committee of Monterey County Greywater Action;

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
GC 1.1 Collaborate with the Chamber of Commerce and California Green Business Network (CGBN) to promote, expand and enhance adoption of the California Green Business Program to increase the number of certified green businesses within the City of Pacific Grove	2027	$25,000	2027-2031	$125,000	The National League of Cities; The Coalition for Green Capital ; California Climate Investments; Urban Greening Program; California Green Business Network; Green Cities California
GC 2.1 Partner with local organizations to promote, expand and enhance local initiatives focused on native plants, pollinators, Integrated Pest Management (IPM), low-impact design and stormwater management, rainwater catchment, rain gardens, food systems, beach clean-ups, and similar environmental initiatives	2027		2027-2031	$0	Monterey Bay Chapter – California Native Plant Society; Monterey Regional Stormwater Management Program; Save Our Shores; Pacific Grove Museum of Natural History
GC 2.2 Develop annual fund or grant program to support local initiatives in expanding and sustaining reach and impact.	2027	$100,000	2027-2031	$500,000	Operating Budget
GC 3.5 Ensure that marginalized communities have access to green spaces, clean water, affordable housing, and sustainable transportation options to ensure climate resilience benefits are shared equitably.	2027		2027-2031	$0	4C, Central Coast Climate Justice Network (C3JN), Community-Based Organizations (CBOs), Housing Authority
TOTAL ANNUAL FUNDING NEEDED $6,249,400					

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
2028					
RS 1.1 In partnership with the Monterey Fire Department, host a "Wildfire Ready Monterey" annual workshop event that is specific to Pacific Grove residents starting in 2026; offer in multiple languages and ensure inclusive engagement with vulnerable populations.	2028		2028-2031	$0	Monterey Fire Department
RS 2.1 Identify, fund, and prepare existing and new public facilities to serve as resilience hubs (i.e. locations which are able to generate power in the event of a power outage, distribute emergency supplies, and coordinate communication)	2028	$1,750,000	2028	$0	CEC; Governor's Office of Planning and Research; PG&E; Strategic Growth Council
RS 5.1 Using the 2026 Urban Tree Canopy Assessment, create a roadmap of planting activities (locations and timeline) with the goal of planting 100 trees annually	2028	$107,200	2028-2031	$536,000	California Department of Forestry and Fire Protection; California ReLeaf; California Natural Resources Agency
RS 6.1 Establish annual funding allocation to increase and maintain the number of certified green businesses each year in partnership with the Monterey Bay Area Green Business Program, and recognize and promote current participants	2028	$5,000	2028-2031	$20,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital
RS 6.2 Collaborate and allocate incentive funds to increase adoption of Green Business and Sustainability Frameworks, and related initiatives, especially among hospitality businesses	2028	$50,000	2028-2031	$250,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital
RS 7.1 Accelerate implementation of Shoreline Management Plan through annual and multi-year funding allocations and pilot implementation. Use Vulnerability Assessment (CCVA) to guide prioritization (e.g. Lovers Point, Ocean View Blvd, Asilomar Dunes).	2027	$75,000	2027-2031	$275,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
AP 1.1 Set annual goal for increased porous surface acres. Increase from (e.g. 500 acres to 750 acres by 2035); Create an implementation plan including annual budget and priority locations	2028	$900,000	2028-2031	$3,600,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 2.1 Partner with the Monterey Bay Sanctuary to promote citizen science programs, such as Dry Run and First Flush Monitoring Program, E9c Outfall Monitoring, and PG Local Water Project	2028		2028-2031	$0	Monterey Bay Sanctuary
AP 3.1 Add funding and implementation schedule as an appendix to the Shoreline Management Plan	2028	$2,000,000	2028-2031	$8,000,000	California State Coastal Conservancy Grants; Urban Greening Program; California State Water Resources Control Board; EPA; Caltrans
RE 2.2 Continue and expand energy savings retrofits and installations including LED lighting, as well as light sensors, timers, and smart thermostats based on occupancy patterns in all applicable areas in municipal buildings, parks and facilities	2028	$100,000	2028-2031	$240,000	3CE rebates and grants; IBank CLEEN Center – SWEEP & LED Street Lighting loans; California Energy Commission – Local Government programs; Energy Savings Performance Contract
TR 1.2 Install 35 electric vehicle chargers at city facilities	2028	$40,000	2028-2031	$80,000	3CE's Charge Your Fleet program
TR 1.3 Accelerate the transition to EVs community-wide and make charging more accessible	2028		2028-2031	$0	3CE's Electrify Your Ride Rebates
TR 2.1 Expand education and outreach campaigns and events to promote walking, biking and taking transit	2028		2028-2031	$0	Partnerships; Regional Surface Transportation Program, Active Transportation Support Program, Work with TAMC on Safe Route to School program, CALTrans' Active Transportation Program

APPENDIX B

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
TR 3.1 Incorporate separated bike lanes through town using similar signage as outlined in the Shoreline Management Plan	2028	$160,000	2028-2031	$320,000	HUD's Clean Air Grants; DOT's Transportation Alternatives Program & Active Transportation Infrastructure Investment Program
TR 3.2 Install sidewalks in Del Monte Park neighborhood to support "Safe Route to School" program	2028	$792,000	2028-2031	$1,584,000	HUD's Clean Air Grants; DOT's Transportation Alternatives Program & Active Transportation Infrastructure Investment Program
RC 5.3 Demonstrate city leadership through adoption of EPA WaterSense retrofits in all municipal buildings by 2027	2028	$21,200	2028-2031	$63,600	EPA's WaterSense program; Monterey Peninsula Water Management District; California State Water Resources Control Board; California Water Efficiency Partnership
RC 5.5 Partner with Monterey Peninsula Water Management District to encourage residential and commercial recycled water projects and provide greywater installation training workshops, rain barrel distribution, financial incentives and/or technical and installation assistance	2028		2028-2031	$0	Monterey Peninsula Water Management District; Water Awareness Committee of Monterey County Greywater Action;
GC 1.1 Collaborate with the Chamber of Commerce and California Green Business Network (CGBN) to promote, expand and enhance adoption of the California Green Business Program to increase the number of certified green businesses within the City of Pacific Grove	2028	$25,000	2028-2031	$125,000	The National League of Cities; The Coalition for Green Capital ; California Climate Investments; Urban Greening Program; California Green Business Network; Green Cities California

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
GC 2.1 Partner with local organizations to promote, expand and enhance local initiatives focused on native plants, pollinators, Integrated Pest Management (IPM), low-impact design and stormwater management, rainwater catchment, rain gardens, food systems, beach clean-ups, and similar environmental initiatives	2028		2028-2031	$0	Monterey Bay Chapter – California Native Plant Society; Monterey Regional Stormwater Management Program; Save Our Shores; Pacific Grove Museum of Natural History
GC 2.2 Develop annual fund or grant program to support local initiatives in expanding and sustaining reach and impact.	2028	$100,000	2028-2031	$500,000	Operating Budget
GC 3.5 Ensure that marginalized communities have access to green spaces, clean water, affordable housing, and sustainable transportation options to ensure climate resilience benefits are shared equitably.	2028		2028-2031	$0	4C, Central Coast Climate Justice Network (C3JN), Community-Based Organizations (CBOs), Housing Authority
TOTAL ANNUAL FUNDING NEEDED $6,070,400					
2029					
RS 1.1 In partnership with the Monterey Fire Department, host a "Wildfire Ready Monterey" annual workshop event that is specific to Pacific Grove residents starting in 2026; offer in multiple languages and ensure inclusive engagement with vulnerable populations	2029		2029-2031	$0	Monterey Fire Department
RS 5.1 Using the 2026 Urban Tree Canopy Assessment, create a roadmap of planting activities (locations and timeline) with the goal of planting 100 trees annually	2029	$107,200	2029-2031	$321,600	California Department of Forestry and Fire Protection; California ReLeaf; California Natural Resources Agency
RS 6.1 Establish annual funding allocation to increase and maintain the number of certified green businesses each year in partnership with the Monterey Bay Area Green Business Program, and recognize and promote current participants	2029	$5,000	2029-2031	$15,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RS 6.2 Collaborate and allocate incentive funds to increase adoption of Green Business and Sustainability Frameworks, and related initiatives, especially among hospitality businesses	2029	$50,000	2029-2031	$150,000	California Green Business Network; Green Cities California; National League of Cities; Coalition for Green Capital
RS 7.1 Accelerate implementation of Shoreline Management Plan through annual and multi-year funding allocations and pilot implementation. Use Vulnerability Assessment (CCVA) to guide prioritization (e.g. Lovers Point, Ocean View Blvd, Asilomar Dunes)	2029	$75,000	2029-2031	$200,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 1.1 Set annual goal for increased porous surface acres. Increase from (e.g. 500 acres to 750 acres by 2035); Create an implementation plan including annual budget and priority locations	2029	$900,000	2029-2031	$2,700,000	CEC; Governor's Office of Planning and Research; California State Coastal Conservancy; California Ocean Protection Council; California Coastal Commission; NOAA; EPA
AP 2.1 Partner with the Monterey Bay Sanctuary to promote citizen science programs, such as Dry Run and First Flush Monitoring Program, E9c Outfall Monitoring, and PG Local Water Project	2029		2029-2031	$0	Monterey Bay Sanctuary
AP 3.1 Add funding and implementation schedule as an appendix to the Shoreline Management Plan	2029	$2,000,000	2029-2031	$6,000,000	California State Coastal Conservancy Grants; Urban Greening Program; California State Water Resources Control Board; EPA; Caltrans
RE 1.1 Consider a crowdfunding residential and commercial bulk purchasing solar campaign, "Solarize PG", to bring upfront costs down	2029	$0	Phase II: 2029	$0	Operating Budget

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RE 2.2 Continue and expand energy savings retrofits and installations including LED lighting, as well as light sensors, timers, and smart thermostats based on occupancy patterns in all applicable areas in municipal buildings, parks and facilities	2029	$100,000	2029-2031	$440,000	3CE rebates and grants; IBank CLEEN Center – SWEEP & LED Street Lighting loans; California Energy Commission – Local Government programs; Energy Savings Performance Contract
TR 1.2 Install 35 electric vehicle chargers at city facilities	2029	$40,000	2029-2031	$40,000	3CE's Charge Your Fleet program
TR 1.3 Accelerate the transition to EVs community-wide and make charging more accessible	2029		2029-2031	$0	3CE's Electrify Your Ride Rebates
TR 2.1 Expand education and outreach campaigns and events to promote walking, biking and taking transit	2029		2029-2031	$0	Partnerships; Regional Surface Transportation Program, Active Transportation Support Program, Work with TAMC on Safe Route to School program, CALTrans' Active Transportation Program
TR 3.1 Incorporate separated bike lanes through town using similar signage as outlined in the Shoreline Management Plan	2029	$160,000	2029-2031	$200,000	HUD's Clean Air Grants; DOT's Transportation Alternatives Program & Active Transportation Infrastructure Investment Program
RC 4.2 Partner with the Chamber of Commerce to implement improved zero waste practices, recycling and organics diversion, water refill stations, and plastic water bottle and Styrofoam ban at Good Old Days, as the largest community event held within the city	2029		2029-2031	$0	Operating Budget
RC 5.4 Expand rain garden, rainwater catchment, and low-impact design demonstration projects by city, residents and businesses	2029		2029-2031	$0	Partnerships

CITY OF PACIFIC GROVE FUNDING PLAN

STRATEGY	IMPLEMENTATION YEAR	ANNUAL COST ESTIMATE	TOTAL PROJECT DURATION	TOTAL PROJECT COST REMAINING	POSSIBLE FUNDING SOURCE(S)
RC 5.5 Partner with Monterey Peninsula Water Management District to encourage residential and commercial recycled water projects and provide greywater installation training workshops, rain barrel distribution, financial incentives and/or technical and installation assistance	2029		2029-2031	$0	Monterey Peninsula Water Management District; Central Coast Greywater Alliance; EPA; The California State Water Resources Control Board; California Water Efficiency Partnership
RC 5.7 Continue regional collaborative management of water recycling and stormwater management	2029		2029-2031	$0	Partnerships
GC 1.1 Collaborate with the Chamber of Commerce and California Green Business Network (CGBN) to promote, expand and enhance adoption of the California Green Business Program to increase the number of certified green businesses within the City of Pacific Grove	2029	$25,000	2029-2031	$150,000	The National League of Cities; The Coalition for Green Capital ; California Climate Investments; Urban Greening Program; California Green Business Network; Green Cities California
GC 2.1 Partner with local organizations to promote, expand and enhance local initiatives focused on native plants, pollinators, Integrated Pest Management (IPM), low-impact design and stormwater management, rainwater catchment, rain gardens, food systems, beach clean-ups, and similar environmental initiatives	2029		2029-2031	$0	Monterey Bay Chapter – California Native Plant Society; Monterey Regional Stormwater Management Program; Save Our Shores; Pacific Grove Museum of Natural History
GC 3.5 Ensure that marginalized communities have access to green spaces, clean water, affordable housing, and sustainable transportation options to ensure climate resilience benefits are shared equitably	2029		2029-2031	$0	4C, Central Coast Climate Justice Network (C3JN), Community-Based Organizations (CBOs), Housing Authority
TOTAL ANNUAL FUNDING NEEDED $3,482,200					

POSSIBLE FUNDING MECHANISMS

Various federal, state, and regional agencies provide grants, loans, and planning support for climate-focused initiatives. Funding opportunities are increasingly available to help local jurisdictions achieve their climate goals, particularly those aimed at reducing emissions. Cities with established CAAPs may have a competitive edge when applying for grants, as these plans demonstrate a strong commitment to climate and proactive planning. While not an exhaustive list of all available funding sources, Table B outlines potential avenues the City could explore to finance the CAAP's implementation. These funds can support early-stage program development, pilot initiatives, and staffing, helping to establish a sustainable financial model for long-term success. Additionally, utilities and other organizations offer rebates, financing options, and discounts to promote energy-efficient upgrades and sustainability projects in residential and commercial sectors.

INTERNAL FUNDING MECHANISMS		
Type of Funding	***Examples***	***Description***
Taxes	Open Space Preservation Tax	Tax on properties for preserving city open spaces and green areas.
	Property Tax Increment	Incremental property tax revenue allocated for development projects.
	Utility User Tax	City tax on utility service consumption such as natural gas.
	Community Services/Facilities District Special Taxes	Levied on property owners to fund neighborhood enhancements.
Fees	Parking Fee	User fee for city-owned parking facilities.
	Development Fee	Fee paid by developers for funding city infrastructure.
	Impact Fees	Paid by property owners who are seeking building permits.
	Congestion Pricing	User fee to reduce traffic congestion and raise funds.
Funds	Enterprise Fund	Cities often collect franchise fees or utility user taxes from private utility providers for the right to operate in public rights-of-way.
	Green Revolving Fund	An internal fund where savings from efficiency projects are reinvested in future green initiatives.
Bonds	Green Bond	Bonds for capital improvements with an environmental focus.

CITY OF PACIFIC GROVE FUNDING PLAN

GOVERNMENT PROGRAMS		
Type of Funding	***Examples***	***Description***
Grants		Grants available for specific projects, often requiring matching funds or in-kind contributions.
Loans	Energy Efficiency Loans	Low-interest loans provided by state or federal agencies for energy-efficiency or renewable energy projects.
Tax credits & deductions	179D for energy efficiency initiatives	Under Section 179D, tax-exempt entities—including cities, counties, and other local governments—can allocate the tax deduction to eligible designers of energy-efficient improvements made to public buildings. This allocation serves as an incentive for designers to incorporate energy-efficient systems into public projects, potentially reducing overall project costs for the City.
	Inflation Reduction Act	Comprehensive set of financial incentives to accelerate the transition to clean energy. Includes Investment and Production Tax Credits, as well as credits for clean vehicles and alternative fueling infrastructure.
Rebates	Energy-Efficiency Rebates, Renewable Energy Rebates, Water-Saving Rebates, Transportation Rebates, Landscaping Rebates, Building Retrofits, Small Business Rebates	Rebates from state and federal agencies incentivize sustainable and energy-efficient practices, such as the use of energy-efficient appliances or renewable energy systems. These rebates typically offset the initial cost of the product or service, making them more accessible.

Third party solutions		
Type of Funding	***Examples***	***Description***
Energy Performance Contracts (EPC)	Energy Efficiency Agreement	Contracts for energy upgrades in exchange for cash flows from a portion of savings.
Infrastructure as a Service (IAAS)	Energy Infrastructure Lease	Leasing energy infrastructure from private entities for funds.

CLIMATE ACTION AND ADAPTATION PLAN

APPENDIX C

Solar Feasibility and Impact Analysis 2.0

City of PACIFIC GROVE

Solar Feasibility and Impact Analysis 2.0

APPENDIX C

SOLAR FEASIBILITY AND IMPACT ANALYSIS 2.0

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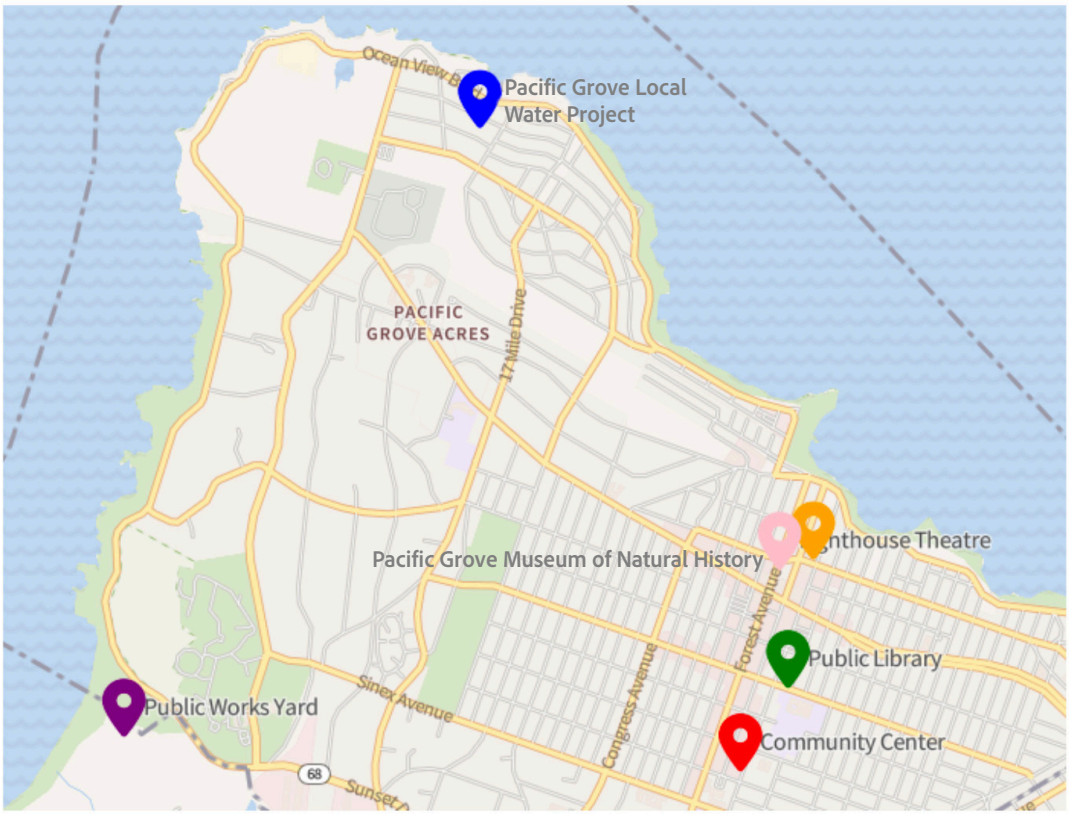
EXECUTIVE SUMMARY

Blue Strike Environmental conducted an update to integrate corrected solar modeling, PG&E's 2025 rate structures, and the Net Billing Tariff framework for six municipal sites within the City of Pacific Grove. This version replaces prior estimates and aligns all findings with verified utility data and current buy-back conditions. The analysis evaluates both technical feasibility and financial performance under PG&E's B-1, B-6, and B-10-S schedules, incorporating the 2025 Net Surplus Compensation (NSC) export rate of $0.0307 per kilowatt-hour.

Collectively, the citywide portfolio totals 288.64 kilowatts of installed capacity and produces approximately 438 megawatt-hours per year with an average performance ratio of 86.4 percent. Payback periods range from 3.7 to 11.1 years and return on investment values from 166 to 720 percent, depending on the site and export treatment.

This update was prepared to provide decision-makers with refined, defensible results before entering the implementation phase of the city's renewable energy program.

Six Potential Sites



PROJECT SCOPE AND OBJECTIVES

The purpose of this work is to merge the earlier feasibility, rate, and solar buy-back analyses into a single, updated assessment. The report applies uniform financial assumptions, recalibrated energy use data, and PG&E's current rate schedules. It also establishes a foundation for future modeling using interval consumption data to capture time-of-use effects more accurately.

METHODOLOGY

- **MODELING PLATFORM:** HelioScope for production, weather, and shading; custom Excel models for financial performance.
- **RATE FRAMEWORK:** Each site modeled using the applicable **PG&E tariff (B-1, B-6, or B-10-S)**. Due to lack of interval load data, blended weighted-average rates were used. A future rerun will apply 15-minute or hourly load profiles for true Time-of-Use (TOU) rate modeling.
- **SOLAR BUYBACK RATE (NET SURPLUS COMPENSATION – NSC):** The 2025 financial modeling incorporates PG&E's Net Surplus Compensation rate, representing the wholesale value of exported solar energy. NSC rates were obtained from PG&E's "Net Surplus Compensation Rates for Energy" (2025) under CPUC Decision D.11-06-016. Monthly NSC values from January–November 2025 average **$0.0307/kWh**. This approach reflects PG&E's current NEM2/NSC framework, where exported electricity receives wholesale compensation at annual true-up rather than full retail credit. Consequently, all site financial results model realistic export valuation under 202 5 market conditions.
- **WEATHER DATASET:** NREL TMY, Pacific Grove (36.65° N, -121.95° W).
- **ASSUMPTIONS:** Discount rate 4.2%, utility escalation 3%, O&M $20/kW-yr, no incentives.

NET BILLING OPTIMIZATION & RATE APPLICATION

- **PG&E'S NET BILLING TARIFF (NBT)** introduces hourly export compensation, typically $0.04–$0.07/kWh, compared to retail on-site energy values of $0.39–$0.43/kWh. In this update:
- Weighted-average rates were used due to lack of interval data.
- Systems with high export fractions (Lighthouse Theatre, Public Works Yard) show inflated ROI under retail netting; actual ROI will decline under NBT export crediting.
- Load-aligned sites (Museum, Library, Pacific Grove Local Water Project, Community Center) maintain strong paybacks even under NBT assumptions.

RATE SENSITIVITY AND EXPORT SCENARIOS

- To evaluate the portfolio's economic sensitivity, two pricing frameworks were modeled. Under the **Retail Netting Case**, all solar generation was credited at each site's weighted average retail rate, ranging from $0.39 to $0.43 per kilowatt-hour. In contrast, the **Net Surplus Compensation (NSC) Export Case** credited on-site energy use at the applicable retail rate while compensating exported energy at PG&E's 2025 NSC wholesale rate of $0.0307 per kilowatt-hour.
- When the NSC export framework is applied, overall portfolio ROI declines by approximately 35 to 45 percent, with the most significant impacts observed at the Lighthouse Theatre and Public Works Yard—sites where generation substantially exceeds annual load. This analysis underscores that maximizing self-consumption remains the primary driver of project value under PG&E's current compensation structure.

UPDATED FINANCIAL AND RATE ASSUMPTIONS

INPUT PARAMETER	ASSUMPTION
Discount Rate	4.2% (NREL REopt Public Sector Standard)
Utility Escalation	3% (EIA longiterm forecast)
Federal Incentive	0% (post-December 2025 phase-out)
Export Credit	Retail-rate netting used for baseline; sensitivity available for PG&E Net Billing Tariff (NBT) $0.04-$0.07/kWh.

ADDRESSES OF EVALUATED SITES

SITE	ADDRESS
Community Center	515 Junipero Ave, Pacific Grove, CA 93950
Lighthouse Theatre (Cinema & Event Center)	525 Lighthouse Ave, Pacific Grove, CA 93950
Pacific Grove Museum of Natural History	165 Forest Ave, Pacific Grove, CA 93950
Public Library	550 Central Ave, Pacific Grove, CA 93950
Pacific Grove Local Water Project	1313 Ocean View Blvd, Pacific Grove, CA 93950
Public Works Yard	2100 Sunset Dr, Pacific Grove, CA 93950

PORTFOLIO FINDINGS SUMMARY

The updated modeling confirms that the City of Pacific Grove's solar portfolio performs strongly from both technical and economic perspectives when evaluated under PG&E's 2025 rate structures. Across all six municipal facilities, the combined installed capacity totals 288.64 kilowatts of direct current generation producing approximately 438 megawatt-hours of energy per year. This represents a citywide performance ratio of 86.4 percent, consistent with modern commercial-scale photovoltaic systems operating in California's coastal climate.

The portfolio includes a mix of building-mounted and carport systems distributed across key municipal assets: the Community Center, Lighthouse Theatre, Pacific Grove Museum of Natural History, Public Library, Pacific Grove Local Water Project, and the Public Works Yard. System sizes range from 15 to 63 kilowatts and deliver energy offsets from 20 to nearly 400 percent of site demand. Collectively, the portfolio offsets an estimated 356 megawatt-hours of grid electricity each year, significantly reducing the City's dependence on external power and shielding operating budgets from future rate escalation.

Figure 1 illustrates total annual solar generation compared with facility electricity consumption for each site. The chart highlights that several systems—particularly the Lighthouse Theatre and Public Works Yard—produce well above on-site load, while others closely match their usage profiles. This balance between generation and load is the key determinant of financial performance across the portfolio.

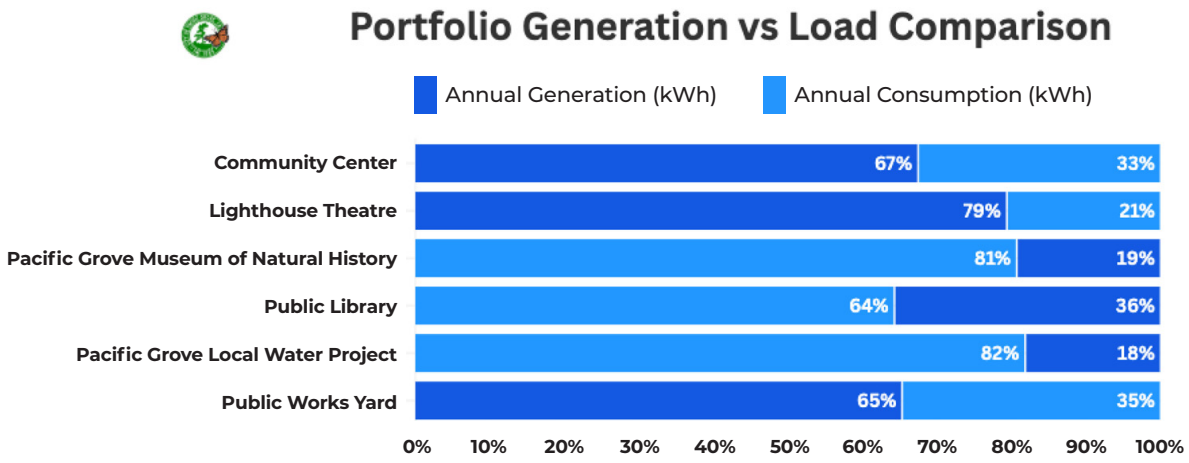


FIGURE 1

Table 1 summarizes the principal findings for each site, including system capacity, annual generation, energy offset, performance ratio, simple payback, and return on investment. These values provide a consistent comparison across all six facilities.

SITE	DC SIZE (KW)	ANNUAL GENERATION (MWH)	ENERGY OFFSET	PAYBACK (YRS)	ROI	RATE CODE	WEIGHTED AVG. RATE ($/KWH)
Community Center	19.52	26.83	204.00	7.40	276.60	B-6	0.43
Lighthouse Theatre (Cinema & Event Center)	63.36	96.96	379.00	11.10	166.80	B-1	0.43256
Pacific Grove Museum of Natural History	15.04	22.90	23.70	3.70	684.70	B-1/ B-10-S	0.39–0.43256
Public Library	24.64	37.60	54.90	3.70	702.10	B-6	0.43
Pacific Grove Local Water Project	40.00	61.00	21.70	3.70	718.60	B-1/ B-10-S	0.39–0.43256
Public Works Yard	62.08	95.34	185.80	6.10	398.40	B-1	0.43256

TABLE 1

Average production cost across the portfolio equals roughly twelve cents per kilowatt-hour when life-cycle costs are annualized over twenty-five years—well below PG&E retail rates of thirty-nine to forty-three cents per kilowatt-hour. This differential underpins the consistently positive returns seen across the portfolio. Four of the six sites achieve payback periods under five years, while the larger, export-heavy systems exhibit longer returns yet remain cost-effective over their lifetime.

Figure 2 compares payback period and return on investment for all sites, illustrating the clear correlation between load alignment and financial outcome. Facilities with strong self-consumption, such as the Museum, Library, Pacific Grove Local Water Project, and Community Center, cluster in the upper-left quadrant, showing both rapid recovery of capital and high overall return. The Lighthouse Theatre and Public Works Yard appear farther right on the axis, reflecting their higher export exposure and opportunity for future storage integration.

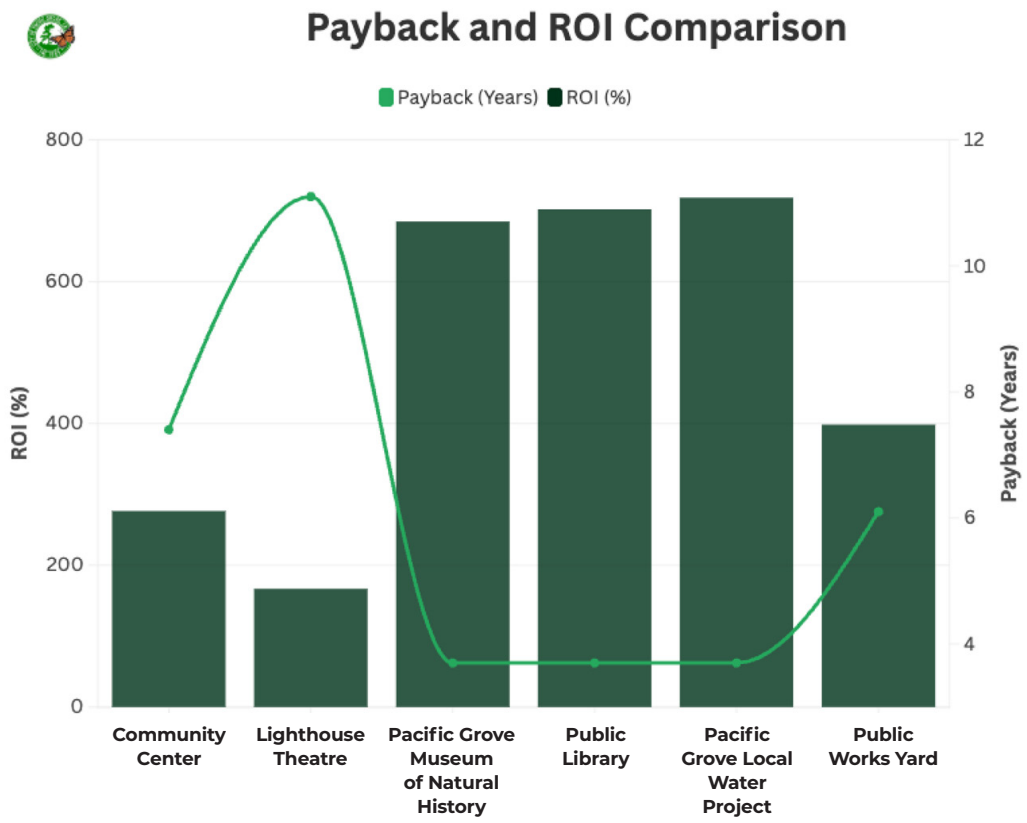


FIGURE 2

System performance modeling indicates that most installations achieve specific yields between 1,370 and 1,535 kilowatt-hours per kilowatt of capacity, confirming both the reliability of the modeling inputs and the suitability of the site conditions. As a combined portfolio, these systems now generate more renewable energy annually than the City consumes on-site, creating a platform for future electric-vehicle charging, fleet electrification, and distributed energy storage.

Under PG&E's 2025 Net Surplus Compensation rate of three cents per kilowatt-hour, the portfolio achieves a simple payback of approximately 6.4 years and an aggregate life-cycle savings exceeding $1.3 million over twenty-five years. Even with conservative export valuation, the City's distributed solar assets remain financially robust and technically sound, providing long-term energy cost stability and measurable progress toward municipal sustainability goals.

COST ANALYSIS

The City's solar portfolio includes six separate PV systems ranging in size from 15 kW to just over 60 kW. Each site has a complete turnkey EPC cost listed in the HelioScope proposal, with no incentives applied. The combined capital requirement for all six installations is 612,800 dollars based on the proposal pricing provided.

The smallest and least expensive installation is the 15.04 kW system at the Community Center, with a total cost of 37,600 dollars. This system represents standard small-commercial pricing and is designed to offset a modest share of the building's load. The 24.64 kW system at the Lighthouse Theatre is priced at 61,600 dollars, scaling proportionally with size and production expectations.

The largest share of the portfolio cost comes from the City's higher-consumption facilities. The Public Library includes a 63.36 kW system costing 158,400 dollars, the highest individual cost across all sites. The Pacific Grove Local Water Project includes a 62.08 kW system costing 155,200 dollars, reflecting similar system scale and production potential.

Two mid-sized systems, each 40.00 kW in capacity, bring additional consistency to the portfolio. The Pacific Grove Museum of Natural History system and the Public Works Yard system each cost 100,000 dollars. These costs fall within expected commercial market ranges and align closely with the cost structure demonstrated across the other sites.

Overall, the pricing across all systems follows a consistent pattern, increasing proportionally with system size and expected performance. The total portfolio cost of 612,800 dollars provides a clear basis for financial planning, budgeting, and evaluating future options such as municipal financing, phased implementation, or power purchase agreements. This cost framework supports transparent decision-making and aligns with the performance analysis for each site.

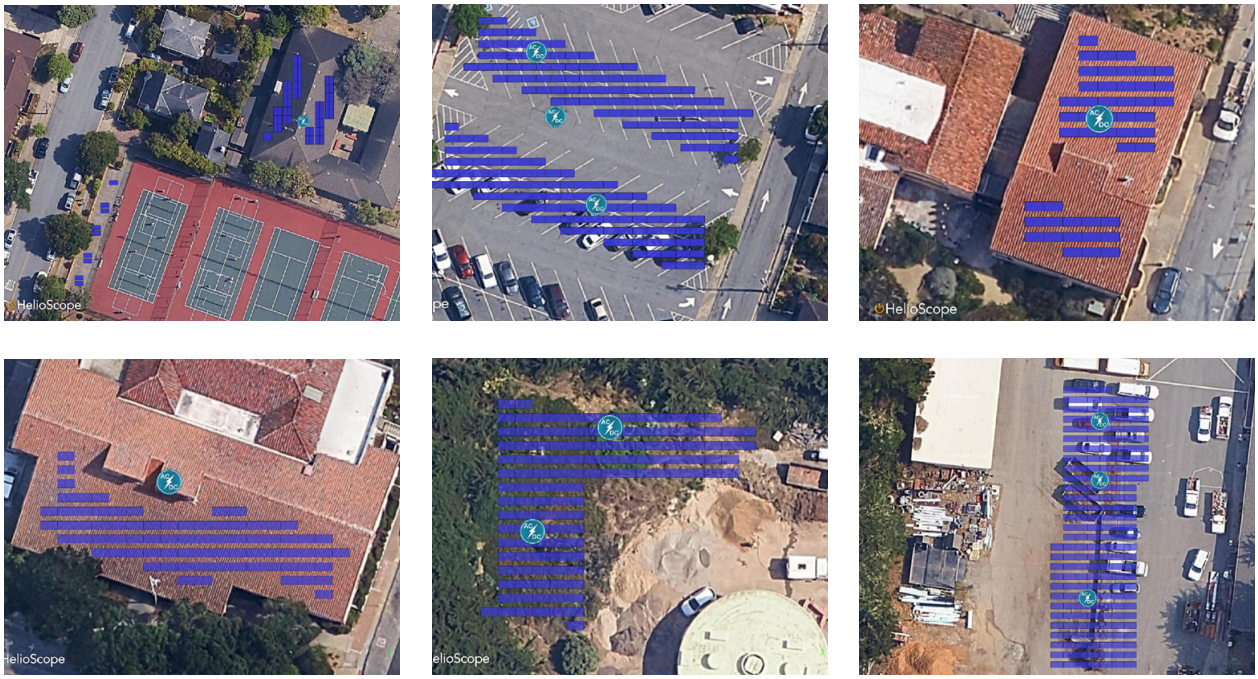
SUMMARY OF SOLAR SYSTEM CAPITAL COSTS

Site	System Size (kW DC)	Total System Pricing	Net System Cost
Community Center	15.04 kW	$37,600	$37,600
Lighthouse Theatre	24.64 kW	$61,600	$61,600
Pacific Grove Museum of Natural History	40.00 kW	$100,000	$100,000
Public Library	63.36 kW	$158,400	$158,400
Pacific Grove Local Water Project	62.08 kW	$155,200	$155,200
Public Works Yard	40.00 kW	$100,000	$100,000

TOTAL PORTFOLIO CAPITAL COST: $612,800

SITE-SPECIFIC HIGHLIGHTS

The six sites analyzed under the updated modeling represent a cross-section of Pacific Grove's municipal energy infrastructure. Each system was evaluated for technical performance, load alignment, and financial return under PG&E's current rate structures. The images above illustrate the array locations in the order described below, proceeding from left to right in the first row and continuing through the second.



Top row (left to right): Community Center, Lighthouse Theatre (Cinema & Event Center), Pacific Grove Museum of Natural History.

Bottom row (left to right): Public Library, Pacific Grove Local Water Project, Public Works Yard.

COMMUNITY CENTER

Parameter	Value
System Type	Rooftop
System Capacity	19.52 kW
Annual Generation	26.83 MWh
Performance Ratio (PR)	83.7%
Energy Offset	204%
Payback Period	7.4 years
Return on Investment (ROI)	276.6%
Rate Schedule	PG&E B-6

The Community Center's 19.52-kilowatt rooftop solar array produces 26.83 megawatt-hours per year, achieving a performance ratio of 83.7 percent. The system is well-matched to the building's load profile, providing more than twice the annual consumption and creating an effective energy buffer for future electric vehicle charging or facility expansion. With a payback period of 7.4 years and a return on investment of 276.6 percent, this installation remains one of the most reliable and balanced contributors to the citywide portfolio.

LIGHTHOUSE THEATRE (CINEMA & EVENT CENTER)

Parameter	Value
System Type	Rooftop
System Capacity	63.36 kW
Annual Generation	96.96 MWh
Performance Ratio (PR)	87.1%
Energy Offset	379%
Payback Period	11.1 years
Return on Investment (ROI)	166.8%
Rate Schedule	PG&E B-1

Two solar segments were removed from the Lighthouse Theatre design to align generation with actual consumption of 25,242 kilowatt-hours. The revised configuration corrects an earlier overproduction issue that had produced negative financial results. The updated system generates 96.96 megawatt-hours annually with a performance ratio of 87.1 percent and an energy offset of 379 percent. Although its return on investment is lower than the smaller load-matched facilities, the system remains financially sound with an 11.1-year payback. The site is a strong candidate for future energy storage to increase self-consumption and reduce exports.

PACIFIC GROVE MUSEUM OF NATURAL HISTORY

Parameter	Value
System Type	Rooftop
System Capacity	15.04 kW
Annual Generation	22.9 MWh
Performance Ratio (PR)	86.7%
Energy Offset	23.7%
Payback Period	3.7 years
Return on Investment (ROI)	684.7%
Rate Schedule	PG&E B-1 / B-10-S

The Pacific Grove Museum of Natural History continues to rank among the city's most efficient and well-aligned solar sites. The 15.04-kilowatt rooftop installation produces 22.9 megawatt-hours per year with a performance ratio of 86.7 percent. With a 23.7 percent offset and consistent daytime operation, the system directly supports the facility's energy use and demonstrates the best self-consumption characteristics in the portfolio. Its 3.7-year payback and return on investment exceeding 680 percent underscore the advantages of sizing systems to match on-site demand.

PUBLIC LIBRARY

Parameter	Value
System Type	Rooftop
System Capacity	15.04 kW
Annual Generation	22.9 MWh
Performance Ratio (PR)	86.7%
Energy Offset	23.7%
Payback Period	3.7 years
Return on Investment (ROI)	684.7%
Rate Schedule	PG&E B-1 / B-10-S

The Public Library's 24.64-kilowatt rooftop array produces 37.6 megawatt-hours annually and achieves a performance ratio of 86.9 percent. The system offsets more than half of the building's annual consumption, making it an ideal example of how Net Billing Tariff (NBT) load matching can maximize savings. Financially, the library demonstrates one of the strongest returns in the portfolio, with a 3.7-year payback and a return on investment above 700 percent.

PACIFIC GROVE LOCAL WATER PROJECT

Parameter	Value
System Type	Ground-Mount
System Capacity	40.00 kW
Annual Generation	61.0 MWh
Performance Ratio (PR)	86.8%
Energy Offset	21.7%
Payback Period	3.7 years
Return on Investment (ROI)	718.6%
Rate Schedule	PG&E B-1 / B-10-S

The ground-mounted system at the Pacific Grove Local Water Project produces 61 megawatt-hours annually and achieves a performance ratio of 86.8 percent. The array was optimized for daytime consumption, resulting in a moderate export volume and a 21.7 percent offset of total site energy. With a return on investment above 700 percent and a payback period of 3.7 years, this facility remains a cornerstone of the city's energy strategy, offering dependable savings and consistent performance.

PUBLIC WORKS YARD

Parameter	Value
System Type	Carport
System Capacity	62.08 kW
Annual Generation	95.34 MWh
Performance Ratio (PR)	87.4%
Energy Offset	185.8%
Payback Period	6.1 years
Return on Investment (ROI)	398.4%
Rate Schedule	PG&E B-1

Two solar segments were removed from the Public Works Yard configuration to improve spatial accuracy and eliminate modules positioned outside viable installation areas. The corrected 62.08-kilowatt carport array now generates 95.34 megawatt-hours annually with a performance ratio of 87.4 percent and an energy offset of 185.8 percent. The system's payback period of 6.1 years and return on investment near 400 percent confirm strong economic performance. This site is a leading candidate for battery integration, as storage would further reduce exports and align generation with the facility's daytime operational profile.

CONCLUSIONS

All six Pacific Grove City sites were found to be technically feasible, physically suitable, and perform above industry PR standards. Financially, the projects remain viable under current tariffs, provided retail-rate netting is applied; however, the Return on Investment (ROI) would significantly decrease if export credits replace the full retail value. In terms of energy offset, three systems at the Museum, Library, and Pacific Grove Local Water Project, are appropriately load-matched, while the remaining two sites, Lighthouse and Yard, are oversized, which makes them ideal candidates for future credit generation or battery storage integration.

NEXT STEPS – ENHANCED RATE AND LOAD ANALYSIS

The next phase of analysis will involve re-running all six site simulations using **15-minute or hourly interval consumption data** rather than monthly averages. The original feasibility analysis relied on averaged monthly loads derived from annual totals, which prevented the full application of PG&E's **Time-of-Use (TOU)** rate structures. Without interval data, rate modeling was limited to **weighted-average blended costs** based on each site's tariff (B-1, B-6, and B-10-S).

By incorporating actual interval load profiles:

1. The HelioScope and financial models can assign generation and consumption to the correct **TOU periods (peak, part-peak, off-peak)**, enabling accurate cost avoidance and export valuation.
2. Demand-charge reductions and on-peak generation benefits can be captured precisely.
3. The City can better evaluate **Net Billing Tariff (NBT)** export compensation impacts, since exports will align with the hourly Energy Export Credit (EEC) schedule.
4. The resulting analysis will provide a more defensible basis for investment decisions, interconnection applications, and future grant proposals.
5. This refined modeling will replace the weighted-average rate assumptions currently used and yield a truer reflection of system economics under each site's actual operating pattern.